LECTURES

AMENDED NOTICE

SOCIETY OF APOTHECARIES OF LONDON

A COURSE of 10 POSTGRADUATE subscription LECTURES on MODERN THERAPEUTICS will be delivered in the HALL, BLACK FRIARS LANE, QUEEN VICTORIA STREET, E.C.4, at 5 p.m., as follows:

Date	*Subject*	*Lecturer*
Oct. 18	"The Clinical Importance of the Rh Factor"	PROFESSOR D. F. CAPPELL, M.D.
Oct. 19	"Rehabilitation of the Physically Injured"	H. OSMOND CLARKE, ESQ., F.R.C.S.
Oct. 20	"Modern Treatment of Some Neurological Disorders"	DR. MACDONALD CRITCHLEY, F.R.C.P.
Oct. 21	"The Treatment of Pulmonary Tuberculosis"	DR. R. R. TRAIL, M.C., F.R.C.P.
Oct. 25	"Hypertension"	DR. BASIL PARSONS-SMITH, F.R.C.P.
Oct. 27	"Therapy as a Diagnostic Measure"	PROFESSOR HENRY COHEN, M.D., F.R.C.P.
Oct. 28	"The Management of Inoperable Malignant Disease"	SIR STANFORD CADE, K.B.E., C.B., F.R.C.S.
Nov. 1	"The Constitutional Factors in Psychological Medicine"	DR. ELIOT SLATER, F.R.C.P.
Nov. 2	"Use of Sex Hormones in Therapeutics"	DR. PETER BISHOP
Nov. 5	"Endocrinology and its Relation to Diagnosis and Therapeutics"	PROFESSOR E. C. DODDS, M.V.O., M.D., F.R.S.

The Fee for the whole Course will be 3 guineas or 7s. 6d. for a single Lecture.

ERNEST BUSBY,
Registrar.

APOTHECARIES' HALL,
BLACK FRIARS LANE, E.C.4.

Assistantships continued from page 27

ASSISTANTSHIPS

WANTED

Wanted, Assistantship with early View or Partnership by Scot, M.B.Glas., aged 31, at present single, ex-Services. Car Experienced G.P., anaesthetics, midwifery, hospitals, England and Scotland. Country or small town preferred.—Box 8306, B.M.J.

Wanted, Assistantship with View to Partnership or Succession by thoroughly experienced M.B. Own car and furniture. Excellent references.—Box 8354, B.M.J.

Wanted, Assistantship with early View, rural or country town, London graduate, ex-R.N.V.R., age 34, single, M.R.C.S., L.R.C.P. (D.Obst.R.C.O.G.). Recent hospital and midwifery, also G.P. experience.—Box 8008, B.M.J.

Assistantship with View wanted by keen, and widely experienced Edinburgh University graduate. Married, no children.—Box 8302, B.M.J.

Assistantship wanted by experienced woman doctor, with or without View. Preferably small town or semi-rural. Moderate salary.—Box 8316, B.M.J.

Assistantship with View wanted by experienced M.D.(Berlin). Twelve years own G.P. Six years medical service overseas. Age 51, married, no children.—Box 8334, B.M.J

Assistantship with or without View required at once by M.D. desirous of gaining experience in general practice Congenial co-operation more appreciated than high salary.—Box 8301, B.M.J.

Assistantship wanted, young married doctor, extensive hospital and G.P. experience Accommodation essential. Free at once.—Box 8348, B.M.J.

After short disappointed stay in Middle East, married doctor, 32, experienced G.P. in England, requires Post with house and prospects. Free late November. What sporting offers?—Box 7978 B.M.J

Assistantship with View in country town or district in Scotland by M.B., Ch.B.Edinburgh, 1942, 31, married, ex-R.N.V.R., G.P. and hospital experience, own car.—Box 8359, B.M.J.

Assistantship with definite View, Partnership or Succession. M.B., B.S., 29, married, two children. C. of E., ex-R.A.M.C., hospital and G.P. experience. Southern half of England except London Four to five bedroom unfurnished house essential —Box 8011, B.M.J

Assistantship wanted with View, young married man, Jewish (ex-principal). Own car. Experience in general practice and anaesthetics, preferable Southern England. House capital available. All correspondence answered confidentially. Free now. —Box 8355, B.M.J.

Assistantship wanted, preferably with View, Yorkshire or Northern England. Ex-R.N.V.R., hospital and G.P. experience, aged 27, married, one child. Accommodation essential. Own car.—Box 8356, B.M.J.

Assistantship with View, rural or country town, West preferred, available one week, aged 36, married, no children. Hospital, G.P., mentals experience, midwifery and hard work welcome. Own car. House, cottage, pre-fab or early prospect essential.—Box 7695, B.M.J.

Doctor, postgraduate, extensive hospital and G.P. experience, available for Evening Surgeries, London area —Box 7965, B.M.J.

Doctor with small nucleus, and experienced G.P., keen obstetrics and gynaecology, offer services to a busy practitioner, London or Middlesex.—Box 8347, B.M.J.

Energetic young M.R.C.S., L.R.C.P., two years' G.P. and hospital experience, married, own car, requires Assistantship with definite early View, preferably Midlands town, in mixed industrial practice. House purchase considered. Available early October.—Box 8009, B.M.J.

Ex-Service willing to do Evening Surgeries or Week-ends in return for Unfurnished Accommodation, London and suburbs.—Box 8308, B.M.J.

Lady doctor, single, G.P. experience, requires easy Assistantship within 15 miles Liverpool or Manchester. No midwifery —Box 8332, B.M.J.

M.D.(Lond.), 30, available for Evening Surgeries in the London area, preferably S.E.—Box 8333, B.M.J

M.B., B.Ch.(hons.), 1½ years' teaching hospitals, 1½ years general practice, new car, aged 26, seeks Assistantship with definite View.—Box 8353, B.M.J.

Part-time Work, West London area, required by experienced ex-Service postgraduate, reading for membership. 'Phone, Ealing 4659.

Part-time Work or Assistantship required S. London, Sussex, Surrey, by postgraduate. Own car. Experienced G.P.—Box 8331, B.M.J.

Postgraduate, G.P. experience, available London for Evening Surgeries, week-end work, etc.—Box 8357, B.M.J.

Postgraduate, married, no children, requires Accommodation central London, preferably furnished, in Exchange Night Work, week-ends; or suggestions.—Box 8358, B.M.J.

Postgraduate, ex-Lt.-Col., age 33, with G.P. experience, offers Assistance evenings, alternate weekends, in return for accommodation. Easy reach Central London October to June.—Box 8335, B.M.J.

Two doctors, single, with considerable medical experience, require vacancies together in a general practice as Partners or Assistants with View to ultimate Succession. Capital available for purchase of house if necessary. All necessary surgery equipment and two cars available.—Box 8360, B.M.J.

Two Guy's Contemporaries, English, aged 28, hospital and G.P. experience, including N.H.S., seek Double Vacancy in expanding practice after short preliminary assistantship. Own cars and equipment.—Box 8307, B.M.J.

LOCUMS

VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars. British Medical Bureau, 33, Cross Street Manchester.

Wanted, reliable Locum Tenens from November 12 to December 6 inclusive, 16 guineas per week all found. Car supplied.—Box 8317, B.M.J.

Locum wanted, preferably young man, November 25 to December 10 Good class rural practice. Car essential. Salary by arrangement.—Dr. MacDonald, Kirkbride, Cumberland.

Locum wanted with car, Nottingham, November 20 to November 27. Panel practice with midwifery —Box 8361, B.M.J.

Required immediately, reliable and experienced Locum for general practice. Car provided and dispenser kept.—Adams, Cooksditch, Faversham, Kent. Tel.: Fav. 2156.

St. George's Hospital, Morpeth. Locum Tenens Medical Officer required, from approximately the first week in October for at least four weeks. Knowledge of psychiatry desirable but not essential. Salary 10 to 12 guineas weekly, according to experience, with usual residential emoluments. Applications, stating age and relevant particulars, to be addressed to the Medical Superintendent

PARTNERSHIPS

WANTED

Experienced G.P., 36, married, four years' hospital experience, wants Partnership or Succession in three months. London suburb preferred. Capital available for house purchase.—Box 8319, B.M.J

MEDICAL POSTS

VACANT

Three Counties Mental Hospital, Arlesey, Beds. Applications are invited for the post of Laboratory Technician. Salary and conditions according to the recommendations of Joint Negotiating Committee. The appointment will be subject to the National Health Service (Superannuation) Regulations. Applications, with full particulars of qualifications and experience and accompanied by copies of recent testimonials, to the Medical Superintendent.

Wanted, Resident Medical Officer for Private Mental Home. Preferably single. Salary £750 with board and accommodation.—Chiswick House, Pinner, Middlesex.

Bristol Mental Hospitals Rese—Applications are invited for the **Research Worker.** Extensive modern biochemical or experimen methods, as applicable to researc is essential. The salary within the to £1,000 according to qualifications ence. Applications, to be accompa recent testimonials or names of th whom reference may be made, shou to the Medical Superintendent, Bris pital, Fishponds, Bristol, as soon

Croydon Group Hospital Manage—Applications are invited for appo **Senior Technicians** for Laborato General Hospital. Applicants mus perience in Biochemistry or Haem and conditions of service in accorda mendations of Joint Negotiating Medical Laboratory Technicians (£ £530 per annum). There is a shor accommodation in Croydon and candidates will be expected to of accommodation. Applications, stat ence and qualifications, together three referees, to be sent within appearance of this advertisement Paines, Secretary, Group Managem General Hospital, Croydon.

Opening in London for young su in Orthopaedics or has just taken —Box 8318, B.M.J.

Pontypridd and Rhondda Hospi Committee.—Applications are invi pointment of **Laboratory Technici** mittee's Rheumatism Clinic, Treal an inclusive salary of £360, risin crements of £15 to £435 per ann must hold the Associateship of Medical Laboratory Technology qualification. Forms of applic tions of appointment may be Medical Officer of Health, Ty Rhondda, by whom com eted be received as soon as pr ibl

PRACTI

FOR S

Australia (Victoria), 125 progressive agricultural tow age collected income £3,7 appointments. Price £3,250 order, all amenities incl kitchen, price £3,250. Details sound practices in S.E. Australia Allan Grant, 54, Collins Str Cables, "Allgra."

Southern Ireland, country town, Practice, about £750 per annum. 11 acres, all modern conveniences P8337, B.M.J.

Violet Town, Victoria, Australia Melbourne, on main road and railw lished Practice for Sale; gross t annum. Scope for improvement. 25s. per week. Equipment, car, a sale if required. Premium £500 Allen Grant, 54, Collins Street,

WANT D

Doctor, retired from own large Small Practice, Partnership, or oth work. Hampshire or Dorset. Goo uated house the essential.—Box P83

Experienced medical practitioner over practice and house of retiring preferably Lincs or Yorks, or Assist early succession.—Box P8339, B.M.J

N.H.S. Practice wanted by exp tioner, wife qualified. Succession wife or single practice. Purchas equipment. Greater London preferr B.M.J

EXCHANGE

Exchange. Attractive Practice in lent assured salary, free house, car could probably be exchanged for Practice and House (buy or rent) in immediately for details or interview B.M.J.

Experienced practitioner at prese large practice Midlands, desires Cha sion or partnership to practice anyw South-West Midlands.—Box P8309.

N.W. London doctor wishes to Ex of approx 4,000 units with excellent for sale, for practice in East Angli one man, or larger practice suitable —Box P8363, B.M.J.

PHARMACISTS, DIETITIANS, DISPENSER

VACANT

Dispenser wanted for firm of Central surgeries. Experience of ty —Dr. Kilner, 19 Angel Hill, Bury St

Qualified Dispenser required for practice, N. Wales.—Dr. Jones N. Wales

UNIVERSITY OF LONDON
BRITISH POSTGRADUATE MEDICAL FEDERATION

EFRESHER COURSES FOR GENERAL PRACTITIONERS, OCTOBER–DECEMBER, 1948

...ate	No. of Weeks	Subject	Hospital
...29	1	Obstetrics and Gynaecology	Lewisham L.C.C. Hospital
...5	1	Medicine	St. Alfege's L.C.C. Hospital, Greenwich
...2–27	1	General	Royal Sussex County Hospital, Brighton
...9–Dec. 11 ..	2	General	Royal Northern Hospital, Holloway Rd., N.7.

... 10 guineas for 2 weeks' course; 5 guineas for 1 week. Schemes of financial assistance are available, ...o certain conditions, for (a) demobilized general practitioners and (b) N.H.S. practitioners.
...lications for places and for further information should be made to the Secretary, British Postgraduate ...al Federation, 2, Gordon Square, W.C.1. They should state if the practitioner is applying under (a) above, or neither.

...ERSITY OF LIVERPOOL.—DEPARTMENT ...HILD HEALTH.—It is proposed to hold a ...me **REFRESHER COURSE** (clinical and ...) in Paediatrics, from November 8 to ...r. 27, 1948. The course will be primarily ... who intend to specialize in Paediatrics ... Health. The fee for the course will be ...s and the number of candidates will be ...20, with 15 as a minimum. Those wish... ...rol for the course should apply to the ... the Faculty of Medicine before October ...

UNIVERSITY OF LEEDS POSTGRADUATE COMMITTEE.—CLINICAL MEETINGS, open to general practitioners and others who may be interested, will be held on Tuesday afternoons, commencing October 5. The meetings will be held, unless otherwise announced, in the Instructional Block, Leeds General Infirmary, at 3.15 p.m. No fee will be charged. Copies of future programmes will be available at the meetings. Further information may be obtained from the Senior Administrative Officer, School of Medicine, Leeds, 2.

LECTURES

ROYAL COLLEGE OF SURGEONS OF ENGLAND
LECTURES IN SURGERY. OCTOBER, 1948

...ng LECTURES IN SURGERY will be delivered at the College in Lincoln's Inn Fields, ... at 5 p.m. on each day:

...R. GUY BLACKBURN	Traumatic Injuries of the Abdomen
...R. A. B. WALLACE	Treatment of Burns
...OF. F. H. BENTLEY	The Interpretation of Visceral Pain
... H. JACKSON BURROWS ..	Bone Graft Surgery
... F. S. COOKSEY	Rehabilitation and Surgery
... R. C. BROCK	Surgery of the Heart and Great Vessels
... J. R. LEARMONTH ..	The Pathological Physiology of Peripheral Arterial Disease
...DENIS BROWNE	Surgery of Congenital Deformities of the Extremities
...T. HOLMES SELLORS ..	Surgery of Pulmonary Tuberculosis
... W. SMITHERS	High Voltage X-rays in the Treatment of Malignant Tumours at a Depth
... PATERSON ROSS ..	Surgery of the Sympathetic Nervous System
...H. MITCHINER	Surgery of Sepsis

...le Course is £5 5s., or 10s. for one lecture.
...ers, and Fellows and Licentiates in Dental Surgery, of the College will be admitted ...n payment of a fee of £3 3s., or to one lecture on payment of 7s. 6d.
...panied by a cheque for £5 5s. or £3 3s., should be sent to the Secretary, Postgraduate ... Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

W. F. DAVIS, Secretary,
Postgraduate Education Committee.

EMPIRE RHEUMATISM COUNCIL

...n week-end course will be held at THE APOTHECARIES' HALL, BLACKFRIARS' LANE, QUEEN ...T, E.C.4 (Blackfriars' Tube Station), on Friday, Saturday, and Sunday, November 26, 27,

LECTURES

	FRIDAY, NOVEMBER 26	
	The Rheumatic Diseases—A Survey ..	W. S. C. Copeman, Esq., O.B.E., F.R.C.P.
	Gout	G. D. Kersley, Esq., F.R.C.P.
	SATURDAY, NOVEMBER 27	
	Spondylitis	F. Dudley Hart, Esq., M.R.C.P.
...-12.15 p.m.	Rheumatoid Arthritis	W. S. Tegner, Esq., M.R.C.P.
	Juvenile Rheumatism	R. E. Bonham-Carter, Esq., M.R.C.P.
	Fibrositis	Oswald Savage, Esq., O.B.E., M.R.C.P.
	Tea.	
...00 p.m.	Differential Diagnosis of Backache ..	J. H. Kellgren, Esq., F.R.C.S., M.R.C.P.
	SUNDAY, NOVEMBER 28	
	Physical Medicine in the Rheumatic Diseases	Hugh Burt, Esq., M.R.C.P.
...-12.15 p.m.	Orthopaedic Aspects of the Rheumatic Diseases	W. D. Coltart, Esq., F.R.C.S.

...or the course will be Two Guineas, limited to 100 entries to be received with remittance, at least ...fore, by the General Secretary, Empire Rheumatism Council, Tavistock House (N), Tavistock, ...ndon, W.C.1.

ROYAL COLLEGE OF SURGEONS OF ENGLAND
FACULTY OF ANAESTHETISTS

...RADUATE LECTURES AND TUTORIALS IN ANAESTHETICS. OCTOBER. 1948

LECTURES

...se of 45 Lectures in Anaesthetics will be given at the College from October 11 to October 29, ...l proposed to give three lectures daily (two in the morning and one in the late afternoon) from ... to Friday for a period of three consecutive weeks.
...e for the whole course is £15 15s., Fellows and Members of the College will be admitted on payment ...f £12 12s.
...mplete list of Lecturers and their subjects will be published in due course.
...losing date for applications is October 8, 1948.

TUTORIALS

...of Tutorials in Anaesthetics will also be held during the same period as the Lectures, and will ...n one-hourly periods commencing at 6.15 p.m.
...torial Class will be limited to ten postgraduate students.
...or the course is £9 9s., and applications must be received by October 1, 1948.

BASIC SCIENCES

...e of 72 Lectures in Anatomy, Applied Physiology, Pathology and Pharmacology is being held ...ege from October to December, 1948. Details may be obtained on application.
...tions, accompanied by a cheque for the appropriate fee, should be sent to the Secretary, Faculty ...sts, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

W. F. DAVIS, Secretary,
Faculty of Anaesthetists.

UNIVERSITY OF GLASGOW
CENTENARY OF THE BIRTH OF SIR WILLIAM MACEWEN

MACEWEN MEMORIAL LECTURE

The Macewen Memorial Lecture will be delivered by Professor Geoffrey Jefferson, F.R.S. (University of Manchester) in the Lecture Theatre, Chemistry Building, on Friday, October 1, at 3 p.m.

Subject: "The Contribution of Sir William Macewen to Neuro-Surgery and its Sequels." The Lecture is free and open without ticket to members of the University and to the public.

Lectures continued on page 28

ASSISTANTSHIPS

VACANT

Wanted, North Midlands, indoor Assistant, single, male or female. Experience not essential. Scot preferred.—Box 8003, B.M.J

Wanted, single Assistant to two partners in N.H.S. with own car preferred. Salary £800 all found, car allowance. Off duty hours by rota. Partnership if compatible after a period. Midlands.—Box 8313, B.M.J.

Wanted, Assistant with View to early Partnership, East Midlands market town. Receipts £6,637. N.H.S. over 4,000. Salary £700 plus car allowance.—Box 8314, B.M.J.

Wanted, Male Assistant, in pleasant South Coast town mixed practice. Car essential, allowance given. Furnished flat available. Send particulars.—Box 8349, B.M.J.

Wanted immediately, married Assistant. Salary good. Unfurnished accommodation. Irish preferred. London area. Must own car.—Box 8350, B.M.J.

Wanted, Part-time Woman Assistant, General Practice, North London.—Box 8303, B.M.J

Wanted, Assistant, single, industrial area, Monmouthshire, work light. Rooms with attendance and car provided. Salary by arrangement.—Box 8304, B.M.J.

Wanted, early October, Assistant to convalescent doctor near Manchester. Work light. Would suit someone reading higher qualification. Salary by arrangement.—Box 8305, B.M.J.

Wanted, Ophthalmic Assistant with View to Partnership, London. Tel.: Ken. 7683 after 8 p.m.—Box 8330, B.M.J.

Wanted, Indoor and Outdoor Assistants with or without View to Partnership, also Locums for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2

Wanted, Part-time Assistant (evening surgery) for Hackney practice.—Box 8373, B.M.J.

Assistant, general practice, Croydon, work light. Suit elderly man. £700, all found, increasing to suitable applicant. Comfortable accommodation.—Box 8327, B.M.J.

Assistant, general practice near London. Commencing £800, with accommodation and attendance Excellent prospects for energetic, newly-qualified man.—Box 8328, B.M.J.

Assistant, single, for mixed practice, live in, salary by arrangement, car allowance.—Apply Drs. Reid and Murray, Excelsior House, Bulwell, Nottingham. 'Phone, Bulwell 78436.

Assistant wanted, as soon as possible, for large semi-rural practice in attractive market town Eastern County. Keen on medicine. Salary £700, or by arrangement, plus £100 car allowance and spacious flat.—Apply Box 8329, B.M.J.

Assistant wanted for industrial practice in Leeds, secretary-nurse employed. Terms by arrangement. —Box 8351, B.M.J.

Assistant, single or married, wanted for steadily increasing practice with definite View to Partnership. Newly decorated modern house available, £800. Car allowance.—Box 8311, B.M.J

Assistant. Riverside suburb. Salary £700 per annum, car allowance £75 per annum. Good flat rent free.—Box 7662, B.M.J

Christian doctor, single and about 35, required as Assistant for a time or perhaps with View Partnership, London suburb. Many attractions.—Box 8006, B.M.J.

Ophthalmic Assistant with or without View.—Write Doctor, 38, Loughton Way, Buckhurst Hill (Buckhurst 4371.)

Urgently required, Assistant, single man preferred (Midlands). £800 rising to £1,000 per annum References essential.—Box 7990, B.M.J

WANTED

Wanted, Assistantship, especially with prospects of Succession, country or English country town, by Cantab, single, twelve years experience of general practice. Free mid-October.—Box 8021 B.M.J.

Wanted, Assistantship with or without View, M.B., B.Ch., married, no family, aged 25. Experience in G.P. Car and furnished accommodation essential.—Box 8315, B.M.J.

Wanted, Assistantship with View Partnership or Succession, Newcastle district or Northumberland, by young energetic, married Durham graduate, wide experience hospital, G.P., keen obstetrics. Car owner.—Box 8352, B.M.J.

Wanted, Assistantship. S.E. Scotland preferred. Married. Returned from part-time general practice abroad Previously hospital and G.P., locum experience in U.K.—Box 8336, B.M.J.

Wanted, Assistantship with View, M.B., two years H.S. appointments, two years H.P., one year G.P., unmarried, aged 34.—Box 8019, B.M.J

Assistantships continued on page 28

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66

Practitioner enters upon its eightieth year this month. The first two issues for 1948 will contain
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JANUARY - - - DIET AND NUTRITION
FEBRUARY - - - VIRUS DISEASES

ew series of articles begins in the January issue and will continue throughout 1948 under
tiue of

CURRENT THERAPEUTICS

first articles in the series will deal with Folic Acid, Curare, BAL, and the newer analgesics. Th
ular feature "Revision Corner" will continue throughout 1948.

ith the appointment of Dr. Robert M. Stecher, M.D., as associate editor of *The Practitioner*
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he Annual Subscription is £2 2s., post free. Orders and remittances should be sent to

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uted in U.S.A., Canada, South and Central America by Charles C Thomas, Publisher, 301–327 East Lawrence
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TRAUMATIC SHIN UL

HEALED WITH JELONET, VISCOPAST PARAGON SPONGE RUBBER AND ELASTO

Fig. 1.

Fig. 2.

Case History

G.H.H. Aged 38. Dock Labourer. Injured his left shin whilst at work. On attending the clinic he had a deep traumatic ulcer surrounded by an inflamed area of skin . . . no varicose veins. (Fig. 1.)

Treatment. *August 9th,* 1946.—Jelonet was applied to cover the ulcer and inflamed area, and a pad of cotton-wool to cover the ulcer only. The leg was bandaged from toes to knee with Viscopaste. (Fig. 2.)

August 23rd, 1946.—The inflamed area was redressed with Jelonet covered by strips of Ichthopaste. A well-bevelled adhesive sponge rubber pad was applied to cover the ulcer, and the leg firmly bandaged with Elastoplast.

Sept. 13th, 1946.—After liberally painting with calamine in oil, covered with Ichthopaste, a large pad of cotton-wool was placed to cover the ulcer and the leg bandaged with Elastoplast.

October 4th, 1946—Ulcer healed. (Fig. 3.)

October 18th, 1946.—Patient discharged to wor

Comment. Although initial bandaging with resulted in marked improvement, there was po pressure as was evident on August 23rd when ulcer was reduced in size, there was pronoun tissue. This resolved rapidly with concentrat beneath sponge rubber with the additional support of Elastoplast. (August 23rd and September 13th.)

Details and illustrations above are of an actual case. T. J. Smith & Nephew, Ltd., Manufacturers of Jelonet, Viscopaste, Ichthopaste and Elastoplast are privileged to publish this instance, typical of many, in which their products have been used with success, in the belief that such authentic records will be of general interest.

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PENICILLIN IN SUBACUTE BACTERIAL ENDOCARDITIS

REPORT TO THE MEDICAL RESEARCH COUNCIL ON 269 PATIENTS TREATED IN 14 CENTRES APPOINTED BY THE PENICILLIN CLINICAL TRIALS COMMITTEE

BY

Professor RONALD V. CHRISTIE, M.D., D.Sc., F.R.C.P.
Secretary of the Committee

Between February, 1945, and March, 1946, 269 patients suffering from subacute bacterial endocarditis were treated in the 14 centres appointed by the Medical Research Council in Belfast, Birmingham, Bristol, Cardiff, Edinburgh, Glasgow, Leeds, Liverpool, London (St. Mary's, Middlesex, and St. Bartholomew's Hospitals), Manchester, Newcastle-upon-Tyne, and Sheffield. The patients were unselected, and were investigated and treated according to a co-ordinated plan.

Results in Previously Untreated Cases

When this investigation was first planned not only was penicillin scarce but very few cases of recovery had been described, and for these reasons amounts of penicillin were used which are now known to be inadequate.

The first group of 52 patients received a total of 5 million units, but the daily dose was varied (Table I). This experiment clearly showed that, within these limits of dosage, the duration of treatment was of greater importance than the amount of penicillin given daily—a conclusion which may now be a commonplace but which at that time was of some importance.

TABLE I.—*Patients Receiving a Total of 5 Million Units of Penicillin, Given in Courses of 5, 10, and 20 Days. (No case had previously received penicillin)*

Dose	Total No. Treated	Died with Infection Apparently Controlled	Died with Infection Uncontrolled	Relapsed	"Cured"	Average Follow-up (Days)	Relapsed or Died Infected
1 mega unit for 5 days ..	18	3	2	13	0	—	83%
0·5 mega unit for 10 days ..	16	4	0	8	25%	665	50%
0·25 mega unit for 20 days	18	6	0	4	44%	579	22%

In the next group of 158 patients the duration of treatment was established at 28 days, but the daily dose was varied (Table II). Of 17 patients who received 100,000 units a day for 28 days, 7 (41%) relapsed or died infected. Of 83 patients receiving 250,000 units a day for 28 days, 13 (16%) relapsed or died infected. Of 58 patients who received 500,000 units a day for 28 days, 4 (6.9%) relapsed or died infected. Only occasionally can failure be explained on the basis of a highly resistant organism; in the four failures referred to above the coefficient of resistance expressed as a multiple of that of the Oxford staphylococcus was 2, 2, 6, and 32.

TABLE II.—*Patients Treated for 28 Days with a Daily Dose of 0.1, 0.25, and 0.5 Mega Unit. (No case had previously received penicillin)*

Dose	Total No. Treated	Died with Infection Apparently Controlled	Died with Infection Uncontrolled	Relapsed	"Cured"	Average Follow-up (Days)	Relapsed or Died Infected
0·1 mega unit a day ..	17	4	0	7	35%	579	41%
0·25 mega unit a day ..	83	30	2	11	48%	447	16%
0·5 mega unit a day ..	58	22	3	1	55%	423	6·9%

Twenty-two previously untreated patients received other systems of dosage, and the results in this group, although not instructive from a therapeutic point of view, are shown in Table III.

TABLE III.—*Patients Receiving Courses not Included in Tables I or II. (No case had previously received penicillin)*

Dose	Total	Died with Infection Apparently Controlled	Died with Infection Uncontrolled	Relapsed	"Cured"	Average Follow-up (Days)
0·25 mega unit a day for from 5 to 6 weeks	3			1	2	426
0·5 mega unit for 21 days	11	1		2	8	650
0·5 mega unit for 5 weeks	4	2			2	341
0·5 mega unit for 2 weeks, increased to 1 mega unit for 2 weeks	4		1		3	395

Except in a few cases penicillin was given either by three-hourly injection or by continuous intramuscular infusion. No difference in the therapeutic results can be demonstrated, and opinion on the merits of these two methods is divided. In some cases the dosage given was only approximately as stated; these exceptions were indicated in a previous report in the *British Medical Journal* of March 16, 1946 (p. 381).

Relapses

Patients who have relapsed are in a separate category with regard to both treatment and prognosis. Of 42 patients who had relapsed after a long course of treatment 59% again relapsed or died infected (Table IV): it can be calculated from Tables I, II, and III that had these patients not previously been treated unsuccessfully only 14% would have been expected to relapse or die infected. Patients who relapse after a short course of penicillin also appear to be slightly more resistant to subsequent treatment (Table V).

The conclusion is justified that if a patient does not respond to a course of penicillin he is less likely to respond to a second course. This may mean that resistance of the

TABLE IV.—*Patients Previously Treated with a Course of Penicillin, of 20 Days or More*

Dose	Total No. Treated	Died with Infection Apparently Controlled	Died with Infection Uncontrolled	Relapsed	"Cured"	Average Follow-up (Days)	Relapsed or Died Infected
0·5 mega unit for 10 days ..	2			2			100%
0·25 mega unit for 20 days	5		4		1	540	80%
0·25 mega unit for 28 days	10		3	5	1	551	80%
0·5 mega unit for 20 days ..	4		3		1	394	75%
0·5 mega unit for 28 days ..	17	4	4	3	6	411	41%
0·5 mega unit for 6–8 weeks	4	2	1		1	270	25%
Total	42	7	15	10	10		59%
Expected numbers from Tables I, II, and III		14·1	1·3	4·5	22		14%

TABLE V.—*Patients Previously Treated with only a Short Course of Penicillin, of 5 to 10 Days' Duration*

Dose	Total No. Treated	Died with Infection Apparently Controlled	Died with Infection Uncontrolled	Relapsed	"Cured"	Average Follow-up (Days)	Relapsed or Died Infected
1 mega unit for 5 days	1			1			
0·5 mega unit for 10 days ..	2				2	631	
0·1 mega unit for 28 days ..	4		1	2	1	607	75%
0·25 mega unit for 20 days	8	3	1	1	3	634	25%
0·25 mega unit for 28 days	10		1	3	6	544	40%
0·5 mega unit for 28 days ..	10	3	2		5	465	20%
Total	35	6	5	7	17		34%
Expected numbers from Tables I, II, and III		11·7	0·9	6·6	15·8		21%

organism to penicillin has been acquired; but that is probably seldom an important factor, since in 50 patients that relapsed and were treated again an increase in resistance was observed only in 12—in five the increase was less than threefold, and in seven it was more than threefold—and in three the resistance decreased. Another possibility is that these patients belong to a selected group of those who are naturally resistant to treatment. The nature of this resistance is not known, but it is conceivable that in some individuals the infecting organisms are so buried in avascular tissue that the drug does not reach them in lethal concentration. Whatever may be the cause, it is clear that patients who have relapsed should be given a more generous system of dosage. A course of 2 million units a day for eight weeks is suggested, but it is possible that even larger doses should be given.

Relapses seldom occur more than a month after treatment (Table VI), but a long period of follow-up shows that

TABLE VI.—*Relapses after Treatment*

Interval between Treatment and Relapse	Relapse after Treatment Lasting 20 Days or More	Relapse after Treatment Lasting 10 Days or Less
0–10 days	20	19
11–20 "	14	3
21–30 "	7	4
31–40 "	—	1
41–50 "	3	—
51–60 "	2	1
Over 60 "	3*	1†

* Relapsed after 130, 250, and 390 days.
† Reinfected with different organisms after 161 days.

a small risk remains even after a year or more of good health. Whether these delayed relapses are due to reinfection or are an indication of dormant infection in the heart valves is uncertain.

The Infecting Organism

In 245 patients the infecting organism was a *Streptococcus viridans*, in 17 a non-haemolytic streptococcus, in 3 a staphylococcus, in 2 a micro-aerophilic streptococcus, in one *Haemophilus influenzae*, and in one the organism was not identified. Patients from whom a positive blood culture was not obtained were excluded from this series. The relationship of the sensitivity of the infecting organisms to the results of treatment is most interesting (Table VII).

TABLE VII.—*Comparison of the Results of Treatment with the Sensitivity of the Organism to Penicillin. (Resistance expressed as a multiple of the resistance of the standard Oxford staphylococcus.) None of the Patients had Previously been Given a Long Course of Treatment*

Dose		Coefficient of Resistance: 1 or Less	2	3–6	8–16	32 or More	Not Known	Total
0·1 mega unit a day for 28 days	Died controlled	3	1					
	Died uncontrolled					1		
	Relapsed ..	7	1				1	
	"Cured" ..	6	1					
0.25 mega unit a day for 20 days	Died controlled	5	1	2			1	
	Died uncontrolled				1			
	Relapsed ..	5						
	"Cured" ..	6	2	1			2	
0.25 mega unit a day for 28 days	Died controlled	17	7	3			3	
	Died uncontrolled	1		2				
	Relapsed ..	11	1	1			1	
	"Cured" ..	28	10	4	1		3	
0·5 mega unit a day for 20 days	Died controlled		1		1			
	Died uncontrolled							
	Relapsed ..		1	1				
	"Cured" ..	4	2	1		1		
0.5 mega unit a day for 28 days	Died controlled	11	6	2	1		5	
	Died uncontrolled		2	1	1	1		
	Relapsed ..		1					
	"Cured" ..	23	7	3	2	1	1	
All doses	Died controlled	36	16	7	2	—	9	70
	Died uncontrolled	1	2	3	2	2	—	10
	Relapsed ..	23	4	2	—	—	2	31
	"Cured" ..	67	22	9	3	2	6	109
Total		127	44	21	7	4	17	220
Relapsed or died infected ..		19%	13·6%	24%	28%	50%	12·1%	18·7%

The percentage of patients who relapsed or died uncontrolled did not appear to be affected by the resistance of the organism over a considerable range. However, our experience during the past year and that of others suggests that when the coefficient of resistance is more than about 8, daily doses larger than 500,000 units should be given, probably over a period longer than 28 days. The system of dosage adopted must depend on the resistance of the organism, and recently we have used as much as 40 million units a day. Fortunately the incidence of organisms more than eight times as resistant as the Oxford staphylococcus is low. The majority were as sensitive to penicillin as the Oxford staphylococcus, sometimes more sensitive; and Table VII clearly shows that even this degree of sensitivity is no indication for a reduction in dosage.

Foci of Infection.—It is generally accepted that every effort should be made to remove foci of infection, particularly in the teeth, and this should be done while the patients are receiving penicillin. There is no proof in this series of the efficacy of this procedure, but so long as any uncertainty exists as to the likelihood of reinfection it seems reasonable to assume that foci of infection should be eradicated.

Causes of Death

In this series 131 patients, or 49%, have died, but many of these received what would now be considered inadequate treatment. Of those whose infection was apparently controlled about 35% have subsequently died of various complications. The majority of deaths occurred either during treatment or soon after treatment was completed (Table VIII). Heart failure caused 40% of the deaths, and was a major cause in another 16% (Table IX). Comparatively few died of uraemia, emboli, or haemorrhage, and in 19% the cause of death was mixed or uncertain. The

TABLE VIII.—*Interval between Treatment and Death*

	Died with Infection Apparently Controlled	Died with Infection Not Controlled	Total
Died during treatment ..	29	8	37
" 0– 49 days after ..	32	19	51
" 50– 99 " " ..	15	4	19
" 100–149 " " ..	8	3	11
" 150–199 " " ..	1	2	3
" 200–249 " " ..	3	1	4
" 250–500 " " ..	6	0	6

TABLE IX.—*Cause of Death*

	Died During Treatment	Died After Treatment	Percentage of Total Deaths
Heart failure	7	45	40
Heart failure and other causes	7	14	16
Uraemia	3	5	6
Emboli	6	9	11
Haemorrhage	4	6	8
Mixed or uncertain	10	15	19
Total	37	94	100

remarkably high death rate from heart failure is of considerable interest and will be referred to later.

The heart valves were examined at necropsy in 47 cases. In 39 of these infection had apparently been controlled by penicillin, and yet what appeared to be living organisms were seen in the heart valves of 13; organisms of uncertain viability were seen in 4; and organisms which appeared to be dead in 9. In the remaining 8 patients infection was not clinically controlled; in 6 of these, apparently living organisms were seen in the heart valves, and in 2 no organisms could be demonstrated. It would be unwise to draw definite conclusions from these results until further evidence of the viability of the organisms is forthcoming. Nevertheless it is disconcerting, to say the least, to find apparently living organisms in the heart valves of one-third of patients in whom, according to the usual clinical criteria, infection had been controlled.

Factors in Prognosis

Death from heart failure and other complications is now a much greater hazard to the patient than the risk of failure to respond to penicillin, and it is therefore of clinical importance as well as of academic interest to estimate this hazard when treatment is started. Tables X–XIII show the significance of certain clinical observations made before treatment began.

The nature of the primary cardiac lesion (Table X) appeared to be of slight significance; the highest death

TABLE X.—*Relation of Primary Cardiac Lesion to Prognosis*

Primary Cardiac Lesion		Total No.	"Cured"	Died	
				No.	%
Rheumatic	Mitral	120	69	51	43·0
	Aortic	29*	15	14	48·5
	Mitral and aortic ..	90	37	53	59·0
	Unspecified	1	1	—	—
	Total	240	122	118	49·0
Congenital	Septal defect	12	8	4	33·0
	Others	17	8	9†	53·0
	Total	29	16	13	45·0

* Including 10 patients in whom a rheumatic history was not given: 5 of these died.
† Including 5 patients with bicuspid aortic valves.

rate was found in combined mitral and aortic lesions (59%), and the lowest in septal defects (33%). Four patients had a patent ductus arteriosus; three of these recovered and one died with the infection uncontrolled. There were 5 patients with mitral stenosis and auricular fibrillation, and one of these died.

Evidence of heart failure (Table XI) is of considerable importance. Of those with no evidence of heart failure

TABLE XI.—*Relation of Heart Failure to Prognosis*

Degree of Heart Failure Before Treatment	Total No.	"Cured"	Died				Deaths (%)
			During Treatment	Within 50 days	Within 100 days	After 100 days	
None	201	128	20	23	9	21	36
Moderate ..	40	10	8	16	6	—	75
Severe	28	0	9	12	4	3	100
Total ..	269	138	37	51	19	24	49

36.4% died, and of those with moderate heart failure 75% died. The 28 patients who had severe heart failure when treatment was started all died.

The duration of infection (Table XII) is also significant: of those recently infected 34% died, while of those infected for six months or more over 60% died.

TABLE XII.—*Relation of Duration of Infection to Prognosis*

Duration of Infection	Total	"Cured"	Died	
			No.	%
0– 9 weeks	94	62	32	34
10–19 "	91	45	46	51
20–29 "	59	22	37	63
30–39 "	13	4	9	69
Over 40 "	12	5	7	58
Total	269	138	131	49

The state of nutrition of the patient (Table XIII) was of surprising importance. The questionary filled in before treatment was started gave a choice of four categories.

TABLE XIII.—*Relation of the State of Nutrition to Prognosis*

State of Nutrition	Total No.	"Cured"	Died During Treatment	Died After Treatment	Total Died	
					No.	%
Good	102	71	11	20	31	30
Poor	125	56	14	55	69	55
Bad	26	9	8	9	17	65
Emaciated ..	16	2	4	10	14	87·5
Totals ..	269	138	37	94	131	49

Of those in a "good" state of nutrition 30% died; when nutrition was "poor" 55% died; when it was "bad" 65% died; and only 2 out of 16 "emaciated" patients recovered—a mortality rate of 87.5%. The significance of nutrition when analysed appears to be independent of the duration of infection or of the incidence of heart failure. For instance, there were 201 patients without evidence of heart failure: in 90 of them nutrition was good and 26% died, in 101 nutrition was poor or bad and 41% died, and of 10 who were emaciated 80% died. These results emphasize the need for an adequate calorie intake as with other prolonged fevers.

The ages of these patients ranged from 7 to 67, with a mean of 31 years (S.D. ± 11.9). Age was of doubtful prognostic significance except in the group over 50. In those under 50 the death rate was 46%, and in 26 patients over 50 it was 69%.

Discussion

It is not within the scope of this report to review the literature on the treatment of subacute bacterial endocarditis, and the emphasis on our own results is not due to any lack of appreciation of the pioneer work in America on the use of penicillin in this disease. Our own series is the largest yet published, and our conclusions regarding treatment are in accord with those of most who have worked in this field.

Although penicillin can now be expected to control the infection in about 90% of patients, a closer inspection of our results shows several features which are far from satisfactory and which reveal our ignorance of several important aspects of this disease: (*a*) In the majority of patients who relapse no good reason can be given for the failure of penicillin; in only a few could it be explained on the basis of a highly resistant organism. (*b*) The remarkably high incidence of heart failure, both during and soon after apparently effective treatment, is not explained. (*c*) The presence in the heart valves of what appeared to be living organisms in about one-third of patients who died after apparently effective treatment suggests that dormant infection may be an important sequel of treatment with penicillin.

For these and other reasons we believe that further intensive research on this disease is indicated, with particular emphasis on higher dosage and on careful analysis of post-mortem material. The following centres are continuing this work, and it is hoped that an adequate number of patients will be referred to them: Belfast (Queen's University, Institute of Pathology). Birmingham (Professor Wilkinson, Queen Elizabeth Hospital). Bristol (Professor Bruce Perry, Bristol Royal Infirmary). Edinburgh (Dr. A. R. Gilchrist, Royal Infirmary). London (Sir Alexander Fleming, St. Mary's Hospital; Professor Christie, St. Bartholomew's Hospital; Dr. G. E. S. Ward, Middlesex Hospital). Manchester (Professor Crighton Bramwell, Royal Infirmary). Leeds (General Infirmary).

Conclusions

The administration of 500,000 units of penicillin a day for 28 days can be expected to control the infection in about 90% of patients suffering from subacute bacterial endocarditis, but about 35% of these die of heart failure and other complications.

Larger doses should be given for a longer period of time to patients who relapse and to patients in whom the infecting organism is more than eight times as resistant as the Oxford staphylococcus.

Of the relapses 90% occurred within a month of treatment, but a danger of relapse persists after a year or more of good health.

Evidence of heart failure or of poor nutrition is of great importance in prognosis. The duration of infection and the nature of the primary cardiac lesion are also of some significance.

What appear to be viable organisms are not infrequently found in the heart valves of those who have died after the infection has apparently been controlled.

This report is made on behalf of a large number of clinicians and bacteriologists who have taken part in this investigation. Dr. V. E. Cates and Dr. P. J. N. Cox have also assisted in the analysis of results. Mr. J. A. Heady and Professor Bradford Hill have given valuable help and advice on statistical analysis.

One of the special duties of the local health department is to disinfest verminous properties and persons. *Insect Pests*, by W. C. Harvey and H. Hill (2nd ed., pp. 347, 14s.; H. K. Lewis and Co., London, 1947), is a useful handbook for the medical officer or sanitary inspector, particularly for its account of practical procedure and legislative control. The biological data about the various pests form the weakest section of the book; there are also some errors and misspelt specific names. The quality of the illustrations varies: about half are photographs which, for such difficult subjects, are fairly good; the rest are drawings and are rather poor. The authors have enlarged this edition to include information about mosquitoes and moths (clothes moths), which for some mysterious reason they discuss in the same chapter. There is an informative chapter on the new insecticides, such as D.D.T., and the authors have taken pains to describe the practical applications of these materials.

INTRAVENOUS ALIMENTATION*

BY

H. E. MAGEE, M.B., D.Sc.

The proper functioning of the body in all or any of its parts demands a sufficiency of all essential nutrients. I mention this obvious fact merely for emphasis. When injury or disease of an incapacitating degree occurs nutrition is nearly always interfered with and malnutrition may be said to have begun. The two main causes are: (*a*) the direct effect of the disease or injury leading to destruction of tissues and loss of nitrogen, and (*b*) inability (or disinclination) to take and retain food. If destruction of tissue continues unchecked malnutrition becomes progressive and a vicious circle begins; the disease causes digestive upsets or anorexia, or both, which in turn aggravate the disease. The clinician then has on his hands the original diseased state complicated by starvation or semi-starvation. He will attempt to break the vicious circle by removing the cause of the tissue destruction or by checking it, and he will probably try to supply nutrients to the tissues so as to combat the malnutrition and assist the body to overcome the primary condition. In chronic conditions, too, these considerations are relevant, and superadded infections, bed sores, or hypostatic pneumonia may develop and make further contribution to the vicious circle.

By malnutrition I mean derangement of the physiological processes concerned in the supply of essential nutrients in sufficient amounts to any and every part of the body and with their metabolism. Although it includes in the broad sense the effects of excess of some or all nutrients, such considerations are not germane to this paper, and I therefore restrict the meaning of the term to the effects of failure of all nutrients or of some to reach the tissues in sufficient quantities. Malnutrition in this sense might be caused by inability to swallow food—e.g., in stenosis of the oesophagus and comatose states; by inability to retain and digest food—e.g., in cyclic vomiting; by failure of absorption—e.g., in persistent diarrhoea. In infective states of long duration, happily less common now than before the introduction of the sulphonamide drugs and penicillin, malnutrition is a prominent feature, partly because of anorexia and partly because of impaired digestion and assimilation; and if stupor and the "typhoid state" supervene inanition becomes absolute and a fatal issue is a matter of time. If the clinician were able to supply nutrients to the body, not merely to stave off starvation but also to supply the elements to reconstruct the damaged tissues and to form antibodies, the outlook would at once be transformed.

Thanks to researches in recent years, we are now able by means of intravenous alimentation to meet such situations with much greater confidence than formerly. Hydrolysates of protein suitable for intravenous use were first prepared about seven or eight years ago. Before that time intravenous alimentation was confined to the use of saline and glucose solutions, the value of which is strictly limited because of the absence of protein.

Protein Requirements

In the conditions we have been considering it is protein that is specially required.

Metabolizable Proteins.—The intestinal villi cannot absorb proteins until they have been hydrolysed by digestion

* Substance of a lecture given to the North of England Branch of the British Medical Association on May 8, 1947.

to amino-acids and peptides. The body is intolerant of foreign proteins; and if they get into the blood they cause reactions of an anaphylactic type. Human blood proteins can, however, be given by vein with impunity, and there is evidence, provided mainly by Madden and Whipple (1940), that blood proteins can supply the "building stones" required for the construction of the body's tissues. For long it was assumed that the amino-acids, after being absorbed, went via the portal vein to the liver, where those not wanted by the body were de-aminized and the non-nitrogenous residue used for energy, while those required for growth or repair by any organ or tissue were taken up from the general circulation. Whipple, on the basis of much experimental evidence, has advanced an attractive theory about the fate of absorbed amino-acids (and peptides). It is that (*a*) the amino-acids are changed, mainly in the liver, into plasma proteins; (*b*) there is a constant ebb and flow between plasma and tissue proteins; (*c*) in the tissues there is a reserve store of protein for emergency use; and (*d*) normally a state of dynamic equilibrium exists between the plasma proteins, the reserve proteins, and those ingested.

Blood Proteins.—It would follow from Whipple's theory that we have had, since blood transfusion became perfected, a means of supplying by vein all the proteins the body requires; but it is doubtful if supplies of human blood available, or likely to be available in the near future, would suffice for the very many uses to which human plasma could be put in intravenous alimentation. Moreover, we do not know whether plasma proteins can be used for energy purposes. As I point out later, a large proportion of the energy needs of the patient treated by intravenous alimentation must, in the present state of knowledge, come from the proteins injected. The use of plasma is therefore likely to be confined to the purposes for which it was originally intended—namely, to combat shock and the effects of haemorrhage and of certain diseases.

Protein Hydrolysates.—Loewi in 1902 was evidently the first to show that nitrogen equilibrium and weight could be maintained by administering protein digests by mouth. He fed dogs on pancreatic digests of protein, plus starch and fat. In 1913 Henriques and Andersen kept goats in N and weight equilibrium for twenty days with intravenous protein digests, sugar, and salts. In 1938 Rose showed that ten of the thirty or so known amino-acids, given by mouth as the only source of N, sufficed for maintenance of N balance and weight in rats. The practical significance of these findings did not become apparent until Elman and Weiner (1939) reported the successful administration of protein digests by vein to human patients. Since then increasing attention has been given to the subject, and there are at present on the market American and British hydrolysates of proteins, which can be given to human patients day after day in substantial quantities without reaction and often with striking success. The subject has been reviewed by Elman (1944), Cuthbertson (1944), and Gaunt (1944).

Hydrolysis of protein can be effected by acids or by enzymes, but enzymic preparations have been found to be the more successful. The earlier preparations often provoked reactions which were caused, as animal experiments showed, either by toxic substances produced by bacteria or by large polypeptide aggregates. The enzymic preparations now used very extensively in North America seem to be practically free from such risks and less prone than acid digests to cause thrombosis. An enzymic preparation made in this country, and at present being submitted to extensive trial under M.R.C. auspices, appears also to be giving satisfactory results, but further experience must be gained before its full therapeutic value can be stated.

Amino-Acids

Madden and Whipple (1946) have done much experimental work on dogs to ascertain whether solutions of pure amino-acids given parenterally could maintain the animals in N equilibrium. The work of Rose (1938), showing that only ten amino-acids are essential, simplified the trials of Whipple's school. He was able to secure substantial quantities of these amino-acids, most of them synthetically prepared, and showed that, when given by mouth, skin, vein, or peritoneum along with glucose, they sufficed for N equilibrium, but weight was not wholly maintained. Whipple, when I saw him in his laboratory in October, 1946, expressed the opinion that another protein element, perhaps a peptide, is essential for health, and it may well be the strepogenin of Woolley (1946); I will take this up later.

All synthesized amino-acids are in racemic form—i.e., a mixture of the natural and unnatural isomers. The animal body can make use of only the natural isomers, and the unnatural forms, which Madden and Whipple (1946) and Madden *et al.* (1946) found to be non-toxic to man, however administered, are excreted unchanged by the urine. The ten essential amino-acids are: threonine, valine, leucine, isoleucine, lysine, tryptophan, phenylalanine, methionine, histidine, and arginine. The use of mixtures of these on an extensive scale is out of the question; they are difficult and very costly to manufacture.

Rose *et al.* (1942, 1943), who maintained young men for several weeks on a diet of which the N was in the form of amino-acids, are of the opinion that arginine and histidine are less essential for man than for the other animals tested. Madden, Whipple, *et al.* (1945) have always incorporated glycine in the amino-acid mixture given to human patients because this seems to make it better tolerated. They have reported the maintenance of, and even gains in, weight of several patients suffering from various diseases with mixtures of the ten essentials and glycine given by vein, skin, or mouth, plus small amounts (about 7 g.) of protein by mouth. It may well be that the protein consumed by mouth filled the part of strepogenin in the animal experiments. One patient suffering from ulcerative colitis was kept going in this way for 100 days, during which a gain in weight of 11 kg. occurred (Madden *et al.*, 1946).

Strepogenin.—Woolley (1946) found that a peptide which he isolated from certain crystalline proteins, including insulin, and which is essential for the growth of haemolytic streptococci, is necessary also for the growth of mice in addition to the ten essential amino-acids plus glycine. He called the peptide "strepogenin." Strepogenin is present in enzymic hydrolysates but not in acid ones.

Urinary Leakage after Injections

Whipple and his colleagues found that, soon after giving amino-acids intravenously, substantial amounts were rapidly excreted in the urine; the excretion was less when they were given by the skin and least by mouth. Clinicians here and in America have found that large amounts of N are lost in the urine in the first half-hour or so after giving hydrolysates by vein. The losses can be detected even by the appearance and smell of the urine. This raises the important question whether, in normal absorption from the intestine, amino-acids undergo any change in physical or chemical properties in passing through the intestinal wall and the liver. It may be that the epithelium

renders the amino-acids more easily metabolized or convertible into plasma proteins. Kotschneff (1926) claims to have found in dogs an increase in polypeptides in the portal vein during absorption of protein meals and of amino-acids. The findings of Madden and Whipple (1946), showing that amino-acids given orally result in better production of blood proteins than when given by vein, support Kotschneff. He used the technique of London (1927), which enables blood to be drawn from the deep blood vessels in unanaesthetized animals. Analysis of blood samples from the portal and hepatic veins of dogs before and after protein meals by modern biochemical methods would be worth while.

There is an important difference between the routes followed by amino-acids absorbed in the ordinary way and by intravenously injected amino-acids or hydrolysates. Normally, of course, all the amino-acids pass via the portal vein to the liver, and, as we have seen, the great bulk of them are apparently changed into polypeptides and proteins. Small amounts of amino-acids are, however, found in the general circulation; but evidently not in such high concentrations as after injections of amino-acids or protein digests. The injected hydrolysates go in the venous blood to the right heart, the lungs, the left heart, and thence in the arterial blood all over the body. If, according to the older theory, the amino-acids were straightway used by the tissues of the body, leakage by the kidney would probably not be as great as it is, but if they must first be changed into blood proteins by the liver, according to Whipple's view, then the dispersal of the material through the circulation would make the necessary transformation in the liver and removal of amino-acids from the blood a very gradual process. The kidney threshold for the separate amino-acids may thus be exceeded. This, it seems to me, is the main reason for the losses of N by the kidney after intravenous infusions. There are clearly many gaps in our knowledge, and it is important that steps should be taken to fill them.

Clinical Experiences

Notwithstanding our lack of knowledge, there is no doubt that protein hydrolysates have provided much success, even where their use has been very limited, as in this country. Very few cases have, however, been published. Two interesting ones came under my observation (Magee, 1946). Both were cases of homologous serum jaundice and were *in extremis* before treatment began; the response and recovery were spectacular. They were given 5% acid hydrolysate in amounts up to 1,000 ml. in twenty-four hours (50 g. of protein and 200 calories) at the rate of 500 ml. in about three hours. The hydrolysates were usually preceded and sometimes followed by 500 ml. of 5% glucose given in amounts up to 1,600 ml. (320 calories) in 24 hours. The rate of administration in North America varies from 350 to 600 ml. an hour of a 5% solution each of digest and glucose, and about 4 litres is apparently the maximum that can be given with impunity in twenty-four hours (200 g. of protein and 1,600 calories). Experience there indicates that it would be difficult to exceed this amount because of the care and attention required for the infusions and because of the risk of reactions and extensive thrombosis.

The conditions in which protein hydrolysates have been used with success include hepatitis, injury or disease of the bowel, intestinal obstruction, severe typhoid state, enteritis, colitis, severe burns, cyclic vomiting, peptic ulcers, and after operations. The most striking case I know of was reported by Brunschwig *et al.* (1945). The patient was kept alive for eight weeks entirely by venous infusions of protein hydrolysate plus glucose; and during this time he had two severe operations—one for removal of a tumour and the other a bowel resection. Brunschwig, when I saw him in October, 1946, informed me that the man was enjoying a normal life about two years after his discharge from hospital.

Thrombosis

Thrombosis has occurred in every case treated with acid preparations that I know of in this country, but it would seem that it is less likely to occur with enzymic preparations. Although they have rarely reported thrombosis in their papers I found that the Americans have also been bothered with it. Brunschwig told me that in his famous case so many superficial veins were affected that he had difficulty in giving injections towards the end of the treatment. The Americans are now combating this complication with fair success by using different veins and giving no more than 500 ml. at a time by the same vein. Joliffe showed me in a New York hospital a novel method of infusion in an emaciated patient—through a cannula tied into a vein. He treated this patient with blood, then protein hydrolysate for a week, and later with a 25% solution of albumin. The improvement in the patient was remarkable. She had had a large intestinal resection and was in desperate plight before the treatment was started.

Energy Requirements

The energy requirement of an adult male confined to bed is probably not much less than 2,000 calories daily, and may be 2,400 or more in febrile states. If the maximum we can give by vein is substantially less than this, then we run the risk of the hydrolysates being used largely for energy purposes, so that nothing would be left over for reconstruction of damaged tissues. It is to avoid this that glucose is given immediately before or in solution with hydrolysates. To what extent this succeeds is unknown, but the question would not arise if we were able completely to satisfy the energy needs from non-protein sources and have, say, 70 g. of protein for reconstruction. This cannot be done with any combination of hydrolysates and glucose because stronger solutions are excluded owing to the risk of extensive thrombosis and losses via the kidneys, and with solutions of the present strengths the bulk of fluid which would have to be given would be too great.

Fats

As we have seen, the maximum energy we can hope to give by vein day after day is only 1,600—i.e., 400–800 calories less than requirements. There can be little doubt, therefore, that a large proportion, maybe all in many cases, of the injected hydrolysate is oxidized for energy, thus frustrating its primary purpose—namely, tissue reconstruction. Now that we have succeeded in making digests of proved value on a commercial scale, the problem remaining to be solved is how to "protect" the protein hydrolysates by sufficient non-protein energy-giving materials so that the bulk of the amino-acids and peptides will be spared for tissue-building. To do this we would require to give 2,000 calories or more a day in non-protein form.

At present we have no means of giving fats and are therefore restricted to glucose, but the maximum energy we can provide in this form is only about 800 calories a day. The energy problem then becomes one of incorporating fat in usable form in the injections. If this were possible we could reduce the protein hydrolysate to about 75 g. more or less—i.e., to 1,500 ml. of a 5% solution. It would, however, be better to increase the fluid to 2,000 ml. and reduce the concentration of digest to 3.5%, thereby lessening the risk of leakage by the kidney.

With glucose in a concentration of 5% this would give 400 non-protein calories, leaving 1,600 to come from fat in order to reach the 2,000 target. About 170 g. of fat would be required.

So far it has not been found possible to give to human subjects fats in amounts that matter, but research is proceeding. Hegsted, Hay, and Stare (1945) have got so far as to risk giving small amounts to patients, but reactions, none serious, have followed in several instances. Dunham and Brunschwig (1944) have also busied themselves on the subject, experimenting with dogs, but apparently with little success. The main difficulty seems to be to get an emulsion stable enough to stand sterilization. Ivy has been working vigorously on the subject, and he informed me at the International Physiological Congress in Oxford in July, 1947, that he had succeeded in making a stable emulsion with which he has kept dogs in N balance, constant weight, and good health by exclusively venous feeding for 42 days. Since then he has been good enough to send me the following particulars of his emulsion.

Preparation of the Emulsion

1. 50 g. of butter oil refined.
2. 2 g. of lecithin "purified."
3. 2.5 g. of "span 20" (a wetting agent).

Mix thoroughly and heat and mix on a steam bath. Then add, stirring, to:

4. 445 ml. of either 5% or 10% glucose solution made in triple-distilled water and containing 0.1% sodium cholate.

Homogenize five times at a pressure of 3,000–4,000 lb. per square in. (210–280 kg. per cm.^{2}) in a Cherry-Burrell viscolizer (junior model) or its equivalent. Autoclave twice at 10 lb. for 10 minutes within 24 hours.

This yields a mixture of: 10% fat by weight, 0.4% lecithin, 0.5% span 20, 0.1% sodium cholate, 5% glucose.

1. The butter oil is refined by melting and removing curd and water. Then the oil is washed with three or four volumes of hot freshly distilled water three times. Highly refined oil may also be used, though most experiments have been done with butter oil.

2. The "purified lecithin" is a soya-bean lecithin prepared by the "Lecithin" Products Co., Elmhurst, New Jersey. If the lecithin is not purified, or even if a 1% concentration of this lecithin is used, anaemia results.

3. Span 20 is a sorbitan wetting agent made by the Atlas Powder Company, Wilmington, Delaware. It is the best (non-toxic) of numerous wetting agents so far used.

4. Sodium cholate is obtained from Breon and Co., of Kansas City, Missouri, or G. D. Searle and Co., of Chicago.

The emulsion is infused slowly intravenously so that the total calorie and nitrogen requirement is given in six to eight hours. Various protein hydrolysates have been used (one by Mead Johnson and Co., Evansville, Indiana, and another prepared by Cutter Laboratories, Berkeley, California). Enough of the hydrolysate is given to keep the dogs in N balance. It can be used separately or mixed with the emulsion.

The total daily mineral and vitamin requirement may be added to the solution. Calcium and iron may disturb the emulsion; these should be given separately.

There can be no doubt that if we succeed in making a preparation suitable for human intravenous use and containing about 75 g. of protein hydrolysate and 2,000 non-protein calories in 2 litres or so we shall have a therapeutic agent of great possibilities. This work of Ivy and his colleagues is an important step in that direction.

Summary

Until recent years we had no adequate means of combating the malnutrition which complicates many diseases, especially those directly hindering the ingestion, digestion, absorption, or metabolism of food. A preparation of protein suitable for intravenous use and metabolizable by the body was required. Although there is evidence suggesting that the plasma proteins can supply the elements for tissue growth and repair, it is doubtful if transfusion with human plasma is the solution of the problem; sufficient human blood might not be obtainable for such extensive use.

Enzymic hydrolysates of protein suitable for administration by vein have been prepared in U.S.A. and Great Britain and have been used with impunity and success in a wide variety of conditions in which secondary malnutrition is a prominent feature. They include acute hepatitis, comatose states, typhoid state, infantile diarrhœa, and post-operative conditions. The hydrolysates are usually given in 5% solution with 5% glucose at about 500 ml. an hour to a maximum of about 4 litres (200 g. of protein and 1,600 calories) in twenty-four hours. Thrombosis can be lessened by using different veins and giving no more than 500 ml. at a time by the same one.

A defect in the present procedure is that a large proportion of the injected hydrolysate is oxidized to supply energy and is thus diverted from its intended purpose of tissue-building, because it is not yet possible to incorporate enough non-protein calories in the infusion fluid.

It is desirable to administer up to 2,000 calories as glucose and fat emulsion; the hydrolysate could then be reduced to about 2,000 ml. of a 3.5% solution (70 g. of protein) and the bulk would probably be used for tissue repair.

It has not yet been possible to make a fat emulsion suitable for human use; but dogs have been kept in N equilibrium for six weeks by intravenous feeding on protein hydrolysates and glucose–fat emulsions which withstand sterilization.

An important problem remaining to be solved is to check the urinary leakage of hydrolysate which occurs in the first thirty minutes or so after starting infusions.

I am indebted to Prof. Himsworth and Dr. Stannus for comments on the paper, and especially to Prof. Ivy for his great courtesy in allowing me to publish for the first time the details of his fat emulsion.

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The number of technical dictionaries available to the medical worker interested in foreign languages is very limited, and any reliable addition to their number is welcome. The *English–Spanish Chemical and Medical Dictionary*, by Morris Goldberg (pp. 692, 50s.; McGraw-Hill, New York, 1947), will be of more use to Spanish-speaking medical men than to their English-speaking colleagues and should provide them with a fairly complete guide to British and American technical terms. The dictionary is up to date and includes such newcomers to medicine as streptomycin and thiouracil. Definitions of words are given in Spanish. It is inevitable that in a new book there should be a number of relatively important omissions. For example, the author has omitted the names of some muscles while including others less commonly referred to. Nevertheless, he has prepared the dictionary as a whole with care, and we can recommend it not only to those interested in medicine and the allied sciences but also to chemists and biologists.

RARER MANIFESTATIONS OF HERPES ZOSTER

A REPORT ON THREE CASES

BY

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Herpes zoster usually presents as a mild illness with a characteristic rash accompanied by local pain and preceded by a varying degree of constitutional disturbance. Post-herpetic neuralgia is a common sequel, but complications are rare. Of the complications which have been recorded a concomitant varicelliform eruption is perhaps the most common. The rarer, and more serious, complications include lesions of the motor neurones, myelitis and meningitis, encephalitis, and osteoarthritis (Wilson, 1940). It is the occurrence of such complications that at once dispels the concept of zoster as a uniformly benign infection confined to the sensory neurones. Moreover, these complications open controversial aspects on the aetiology and pathology of the disease and upon the difficult problem of the relationship between zoster and varicella. The following three cases are placed on record as exemplifying certain of these rare complications. All three patients showed evidence of affection of motor neurones, and two of them exhibited a generalized eruption during the course of the disease.

Case 1

Zoster, accompanied by paralysis, in the distribution of the fifth cervical segment.

A solicitor's clerk aged 60 was admitted to hospital on July 4, 1947. He gave a history of chicken-pox in childhood. In 1918 he had sustained a shrapnel wound of the right elbow, which had left him with a complete ulnar lesion on that side and much limitation of movement of the elbow-joint.

Six weeks before his admission he had suffered from acute pain in the right shoulder. Three days later a rash appeared in the antecubital fossa and rapidly spread up the outer side of the arm as far as the right shoulder. Three days after the appearance of the rash he noticed, quite suddenly, that his right arm was weak and that he could raise the arm from the side only with difficulty. The weakness increased over the next few days until the right arm was quite useless. Since that time the rash had cleared up, but the weakness had not improved at all. After the disappearance of the rash he had felt tingling and numbness in the area of skin previously affected.

Examination showed a healthy well-built man. There was a pigmented scarring over the site of the recent rash, distributed on the outer side of the upper arm from the shoulder to the elbow—i.e., in the cutaneous distribution of the fifth cervical dermatome. There was some hypo-aesthesia to pin-prick and cotton-wool sensation in the same area. There was considerable wasting of the right deltoid, supraspinatus, and infraspinatus muscles. No abduction of the shoulder was possible, although a flicker of muscular contraction was palpable over the deltoid muscle when abduction was attempted. Slight contraction of the supraspinatus and infraspinatus was likewise palpable over the muscle bellies. The biceps and brachioradialis muscles on the right side were weaker than those on the left. Under the nomenclature suggested by the Medical Research Council (1942) the muscular contractions at this time were: deltoid 1, supraspinatus 1, infraspinatus 1, biceps 4, brachioradialis 4. There was a deep scar of the old wound on the inner side of the right elbow, and below the elbow there was a complete ulnar-nerve palsy. The biceps and supinator reflexes on the right side were impaired: the triceps-jerk was normal. The remainder of the physical examination revealed nothing abnormal. Lumbar puncture on July 6 showed a clear fluid under normal pressure. The cerebrospinal fluid contained 5 cells per c.mm. The protein was 0.055% with a slight increase of globulin, and the chlorides 0.75%. The Wassermann reaction and Lange curve were negative.

The patient was treated by resting the arm in an abduction splint and by faradic stimulation of the muscles affected. He was discharged from hospital on July 30 to continue treatment as an out-patient, and at this time there was pronounced objective improvement. He was last seen on Aug. 16, when recovery was almost complete.

Case 2

Ophthalmic zoster with generalized eruption, followed by weakness of the levator palpebrae.

A housewife aged 48 was admitted to hospital on July 9, 1946. There was no history of previous illness, and she denied having had chicken-pox. She complained of an irritation on the left side of the forehead for the previous week, and on July 6 she had first had severe neuralgic pains over the left eyebrow. On the day before admission the left eye became swollen and painful, and a rash was noticed on the forehead. On admission the patient looked ill and had a fever of 101.8° F. (38.8° C.). There were a moderate number of vesicles on erythematous bases in the distribution of the ophthalmic division of the trigeminal nerve on the left side. The left eye showed conjunctival injection, with some photophobia and extreme tenderness to pressure. There were no other abnormal signs, and the rest of the skin was clear. During the next three days (July 10 to 12) the number of vesicles increased, the erythema spread, and the upper and lower lids became grossly oedematous. The appearance was now quite typical of a severe herpes zoster.

On July 13 the patient complained of irritation of the skin. Examination then showed that she had a generalized eruption on the trunk and proximal parts of the limbs, with a single lesion on the face. The eruption was quite typical of that seen in varicella, and the subsequent course of pustule formation and healing followed as customary in that disease. It was noted, however, that after the first 24 hours no fresh crops of vesicles arose. Whether or not the previous lesions had occurred in crops is not known, as no examination of the skin had been carried out between the initial examination and the complaint of irritation. As the herpes recovered it was evident that there was considerable weakness of the levator palpebrae muscle on the left, giving rise to obvious ptosis. The scabs from the varicelliform rash separated on Aug. 1, 14 days after their occurrence, and the patient was allowed to leave hospital. The ptosis was still present on discharge and persisted for many weeks. The patient was last seen in December, 1946, when the ptosis had completely recovered. At no time was there any oculomotor paralysis or abnormality in the pupil response.

Case 3

Zoster of trigeminal and cervical distribution accompanied by generalized eruption and followed by facial palsy.

An engineer aged 43 was admitted to hospital on July 13, 1947. In his youth he had suffered from scarlet fever, diphtheria, and chicken-pox. In February, 1945, he developed shingles over the lower half of the left side of the face, the upper part of the neck, and behind the left ear. He stated that in spite of careful search no lesions were found in the ear or inside the mouth. Four days after the appearance of the zoster he developed "an attack of chicken-pox," and because of this he was transferred to an isolation hospital. Within a day or two he suddenly developed a complete left facial palsy, which persisted until his discharge from hospital some five weeks later. Since that time there had been some improvement in the weakness of the face, but he had always been greatly troubled by difficulty in eating, numbness of the face, and severe neuralgia. His present admission followed a cerebral vascular accident which had occurred twelve weeks previously and which had caused aphasia and weakness of the right arm and face. The disability arising from this cerebral lesion had almost disappeared on admission.

Examination showed a pronounced left lower neurone facial weakness, together with diminished sensations over the lower

part of the face and on the inside of the left cheek. The tongue was protruded centrally. Although the patient complained of lack of appreciation of taste on the left side of the tongue, the presence of hemiageusia was not confirmed by crude tests. In addition to these signs there was an increase in the tendon reflexes and a diminution of the abdominal reflexes on the right, representing the residuum of the recent cerebral thrombosis. His blood pressure was 210/120. No other abnormal findings were present. Lumbar puncture showed a clear fluid under normal pressure. The cerebrospinal fluid contained 3 cells per c.mm.; the protein was 0.04%; and the Wassermann reaction and Lange curve were negative.

Discussion

Zoster Generalisatus and its Relation to Varicella

The occurrence of a varicelliform rash in the course of herpes zoster is a well-recognized entity. It is variously referred to as zoster generalisatus, zoster universalis, and varicelliform zoster. The condition was probably first described by Tenneson in 1893, and many examples have been recorded since. Minet and Leclercq (1911) collected 25 cases, and Parkes Weber (1913, 1916a, 1916b) described several cases and quoted 20 references. Most reports stress its occurrence in elderly patients. The extent of the eruption varies from the presence of a few aberrant vesicles to a diffuse eruption indistinguishable from the exanthem of varicella. The rash in Case 2, described above, was typical of varicella. Case 3 was not seen in the acute phase of the disease, but the eruption was evidently so like that of varicella, that the patient was transferred to an isolation hospital.

The condition is of particular interest in that it provides a no-man's-land in the perennial battle between the monists and the dualists, over the relationship between zoster and varicella. It has been assumed by some writers that the eruption constitutes a true attack of chicken-pox (Allen, 1944; Manning, 1944; Sharpe, 1946; and others), or that the concurrence of the two conditions is proof that zoster and varicella are but phases of one and the same disease (Le Feuvre, 1917). But, as Parkes Weber (1916a) has pointed out, this conclusion is hardly justified, as some of the cases show only a few aberrant vesicles, and evidence of an increase in cases of zoster during epidemics of varicella is lacking.

The experimental work of Kundratitz (1925) and Bruusgaard (1932) has an important bearing on this issue. These writers showed that the inoculation of children with vesicle fluid from cases of zoster produced a quasi-varicella rash and that contacts with these children also developed an eruption indistinguishable from varicella. Bruusgaard draws no definite conclusions from this work, but points out that the findings are compatible with the postulate of Haslund (1900) that the difference in the manifestations of infection with the zoster virus might well depend on the portal of entry. Haslund suggested that in zoster the virus gains access to the body via the nasopharynx and spreads to the nervous system, and that the generalized eruption is due to haematogenous dissemination to the skin.

The problem of the relationship between the two diseases is clearly not proved (cp. Wilson, 1940) and will remain so until further facts accumulate. Such data will become available only as the result of systematic investigations, and two lines of approach seem possible. The first is an extension of the work of Aitken and Brain (1933) on the complement-fixation test for the zoster virus, which they found to be positive in all of nine cases of zoster. Application of this test to cases of varicella does not seem to have been undertaken. The second line of approach, suggested by Le Feuvre (1917) and Taylor (1945), is the compulsory notification of herpes zoster, so that its epidemiology might be compared with that of varicella. From observations made in a relatively isolated community Pickles (1939) showed that the epidemic peaks of the two diseases roughly correspond.

Motor Symptoms in Zoster

Of considerable interest and importance are the rare cases of zoster in the course of which the motor nervous system is affected. Involvement of the upper motor neurones has been described (Parkes Weber, 1915), and references to this condition are given by Carter and Dunlop (1941). The majority of recorded cases, however, refer to lesions of the lower motor neurones. These lower motor neurone pareses may be conveniently divided into three clinical types: facial palsy, oculomotor paresis, and segmental spinal-cord paralysis. The three cases described above provide one example of each of these types. As will be seen in the discussion that follows, the mechanism of the production of the motor symptoms is probably different in the three types. In facial palsy the motor fibres are incidentally involved in their transit through the geniculate ganglion, oculomotor lesions arise from peripheral spread of the infection, and spinal paralyses are probably due to actual involvement of the spinal cord by the zoster virus.

Facial palsy is by far the commonest of the motor lesions (Hunt, 1909). It was first clearly described by Ramsay Hunt (1907), and the syndrome often goes by his name. The primary lesion is in the geniculate ganglion, and the herpetic eruption occurs in the cone-shaped area of the cutaneous distribution of the facial nerve, which includes the posterior portion of the tympanic membrane and the external canal, the concha, the antitragus, and the antihelix. In addition to this classical syndrome, facial palsy occurs as a complication of trigeminal herpes (Wilson, 1940; Spillane, 1941). In such cases presumably the Gasserian and geniculate ganglia are affected simultaneously.

An important group of cases is that in which trigeminal herpes occurs with facial palsy but without herpetic eruption in the seventh-nerve distribution. In these cases, of which Case 3 is an example, it has been suggested that the inflammation of the geniculate ganglion is extensive enough to produce paresis, but not to produce herpes (Sharpe, 1915). The significance of these cases is that they provide examples of "zoster sine herpete" of the geniculate ganglion, with abundant evidence of zoster of the neighbouring ganglia. It is but a short step to the assumption that certain cases of "idiopathic" Bell's palsy might be formes frustes of zoster. Ample substantiation of this supposition is to be found in the work of Aitken and Brain (1933), who demonstrated a positive complement-fixation reaction for zoster in four out of 22 cases of facial palsy in which there was no rash. Spillane (1941) brought other evidence to bear in support of this concept when he described a small epidemic of zoster in the course of which a single case of Bell's palsy was seen.

When oculomotor palsy occurs in the course of zoster it does so invariably as a complication of zoster ophthalmicus. The condition was probably first described by Vernon in 1868, and cases were later reported by Hall (1903), Mules (1903), and Parkes Weber (1916a, 1916b). The paresis may be slight, as in Case 2, in which ptosis was the sole manifestation, or more severe, producing complete paresis of the muscles supplied by the third, fourth, or sixth nerves (Hunt, 1909; Carmody, 1937). The clinical aspect is fully reviewed by Edgerton (1942). According to Kinnier Wilson (1940) the probable mechanism of its production is that spread takes place via the small communicating fibres between the first division of the

trigeminal nerve and the oculomotor nerves in the wall of the cavernous sinus. From analogy with geniculate zoster it is tempting to assume that certain of the oculomotor paralyses, especially when associated with ophthalmic neuralgia, might be due to "zoster sine herpete." No work seems to have been done on the complement-fixation test in such cases. It is of interest to note that this possibility was suggested by Mules (1903) some years before the classical work on geniculate zoster by Ramsay Hunt (1907).

Segmental paralysis of spinal-root distribution is rare in the course of zoster, but the complication was clearly described by Sir William Broadbent (1866), who reported a case in which paralysis of the arm followed herpes of the arm and neck. Joffroy (1882) described two cases—one affecting the deltoid and the other the small muscles of the hand. Most of the reports of cases describe cervical segment paralysis (Buzzard, 1902; Wilson, 1940), but involvement of the abdominal muscles (Taylor, 1895) and of the leg muscles (Carter and Dunlop, 1941) has been recorded. In Case 1, reported above, the cutaneous rash and the paralysis were in the distribution of the fifth cervical segment. Recovery was practically complete in three months from the onset. That the prognosis is not always so good is indicated by Carter and Dunlop (1941), in neither of whose cases had complete recovery taken place in nine months to one year.

These cases of segmental motor paralysis throw further light on the pathology of herpes zoster. The primary lesion in zoster is usually to be found in the posterior root ganglion. Head and Campbell (1900), in a study of the post-mortem changes, demonstrated that these ganglia showed round-cell infiltration, haemorrhage, and cell necrosis. They concluded that the changes in the posterior roots and horns and in the peripheral nerves were secondary and degenerative. This is undoubtedly the common state of affairs, but it fails to explain the rare cases in which there is definite clinical evidence of motor-root lesions. Further light is thrown on this problem by the work of Lhermitte and Nicolas (1924). These authors examined the spinal cord of a patient who died of an incidental disease seven weeks after an acute attack of zoster. In this case there was, in addition to the perivascular infiltration and demyelination in the posterior horns, marked evidence of inflammatory changes in the anterior horns. In spite of this there had been no clinical mention of a motor lesion. This finding confirms affection of the anterior and posterior horns of the spinal cord, and the presence of cord inflammation is borne out by the lymphocytosis and the increase in the protein content of the cerebrospinal fluid which commonly occurs (Wilson, 1940; Carter and Dunlop, 1941). The pleocytosis of the cerebrospinal fluid, the clinical manifestations of motor segmental paralyses, and the anterior horn changes in these cases bear a striking resemblance to those found in poliomyelitis. Parkes Weber (1916a) has taken this analogy even further by suggesting that the two diseases may in fact be caused by the same virus. As evidence he quoted the occasional appearance of the diffuse herpes in certain cases of poliomyelitis and the concurrence of epidemics of the two diseases. Further, he suggested that certain cases of painful muscle paresis of obscure aetiology might be regarded as cases of "zoster sine herpete."

Conclusions

In causing infection of the human body the herpes zoster virus shows a predilection for nervous tissue and the skin. In the classical form the brunt of the infection is borne by the sensory ganglia, the resulting symptoms being pain and a cutaneous eruption in the peripheral distribution of the fibres proceeding from the affected ganglia. Study of the rarer manifestations of the disease shows that the infection often spreads beyond these confines. In some cases in which motor symptoms occur there is clinical and pathological evidence that the anterior horn cells of the spinal cord are affected in a manner similar to that in poliomyelitis. In others the infection produces an exanthem clinically identical with that of varicella.

From the available evidence it seems no more reasonable to deduce that varicella and zoster are caused by the same virus than it would be to make a similar deduction regarding zoster and poliomyelitis. It seems much more probable that the virus is capable of producing a range of clinical manifestations varying from simple motor lesions on the one hand to generalized skin lesions on the other, and that the classical form of the disease lies midway between these extremes. This clinical range might be represented as follows: poliomyelitis-like illness—zoster sine herpete—herpes zoster with paralysis—classical herpes zoster—herpes zoster with generalized eruption—varicelliform zoster (sine herpete). This suggestion is of course speculative, and it takes no account of the encephalitic symptoms which are said to occur. Nevertheless, clinically proved examples of each group are to be found in the literature, with the exception of the hypothetical poliomyelitis-like illness, and it is unlikely that evidence of this will be found in the absence of specific complement-fixation tests on such cases.

Summary

Three cases of herpes zoster showing unusual motor and cutaneous manifestations are described. It is suggested that the zoster virus produces a pleomorphic group of diseases with varying degrees of cutaneous and nervous symptoms. Further evidence on certain aspects of the disease could be obtained by immunological and epidemiological investigations.

I wish to thank Dr. E. R. Cullinan for permission to publish Case 3, Dr. A. W. Spence for permission to publish Case 1, and Dr. Paul Abbey for his assistance in Case 2.

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TREATMENT OF CHRONIC ULCERATION AFTER IRRADIATION OF PLANTAR WART

BY

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The plantar wart is commonly cured by irradiation. In wartime the condition was a frequent cause of minor disability in the Services, and was treated by radiotherapy under out-patient arrangements. A record of dosage sometimes failed to follow the patient on his travels; and over-exposure undoubtedly occurred in some instances. Chronic intractable ulceration of the sole resulted in prolonged disability out of all proportion to the importance of the original lesion.

The ulcer heals slowly or not at all when treated with recumbency and local applications. Deep fibrosis leads to an unstable tender scar on the sole which prevents normal walking. Recurrence follows simple excision performed without skin replacement. A "free" skin-graft is unlikely to provide a permanent cover in this situation even if it succeeds on the relatively avascular base. Local pedicled flaps are as unsatisfactory on the sole as they are on the palm.

Radical excision down to healthy tissue and outwards to normal skin, however, leaves a defect which can readily be filled by means of a direct pedicled flap from the opposite leg. This provides a stable skin cover with a subcutaneous pad. The patient can walk in normal shoes without pain in six to eight weeks. It should be emphasized that this method of treatment is advised for ulceration which results in all probability from the radiation itself, and not for that which may follow repeated attempts to eradicate the plantar wart by mechanical, thermal, and chemical means.

Case 1

A married woman aged 36 complained of an extremely tender ulcer on the sole of the foot. The ulcer had persisted for two and a half years after a repeated application of deep *x*-ray therapy to a plantar wart. Excision had been performed more than once, and many remedies had been applied locally. The ulcer varied in size and in degree of infection, but had never healed.

When seen on Sept. 4, 1944, the ulcer was 1/2 in. (1.25 cm.) in diameter, had an indolent rolled edge, but was relatively free from infection after treatment with penicillin cream during a recent puerperium. A haemolytic staphylococcus was cultured.

On Sept. 7 the ulcer was excised down to healthy plantar fascia and a margin of apparently healthy skin was included; a pedicled flap was raised from the opposite leg to fill the defect. A five-day systemic course of penicillin was given. The pedicle was separated and the flap implanted on Sept. 26. Healing was rapid. The patient left hospital able to walk in normal shoes on Nov. 3.

The pathologist's report was as follows: "The skin changes are compatible with irradiation dermatitis (hyperkeratosis, obliterative endarteritis, and atrophic changes in accessory skin structures), followed by superficial ulceration and subcutaneous fibrosis. There is no evidence of malignant change in the section examined."

Case 2

A soldier aged 34 had suffered from the effects of a plantar wart since 1943. This had been pared by a chiropodist, excised at least four times in different hospitals, and cauterized. The ulcer had been treated with permanganate, salicylic acid, vitriol, formalin, flavine, eusol, gentian violet, penicillin cream, and several other less certain substances. Deep *x*-ray treatment had been given at more than one hospital, and in several doses.

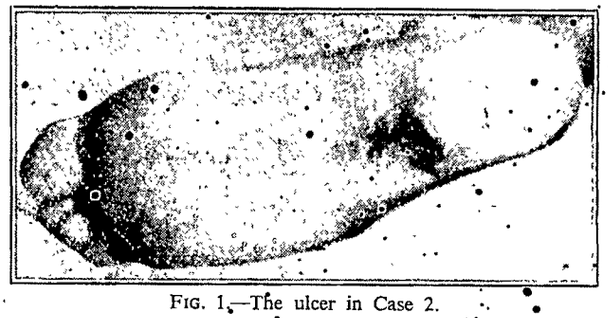

FIG. 1.—The ulcer in Case 2.

When seen on July 12, 1946, there was an ulcer on the sole of the right foot, 1¼ in. (3 cm.) in diameter (Fig. 1). The base consisted of firm tender granulations with a yellow slough. The edge was indolent and blue in colour, and was surrounded by an area of dusky induration. The Wassermann reaction was negative.

The ulcer was excised on July 29 and the defect, which extended down to plantar fascia and measured 2 in. (5 cm.) square, was filled by means of a direct pedicled flap from the

FIG. 2.—Application of a pedicled flap from the opposite leg.

opposite leg (Fig. 2). The secondary defect of the donor leg was closed by a dermatome graft from the thigh. A systemic course of penicillin was administered for five days.

The pedicle was divided on Aug. 23, and the flap implanted. The patient began to walk after a course of physiotherapy. He went before the medical board on Oct. 24 and was discharged

FIG. 3.—Showing the foot soundly healed.

from the Army. The foot was soundly healed (Fig. 3). The pathologist's report was: "Portion of skin shows ulceration with fibrinoid necrosis in the floor of the ulcer."

EXERTION HAEMOGLOBINURIA

REPORT OF A CASE

BY

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The form of paroxysmal haemoglobinuria associated with exertion is rare and its pathology is imperfectly understood. The clinical features and the results of laboratory investigations undertaken in a case studied by us are here recorded.

Case History

The patient, a European sergeant aged 33, first came under our observation at the end of July, 1944, when he was seen as an out-patient by one of us. He brought with him a sample of almost black urine which he had passed after playing a game of football. He gave the following interesting history.

In civil life he had worked as a stevedore and had never noticed any urinary abnormality or suffered from any illness. In September, 1940, on returning to the U.K. from France, he noticed that after a cross-country run his urine was dark. The same occurrence was noticed on two subsequent occasions under similar circumstances. He then remained free from symptoms until June, 1942, when again after a run his urine was dark. He was admitted to hospital for investigation, the results of which are not known to us, but his medical category was lowered to B. In June, 1943, his category was raised to A again, as he was eager for service afloat. In June, 1944, he arrived in East Africa, and early in July, after a route march, he had his first recurrence of the old symptom. On July 27 he played football, and it was a sample of the urine passed after this game that he brought with him to hospital. Examination of this specimen of urine showed: colour very dark brown; reaction acid; albumin ++++; benzidine test ++; deposit: a few red blood cells, granular casts +, urates ++, a few calcium oxalate crystals.

He was admitted to hospital on July 31 for further investigation. It was established that a 20-minutes run invariably resulted in a paroxysm of haemoglobinuria lasting several hours. No constitutional disturbance accompanied the paroxysms, but there was some aching in the back and abdomen. The patient was of good physique; no other signs of disease were detected, and before an attack the urine contained nothing abnormal. It was decided to lower his medical category to C for six months, and he was discharged to duty in this category on Aug. 30.

During the next three months the patient reported that the paroxysms were becoming more frequent and that less exertion was required to produce them. Actions such as hauling on ropes were now apt to be followed by an attack, and the condition was becoming a liability in his daily work. He was readmitted to hospital on Nov. 29, and the investigations detailed in Table I were carried out.

An attempt was made to demonstrate the presence of intravascular haemolysins. The patient's red blood corpuscles and serum were mixed and incubated at 37° C. for two hours, with and without previous exposure to a temperature of 4° C. for 30 minutes, and with and without added complement (Donath-Landsteiner reaction). Foreign group O cells and patient's serum, and patient's cells and foreign serum, were also set up against each other in a similar manner. All these tests were carried out on blood taken from the patient 3 minutes, 15 minutes, and 30 minutes after the beginning of a 30-minute run, and then 45 minutes, 90 minutes, and 7 hours after the exercise was finished. Haemolysis *in vitro* was not demonstrated in any of these tests, or in tests for haemolysin on small amounts of fluid aspirated from muscle during and after exercise. Examination of urine taken at intervals after the beginning of exercise gave the results shown in Table II.

TABLE I.—*Results of Tests Before and Immediately After a 30-minute Run*

Test	Before Exercise	After Exercise
Haemoglobin (Sahli)	120%	106%
Red cells	5,750,000/c.mm.	5,320,000/c.mm.
White cells	9,000/c.mm.	8,400/c.mm.
Neutrophils	74%	78%
Lymphocytes	19%	18%
Monocytes	5%	3%
Eosinophils	2%	0·5%
Basophils	—	0·5%
Primitive white and red cells	Nil	Nil
Platelets	545,000/c.mm.	475,000/c.mm.
Coagulation time (at 30° C.)	5 minutes	6 minutes
Bleeding time	60 seconds	60 seconds
Reticulocytes	0·6%	0·4%
Blood group	O	O
Fragility of red cells	Total lysis in 0·34% NaCl; no lysis in 0·42% NaCl (within normal limits)	Total lysis in 0·32% NaCl; no lysis in 0·42% NaCl (within normal limits)
Packed cell volume	41%	40%
Mean corpuscular diameter	6·8μ	6·8μ
" " volume	71 c.μ	75 c.μ
" " average thickness	1·9μ	2·1 μ
Van den Bergh reaction	Direct, nil. Indirect, 1 6 units	Marked haemolysis
Icterus index	6·6	

A rising and falling curve of oxyhaemoglobinaemia, which approximately paralleled the curve of haemoglobinuria, was demonstrated by tests on blood taken at intervals during and after exertion. It was possible to make only a rough estimate of haemoglobin by Sahli's method; the figures obtained are shown in Table III. The absorption spectrum for pseudo-methaemoglobin was not found in any of the sera examined.

TABLE III

Time Since Exercise Began:	During Exercise			After Exercise		
	3 min.	15 min.	30 min.	75 min.	120 min.	450 min.
% Hb (Sahli)	Less than 0·2	0·5	1·5	1	0·2	Less than 0·2
Hb (calculated from Sahli)	Less than 34 mg.	85 mg.	255 mg.	170 mg.	34 mg.	Less than 34 mg.

The following experiment was performed in an attempt to determine if haemolysis occurs locally in muscle during exercise. First, 5 ml. of blood was withdrawn from a vein in the right arm and allowed to clot. A sphygmomanometer cuff was then applied to the left upper arm and inflated to a pressure of 100 mm. Hg. The patient then exercised the left arm, alternately extending and flexing the wrist and fingers for two minutes. At the end of this time blood was withdrawn from a vein in the left arm, with the sphygmomanometer cuff inflated. The serum from these two specimens showed no perceptible difference in colour. The experiment was repeated, this time releasing the cuff just before blood was withdrawn; the specimen presumably contained blood from all parts of the occluded limb, and it, too, showed no trace of haemolysis.

TABLE II.—*Results of Urine Examinations*

Hours after Exercise Started	Appearance	Spectroscopy	Protein	Sugar	Deposit
1/2	Dark brown, turbid	Oxyhaemoglobin ++; methaemoglobin +++	++++	Nil	Granular casts +++; epithelial and pus cells +
1	Dark brown, very turbid	Methaemoglobin ++++	++++	"	Granular casts and epithelial and pus cells +
1½	Dark brown, turbid	Methaemoglobin ++	+	"	Granular casts and epithelial cells +
3	Brown	Methaemoglobin ++	+	"	" "
5	Pale brown, slightly turbid	Methaemoglobin +	Trace	"	Epithelial cells +
7	Amber, clear	No blood pigment	"	"	Pus cells and epithelial cells +
24	" "	" "	"	"	" "

Finally it was decided to test the effect of posture. The patient stated that 20 minutes' vigorous swimming had not precipitated an attack. In our experiment he was instructed to "cycle" on his back, supporting his buttocks on his hands, his flexed elbows resting on the bed. This position over-corrected any possible lordosis. After 10 minutes' vigorous exercise in this position blood was withdrawn from a vein. The serum from this specimen showed no trace of haemolysis, and urine passed shortly afterwards was also clear of protein and of haemoglobin derivatives.

Discussion

Our experiments support the view that exertion haemoglobinuria results from haemolysis during exertion in the erect or extended position. This agrees with the common view. Cases, however, seem to vary in their degree of dependence on the postural factor. Thus in the case recorded by Makin (1944) haemoglobinuria was strictly postural; and did not occur after exercise on a bicycle, whereas in the case recorded by Witts (1936) running with bent back and work on the bicycle ergometer were followed by haemoglobinuria. The postural factor and the common association with lordosis suggest that the condition is allied to orthostatic albuminuria. Bicycle exercise in Makin's case was followed by albuminuria but not by haemoglobinuria. Orthostatic albuminuria was not present in our case.

The failure to demonstrate circulating haemolysin is of little significance and does not rule out the occurrence of intravascular haemolysis; for unless combination with red cells is prevented by special factors, as it is in the case of cold haemoglobinuria, haemolysin liberated into the circulation is likely to be fixed rapidly. In nocturnal haemoglobinuria all efforts to demonstrate circulating haemolysin have failed (Witts, 1936). The failure to demonstrate local haemolysin in muscle is in keeping with the postural features of the disorder and with the view of Witts, who regards the kidney as the source of the haemolysin. He considers intravascular haemolysis "hardly conceivable" in view of the absence of anaemia and the slightness of systemic changes and of haemoglobinaemia; he regards a local haemolysis in the vessels of the kidney as more probable.

According to Whitby and Britton (1944), in exertion haemoglobinuria "there are neither the constitutional symptoms nor the haemoglobinaemia so characteristic of haemoglobinuria from cold." In our case there was a cherry-red concentration of haemoglobin in the serum, and it would seem that the lowering of the blood haemoglobin level was slight because haemolysis was of short duration only, accompanying tiring exertion in the vertical posture. Whitby and Britton state that in cold haemoglobinuria haemoglobin appears in the urine when the free haemoglobin in the plasma exceeds 100 to 140 mg. per 100 ml. This is higher than the plasma haemoglobin level recorded after exercise in Witts's case (46.5 mg.) but considerably lower than that recorded in ours.

History of an injury is another inconstant feature in exertion haemoglobinuria, which, however, helps to incriminate an abnormal kidney as the immediate cause of haemolysin production. No history of injury was elicited in our case, but the disease had come on rather suddenly shortly after a campaign, when slight injuries might have been ignored. In contrast to the usual history, our case resembled that of Witts in showing symptoms for a period (with intermissions) of considerably more than one year. The age at onset of the complaint was much above the average, and it is of interest that the condition recurred with unusual severity when the patient came to the Tropics.

Summary

A case of paroxysmal haemoglobinuria of exertion is described.

Laboratory investigations, including attempts to demonstrate circulating haemolysin, are described and discussed.

Our thanks are due to Brig. R. Cormack, D.M.S., E.A. Command, for permission to submit this article for publication.

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"TRIDIONE" IN THE TREATMENT OF PETIT MAL

BY

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Tridione, the synthetic anticonvulsant drug (3,5,5-trimethyloxazolidine-2,4-dione), has been extensively used in the treatment of the petit-mal epilepsies by investigators in America since 1944.

A Preliminary Investigation

Recently, when supplies became available in this country, a preliminary investigation was made at St. David's Hospital (for epilepsy), the findings of which are tabulated below. Most of the patients (who are sane males suffering from idiopathic epilepsy, and whose ages range from 17 to 56) have been taking the drug for three months.

Tridione is supplied in 0.3 g. capsules. So far it has been found that the apparently optimum dose in the average case is four capsules daily, in divided doses. One patient aged 17, however, has had his petit-mal attacks abolished by taking only two capsules daily. The drug was given in addition to other medication, such as phenobarbitone and "epanutin" (soluble phenytoin), which the patients had previously been taking.

Convulsive seizures of the grand-mal type did not appear to be reduced by tridione in any case, and one man experienced, possibly as a coincidence, an increase in the number of his fits. All the patients suffered from petit-mal except one whose seizures were of the myoclonic type. This man's condition did not improve. Another, however, who had myoclonic spasms as well as ordinary petit mal, states that he feels better than he has done for years.

It is possible that the patients who showed no improvement might have been benefited had they been given more than six capsules daily. Unfortunately a shortage of supplies precluded an increase of this dose.

No. of patients	23
Entirely free from petit mal	4 (17.4%)
Petit mal reduced by more than half ..	12 (52.2%)
Definite but slighter improvement	2 (8.7%)
No improvement, or toxic symptoms necessitating withdrawal of drug	5 (21.7%)

Because of the notorious difficulty in obtaining an accurate record of petit-mal attacks each patient was given a notebook, and in this he marked down every attack of which he was aware, or which any fellow patient or member of the nursing staff observed. For the purpose of comparison the patients had kept similar records of their attacks for a period of two months before starting tridione medication.

A few days after beginning to take the drug approximately four-fifths of the patients reported a reduction in the number of their petit-mal attacks. After a week or 10 days no fewer than 19 of the 23 patients mentioned that on walking out of a building into the open air they found the

light too bright. This phenomenon was variously described as "dazzle," or "glare," or "a whiteness like mist over everything." Some patients stated that they found reading in the open air to be impossible, and others said that objects appeared to have changed colour, as, for example, a familiar blue motor-car seemed to be cream-coloured. In most instances the sensation ceased after a short interval, but 10 of the men found it trying and were glad to wear dark glasses to mitigate the effect.

Five men were aware of slight drowsiness, apparently due to the drug; one complained of lack of concentration, and one of restlessness. Two developed slight ataxia; two complained of hiccup, and two of slight epigastric discomfort. One developed a slight rash, similar to acne, on the face; and one, whether *post* or *propter-hoc*, had a severe rash of the face, neck, and hands which initially looked like urticaria and proceeded to an acute dermatitis with exudation and desquamation. In this case the drug was withdrawn, as it was in four others in which, although no marked toxic symptoms were present, there appeared to be no improvement in the incidence of petit mal. Most of the other 18 patients were anxious to continue taking the drug, as in their opinion the relief obtained from the reduction in their attacks more than outweighed the slight nuisance of the "dazzle phenomenon" or the other symptoms mentioned above.

Comment

Several important points emerge from a review of some of the literature on the subject. Tridione is said to be contraindicated in patients with severe renal or hepatic damage and in conditions in which optic-nerve disease is already present; but no residual damage to the optic nerve has been detected in patients complaining of the "dazzle phenomenon"; and "histological studies on the optic nerves and retinae of experimental animals receiving large doses of tridione over long periods have failed to reveal any evidence of damage." Several investigators have also recorded that when the drug is withdrawn weeks or months may elapse before attacks of petit mal return.

Obviously more time and greater experience are required before this drug can properly be evaluated, but there is no doubt that tridione has a pronounced inhibitory effect on petit mal and also, in the experience of American investigators, on myoclonic spasms and akinetic seizures.

Summary

The treatment by tridione of 23 cases of the petit-mal epilepsies is analysed.

Approximately four-fifths of the patients improved, but various toxic symptoms and signs were manifested in almost every case.

I wish to express my cordial thanks to the male nurses of St. David's Hospital for their keen and efficient co-operation in conducting this investigation.

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The Merseyside Hospitals Council Report for 1946, *Carefree Convalescence*, is a pleasantly illustrated pamphlet with a brief account of the after-care arrangements that the Council has developed during the last twenty years. The Council has continued to acquire houses for convalescent homes, and suggests that the increasing demand for such facilities likely to rise under the National Health Service might be met in part by voluntary assistance. Four members of the Council have been appointed to the Liverpool Regional Hospital Board.

Medical Memoranda

A Fatal Case of Agranulocytosis Associated with "Tridione" Therapy

Now that tridione is being used for the treatment of certain types of epilepsy it is of interest to record the following case. This substance seems to have a high therapeutic value. Nevertheless, until extended use of it proves otherwise, it seems that it should be used with care owing to a possible depressant action on the granulocyte precursors in the bone marrow.

CASE HISTORY

A boy aged 11 had suffered from petit mal for over three years, during which time he had received amphetamine sulphate ("benzedrine") in doses of 0.01 to 0.025 g. daily. For 53 days he received four 0.3-g. tablets of tridione daily. On the 25th day of receiving tridione he developed an urticarial rash on the thighs which faded in two days. On the 51st day of tridione therapy he became ill with gingivitis and a temperature. He lived for 21 days after ceasing tridione. He received sulphathiazole (a small total amount) and penicillin by injection without any helpful effect.

When examined nine days before death he repeatedly complained of sore throat, and was very pale. The mucous membranes were a good colour, the gums were hypertrophied a little and very red, the tongue was furred and had an ulcer on the left margin. The fauces were somewhat red, but there was no lesion. The upper and lower cervical glands and a gland on the edge of the jaw were enlarged. The left submaxillary gland was enlarged and painful. The trachea was pushed to the right. There was tenderness in the right iliac fossa, where a movable tumour 2 by 2 in. (5 by 5 cm.) was felt. The spleen was slightly enlarged, as were the glands in the groins and axillae.

A radiograph of the chest revealed a shadow in the mediastinum displacing the trachea to the right. A blood count showed: Hb, 44%; R.B.C., 2,730,000; colour index, 0.8; W.B.C., 800 per c.mm. A differential count showed: all lymphocytes and no granulocytes; there were abundant platelets; after a prolonged search no "blast" cells were seen; all the white cells were mononuclears in type, and immature. A trace of albumin was present in the urine. A sternal puncture marrow smear revealed an aplasia of the erythroblastic tissue with a primary agranulocytosis.

Treatment consisted of blood transfusion and administration of pyridoxin and plexan. For two days before death he had profuse yellow diarrhoea. Later blood examination showed no change.

Abnormal Post-mortem Findings.—Bowel: Small yellow sloughing ulcers in lower foot or so of ileum in Peyer's patches, which were hyperplastic; gross swelling, redness, and ulceration of lower 3 in. (7.5 cm.) of small bowel, ileo-caecal valve, and caecum; multiple yellow ulcers in ascending colon; mesenteric glands +. *Liver:* Dark from free iron +. *Spleen:* Enlarged; free iron +. *Suprarenals:* Greyish with little lipoid. *Brain:* Greyish, especially cortex. *Bone:* Dark-red marrow in sternum, ribs, vertebrae, femur.

Microscopical Findings from Post-mortem Material.—The tumour in the right iliac fossa showed non-specific ulceration and gross oedema. *Lumbar vertebra section:* Macroscopically the bone marrow is very red; microscopically there is some erythroblastic (normoblastic) hyperplasia, an almost complete absence of myeloid elements, and an approximately normal number of megakaryocytes.

COMMENTARY

The bone section shows that a complete aplasia of the granulocyte precursors in the marrow had supervened. The amount of sulphathiazole seems much too small to have caused this depression (over 30 g. has usually been taken in agranulocytosis due to sulphonamides). Tridione is strongly inculpated. It will be noticed that about half-way through his tridione course (25th day) the patient developed a rash. Two other children on tridione for epilepsy developed rashes and diffuse lymph-gland enlargement. In their case tridione was stopped immediately the rash appeared, and they recovered uneventfully without abnormality in the blood picture.

If during the course of tridione therapy any generalized rash, lymphatic enlargement, undue redness of gums, anaemia, or changes in the white cell count appear it would be wise to cease using tridione.

I have to thank Dr. E. A. Hunter, senior physician in charge of the case, for permission to publish and Dr. T. N. Gledhill for his report on the marrow section.

R. F. BRAITHWAITE, M.R.C.S., L.R.C.P.

Reviews

CHILD HEALTH

Child Health and Development. By Various Authors. Edited by Richard W. B. Ellis, M.D., F.R.C.P. (Pp. 364; 49 illustrations. 18s.) London: J. and A. Churchill. 1947.

This book is a valuable addition to the growing library of books on child health, and the editor has been fortunate in the authority and special knowledge of the twelve other contributors to the volume. Of its two sections the first—on development—contains an account of anatomical, physiological, and psychological aspects of growth. We would draw attention to the masterly chapter on functional development of the foetus, by the late Sir Joseph Barcroft, and those on growth and puberty by Prof. H. A. Harris and by the editor. Prof. Ellis also contributes to this section two chapters on the newborn and on digestion, nutrition, and feeding, in which he combines in a clear and concise narrative essential scientific knowledge with practical guidance. The second section, "Social Aspects of Child Health," is considerably shorter and is mainly devoted to brief accounts of the social services and institutions dealing with healthy, "deprived," and delinquent children. It also includes a short account of the English educational system by Sir Fred Clarke.

The unfolding and complicated life of the growing child in all its aspects, together with the social problems that are involved, is a vast subject, and we cannot expect a book of this modest size to contain a full account. It is also difficult to give unity to a book of composite authorship. But all who have the care of children will welcome this book; it is a scientific manual and makes fundamental scientific knowledge available for the practical guidance and control of child health.

CHARLES MCNEIL.

TREATMENT OF DELINQUENCY

The Psycho-analytical Approach to Juvenile Delinquency. Theory, Case Studies, Treatment. By Kate Friedlander, M.D., D.P.M. International Library of Sociology and Social Reconstruction. (Pp. 296. 18s.) London: Kegan Paul, Trench, Trubner and Co. 1947.

Although a steadily increasing amount of work has been done on the psychological aspects of delinquency, so much indeed that the clinical diagnosis and treatment of delinquency can now be regarded as a special branch of medical psychology, there is an astonishing dearth of reliable textbooks on the subject. Dr. Friedlander's book goes far to remedy this defect. That it is written by a thorough-paced Freudian is not altogether inappropriate, for without Freud's discoveries of the unconscious mind and of the unconscious mechanisms that regulate it the field of delinquency must have remained a *terra incognita.*

Despite the fact that the author devotes a substantial part of her book to presenting psycho-analytical theory and is throughout clearly influenced by psycho-analytical opinions, the scope and method of her presentation give evidence of first-hand clinical experience. In the section on diagnosis she clearly distinguishes unconscious factors from those social factors which not only influence the development of antisocial conduct but often determine its immediate direction. Indeed, she bases her classifications of delinquent states largely on these distinctions. Perhaps here she is least convincing. Like many analysts she pays scant attention to the clinical concept of psychopathy, a neglect which is justified only if psycho-analysts can produce more illuminating and at the same time more useful clinical classifications of character disorder. They do not appear to have done this.

Discussing treatment, Dr. Friedlander carefully distinguishes between psycho-analytic and other forms of psychotherapy and points out the limitations to applying classical psycho-analytic methods to delinquent subjects. She describes clearly the role of "transference" in the various forms of social therapy or disposal and ends with a useful outline of preventive measures. This is a good book.

EDWARD GLOVER.

EXTRACELLULAR FLUID

Chemical Anatomy, Physiology and Pathology of Extracellular Fluid: A Lecture Syllabus. By James L. Gamble. Fifth edition. (Pp. 160. 52 charts. 7s. 6d.) Cambridge, Mass.: Harvard University Press. London: Geoffrey Cumberlege (Oxford University Press). 1947.

Prof. Gamble's monograph is now established as being one of those few medical books which may truly be described as classics. As in previous editions he modestly presents the material as a syllabus of concise lecture notes based on illustrative charts; thus each section is simply headed with the number of a chart, which is explained in the text. This manner of exposition from simple line diagrams enables the author to make complex biochemical subjects easily understandable to the general medical reader. The text is brief, occupying 105 pages in large print, but characterized by remarkable lucidity and by flashes of inspired phrasing.

The main feature of the book is that the author amplifies and gives precision to Claude Bernard's great concept of the internal environment. Prof. Gamble, largely on the basis of his own research, has revealed the essential qualitative and quantitative aspects of the extracellular fluid. His separate papers and this integrated presentation illumine and make real a subject, hitherto dimly understood, which is not only important in the theory of physiology and pathology but of great practical significance in a wide range of medical and surgical disorders. To quote but one example: understanding of the normal and abnormal states of the extracellular fluid is fundamental to the proper use of fluid administration whether by mouth or by parenteral routes. The construction of the book is similar to that of former editions, but it contains some new material. The author begins by describing the normal quantity and composition of the extracellular fluid and then goes on to discuss how its constancy of composition and volume are maintained. In the later part of the book he considers the pathogenesis of dehydration and of acidosis and alkalosis and, finally, parenteral fluid therapy.

H. L. MARRIOTT.

RADIOLOGY

Radiography for Medical Students. By Fred Jenner Hodges, M.D., Isadore Lampe, M.D., and John Floyd Holt, M.D. (Pp. 424; 103 plates. $6.75 or 37s. 6d.) Chicago: Year Book Publishers, Inc. London: H. K. Lewis and Co. 1947.

Confrontations. Radio-Anatomo-Cliniques. Published under the direction of M. Chiray, R. K. Gutmann, and J. Sénèque. Fascicule I. (Pp. 56; 98 figures. 370 francs.) Paris: G. Doin et Cie, Masson et Cie. 1946.

The undergraduate teaching of radiology in Britain is essentially elementary and in most medical schools does not consist of more than half a dozen lectures a year; it is debatable whether more should be packed into the already overloaded curriculum. Radiology is now sometimes taught with anatomy and physiology, and some of the pioneers argue that the combination is particularly instructive. American medicine has gone much further in this direction. This interesting volume, equally divided into accounts of *x*-ray diagnosis and therapy, is founded on the authors' teaching of undergraduates in the University of Michigan. There is no doubt that if the undergraduate has the time and basic knowledge to read and digest its contents he would become a wiser and better doctor, for it is well written and combines a full account of pathology with instruction in elementary radiology and physics. Judged by British standards it contains far too much, and it is not unreasonable to say that the material is so plausibly presented that there is a danger of diverting the student from more fundamental approaches to health and disease. This book is best for the postgraduate student and the beginner in radiology, but something less than this and more than the meagre pittance we consider necessary for the undergraduate is desirable and has still to be written.

The second volume is neither an essay on radiology nor a textbook but a report of the clinical, pathological, and radiological findings in 53 interesting cases of disease of the gastro-intestinal tract. The authors are well known to radiologists for their interesting pre-war contributions to the study of early carcinoma of the stomach. In this series there are many such

cases; they are of considerable interest in that they show how easy it is when certain appearances are present to confuse benign with malignant lesions. With one or two exceptions all the material has been selected because the cases were difficult to diagnose. There are a few striking examples of cholecystography in which the gall-bladder failed to fill after a single dose of radio-opaque substance but concentrated normally when a second dose was given immediately after the first x-ray examination. All these case histories are well worth detailed study by radiologists.

PETER KERLEY.

PHYSIOLOGY

Précis de Physiologie. By L. C. Soula. (Pp. 1,086; 334 figures. 1,450 francs.) Paris: Masson et Cie. 1947.

Perusal of this outline of physiology confirms the significance of its dedication to Sir Charles Sherrington. The author claims—and he is probably right—that it is the first treatise on physiology in the French language to be based on the school of neurophysiology that Sherrington founded, and that it brings into accord the traditional outlook of French universities with that of the modern British medical schools. He emphasizes the large part played by new techniques in the transformation undergone by physiology in recent years. His central idea is the unity of the living animal—as he indicates in an admirable introduction—and everywhere he incorporates the recent teachings of general physiology as they throw light on the mechanisms of the human body. The book is well written, thoroughly up to date; and the diagrams are clear and instructive. It is an outline of modern physiology admirably suitable for the student of medicine.

C. LOVATT EVANS.

ASTHMA

The Diagnosis and Treatment of Bronchial Asthma. By Leslie N. Gay, Ph.B., M.D. With foreword by Warfield T. Longcope, M.D. (Pp. 334; 80 illustrations. 27s. 6d.) London: Baillière, Tindall and Cox. 1946.

Handbooks on bronchial asthma come across the Atlantic with such regularity that one is sometimes tempted to ask, "Is your journey really necessary?" A number of features give this book a certain individuality and interest for the general medical reader. Much of its content is a recapitulation of the author's own work, and it is evident that he has had wide experience in this field. The account of pollen surveys is interesting and shows how much work has been done on this important subject in the U.S.A. The chapter on pathology includes post-mortem records of 24 patients dying of asthma at the Johns Hopkins Hospital. In the last 130 pages the author describes the treatment of asthma in a practical and detailed manner, with a complete account of modern methods. The many case histories illustrating certain points in the history or treatment are an important feature of the book; they are helpful but could often be more concise without impairing their usefulness.

The arrangement of the subject matter is sometimes confusing. For example, in discussing the treatment of asthma combined with bronchial infection, the author does not mention penicillin or sulphonamide therapy, though he adequately describes them under a separate heading later on. In Chapter V the accounts of complications and differential diagnoses of bronchial asthma are inextricably mixed, and we cannot see why the effect of anaesthetics should be discussed here at all. Nor is it clear why cases of asthma starting during pregnancy are considered under the heading of "Psychosomatic Syndrome," while those whose symptoms occur during menstruation or at the menopause are regarded as due to "endocrine disorders."

It is surprising to read that Dr. Gay considers that 50% of patients with hay-fever get asthma unless properly treated; in Britain such a figure would certainly be too high. On the other hand readers in this country will be comforted to know that in the author's opinion there is no field of allergy more overrated than so-called gastro-intestinal allergy, and that the "leukopenic index"—a tedious manœuvre for the diagnosis of specific food sensitivity—is inconsistent and unreliable.

R. S. BRUCE PEARSON.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

African Medical Handbook. By Michael Gelfand, M.B., M.R.C.P. (Pp. 202. 15s.) Capetown: The African Bookman. 1947.

An outline of medicine and hospital practice for African nurses and orderlies.

Plough and Pasture. By E. Cecil Curwen, M.A., M.B., F.S.A. (Pp. 122. 7s. 6d.) London: Cobbett Press. 1946.

The early history of agriculture and stock breeding.

Physical Fitness Appraisal and Guidance. By T. K. Cureton, Jr., M.A., M.P.E., Ph.D., *et al.* (Pp. 566. 30s.) London: Henry Kimpton. 1947.

A general account of physique and its measurement.

Psychological Approaches to the Biography of Genius. By L. M. Terman, LL.D., Ph.D., Sc.D. (Pp. 24. 1s. 6d.) London: Hamish Hamilton. 1947.

A presidential address delivered before the Pacific Division of the American Association for the Advancement of Science.

Genetics, Medicine, and Man. By H. J. Muller, C. C. Little, and L. H. Snyder. (Pp. 158. 12s. 6d. or $2.25.) Ithaca, New York: Cornell University Press. 1947.

Essays on the gene, heredity, and mutation.

Treatment of Some Chronic and 'Incurable' Diseases. By A. T. Todd, O.B.E., M.B., M.R.C.P. 2nd ed. (Pp. 324. 25s.) Bristol: John Wright and Sons, Ltd.; London: Simpkin Marshall, Ltd. 1947.

Includes discussion of epilepsy, cancer, asthma, diabetes mellitus, constipation and rheumatism.

Operative Gynecology. By Richard W. Te Linde, M.D. (Pp. 751. £5 10s.) London: J. B. Lippincott. 1947.

A profusely illustrated textbook by the professor of gynaecology at Johns Hopkins University.

Hormones and Vitamins. By G. A. Stephens, M.P.S. (Pp. 315 21s.) London: George Newnes, Ltd. 1947.

Compiled to facilitate the prescribing and dispensing of hormones and vitamins.

Handbook of Child Guidance. Edited by Ernest Harms. (Pp. 751. No price.) New York: Child Care Publications. 1947.

Articles on child guidance in America by various authoritics.

Psychologie der Suggestie en Autosuggestie. By Dr. Berthold Stokvis. (Pp. 263. 15 Dutch florins.) Lochem: De Tijdstroom. 1947.

A monograph on the psychology of suggestion and hypnosis. In Dutch.

Lehrbuch der Pharmakognosie. By George Karsten and Dr. Ulrich Weber. (Pp. 428. No price.) Vienna: Verlag von Gustav Fischer. 1947.

A textbook of botany for students.

Modern Drugs in General Practice. By Ethel Browning, M.D., Ch.B. 2nd ed. (Pp. 223. 12s. 6d.) London: Edward Arnold and Co. 1947.

An account for medical practitioners of the more recently introduced drugs.

Clinical Dental Roentgenology. By J. O. McCall, D.D.S., F.A.C.D., and S. S. Wald, D.D.S., F.A.C.D. 2nd ed. (Pp. 343 35s.) London and Philadelphia: W. B. Saunders Co. 1947.

Describes the technique of dental radiography and interpretation of skiagrams.

Nelson Loose-leaf Medicine. Renewal pages. (No price.) Thomas Nelson. 1947.

The Biological Standardisation of the Vitamins. By Katharine H. Coward, D.Sc. 2nd ed. (Pp. 224. 16s.) London: Baillière, Tindall and Cox. 1947.

Discusses the methods of standardization and their statistical evaluation.

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CONSULTANTS AND THE ACT

When changes in the Emergency Medical Service were announced by the Minister of Health in November, 1939, the three distinguished men who were then Presidents of the Royal College of Physicians, Royal College of Surgeons, and Royal College of Obstetricians and Gynaecologists wrote a letter to the *Journal*[1] urging the medical profession to accept the Minister's proposals. In this letter the Presidents sought to allay the fears of those who saw in these proposals the nucleus of a State Medical Service. What they then wrote is worth quoting:

> "There is a suspicion amongst some doctors that the Ministry of Health may be proposing to use the E.M.S. as the thin end of the wedge for a post-war State Medical Service. We can assure such, on the highest authority, that nothing is further from the Ministry's intention and that all such fears are groundless. It may well be, of course, that after the war economic conditions may make some form of assistance to the voluntary hospitals, by grants-in-aid or otherwise, necessary, but that the voluntary system will continue there is no reason to doubt."

The Presidents' assurance was of course accepted, just as they, and quite rightly, accepted the assurance of the "highest authority." But, as Dr. Alan Wigfield subsequently pointed out,[2] the assurance must be "based on the assumption that this same Ministry and, indeed, this same Government will be in office when the war is over." Dr. Wigfield went on to say, "Whatever may be the case we must keep before us the possibility that sooner or later a political group for the time being in power may yet seek to introduce a State Medical Service." Dr. Wigfield has proved to be a safe prophet. While recognizing that the voluntary hospitals might need financial assistance, the Presidents undoubtedly believed that they would continue within the framework of the voluntary system. But this is not to be. The voluntary hospitals on July 5 this year will be State hospitals and each will be administered by Boards of Governors the chairmen of which are to be appointed by the Minister of Health. The teaching hospitals, too, it must be emphasized, will be State hospitals. The voluntary system will come to an end, and the State will be the monopoly owner of all voluntary, municipal, and other hospitals the Minister decides to take over on the recommendation of the Regional Hospital Boards.

No one would assert that the hospital service in this country is the best in the best of all possible worlds. The idea of establishing a hospital service on regional lines under the influence of university centres has received widespread professional support. Some plan of efficient co-ordination in hospitals was clearly necessary. Those who were aware of the defects in the vast hospital service administered by the London County Council were, nevertheless, apprehensive of the dangers of too much planning, of too much Government. Yet it is remarkable to note that the existing owners of hospitals and the medical men who work in them have made little effective criticism of the Minister's hospital proposals in the National Health Service Act. So anxious have many been that they should not come under the control of local authorities that they have accepted with some sense of relief the translation of the municipal hospital into the State hospital. Consultants, but by no means all, have accepted the State hospital as the lesser of two evils, and all have been balked by the spectre of hospital finance from thinking further on constructive lines.

Such is the confusion of minds and of tongues in the consultant and hospital world that there is unlikely to be any effective challenge to the proposed transfer on July 5, 1948, of the hospitals of Great Britain into the ownership of the State. The implications of this revolutionary step will become more and more visible as the months and the years pass. While many consultants and specialists may accept this as an inevitable step, and some may accept it as a desirable step, we believe that the majority are still opposed to a State Medical Service. In the last plebiscite more than 50% of consultants and specialists voting voted against negotiations with the Minister under the present Act. Consultants and specialists may now consider that if there is to be opposition to the State Medical Service foreshadowed in Mr. Aneurin Bevan's Act it must come, if it is to come, principally from general practitioners and that they as consultants and specialists will have little part to play. Those who observed the difference in Mr. Bevan's manner when he addressed himself to the Consultant section of the Negotiating Committee on Dec. 2 and 3 were left in no doubt that he hoped to rule by dividing. But if we fail, because of our differences, to preserve unity as a profession we shall lose what chance is left of moulding the Health Service according to professional ideals. Apart from all this the consultant may feel himself to be in a dilemma. Firmly opposed as he may be to a State Medical Service he knows that to work in a hospital is for him the supreme necessity of his professional life. What, he may well ask, will happen to him if he sees the hospital gates shut against him because of his refusal to work in the National Health Service under the terms of the present Act? This is a dilemma, but one which we believe to be of little significance between now and July 5, 1948. In the first place the report of the Spens Committee on the remuneration of consultants and specialists is unlikely to be completed before Easter. Once the report of this Committee is published it will have to be scrutinized carefully by the profession as a whole and by the various bodies which represent the consultant world. And when the professional debates on this Committee's report have come to an end there will be the inevitable negotiations with the Ministry of Health. These are not matters that can be settled

[1] *British Medical Journal Supplement*, 1939, 2, 231.
[2] Ibid., 1939, 2, 247.

quickly, because of the varying nature of the commitments consultants will have to undertake. It is therefore highly unlikely that consultants will be in a position to sign contracts of service before July 5, 1948, because for one thing the Government will not be in a position to offer them. They will continue their work in their own hospitals on the same basis as at present. To put it at its lowest, then, consultants and specialists should have no need to fear that by adhering to a principle they will endanger their careers or suffer financial loss. Again, if the result of the plebiscite is the same as the plebiscite of a year ago, no Minister of Health could prevent sick persons in hospitals from receiving the skilled services of such a large number of the consultants and specialists in this country.

The medical profession in Britain is now faced with the most important issue in the whole of its long history. We live in times when ideals and traditions are at a discount and when the cynic may too easily prove his case that principles may be dissolved in gold—or its many equivalents, of which power is one. Mr. Bevan has somewhat cynically dangled before the consultant the bait of no-ceiling paying beds in some State hospitals. But neither this nor his promise to exclude private nursing-homes from State control will affect those consultants—and we believe they are many—who see this Act as the first fulfilment of the Government's policy to introduce a whole-time salaried State Medical Service. This is the one central fact of the present deep conflict between the medical profession and the Minister of Health. He has refused to shift his ground and the profession must be equally resolute in refusing to shift its ground. We have a responsibility to the past as well as to the future, and we have a responsibility to the profession not only in this country but also in others. Unfortunately the World Medical Association at its meeting in September last year in Paris did not find time to hold the debate which all were anxiously awaiting—on the relationship between the doctor and the State. But in the intervals of the meeting, when medical men of close on fifty nations could discuss matters freely, this was clearly the one subject that was of the greatest concern. Medical men in the Dominions, in the U.S.A., in Scandinavia, in Europe, in India, in the Middle East, in China, are all sorely perplexed by the growing tendency of the State machine to thrust itself between the individual doctor and the individual patient. They see this intervention of the State as something essentially harmful to medicine, and they look to this country for a lead and are anxiously awaiting the outcome of the present struggle. The consultant and the general practitioner form an organic whole. Without the closest co-operation between these two the patient suffers. Both general practitioners and consultants must, therefore, resist the painfully obvious attempts being made to sever them. If those who are like-minded in their opposition to a State Medical Service stand firmly together they need remain in no doubt about the result. Mr. Bevan has the advantage that he has to make up only one mind. The medical profession is a collection of highly individualistic minds, but its problem is in essence simple, and that is to make its collective view clear on one point—whether or not it is in favour of a State Medical Service.

PENICILLIN IN BACTERIAL ENDOCARDITIS

It is surprising to recollect that until three years ago the treatment of subacute bacterial endocarditis with penicillin was strongly discountenanced in this country, the official attitude being that the large amount of the drug required could be better employed in other ways. This was perhaps true until that time, but sufferers from this disease have since been more fortunate. Encouraged by reports of its successful treatment in the U.S.A., and by the improving supply position, the Ministry of Health allocated a quantity of penicillin for this purpose at the beginning of 1945, and the control of its use was entrusted to a committee of the Medical Research Council. This committee established fourteen centres where the treatment could be carried out in accordance with a preconcerted plan, and results from all centres have been reported to the committee. A report on earlier results by the secretary of this committee, Prof. R. V. Christie, appeared in this *Journal*[1] early in 1946. We now publish (p. 1) a second report in his name amplifying the previous observations not only by the inclusion of further cases but by a more searching analysis of results which have gained in significance by the longer period of the follow-up. This is the largest series of such cases on record, and it makes plain the advantages of organizing the study of a new and difficult form of treatment as a piece of co-ordinated research on a nation-wide scale. Had each institution undertaking this treatment been an independent unit, formulating its own plans and having to base conclusions only on its own experience, a good deal would perhaps have remained uncertain which is now statistically well ascertained.

In the first series of findings it was made clear that the duration of treatment was all-important, and that when this was standardized at one month the larger the dose within the limits then employed the better the results. In the earlier report the numbers on which this conclusion was based were small, but much more extensive experience has been only confirmatory. Of 58 patients given 500,000 units daily, only 6.9% died with the infection uncontrolled or relapsed; among 83 patients given 250,000 units this proportion was 16%, and in 17 receiving only 100,000 units daily it was 41%. The superiority of the largest dose is thus clearly evident, and it may be expected to eliminate the infection in at least 9 cases out of 10. On the other hand, about 35% of these initially successful cases die of heart failure or other complications, and the over-all recovery rate is thus not likely to exceed 60%. That heart failure should figure so largely as a cause of death is perhaps not so unexpected as this report seems to suggest. Unless diagnosed very early, this disease causes a degree of valvular destruction and incompetence unequalled in any other condition, and there is no evidence that healing improves the function of the valve; fibrosis and calcification may even worsen it. Whatever the achievements of chemotherapy, some of these patients must always die from the mechanical consequences of damage done before the diagnosis is made.

From this analysis there are several conclusions which emerge clearly, and other features which remain to be

[1] 1946, 1, 381.

explained. Prognosis is affected by five factors, of which the duration of the disease, the presence or absence of heart failure, and the state of nutrition have the most decided effect. Since the two latter depend largely on the first, they may be regarded almost as different expressions of the same thing, but they lay treble emphasis on the paramount importance of early diagnosis. The vast majority of these patients owe their predisposition to past rheumatic carditis, and a history of this disease should be borne constantly in mind. If unexplained fever in such a patient were always regarded as demanding hospital admission forthwith and a series of blood cultures, very early diagnosis would be the rule and the recovery rate would undoubtedly improve. Prognosis depends also on age, but only clearly to the extent that it is worse in patients over 50. It also depends on the site of the lesion, combined aortic and mitral disease having the worst prognosis, and septal defects the best. There were only 12 cases of septal defect, and the figures are therefore not conclusive; but the absence of valvular damage puts this form of the disease in a different category, and it would be surprising if the ultimate results were not more favourable. It also seems that the prognosis is worsened by previous treatment with penicillin; the difference is decided if relapse has occurred after a full course, but less marked if previous treatment has been inadequate.

The features which remain to be explained are failure to control infection in a small proportion of patients adequately treated, and relapse—usually within a month—in others in whom treatment was initially successful. It has also been observed that in about one-third of the patients dying after apparently effective treatment "what appeared to be living organisms" were still present in the affected valves. It might have been supposed that the degree of susceptibility of the causative organism to penicillin would be an important factor here. This is known to vary widely, the growth of some of these streptococci being inhibited by less than 0.02 unit per ml.—the approximate concentration inhibiting that of the Oxford staphylococcus—while other strains require many times this amount. The influence of this factor has been analysed in all possible detail, and it seems that unless the coefficient of resistance is 8 or more it has no observable effect. Until the cause of this sort of failure is understood it is unfortunately by no means certain that the higher dosage it is proposed to use will have any better effect. It will be noted that this study is to be continued at eight of the centres which co-operated in the earlier work: they are named at the end of the report, with an invitation that cases be sent to them.

CONDITIONED VITAMIN-D DEFICIENCY

In most children freedom from rickets is ensured if the diet contains adequate and well-balanced amounts of calcium and phosphorus, and if vitamin D is supplied either in the food or by exposure of the body to sunlight. Older subjects are similarly protected from osteomalacia, the adult counterpart of rickets. In some instances, however, calcification is defective even with a diet which appears to be satisfactory, and therapy with ordinary doses of vitamin D is unsuccessful. Among these special patients some may have lesions beyond the control of vitamin D, but others may be cured by very heavy dosing. Thus ten years ago the American workers Albright, Butler, and Bloomberg[1] reported that a patient who had suffered from rickets for many years in spite of ordinary doses of vitamin D was cured when the dosage was raised to 450,000 i.u. daily. Subsequently Albright and his colleagues[2] described a series of cases in which osteomalacia was associated with steatorrhoea or with renal lesions. Some of these patients responded to massive doses of vitamin D and were considered therefore to have an abnormal resistance to the vitamin.

In this country R. A. McCance[3] has recently studied an interesting case in which severe osteomalacia was traced to R.R.D. (raised resistance to D). The patient, a young woman, came under his care about eight years after the start of her illness. Her early history had been uneventful; she had been born of healthy parents and developed into a strong schoolgirl with a good record in athletics. When she was 14 years old, however, her gait became abnormal. This symptom was soon followed by great muscular weakness, which made it difficult and painful for her to walk, or even rise from a sitting posture. Primary muscular dystrophy was diagnosed and was treated with glycine, but after a slight temporary improvement the patient's condition deteriorated during the next two years until she became completely crippled. *X*-ray examinations now revealed decalcification of the skeleton and deformity of the pelvis. Serum phosphorus was low, but calcium was normal. When the patient was aged 18½ years, therefore, a double diagnosis of myopathy combined with osteomalacia was entertained. If any further evidence of decalcification was necessary it was soon provided by spontaneous fractures of one ulna, the pelvic bones, and extreme coxa vara. Vitamin D was now given in doses of 2,000–7,500 i.u. daily. Some progress was made, and although decalcification persisted walking became possible with the aid of crutches.

When the patient was 23 years old she came under the observation of Prof. McCance. No evidence was found of abnormalities in her kidneys or intestinal tract. A careful study of her calcium and phosph[illegible] metabolism was made, and the balance for both was found to be negative. *X*-ray examinations indicated the presence of spontaneous, idiopathic, symmetrical pseudo-fractures which were clearly identical with lesions which have been described by Looser[4] and Milkman.[5] In spite of a good dietary history, and of exposure to irradiation as indicated by a sunburnt skin, vitamin D therapy was instituted at the high level of 500,000 i.u. daily. No dramatic change was noticed during the first 14 days of dosing, but soon afterwards both calcium and phosphorus were found to be in positive balance. The faecal excretion of calcium fell to about one-tenth of the previous level, although an increased excretion by the kidneys reduced the net gain. With phosphorus the threshold value of excretion by the kidney appeared to be increased. After therapy had been kept up for about six weeks, with a total intake of 21,000,000 i.u. of vitamin D, there was some evidence of toxic effects, and dosing was stopped. The patient's condition, however, continued to improve. After four months, *x*-ray examination showed considerable recalcification, with callus formation at the sites of the pseudo-fractures. Ten months after treatment recalcification was still proceeding at the rate of 5 g. weekly, while the bones appeared almost normal on *x*-ray examination. The final state of the patient, one year after treatment, was most satisfactory. She had no

[1] *Amer. J. Dis. Child.*, 1937, **54**, 529.
[2] *Medicine*, 1946, **25**, 399.
[3] *Quart. J. Med.*, 1947, **16**, 33.
[4] *Dtsch. Z. Chir.*, 1920, **152**, 210; *Zbl. Chir.*, 1920, **47**, 1470.
[5] *Amer. J. Roentgen.*, 1934, **24**, 29.

pain, could walk with confidence, and was physically capable of earning her living. In addition to providing an illustrative and authentic example to add to our list of conditioned vitamin deficiencies, therefore, Prof. McCance has had the satisfaction of restoring to a normal life a patient who appeared to be a hopeless cripple.

CHOLERA IN EGYPT

The recent epidemic of cholera in Egypt began in September at El Kurein in the Delta province of Sharkiya. Details were given from week to week in our epidemiological notes, and some account of the measures taken to control the epidemic appeared in these columns.[1] It is now clear that during the first week the infection spread from Sharkiya to the neighbouring provinces of Dakahliya, Minufiya, and Kalyubiya in Lower Egypt, and to Ismailia and Suez. By the end of the second week there were cases in Upper Egypt, and all the Delta provinces were involved except Beheira. It was at the end of the fourth week that the curve of incidence rose steeply to the peak figure of 1,022 cases, with 581 deaths, on Oct. 20. In that week there were 4,566 cases, with 2,057 deaths.

The later course of the epidemic has recently been reviewed.[2] The worst day was Oct. 20, but the fifth week brought a further 5,976 cases and 2,933 deaths, and by this time 367 of the 425 villages in Dakahliya Province were affected. A decline began in the sixth week and thereafter continued steadily. During the eighth week no new areas were affected, and in the seven days there were reported 750 cases and 505 deaths. Over the eight full weeks from Sept. 23 to Nov. 16 there was a total of 20,877 cases, with 10,265 deaths—a case fatality of 49%. It should perhaps be recalled that when Egypt experienced its last cholera epidemic forty-five years ago there were over 40,000 cases, with a case fatality rate of 85%, and since the 1902 epidemic the population of Egypt has almost doubled. Once again the great majority of the cases appeared in the villages, and the disease failed to establish itself in any of the towns provided with satisfactory water supplies and adequate sewage disposal systems. It is true that the over-all incidence began to decline as soon as 80% of the population had been inoculated with anti-cholera vaccine, but whether this represents a causal relationship or merely the coincidence of inoculation and a spontaneous autumnal decline it is too early to say.

The part played by the World Health Organization in meeting a grave threat to international public health augurs well for the future. As soon as news of the outbreak was received members of the Interim Commission were consulted and authorized certain expenditure. The Division of Epidemiology advised all countries connected with Egypt by land, sea, and air routes, and every country which might possibly be concerned was provided with up-to-date information and thus enabled to take the necessary quarantine measures. The expert committee on quarantine met in Geneva, and we reported then the measures that were advised or that had already been taken by the Egyptian Government.[3] So far as this country is concerned, only one individual arriving by air from Egypt was ever suspected as a possible case of cholera,[4] and this suspicion proved to be unfounded. It should also be recorded that the mere concentration of orders for cholera vaccine through the W.H.O. Secretariat is said to have resulted in a saving for the Egyptian Government of $125,000.

1 *British Medical Journal*, 1947, 2, 619.
2 *Chronicle of W.H.O.*, 1947, 1, 157.
3 *British Medical Journal*, 1947, 2, 801.
4 Ibid., 1947, 2, 851.

HABITUATION TO STREPTOMYCIN

Bacteria can acquire some degree of tolerance to almost any lethal agent. Unfortunately the antibiotics are far from being an exception to this; penicillin-resistant strains of certain species, particularly *Staph. aureus*, are now frequently encountered, and this subject was discussed in a leading article in the *Journal* of Nov. 29. But no such habituation as that exhibited by some bacteria on contact with streptomycin has ever been seen before; it is well recognized as a defect which severely limits the usefulness of this drug and renders its employment always something of a gamble. How rapid and extreme the change may be is illustrated in the studies of Finland and his colleagues[1] of the treatment of urinary tract infections caused by coliform bacilli. These organisms, originally inhibited by not more than 25 units of streptomycin per ml., became resistant within a few days—in one patient after only one day—to no less than 50,000 units per ml. Similar observations are features of many reports of failure in streptomycin treatment for conditions of various kinds. There has been much speculation about the mechanism by which this resistance is acquired, and some authors believe that the original bacterial population may contain a very small minority of naturally resistant cells. Alexander and Leidy[2] offer actual proof of this, obtained by the study of cultures of *H. influenzae* from cases of meningitis. By inoculating with enormous numbers of organisms media containing 1,000 units of streptomycin per ml. they obtained a few colonies, thus indicating that an infinitesimal proportion (1 in some billions) of cells in cultures obtained before treatment was begun possessed this high resistance. Strains from 14 patients all behaved in this way *in vitro*, although 10 of the patients had been cured by streptomycin and 4 had not, failure in 3 being attributable to the development of resistance *in vivo*. These authors believe that the outcome of treatment depends on whether one or more of these resistant cells is present when treatment is begun. The probability of this increases with progress of the disease and the greater total number of bacilli in the meninges. A patient whose strain developed resistance during treatment was found to have in the nasopharynx a year later *H. influenzae* still resistant to 1,000 units of streptomycin per ml. It is clearly only a matter of time before such strains become common, if not predominant, and a new antibiotic will consequently be needed.

A stage further than habituation has now been described, no less than the ludicrous situation in which a previously susceptible organism now requires streptomycin to enable it to grow and produce disease. Miller and Bohnhoff[3] have shown previously that meningococci originally very susceptible to streptomycin can be trained within a week to withstand 75,000 units per ml. In an extension of these studies[4] they have observed two types of resistant variant. One of these is unchanged except in its capacity for resistance to the drug; it grows normally on all media, whether containing streptomycin or not, and retains its previous pathogenicity for mice. The second type grows only on streptomycin-containing media, having lost its capacity for growth on ordinary media altogether. Its behaviour in mice corresponds: avirulent in the ordinary sense, it assumes full virulence, producing a fatal infection, only in animals treated with streptomycin. What are we to think of a chemotherapeutic agent which can become an essential growth factor for a previously susceptible organism?

1 *J. Amer. med. Ass.*, 1946, 132, 16.
2 *J. exp. Med.*, 1947, 85, 329, 607.
3 *J. Amer. med. Ass.*, 1946, 130, 485.
4 *Science*, 1947, 105, 620.

PULMONARY HEART DISEASE

Pulmonary heart disease may be defined as a disorder of the heart resulting from disease of the lungs or of the pulmonary circulation. It may be acute, as in massive pulmonary embolism; subacute, as in recurrent thrombo-embolism and secondary carcinomatosis of the lungs; or chronic.

Massive pulmonary embolism is responsible for approximately 1% of all obstetrical, surgical, and medical deaths in hospital. Thrombosis usually begins in the calves of the legs. The most useful early sign of a dangerous phlebothrombosis is a rise of the skin temperature of the affected leg. The clinical features of massive pulmonary embolism include sudden faintness and dyspnoea, substernal constricting pain, an abrupt and marked fall of blood pressure, elevation of the venous pressure, and signs of profound compensatory peripheral vaso-constriction. The most certain way of making a correct diagnosis is by means of multiple chest-lead electrocardiography.[1] Treatment by heparin and dicoumarol should be instituted at once, preferably as soon as phlebothrombosis is suspected.

An interesting form of pulmonary heart disease is that due to progressive blocking of the pulmonary circulation by carcinomatous emboli or by multiple thromboses secondary to perivascular lymphatic carcinomatous infiltration.[2] Chorion-epithelioma or carcinoma of the stomach is usually responsible.

Chronic pulmonary heart disease is of two main types, hypertensive and anoxic, though the latter rarely, if ever, occurs alone. Hypertensive pulmonary heart disease may be of known or unknown aetiology. Known causes include bilharzia, periarteritis, and Buerger's disease, but the majority of cases seen in this country are of obscure origin. The sexes are equally represented. Most of the patients reported have been relatively young, and some have been children. Clinically, the disease is characterized by a preliminary variable period of breathlessness, followed by progressive congestive heart failure with a high right-ventricular pressure, low cardiac output, normal or near-normal arterial oxygen saturation, and peripheral cyanosis. There is radiological and electrocardiographic evidence of great enlargement of the right ventricle, and the pulmonary artery is dilated. Treatment is singularly ineffective and the outcome invariably fatal.

Pathological findings have been variable. Medial hypertrophy of the smaller arteries is far from constant, and when present rarely affects more than about a quarter of the vessels.[3] Intimal thickening of patchy distribution is the rule, and atherosclerosis is commonly extensive. Multiple thromboses have also been described and, when old, may be difficult to distinguish from atherosclerotic lesions. Dilatation of the pulmonary artery may be associated with medial hypoplasia, as in the case described by Gold.[4] Gilmour and Evans[5] reported a case very similar to Gold's, and suggested that endarteritis, which seemed to be responsible for the hypertension, began as a compensatory reaction to medial hypoplasia. They thought that a vicious circle then became established, endarteritis leading to hypertension and hypertension to further endarteritis. As the authors observe, however, medial deficiencies are not believed to be the rule in cases of "primary pulmonary vascular sclerosis." Nevertheless, the idea that some congenital abnormality of the pulmonary arterial tree may be an important aetiological factor in these cases is worth further investigation.

The anoxic type of pulmonary heart disease is characterized by a long history of chronic bronchitis or asthma, evidence of marked emphysema, cyanosis due to reduction of the arterial oxygen saturation, compensatory elevation of the cardiac output,[6] and finally by congestive heart failure The right ventricular pressure is raised,[7] but much less so than in "primary" hypertensive cases. *X*-ray investigation again shows enlargement of the right ventricle and dilatation of the pulmonary artery. It is possible that anoxia due to emphysema is responsible for the hypertension.[8] Aneurysmal dilatation of the pulmonary artery, of its left or right branch, or of all three may occur when medial hypoplasia is associated with pulmonary hypertension from any cause.

1 Wood, P., *Brit. Heart J.*, 1941, 3, 21.
2 Brill, I. C., and Robertson, T. D., *Arch. Intern. Med.*, 1937, 60, 1043.
3 Brenner, O., Ibid., Parts 1–4, 56, 211, 457, 724, 976.
4 Ibid., 1946, 78, 197.
5 *J. Path. Bact.*, 1946, 58, 687.
6 Howarth, S., *et al.*, *Clin. Science*, 1947, 6, 187.
7 Cournand, A., *et al.*, *J. clin. Invest.*, 1946, 25, 639.
8 Motley, H. L., Cournand, A., Werko, L., Himmelstein, A., and Dresdale, D., *Amer. J. Physiol.*, 1947, 150, 315.

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INTRATHORACIC NEUROGENIC TUMOURS

Neoplasms arising from nervous tissue are the commonest tumours of the posterior mediastinum. They grow from the sympathetic system or from an intercostal nerve and originate from Schwann cells, connective-tissue cells, or true nervous tissue. Most of them are benign but some are malignant, or become malignant after many years. Even those that are not biologically malignant threaten life, like all intrathoracic tumours, owing to their position; they may grow rapidly and become very large. Although these tumours are comparatively rare, they are being met with in larger numbers to-day because of the increasing applications of radiography. Susman[1] describes four cases treated by operation; two were examples of sympathetic ganglioneuromata, and two were neurofibromata arising from the sheath of an intercostal nerve. One of these last appeared in a child aged 11 who had a generalized neurofibromatosis —von Recklinghausen's disease. A huge left basal tumour eroding two ribs was removed, but several months later complete paraplegia developed and death followed. This liability of the neurogenic tumours to be associated with an intraspinal portion (dumb-bell tumour) is another reason for operative removal.

Olivier Monod,[2] in a study of 19 cases, states that it is better not to attempt removal, unless there is definite compression, when the tumour is a part of a neurofibromatosis because of the danger of malignant change. He points out that the neurogenic tumours are usually solitary, rounded, posterior, and subpleural; they have a poor blood supply and are easily freed and removed. Symptoms are often slight and the differential diagnosis must generally be made radiologically and depends upon the demonstration that the tumour is in the posterior mediastinum. Artificial pneumothorax often helps diagnosis by dissociating the lung from the tumour. Any pulmonary symptoms such as cough or haemoptysis are against the diagnosis of a neurogenic tumour. Monod recommends extrapleural rather than transpleural removal. Of the 17 tumours that he has removed, 11 were dealt with extrapleurally. His description of the extrapleural approach is interesting and should be consulted, but it is not entirely satisfactory except for the smaller tumours. It can be seen from his radiographs that it has been necessary to resect as many as four ribs. A transpleural approach should enable even a very large tumour to be removed after resecting only one rib, with possibly the division of one adjacent rib. Most thoracic surgeons feel that it is difficult to avoid opening the pleura when removing a large tumour, and the extrapleural approach is so apt to be cramped that they prefer a deliberate transpleural operation for almost all cases.

1 *Austral. New Zeal. J. Surg.*, 1947, 16, 200.
2 *Le Poumon*, 1947, 3, 97.

CANCER RESEARCH

ANNUAL REPORT OF B.E.C.C.

The Annual Report of the British Empire Cancer Campaign consists as usual of a compilation of separate reports from research laboratories, radium institutes, and hospitals, as well as from individual investigators, scattered over this country and to some extent over the Dominions. Most of the chemical, physical, and biological investigation here recorded is of a highly specialist character, employing techniques familiar only to those working in that particular field. For the twenty-fourth year in succession Mr. J. P. Lockhart-Mummery has done a useful service in editing this mass of material, but even so it is not easy to place all this work in perspective. As Lord Horder put it at the annual meeting of the Campaign recently, many pieces of the jig-saw have been found, but the masterpiece which reveals the picture is still hidden. Many of the investigations which are proceeding are long-term ones, and immediate results are not to be expected. Among the investigations described are those on the production of gene mutation in mice by dibenzanthracene, the cytochemistry of avian tumours, and the effect of sulphamezathine in inducing precocious growth in young cockerels. Every ray of light, however indirect, is presumably valuable, and one of the fascinating things about work of this kind is that no one knows at what point the whole landscape may be suddenly illuminated.

Mass Statistics

In the present report an unusually large number of cancer statistics is given. At a recent symposium on breast cancer at the Royal Society of Medicine the main controversy appeared to surround not competing methods of treatment but the interpretation to be placed upon statistics. Statistics, it is said, can be made to prove anything—even the truth. At this symposium three-year survival rates were discarded altogether. Even five-year rates were looked upon in some quarters with scepticism, and one speaker argued that the percentage claimed by one surgeon as his ten-year survival rate after operation was in excess of the ten-year expectation of life for the normal population of the same age group, demonstrating to his mind the fallacy underlying all statistics on such bases.

Whatever their exact worth, however, such statistics as are quoted in this report are of interest. The Marie Curie Hospital, for example, records 1,832 cases of cancer of the cervix treated radiologically, mostly by radium alone, since 1925. The five-year survival rate here for all the four stages is given as 45%. Attention is drawn to the difficulty of estimating the relative merits of surgery and of radiology in cancer of the body of the uterus, because comparable groups of cases treated primarily by either method are not easy to obtain. The same hospital has treated 510 cases of breast cancer over a period of 25 years, and gives the ten-year survival rate for patients in stage I as 27.2%, and for stage II, 17.6%.

Cancer of the Lung

Under the leadership of Sir John Kennaway workers in the pathological department at St. Bartholomew's Hospital have been studying the death certificates for cancer of the lung and of the larynx in men during the period 1921–38. During this period deaths attributed to cancer of the lung increased by 16.5 times in men, and by 8 times in women, though the incidence of cancer of the larynx has not risen in either sex during the last fifteen years. The examination of occupations does not disclose anything which would account for a large fraction of the increase in these deaths, and the two largest industries in the country, agriculture and coal mining, show a low incidence. The possibility of the great increase in the habit of tobacco smoking being a factor has been considered. During the period in question the consumption of tobacco roughly doubled. But the investigators do not commit themselves on this or any other factor in causation, nor indeed on whether or to what extent the increase is a real one.

The Clinical Cancer Research Committee of the Campaign presents every year a highly elaborate statistical analysis of cases of cancer, derived from London hospitals, pertaining to some region of the body. This year attention is given to 916 cases of cancer of the colon and the results are analysed in some 40 tables. Cancer of the caecum and proximal colon is relatively more common among females, who form 60% of the cases. In cancer of the descending colon and sigmoid the proportion of the sexes is nearly equal. The mean ages of males and females in this series were 62.1 and 60.8, respectively. No significant variation was found pointing to an occupational factor among the males. The patients who consulted a doctor within three months of the onset of symptoms constituted 63% of the whole series. In 21% palliative treatment had been persisted in for more than three months before reference to a hospital. Radical operation was possible in only a little over one-third of the cases, with a mortality of 18.3%. The five-year survival rate was 31.2%.

Of the various radiobiological investigations which are recorded attention may be drawn to some interesting work carried out in the department of biophysics at Mount Vernon, which was lately brought before the British Institute of Radiology. This concerns the effect of ionizing radiations on the broad-bean root (*Vicia faba*). These roots have been found to be more easily damaged by *x* rays when irradiated either at 3° C. or when under the influence of hydrocyanic acid, and less easily damaged when irradiated in an atmosphere of nitrogen. The difference between the degree of growth inhibition resulting from aerobic and anaerobic radiation has been shown to be closely related to the difference in the proportion of cells in which structural changes in the chromosomes are produced under corresponding conditions of radiation.

Virus Research

The Campaign awarded some £75,000 as grants to hospitals and research workers during the year, and made a further special grant of £25,000 for virus research in relation to cancer. This special grant is to be applied over a period under the direction of the Scientific Advisory Committee. Work has been begun under its auspices in Glasgow, at the Royal Cancer Hospital; in Edinburgh, at the Institute of Animal Genetics; and in London, at the Middlesex, Royal Cancer, and Westminster Hospitals. The scheme embraces all aspects of the problem, including the use of the electron microscope and of the ultra-centrifuge, and an important part of the project is the training of workers in virus research. It takes from six months to two years for even a bacteriologist, if his previous studies have been limited to bacteria, to master the finer manipulations required in virus work. It is expected that the £25,000 will need to be considerably supplemented as the work goes on.

On the whole of this slow-moving and many-sided research Lord Horder's speech at the annual meeting may again be quoted: "We can juggle (I use the word deliberately) with carcinogens, with oestrogens, with susceptible and with resistant animal strains, with invisible 'agents' and with undefined 'factors,' but the essential causation of cancer in a woman's breast or in a man's stomach still eludes us."

Reports of Societies

RENAL FUNCTION IN DISEASE

At a meeting of the Manchester Medical Society on Dec. 3 Prof. ROBERT PLATT gave an address on "Renal Function in Disease."

He first considered the syndrome of renal failure, which was characterized by a steady deterioration in the power of the kidney to produce a concentrated urine; in the later stages the urine was pale, copious, dilute, and had a specific gravity of about 1010. When the functional power of the kidney was insufficient for the excretory needs of the body the symptoms of uraemia developed, not only because of retention of the waste products of metabolism but because of a general

disturbance of such electrolytes as sodium, potassium, chloride, calcium, and phosphates. The symptoms of uraemia—weakness, anaemia, anorexia, vomiting, wasting, drowsiness; and coma—should be clearly distinguished from the more dramatic symptoms of hypertension, such as severe periodic headache, retinal disturbances, convulsions, and paralyses, which so often co-existed and confused the clinical picture.

The first question to be discussed was why the kidney lost its concentrating power in renal failure. The underlying pathology common to all cases was loss of nephrons, and the usual explanation of the lack of concentrating power was that there was a failure of the cells of the tubules to continue their function of elaborating a highly differentiated urine. This theory was unsatisfactory. Rose Bradford showed fifty years ago that surgical removal of most of the kidney caused the remainder to secrete urine of the same type—copious, dilute, and of low specific gravity. It was inconceivable that in the circumstances the remaining nephrons should suddenly have developed tubular failure. Verney and Winton showed many years ago that an increase in glomerular pressure would also give rise to a urine of this type. More recent investigations by means of inulin and diodrast clearances had shown that the filtration fraction in chronic renal disease was high, which suggested that there was in fact a high glomerular pressure. If this was so, he suggested that it might be brought about simply by a large amount of blood perfusing a small number of nephrons. There could be no humoral mechanism involved because it was possible to have a condition of renal failure in one kidney while the other kidney was secreting a normally concentrated urine.

If it were accepted that a high glomerular pressure accounted for the character of the urine in renal failure, this did not rule out the possibility of a co-existing tubular failure in some cases, but failure of the tubule cells should give rise to glycosuria—which was never present in chronic renal disease. Moreover, the histology of chronic nephritis showed in general that in those areas where there was tubular atrophy the glomeruli were non-functioning, whereas the few remaining glomeruli were surrounded by apparently active and dilated tubules.

Prof. Platt then considered the question of oedema in acute nephritis. This was not due to hypoproteinaemia nor to heart failure. Current literature still subscribed to the view that it was due to increased capillary permeability. This view, which was never satisfactory, was based on observations on the protein content of the oedema fluid in acute nephritis which had since been discredited. Prof. Platt suggested that a low glomerular pressure would account for the scanty urine of high specific gravity which was typical of the early stage of acute nephritis, and would lead to increased reabsorption in the tubules, giving rise to fluid retention and oedema. Inulin and diodrast clearances supported this hypothesis by showing a low filtration fraction. Recent work in Manchester and elsewhere suggested that there was haemodilution with a high blood volume in the early stages of acute nephritis, a finding which supported the view that the kidney was primarily at fault and was strong evidence against the theory of capillary permeability.

Finally, Prof. Platt described briefly the recent work of Trueta, Barclay, and others, which had shown that the renal circulation could be largely diverted from the cortex into the medulla, and he discussed the bearing of these researches on reflex anuria and cortical necrosis of the kidney.

Drs. MARSDEN, ISRAELS, R. W. FAIRBROTHER, LANGLEY, DON, OLIVER, and Prof. G. JEFFERSON, F.R.S., took part in the subsequent discussion, to which Prof. Robert Platt replied.

PRIMARY STERILITY

At a meeting of the Section of Obstetrics of the Royal Academy of Medicine in Ireland, held in the Royal College of Physicians of Ireland on Nov. 7, Dr. BETHEL SOLOMONS took the chair in the absence of the new president, Dr. O'Donel Browne, who was recently elected Master of the Rotunda.

Dr. RAYMOND G. CROSS presented a series of 358 cases of primary sterility which had been investigated and treated at the Rotunda Hospital by Dr. A. H. Davidson during the years 1935–9. He found the causes of female sterility in his series to be as follows:

	No. of Cases	Percentage of Total
Fibroids	37	10.3
Ovarian cysts	26	7.2
Retroversion	81	22.6
Endometriosis	7	1.9
Tuberculosis (genital)	12	3.3
Adhesions	39	10.8
Salpingitis (unilateral)	27	7.5
Salpingitis (bilateral)	13	3.6
Hypoplasia	26	7.2
Anovular menstruation	8 in 136	5.8
Gonococcal infection	3	0.8
Uterus bicornuata	1	0.27
Carcinoma	1	0.27

A postal survey was carried out to determine the number of patients who subsequently became pregnant; 211 patients replied, and 81 had become pregnant. This represented 38% of the known results and 23% of the total cases. He analysed in detail the pregnancies in the various conditions and compared and contrasted them with the figures from centres in Europe and America. He emphasized the good prognosis in fibroids, ovarian cysts, endometriosis, non-tuberculous salpingitis, and adhesions due to appendicitis. He further discussed the investigation and treatment of hypoplasia and anovular menstruation, and finally drew attention to the poor prognosis in cases of genital tuberculosis.

Dr. BETHEL SOLOMONS asked what was the interval which elapsed before a marriage was considered sterile? One and a half years was a fair average. Although this inquiry was into female sterility, the results were incomplete unless the number of males responsible was shown; in his clinic the male was responsible in 50% of cases. The removal of fibroids meant a cure in a large number of cases, but it should be followed by insufflation of the tubes if pregnancy did not occur within six months. While pregnancy could occur when the uterus was in retroflexion, if the marriage remained sterile and this displacement was present it should be corrected. The removal of an ovarian cyst was also followed by increased fertility. Although the results of salpingostomy were disappointing, pregnancy occurred after a skilfully performed operation in 8 to 10% of cases. Tuberculosis of the Fallopian tubes was difficult to diagnose even when the abdomen was opened. If the tubes were tuberculous, the outlook for pregnancy was hopeless. When the condition was diagnosed, ultra-short-wave therapy was indicated rather than operation. Gonadotrophic hormones were valuable and should be used. The injection of a radio-opaque substance was strongly advised. He had done hundreds of salpingographies without any fatal results and with a minimum of complications. The injection of air, oxygen, or carbon dioxide had been followed by fatal results in several cases in Dublin. He had come to the conclusion that these fatalities were due to an absence of care in technique. Carbon dioxide should be used, the gas should be allowed to percolate very slowly, the pressure should be kept low, and no anaesthetic should be used.

General Discussion

Dr. A. W. SPAIN said that in dealing with these cases it was difficult to lay down any arbitrary time. In the younger group he would be inclined to wait for three years: in older women something should be done in a much shorter time. Curettage was helpful in the diagnosis of tuberculous salpingitis, but should not be undertaken in the pre-menstrual stage.

Dr. J. GALLAGHER said that he did not regard as sterile any woman under 35 years of age until after at least three years of unfertile marriage. If the patient was over 35 years of age and had been married for one or one and a half years he would advise salpingography. Most cases in the "early married group" if left alone would become pregnant anyway. He did not think retroversion was a cause of sterility at all. Rubin's test carried a definite risk, and he knew of eight deaths following this investigation.

Dr. EDWARD SOLOMONS, Dr. E. A. KEELAN, Dr. F. GEOGHEGAN, and Mr. O'NEILL also joined in the discussion, to which Dr. Cross replied.

Correspondence

National Health Service

SIR,—The *Journal* of Dec. 20, 1947, makes a reference (p. 1005) to the premature disclosure in the *Tribune*, Dec. 12, 1947, of the discussions conducted by the Minister of Health with the Negotiating Committee. In an answer in *Hansard* (Dec. 19, 1947) the Minister declared that as far as he and his colleague, the Secretary of State for Scotland, and their respective officers are concerned he "could state categorically that no disclosure of any kind had been made or condoned of the discussions, which it had been agreed with the Negotiating Committee would not be published before Dec. 19, 1947." The *Tribune* notoriously draws its inspiration from leading members of the Socialist Party. Mr. Bevan's wife is a director, and he himself was closely associated with its management up to the time of his appointment as Minister of Health.

In these circumstances I submit that it is of the first importance that the profession should be made aware of the terms of this disclosure, and I would suggest further that the *Journal* should reproduce the full text. I would emphasize particularly the passages in which the *Tribune* editorial gleefully records and in great detail how the Minister rejected all the principal demands voiced by the medical representatives, adding the dubious information that "the Minister was supported in doing so by those negotiators who were not tied to the B.M.A." The editorial accords this final meed of praise: "Politically, the Minister's firmness has been most important . . . if he had been weak in face of this reactionary profession, it would have increased doubts as to the intention to carry out a Socialist programme."

In this connexion it must be emphasized that the official "Socialist programme," published in 1943, demanded the establishment of a full-time salaried State medical service, and Mr. Arthur Greenwood (then Lord Privy Seal) in the debate on the Second Reading (*Hansard*, May 1, 1946) stated quite firmly that that demand remains the party's ultimate and unalterable aim. It must be further emphasized that the "regulation-making power," reserved to the Minister in a measure hitherto unprecedented, would enable him to impose *by regulation* a full-time salaried State medical service when, as he foreshadowed in a speech in the House, "the time is ripe" to do so.

The *Tribune* further reports: "Aneurin Bevan made it quite clear to the Negotiating Committee that the service will start on July 5 with the resources at our disposal.'" This repeats textually his reply to my question (*Hansard*, Nov. 10, 1947) in which I asked him to inform the House how many general practitioners and specialists he would require to warrant inaugurating the new health services and what measures had been taken to provide the buildings essential to carry out the undertakings of the Act. He evaded these queries with an answer which recalls a similarly defiant declaration made by the then Minister of Education in a public speech (February, 1946) that "the school-leaving age would be raised on April 1, 1947, *whether or not the teachers or the classrooms were there.*" It would seem that the Minister of Health is similarly resolved to "launch" the National Health Service Act, 1946, whether or not the doctors or the buildings are there. In these examples both Ministers are clearly more concerned with "carrying out a Socialist programme" than with effecting any real improvement in the existing provision of education and health services. In these circumstances, I submit, the profession will be indeed mad (*quem Deus vult perdere primum dementat*) if it hands to the Minister a blank cheque for him to fill in as he will, for that is what acceptance of the present Act would in effect mean.—I am, etc.,

House of Commons. E. GRAHAM-LITTLE.

SIR,—When doctors make partnership agreements or draw up a lease they employ experts to study the details and advise them. There are usually some clauses that the experts regard as important, the importance of which escapes the non-expert. We do not hesitate to take the expert advice. I imagine there are thousands of doctors like myself who have neither the time nor the ability thoroughly to digest and understand the National Health Service Act. The Negotiating Committee has spent a very long time digesting and discussing all the clauses of this Act. It has looked into the obvious, the not so obvious, and the frankly obscure implications of each clause.

Certain principles are considered vitally important. Do not let us be fooled by plausible statements to the effect that the Negotiating Committee is making mountains out of molehills. Let us believe our own experts, who have studied the whole matter with so much care. Let us rally round and support the Negotiating Committee. Let us unite as never before, promise in writing not to join the Service until advised to do so by the Negotiating Committee, and stick to it. By so doing we shall not harm the Service but will safeguard the future, immediate and remote. Surely it is the remote future which is in so much danger.—I am, etc.,

Bungay, Suffolk. P. G. LEVICK.

SIR,—I am overwhelmed by the benevolence and thought for our welfare shown by that enemy of the upper and middle classes, Mr. Bevan. His attractive financial terms, his previous promises, and the exhibition of skilful skating over legally doubtful ice make delightful reading—almost a Christmas carol. But we must remember: (1) It is established that no Minister of the Crown is bound by his predecessors' promises. (2) Once we have sold our practices we have no legal say in what the purchaser does with them, and will lose all power of individual initiative.

We shall be dependent on a majority agreeing with our individual dislikes and the use of that loathsome weapon, a strike. In the meantime the basic salary can be raised at someone's discretion with a lowering of the capitation fee to balance, or just as likely, in view of an "imminent crisis," merely the latter; and we shall not be able to do a thing about it. Let us, therefore, set our faces against this modern search for easy flesh-pots and keep the standard of individual initiative flying for the rest of our great country to follow.—I am, etc.,

Cromer, Norfolk. A. H. GREGSON.

SIR,—I am strongly opposed to the National Health Service Act but am not greatly impressed by the Negotiating Committee's case, although the Minister has avoided answering any of the main points. Why does he insist on a basic salary when a system of Government grants for young practitioners would meet all reasonable difficulties?

I feel that I could influence my neighbours and partners if I had information on the following points: (1) Are salary and capitation fee subject to "regulation" by the Minister? (2) In actual fact how far are regulations subject to the control of Parliament? I understand that the Minister, in practice, has an almost free hand. (3) This Act is the work of one man. Therefore it is right for us to learn what we can of his character and political history before we decide to accept his word, which is what he naively asks us to do. What is his record? This is business, not a tea party.

I have a son of 16 who wants to go into general practice; my father too was a G.P. and my grandfather. Why I ask the above three questions is because I find my doctor friends drawn away from consideration of principles to the Minister's statement about remuneration. If these promises are to be mere scraps of paper we shall be forced to consider the main structure of the Act—to what extent we will agree to be his servants, with no alternative employment or employer.—I am, etc.,

Havant, Hants. M. S. DEWHURST.

SIR,—With the publication of the Minister of Health's reply to the Negotiating Committee, there is certain to be a spate of letters, discussions, and meetings on the subjects raised. May I suggest that much time and energy would be saved if members of the profession would realize that by the Minister's refusal to compromise on the seven basic principles laid down by the B.M.A. the position is entirely unchanged from the time when the plebiscite was answered by the profession earlier in the year?

It was then our feeling that terms of service could not usefully be discussed unless vital principles were conceded. As nothing has happened since then to modify the Minister's original attitude to our demands, it seems to me that Divisions and members should be warned against dissipating their efforts by discussing terms of service in a scheme which is patently unacceptable, as the liberties of the profession have not been safeguarded. Do we still hold to all we said and wrote in those days, or have we allowed ourselves to be "softened up" by the passage of time?—I am, etc.,

Tiverton, Devon. THOMAS N. RUDD.

SIR,—Why another plebiscite? Did not the profession indicate in the last its opposition to discussion with the Minister? Why should we allow ourselves to be added to the multitude of slaves of the State? Why present the Minister with our capital, the fruits of our labours? Why even discuss a medical service which fosters numbers and not quality?—I am, etc.,

Gerrards Cross, Bucks. H. N. HORNIBROOK.

SIR,—It is essential that the impending plebiscite on the Health Act should provide clear information not only of the views of members of the profession but also of the action they are prepared to take in support. There are many who dislike the Act but fear to vote against acceptance on financial grounds and others who would be content to accept it but not against the will of the majority of the profession. The former must be reassured and the numbers of the latter assessed.

I therefore suggest that two questions be asked: (1) Are you in favour of the profession accepting service under the Act? (2) Are you prepared to support the decision of the majority?

The decision should be taken on the vote of private practitioners only (consultant and general), whose future is at stake. Permanent officers of the Armed Forces, salaried officials of the Ministries, county councils, and other public bodies will naturally continue their work in any event, and their votes should not influence the issue.—I am, etc.,

Finchampstead, Berks. E. BILLING.

SIR,—The time has come when it is necessary to warn all those members of the medical profession who are inclined to regard any promise given by a Minister at the present time as necessarily permanent in the future. After a few years, when the profession is firmly in the grip of the Ministry of Health, the following can and most probably will happen: (*a*) On grounds of economy the remuneration of the doctors can be reduced, possibly without arbitration. (*b*) Private practice will ultimately dwindle, and it may happen that the Minister will issue an Order which will prohibit State medical practitioners from taking private patients. This could very well occur when the health centres are finally in operation. (*c*) Orders can be issued directing a doctor how he may or may not treat his patients, and he will have no more freedom or personal initiative than any other Civil Servant.

We have not forgotten that some years ago a Minister did in fact alter the terms of service, without consulting the profession, in spite of promises given beforehand. Also, we have learnt that an undertaking given by one Minister is not necessarily binding on his successors. Let us ponder these facts very carefully before we barter our heritage of freedom for a mess of pottage, however well sweetened.—I am, etc.,

Keighley, Yorks. B. A. SLOCOMBE.

SIR,—It is rather difficult, after several years of controversy about the National Health Service Act, to see the wood rather than the trees, but is it not at the back of all our minds that this scheme is as unrealistic as prohibition in America? The ordinary middle-aged doctor who has been any good at his job finds himself with an increasing reputation and demand for his services. He has always been able to meet this situation in one of two ways. If he is as strong as a horse, he can accept more and more patients. If not, he can raise his fees and so keep his work within the limits of his sclerotic arteries. That is the true reason why we fear to see the last of private practice: it reduces the incidence of coronary thrombosis in the medical profession.

As long as a sufficient part of the populace can pay fees, a doctor's life is endurable. A 100% service, whether salaried or by capitation fee, removes any possibility of self-protection except through the bankruptcy court. It puts a premium on untutored youth and physical stamina, and a discount on greying hairs and wise judgment. It is thoroughly bad and, if introduced, is liable to suffer the same fate as prohibition.—I am, etc.,

Ashtead, Surrey. W. EDWARDS.

SIR,—The Minister's reply was more conciliatory than some of us were led to expect. But paragraph 25, "The Doctor's House," requires explanation. Why did the Minister seek advice about the citizen's right inherent in the Common Law of the land to sell what he owns, and from what will the certificate of the Medical Practices Committee protect him? Surely this unnecessary information is there to confuse or to hide something.—I am, etc.,

Haddenham, Bucks. T. W. S. PATERSON.

SIR,—The Negotiating Committee's case and the Minister's reply show how far we have travelled already towards first the twilight and then the night of our freedom. Gild it how he may, the Minister is asking us to become Civil Servants, shackled to a State machine, ready to obey the rules and regulations made for us by him and his successors at the Ministry of Health.

It was in May, 1946, that the Representative Body of the B.M.A. passed a resolution by 210 votes to 29 rejecting State ownership of hospitals; and another by 214 votes to 2 rejecting control over doctors with regard to the area in which they practise. In summing up the results of this meeting, the Chairman commented: "Now we have come to the time when one side or the other has to give way. A conflict is inevitable." They were fine motions, fine words, but during the eighteen months that have passed since that date, by subtle whispering propaganda and clever parliamentary tactics, the Minister has been enabled to take action so that he has made the State ownership of hospitals inevitable. During the same period he has formed committees within the framework of the Act and found medical personnel to serve on them; and among other things the functions of these committees have very much to do with the control of doctors in the area in which they practise.

The Minister is a clever psychologist, and in many respects he has jockeyed the profession into false positions. Let us remember that all his premises are based on his false assumption that the working of the Act is inevitable. Let us not make the same assumption: once we do so, we are lost. Most of us are non-political and thoughtful members of society. We are convinced in our hearts, by the tradition we inherit, that the practice of medicine must remain free if it is to prosper.

When we think of the history of our profession we realize that men of outstanding genius were always men of independent, unusual frame; and by their unique genius they made British medicine great. Surely it is only those who in their hearts regard greatness with envy who think that a State medical service is a good thing. I do not believe for one moment that such a service would appeal to first-class minds: with its pettifogging rules, its multitudinous forms, its endless negations, it could not do so. Instead, if this Service should come to pass, as it is envisaged by this Minister of Health, by this Government, it will come to be filled with a multitude of second-rate minds of a yes-man shape, who will make of British medicine an institution world-famous for its dull mediocrity, its small scientific exactness, the excellence of its statistics, and the envy the world over of the good bureaucrat. But this will not be the profession that could produce a Lister, a Harvey, a Moynihan, a Treves, and I do not believe that my great profession will meekly give up its freedom when the decisive day arrives.—I am, etc.,

Teignmouth, Devon. GEORGE A. F. QUINNELL.

SIR,—"And thus for nearly a year we have worked at the conference table to no purpose." And thus, too, do the Council add confirmation to the fears of many doctors that one of Mr. Bevan's type, creed, and expressed opinions has had from the beginning no intention of amending his Act and would prove impervious to conviction. Twelve months have

been spent in discussions with Ministry of Health officials, almost the net result of which has been to bring into sharper relief the difficulties and the pitfalls for the profession inherent in the Act. Indeed, one has the feeling that to describe such conversations as negotiations is altogether misleading and that the Committee's case could have been as well prepared in discussion among themselves with the help of legal advice, and also in half the time.

In the year that has passed all the business sides of a doctor's life as it concerns future plans have been completely held up. Behind a smoke-screen of secrecy the framework of the new Health Service has been steadily pushed forward, and doctor committee-men have taken their places among the planning authorities. Indeed, the words of the Council quoted above cannot be regarded as an overstatement, unless the delay has served the purpose of the Minister. We are now but little more than six months from the date of implementation of the Act, and still essentials and details are interlocked in a fog of uncertainty and confusion. For example, the sale and purchase of practice are defended in short and concise terms as an essential of continued freedom and efficiency, and then paragraph after paragraph is devoted to legalistic argument anent the difficulties that will arise if sale and purchase are abolished.

On which ground, then, are we prepared to join issue—on a principle of personal liberty or on the practical difficulty of working the Act as it stands? On this point it needs to be pointed out—and it cannot be too strongly emphasized—that the interests of the various sections of the profession are not identical. Of this a paramount example is again that of the sale and purchase of practice. This, though a sheet-anchor of independence and freedom as well as a guarantee of continuing efficiency to the general practitioner, is a matter of minor importance to the health officer or to the consultant. The hard truth should be faced without hypocrisy, for it is part of human nature, that men, or rather the great majority, will be more ready to disavow those principles in which they have no personal interest. Special weighting, therefore, should be allowed to the views of general practitioners in this matter.

In any event further equivocation and delay at this stage would be inexcusable and altogether intolerable. Argument and bargaining points must be put aside and the principles upon which we are prepared to stand fast decided. It is for the Council to strip themselves for action, and at the earliest possible moment to demand from the profession a plain yea or nay on simple issues which none can misunderstand.—I am, etc.,

Wirksworth, Derbyshire. E. D. BROSTER.

SIR,—The supporters of the National Health Service have decried the present medical services as being inefficient and out of date, and have drawn much attention to the inadequate accommodation and equipment of the surgeries and waiting-rooms in doctors' private houses. The public were told that under the new scheme they would have magnificent health centres, fully equipped with x-ray apparatus and laboratories and a team of doctors who would work regular hours and not be overworked. Now that we know the details the scheme is apparently merely to put the whole nation on the panel and thus accentuate the overcrowding of the already inadequate accommodation, and there is nothing new in it at all.

Mr. Bevan would have been wiser to have followed the example of General Montgomery, who made certain that every detail of his scheme was planned before taking action.—I am, etc.,

Camberley, Surrey. LESLIE HARTLEY.

SIR,—The doctors can accept the National Health Service Act or refuse it. The choice is theirs, they have but to exercise it. If they so will the Service cannot be forced upon them, for if 75% refuse to join on the appointed day then it cannot function, and an amending Act becomes a certainty—and that soon. The issue now before the profession is therefore remarkably simple and yet of transcendental importance, for it is nothing less than our freedom itself. On the one hand we may accept the Act as it now stands, entailing appropriation of our practices and remuneration by a basic salary—at first small to ensnare and delude us but at any time capable of increase by regulation to, mayhap, 99.9% at the will of the Minister without reference to Parliament—in short, complete loss of our freedom and liberty of action in a full-time State salaried service. Loss of our practices inevitably implies this loss of our freedom, a disaster to both doctor and patient alike.

On the other hand we may reject the present Act by refusing, in resounding majority, to join the Service and indicate this decision by a decisive negative in the forthcoming plebiscite. Such refusal, without doubt, will compel the introduction of an amending Act in which we will retain our practices and be remunerated by capitation fee alone. Thus may we assure our freedom without in any way sacrificing the interests of our patients, but on the contrary safeguarding them.

Either to accept thraldom on the appointed day or to seek service in the future under an amended Act that preserves both the liberty of the profession and the true interests of our patients is the crucial issue now before us. It must not be obscured by endless discussion of items of relatively little importance such as terms of service, remuneration, superannuation, etc. The fundamental consideration now is the future freedom of the profession or its serfdom—nothing less. That freedom is incompatible with service under the present Act. Finally, the profession itself holds the trump card, not the Minister. For pity's sake let us play it and answer in the plebiscite with an emphatic and overwhelming "NO."—I am, etc.,

Tiverton, Devon. R. E. J. PEMBREY.

The Minister's Gloss

SIR,—Your excellent leading article (Dec. 27, 1947, p. 1037) should be studied by all members of B.M.A. Beveridge's suggestion that it was not in the interest of the State to have sick people on disability funds caused the membership of B.M.A. to rise. The Coalition Minister of Health did listen to argument and was prepared to amend his White Paper when ousted from office. The present Act was heavily opposed by the Opposition in the House, as it is by most of one's patients, be they rich or poor. Sixty-four per cent of G.P.s rejected negotiation, but three great men of the profession overruled this, provided the Minister would consider fresh legislation.

The Minister has evaded this. Why another plebiscite? A year ago, faced with a panel strike, the Minister yielded to the weapon he knows so well. I forecast that this Act will have to be amended and that the stand of the profession will earn the gratitude of millions in this country.—I am, etc.,

Newquay, Cornwall. J. P. O'SHEA.

Congenital Pyloric Stenosis: Two Cases in One Family

SIR,—Mrs. X., aged 30, was delivered of a male infant. At six weeks the child was diagnosed as a congenital pyloric stenosis and operation performed. Feeding difficulties arose and gastro-enteritis followed, the infant dying 17 days later. Subsequently Mrs. X. was delivered of a boy and then a girl. When 39 she was delivered of an apparently normal male. Projectile vomiting appeared at the third week and one week later congenital pyloric stenosis was confirmed at operation. This infant is making good progress.—I am, etc.,

Wembley, Middlesex. M. B. STUNGO.

The Dangers of Going to Bed

SIR,—Our congratulations are due to Dr. R. A. J. Asher for his dissertation (Dec. 13, 1947, p. 967) on the dangers of going to bed or, more correctly, being confined to bed. I should like to add one more example of the untoward and contrary result arising from prolonged rest in bed. If we wish to stenose any part of the body immobilization is the accepted procedure. It is the common practice, as mentioned by Dr. Asher, to immobilize cases of rheumatic fever for a considerable period after the fever has departed. In bygone days months in bed was considered sound practice, with mitral stenosis as the inevitable end-result—the most serious of all valvular disorders.

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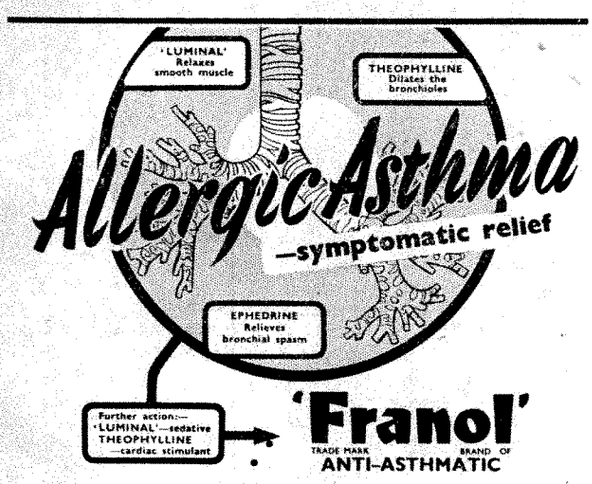

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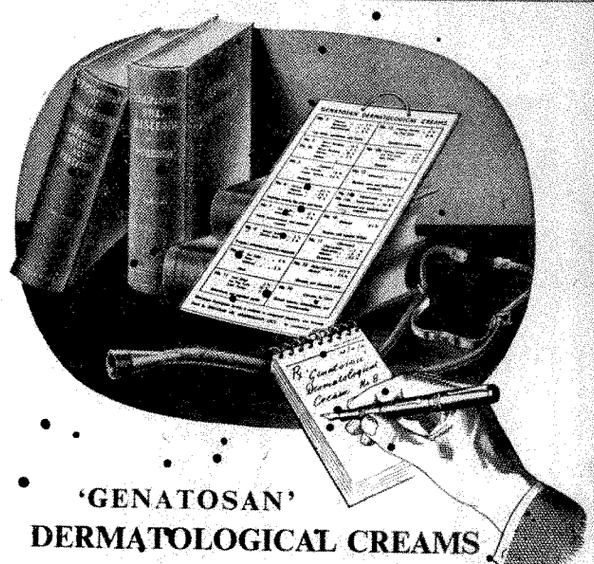

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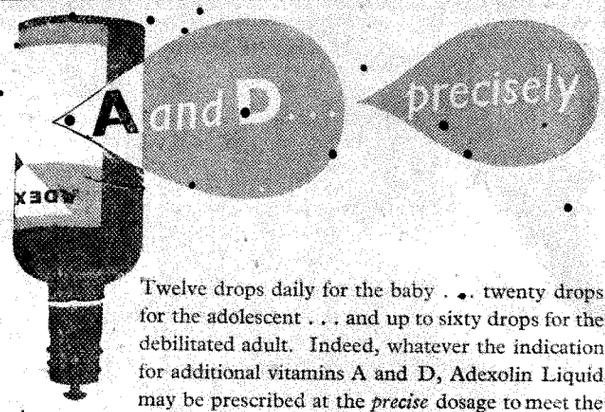

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in hospital practice. The incidence of rheumatic fever was found by Coombs to be 5 girls to 4 boys; yet the incidence of mitral stenosis in females must be in the region of 5 to 1 male. This is due to the less active life led by girls, who are seldom permitted to be out of range of the maternal eye; they sit and knit and acquire obstructive stenosis and provide most examples of auricular fibrillation in the forties. Her brother with the same diseases escapes to the playground and, despite restrictive advice, ensures that the cusps of the mitral valve are kept well apart by the vigour of his exercise, thereby securing a greater volume in flow and growth of the left ventricle. At the same time he prolongs his life.

Convalescent heart homes are not the nurseries for the cultivation of mitral stenosis that they used to be; nevertheless the introduction of the sedimentation rate has tended to increase bed rest in these cases, and mitral stenosis is actively encouraged once again. Because the sedimentation rate is increased, active endocarditis is presumed with often no justification; it might well be tonsil, sinus, or other infection. Immobilization and fibrosis are inseparable bed-mates and are no companions for growing hearts.—I am, etc.,

London, W.1. BRUCE WILLIAMSON.

Diet and the Nation's Health

SIR,—As a humble member of the profession I note with dismay that Dr. S. K. Westman (Dec. 6, 1947, p. 926) regards the Hunterian Society and frivolity as being synonymous. A press précis can be misleading; it is probable that he has now had access to the full discussion and is a wiser man. The comparative statistics given in his letter beg many questions, but this outstanding and alarming fact is borne out—namely, the famine babies of 1919–21 responded, in the absence of adequate food for the body, to a dangerous and devastating dietary of distorted mental and moral feeding. They contributed to the downfall of their country and plunged the civilized world into chaos and economic disaster. Was the subsequent prowess of Hitler Youth in war the triumph of starvation or the thrust behind a fanatical and insatiable ambition for power? In their quest for *Lebensraum* was it not perhaps a bigger dining-room they subconsciously sought?

While I admire Dr. Westman's personal victory of mind over matter, I would remind him that his unusual menu for strength is in short supply in this country. It would be regrettable if our rowing blues were deprived of their sport because they had nibbled their oars and sucked the substance of the boats while in training. The whittling down of our larder has already caused deterioration in our morale and bred dishonesty in many a decent home. The man in the street does not need a learned society to point that out to him. The desire for a high standard of food and health is not actuated by selfishness and greed on Britain's part, but in her upholding the terms of the Atlantic Charter—"that all the men in all the lands may live out their lives in freedom from fear and want." We want butter in our guns and so avoid any continental European or Asiatic parallels of hunger and discontent.—I am, etc.,

Dursley, Gloucestershire. ISABELLE B. S. FAYLE.

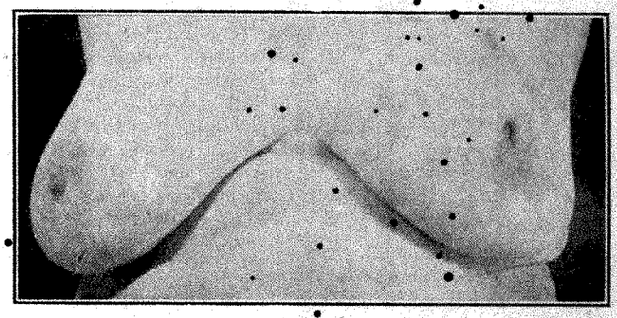
SIR,—May I add a note to Dr. F. M. R. Walshe's eloquent letter (Dec. 13, 1947, p. 971) emphasizing the importance of subjective impressions in the formulation of evidence? Sir Jack Drummond's argument seems to me to suffer from a fallacy of misplaced concreteness. He was mistaking the modern concept of nutrition for a fact, and forgetting that it is a theory still to be tested by experience. He maintained that, because we were getting all the items of diet which the modern theory of nutrition held to be necessary for our health, therefore we must be healthy. But this theory may prove to be inadequate, just as those theories of nutrition in vogue before the discovery of vitamins proved to be inadequate. It may be that from these subjective impressions which he scorns to notice new facts will emerge compelling the theory to be recast.

Of course, subjective impressions are dangerous data. The field they grow in may be thickly sown with the tares of wishful thinking. Disapproval of the Government's activities may easily squeeze itself through the gaps in our sentiment of scientific impartiality and emerge as subjective impressions concealing a grudge. This is what happened, no doubt, to those physicians who felt that their patients were suffering from the effects of calcium in the bread at a time when the calcium was present only in their imaginations. Much laborious and honest threshing is necessary to winnow away the chaff of adventitious percepts from the grain of a new impression. But it is the impressions which supply us with new facts and which therefore ought never to be neglected.—I am, etc.,

Wallingford, Berks. E. H. HARE.

A Sign of Carcinoma

SIR,—Carcinoma of the breast frequently presents one of the stiffest problems in surgical diagnosis, and all surgeons of experience approach these cases with humility, which is understandable when pathologists tell us that never a year passes by but they see at least one breast removed in the Halsted fashion for mastitis and more than one local removal of a carcinoma in error for a benign condition.



The simple manœuvre employed to obtain the accompanying photograph I have found after long experience to be a great help in diagnosis. If the arms are raised above the head as high as possible all the usual signs of carcinoma are increased and, if not already present, are frequently made manifest in the most surprising manner. This applies to the level of the nipples, retraction of the nipple, puckering of the skin, and even peau d'orange. In addition the palpability of the tumour to the flat hand is easier to elicit when the underlying muscles are on the stretch.

The case illustrated was referred to the out-patient department as a case of chronic mastitis, and with the arms hanging by the side the breasts were indistinguishable on inspection and the tumour was vague to the finger and impalpable to the palm of the hand. The raising of the arms above the head instantly made the diagnosis of malignancy indubitable. With chronic mastitis some puckering of the skin may be produced, but it is generally a diffuse rippling over a fair area rather than a well-defined depression such as is seen in the photograph. Feeling sure that others have made this discovery before, this simple test is nevertheless put forward in the hope that wider publicity for it will help in what must be regarded as one of the most responsible and difficult diagnoses which come the way of the clinician.—I am, etc.,

London, W.1. A. DICKSON WRIGHT.

Staphylococcal Infection due to Penicillin-resistant Strains

SIR,—In her very interesting article (Nov. 29, 1947, p. 863) Dr. Mary Barber draws attention to the increasing incidence of strains of *Staphylococcus pyogenes* that are grossly resistant to penicillin. We have been testing between April and December, 1947, all cultures of *Staph. pyogenes* for penicillin-sensitivity, using the penicillin-ditch method with 1, 5, and 10 units of penicillin per ml. Secondary cultures had been tested throughout. Out of a total of 115 cultures of *Staph. pyogenes*, 9 (7.8%) were penicillin-resistant.

Type of Infection.—Axillary abscess, 1; otitis media, 2; furunculosis, 1; dermatitis, 1; aplastic anaemia, 1 (blood culture). The 3 other penicillin-resistant strains were grown from the throat (2) and nose swabs (1) of carriers. Considering only the strains from infected cases, 6 (5.2%) were penicillin-resistant.

In Czechoslovakia, owing to the comparative shortage, the use of penicillin, especially in the form of ointments lozenges, etc., has not been as widespread as in Great Britain. None of the cases examined had received penicillin prior to the bacterio-

logical examination. Our figures might therefore indicate a "normal" rate of occurrence (about 5%) of penicillin-resistant strains of *Staph. pyogenes*.—I am, etc.,

Kosice, Czechoslovakia. I. FRIEDMANN.

Pica for Pipes

SIR,—I recently encountered rather an unusual instance of pica (craving for unnatural food) in pregnancy, which may be of interest to your readers. The patient, a woman of 36 years, had 14 pregnancies—10 full-term and 4 miscarriages. She was recently in hospital for her fourth miscarriage, with which she had a severe haemorrhage necessitating a blood transfusion. When she was later persuaded to swallow iron in the shape of ferrous sulphate for her still present anaemia, she declared she would sooner have some clay pipes to eat.

It transpired that during all her pregnancies (and most of her married life seems to have been spent in the pregnant state) she developed a craving for clay—generally in the form of clay pipes, which were, at one time at any rate, cheap to buy and easily procurable. She has good strong teeth and evidently experiences no difficulty in the mastication of the pipes, and when she cannot obtain the latter she eats pipe-clay, as used for cleaning stairs. She remarked jocularly that her doctor used to try and dissuade her from her practice by warning that she would give birth to "stooky weans." De Lee (1947) makes a reference to the desire for clay, among other unnatural foods, by certain pregnant women.—I am, etc.,

Bellshill, Lanarkshire. JOHN M. KING.

REFERENCE

De Lee, J. B., and Greenhill, J. P. (1947). *Principles and Practice of Obstetrics*, 9th edition, W. B. Saunders, Philadelphia, p. 83.

New South Wales Branch of B.M.A. and R.M.B.F.

SIR,—I hope you will allow me through your columns to record the indebtedness of the Royal Medical Benevolent Fund to the New South Wales Branch of the British Medical Association. All your readers will like to know of the great generosity of the members of the New South Wales Branch who have recently sent 360 food gift parcels to beneficiaries of this fund. This is such a warm-hearted and kindly action on the part of our colleagues overseas that I feel all members of the profession living in the home country will join with me in thanking our many friends in New South Wales.—I am, etc.,

ALFRED WEBB-JOHNSON,
President, Royal Medical Benevolent Fund.

POINTS FROM LETTERS

Splints from Spatulas

Mr. A. MACDIARMID (Thames, New Zealand) writes: Take an ordinary wooden tongue spatula and introduce it into the steam in a boiling sterilizer. To do this, lower the lid so that it holds the end of the spatula against the edge of the side of the sterilizer. Leave the spatula to steam for about a minute and then take it out. It is now pliable and can be bent to the desired shape between the fingers and thumb. It should be held thus until it dries, hardens, and maintains its shape. In this way it is easy to produce a curved splint or one with several angles of 45 degrees. The splint can be padded with a strip of adhesive felt. Do not put the splint in the water or it will become too wet.

Always in the House

A DOCTOR'S WIFE writes: "My dear, I never pass a day but I think how lucky you are to have a doctor in the house." . . . So speaks one of the best patients as one is laboriously toiling up the hill with a pram, having abandoned that wretched phone to the fates for an hour. Summer isn't quite so bad, but let me sympathize with all those other poor miserable creatures whose bed-companion is the telephone and whose days are spent keeping food eternally at a reasonable temperature so that the patient may have his doctor. Then, what of the evenings? Mentally and physically exhausted, the evening surgery done, and the last sickly patient tucked safely into bed, home comes the doctor to yet another sliding meal—eight, nine, ten—whatever the whim takes him. The newspaper, a pipe, and after a few minutes loud catarrhal snores. What a cheerful evening! Woe betide the wife who inquires for medical remedies at this juncture; they are doomed to be cast off as mere psychological flights of fancy. Better to keep one's thoughts of aching chilblains or children's spots deep in the crevices of the mind. What is there to it? One often wonders; and still every medical school pours out its numerous doctors, and a thousand crazy females go and land themselves into this heaven, with a doctor "always" in the house.

Obituary

G. F. STEBBING, M.B., F.R.C.S.

Mr. G. F. Stebbing, a pioneer of radiotherapy in this country and an outstanding personality, died at his home on Dec. 22 at the age of 63, after a long and painful illness, borne with characteristic optimism and courage. Like many other medical men he succumbed to a disease to the treatment of which he had devoted himself for many years.

George French Stebbing was educated at Guy's Hospital and qualified in 1906, taking the conjoint diploma and the M.B., B.S. with honours and distinction in surgery. After completing his house appointments he told Mr. Symonds, later Sir Chartres Symonds, whose house-surgeon he had been, about the kind of institutional work he would like to do. Sir Chartres replied that he knew of no such place and that Stebbing must create it for himself. In 1908 Stebbing went to the Lambeth Infirmary, and with the encouragement of the late medical superintendent, Dr. A. L. Baly, he developed the clinical side there and so rapidly raised the standard of work that by 1914 Lambeth Infirmary was held in high esteem by both the local populace and general practitioners. After a period of service in the Navy he returned to Lambeth Hospital, where he remained a leading light until the day of his death. In 1934 he was elected a Fellow of the Royal College of Surgeons and recently was a member of the Council of the College. He was made a Fellow of the Faculty of Radiology in 1939.

In his early years he devoted himself to all branches of medicine and surgery, and with his tremendous capacity for work and wide reading he became a "G.P." in the very best sense of the term. Many old Lambeth medical officers and nurses have reason to thank "Steb," or the "Great White Chief" as he was affectionately termed (he wore a long white coat not usual in those days), for all he taught them. His experience was so great that his phrase, "I am quite familiar with that," disappointed many a junior colleague who felt he had produced a problem for his chief.

Some twenty-five years ago Stebbing became interested in the use of radium for the treatment of malignant disease, and in 1929 arrangements were made between the Lambeth Board of Guardians and the Ministry of Health to provide Lambeth Hospital with radium and deep *x*-ray therapy plant, which was to be available for the treatment of patients not only from the district but from any part of London. Stebbing visited all the principal clinics in this country and on the Continent, and the information he obtained was applied in equipping the new department. As a first-class surgeon and radiotherapist, a rare combination, he achieved great success in a great number of patients, and even when this was not possible the confidence that he inspired and the infinite pains he took with palliative measures brought comfort to many sad cases.

Stebbing will always be remembered by his contemporaries for his wide interests both inside and outside the hospital. He was a member and honorary secretary of the Radium Commission from its formation in 1929. He was chairman of the London and Counties Medical Protection Society. He was largely responsible for the establishment of the L.C.C. Clinical Research Committee and was its first chairman. From this there developed the L.C.C. Medical Society, of whose first council he was chairman. He was also for many years examiner in radiology for the Conjoint Board. He had the faculty of always being able to interest himself in anything which interested his friends and acquaintances. He was a fine team worker and was never found unwilling to see any case a colleague desired him to see. An American visitor to his clinic once described him as the "human dynamo," a tribute to his amazing energy. His direct approach to the things that mattered and his dislike of non-essentials were characteristic. He inspired complete confidence and affection in his patients and he could remember them years afterwards and what he had done for them. He was a fine lecturer and clinical teacher.

The L.C.C. Public Health Department, and particularly Lambeth, will miss him sadly, and the sympathy of the whole staff goes out to his wife, his married daughter, and the two sons, both doing medicine, who survive him.—A. D.

Sir E. Rock Carling writes: Mr. Stebbing's activities were numerous and widespread. To them all he brought the same inexhaustible energy and enthusiasm. Whatever he did he did with his might, whether as medical secretary of the Radium Commission, as chairman of Council of the Medical Protection Society, as a member of the Cancer Committee and other committees of the Ministry of Health, of the Faculty of Radiologists, or the Medical Research Council's Nuclear Physics Committee, of a dozen other bodies upon which he served. All that, too, was work of supererogation, for he filled the double post of surgeon in charge of a division at the Lambeth Hospital and radiotherapist-in-chief. Stebbing held his views with tenacity. He formed them upon what he believed to be fundamental premises and permitted no deviation. He was utterly free from self-interest, and, if not entirely devoid of ambition, his aims and object had no taint of personal advantage. He wished to exert his influence to the full in the interests of sound and safe treatment for the sick. To that extent he sought positions whence he could apply his influence, but certainly without thought of reward other than a just prestige. He was no respecter of persons but generous in his appreciation of the worth of other men whose work he could admire. His habitual cheerfulness, his sense of the comic, his genuine friendliness made him loved by those who knew him well. His transparent integrity, his professional skill and competence, his upright character, all combined to secure him the esteem and admiration of his colleagues.

Mr. Malcolm Donaldson writes: The death of George Stebbing is not only a very great sorrow to his many friends but a serious loss to the forces ranged against cancer. He was a man of outstanding character and quite fearless in expressing his views. One of the foremost radiotherapists of his time, his work in connexion with the formation of the Faculty of Radiologists is well known, but perhaps his greatest work was done with the National Radium Commission. It is no exaggeration to say that the success of the Commission was largely due to his personality and unbounded energy. Being a general surgeon as well as a radiotherapist he realized that the treatment of cancer cannot be kept in watertight compartments but must be considered as a whole. It was in connexion with the Commission that I first met Stebbing, and the more I saw of him the more I liked and admired him. He was one of the "whitest men" with whom it has been my privilege to serve.

SIR BERNARD SPILSBURY, M.B., F.R.C.P.

Dr. G. Roche Lynch writes: I would like to pay a tribute to the memory of Spilsbury and his medical work, for no one in this country during the last forty years has done more for this subject, which in turn has led to the production of adequate and accurate scientific work for evidence in the criminal courts. Many times have judges complimented him upon his clear, lucid, and accurate evidence. His energy, thoroughness, and capacity for detail are by-words, but I would like to add that the investigation only commenced in the post-mortem room, to be followed up by careful laboratory work, in turn to be followed by many hours of quiet assessment of all the material facts in his study. Thus his final opinion was made after a judicial weighing up of the facts, and it would be doing him a great wrong if it were suggested that he was a witness for the prosecution.

All his life he overworked, and in the later years he continued to do so well knowing that his heart was not strong and that prudence dictated a less energetic mode of life. It is a matter of great regret that he has not left any record of his cases, for this would be of inestimable value to future workers in this field. But his excuse would have been a genuine one—namely, he had no time. Perhaps one of the most important results of his work—one which cannot be overstressed—is his influence upon coroners. When Spilsbury commenced to work for them they employed but few trained pathologists and the work was not of a very high order. Nowadays, thanks to him, coroners have realized the importance of the employment of trained pathologists.

Spilsbury was a very human person and a delightful companion. When away in the country on a long case at the assizes one could not wish for better company and he had a gift of making friends. He was very conscious of the difficulties of the doctor who was suddenly confronted with a serious criminal case and would do everything in his power to make things easy for him.

A correspondent writes: Bernard Spilsbury's professional eminence and skill are too well known to need any eulogy—this is intended rather as a personal tribute to a great man by one who has been privileged to enjoy his friendship for more than twenty-five years. It began by our common membership of a society in which we were both interested and in which not long afterwards we had the honour of holding joint office for several years, Spilsbury later becoming one of its most distinguished presidents. He was one of the most truly modest and humble-minded men I have ever known, for although I am convinced that he knew quite well that in that branch of medicine which he had made his own he stood pre-eminent and without a rival, yet he never spoke of himself or his own achievement, and both hated and, so far as he possibly could, shunned the public notice which was inevitably thrust upon him. His complete absorption in his work was for the sake of the work itself and the advancement of the ends of justice and true knowledge, not for any personal distinction.

Spilsbury was a devoted son of Oxford and of his own College, Magdalen, where he was an honorary member of Common Room, and he used to delight in recalling his own undergraduate days. He preserved in later life much of the gaiety and almost boyish high spirits which usually belonged to much younger men, and I used often to marvel how he was able to do so under the burden of his always exacting, and often grim, professional work. His later years were greatly burdened by the loss of his two elder sons, the younger of whom had just qualified and obtained a house appointment at St. Thomas's when he was killed while on duty in one of the early air raids in the autumn of 1940. The elder son, whose health had never been robust, died in 1945. Notwithstanding these blows he still kept at his work, his capacity for which was enormous, and there was no five-day week or eight-hour day for him. What was to me one of Spilsbury's most striking characteristics as a medical witness was his great sense of fairness, and I believe that this was the general impression of the public who followed with so much interest the notable trials in which he was concerned. His evidence was always directed not to the securing of a conviction, but to the ascertainment of the truth and to the fulfilment of justice, and whenever anything was to be said in favour of an accused person one could be quite sure that Spilsbury would say it. The professions of both medicine and law will deplore his passing, and those who, like myself, have known him as a friend will be the poorer for the loss of one whom to have known as such was in itself both an education and a source of pride.

Dr. HAMISH FALCONER MASSON died suddenly, from coronary thrombosis, on Dec. 7, at the early age of 45. The third son of the late George Masson, J.P., of Kingussie, he was educated at Fettes College and Edinburgh University, where he took the M.A. in 1923. In 1926 he graduated M.B., Ch.B., and passed the examination for the F.R.C.S.Ed. in 1930. After house appointments at Preston Royal Infirmary and Kettering he was for a time in practice in Dingwall before settling in South Woodford, where he had practised for the last ten years. Hamish Masson had intellectual gifts and a personality that could have carried him to a high place among consultants, but he preferred general practice with its more personal human contacts. As a general practitioner he was immensely popular and built up a large practice in South Woodford. His handsome appearance made him a conspicuous figure in any company, but no man so gifted was ever more unassuming or more tolerant towards his fellow men. His work made great demands upon him, and he never spared himself. In the last year his health gave some grounds for anxiety, but the end, when it came, was quite unexpected. On Dec. 13 a memorial service was held at All Saints' Church, Woodford Green, Essex. A crowded church was evidence of the respect and affection in which Dr. Masson was held. He will be gratefully remembered in Woodford as a good doctor.—J. B. Y.

Medical Notes in Parliament

The Medical Practitioners and Pharmacists Act received the Royal Assent on Dec. 18.

The Children Bill to make further provision for the care and welfare of boys and girls when without parents, or living away from their parents, or when their parents are unfit or unable to take care of them, and to end the Young Persons Act, 1933, and other Acts, was read a first time in the House of Lords on Dec. 18.

First readings were given in the House of Commons on Dec. 18 to the Attempted Rape Bill, and to the Animals' Bill, extending the period during which payments can be made for eradication of bovine tuberculosis.

The Report of the Committee of the Privy Council for Medical Research and the Report of the Medical Research Council for the war years 1939–45 were presented to Parliament on Dec. 18.

Venereal Disease.—On Dec. 11 Mr. SORENSEN asked against how many men and women had complaints been lodged in respect of suspected V.D. in the Metropolitan Police area during the past twelve months. Mr. BEVAN replied that figures were not kept for the Metropolitan Police district, but in London and the Home Counties reports were received about 54 men and 875 women in 1946, compared with 37 men and 2,679 women in 1945. The number who received treatment was not available. He added that the figures showed the position was not unsatisfactory.

Health Education.—Mr. HASTINGS, on Dec. 18, asked the Minister of Health whether in view of the important part that prevention must play in the new National Health Service, and the consequent need for guidance of officers of local authorities in health education matters, he would increase the support, financial and otherwise, given by his Ministry to the Central Council for Health Education. Mr. BEVAN answered that the nature and financing of the services to be provided by the Central Council after the appointed day were still under discussion between his officers and representatives of the Council and of local authorities.

Obstetric Analgesia.—The number of cases where analgesia was provided by domiciliary midwives increased from 7,262 in 1945 to 20,507 in 1946. The number of midwives trained to give it had doubled in the current year.

Milk.—The average weekly consumption of milk under the Milk in Schools Scheme during October, 1947, is estimated to have been 980,000 gallons, which represents a weekly average of approximately 1.6 pints (908 ml.) per child taking milk.

Mass Radiography.—There are 22 mass radiography outfits working in England and Wales. For the first six months of this year the number of persons examined averaged about 50,000 a month.

Penicillin.—Current production of penicillin in the United Kingdom averages 520,000 mega units a month and is increasing. It involves no charge on public funds.

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

Geoffrey Wingfield Harris, M.D., has been appointed Lecturer in Physiology, with tenure to Dec. 31, 1949, and seniority from Jan. 1, 1947.

The following degrees were conferred on Dec. 13, 1947:

M.D.—J. H. Walters, T. C. N. Gibbens, V. H. Wilson.

The following candidates have been approved at the examination indicated:

FINAL M.B.—*Part II (Principles and Practice of Physic, Pathology and Pharmacology)*. M. S. Adams, P. S. Andrews, J. H. Angel, C. P. Atkin, J. R. Bennett, J. G. Bennette, H. C. H. Bird, M. D. M. Bowen, P. H. Bright, M. H. Clement, D. Cooper, J. D. Cox, J. H. Cule, J. M. Frew, R. G. Gibbs, M. T. Gillies, E. H. Griffiths, N. H. Harris, O. E. F. Hodgson, C. B. Holmes, M. C. Hudson Bennett, D. A. P. Hunt, W. N. Ingham, J. H. Inskip, J. S. Jenkins, A. H. Jones, H. W. H. Kennard, R. V. Knight, F. R. Lambert, M. G. H. Lewis, W. Lewis, A. A. McInnes, J. E. MacIver, I. K. R. McMillan, R. K. Mason, F. S. Mellows, D. J. Morton, D. S. Paine, J. C. R. Payne, A. I. D. Prentice, J. Prestt, L. C. Robson, R. C. Roxburgh, M. H. Russell, J. D. Scott, B. E. Shairp, P. H. A. Sneath, K. C. G. Taylor, J. P. D. Thomas, M. B. Thompson, F. G. Tomlins, J. D. G. Turner, D. H. H. Walford, G. G. Walker, B. M. Watney, J. O. M. Wedderburn, J. D. Whitby, D. Whitfield, H. B. L. Williams, K. L. Williams, H. L. J. Wilson, G. E. W. Wolstenholme, G. M. Woodwark. *Women:* B. Jones, A. E. Perkins.

UNIVERSITY OF EDINBURGH

At a graduation ceremonial on Dec. 19, 1947, the following degrees were conferred:

M.D.—T. M. Abbas, [2]A. W. Branwood, F. S. Fiddes, S. L. Forrest, [1]J. A. L. Gilbert, [2]I. W. Rae, S. A. Rahman (*in absentia*).

PH.D.—In the Faculty of Medicine: M. L. Bayoumi, M.B., Ch.B.

M.B., Ch.B.—A. McD. Allan, H. W. Bisset, G. Brown, Margaret W. Brown, Jean Buchanan, F. G. Cumming, I. H. P. Doherty, T. H. Donaldson, L. A. Gess, R. R. Gillies, A. Girby, G. T. Graham, Janet Hazell, L. J. M. Jamieson, H. A. Jones, H. M. Kirkpatrick, F. E. Kohler, R. G. Krause, Marjorie V. Kydd, Anne M. McCartney, B. T. Mulligan, A. M. Nelson, W. H. Nisbet, Susan B. G. Ofori-Atta, J. G. Parish, A. G. B. Poole, A. D. Ross, Jean R. W. Ross, K. Saltman, D. A. Smith, B. J. Sproule, Diana Stewart, Leila M. Wojtczak (*née* Sinha), Lesley L. D. Wood.

[1] Highly commended for thesis.
[2] Commended for thesis.

UNIVERSITY OF DURHAM

In a congregation on Dec. 19, 1947, the following medical degrees and diploma were conferred:

M.B., B.S.—Anna Book, H. M. Brand, H. C. Brown, J. D. Brown, J. H. Grant, Brenda M. Hilton, A. R. Horler, A. A. Lawson, K. M. Martischnig, W. H. Raine, A. Rounding, J. R. W. Sinton, R. Whitfield, P. E. I. Winburn, K. M. Wood.

B.D.S.—C. H. Tonge, M.B., B.S.

UNIVERSITY OF LEEDS

At a meeting of the council held on Dec. 17, 1947, George Norman Myers, M.D., F.R.C.P., was appointed to the newly instituted post of Director of Research in Rheumatism.

UNIVERSITY OF SHEFFIELD

At a meeting of the University Council on Dec. 19, 1947, Ronan O'Rahilly, M.Sc., M.B., B.Ch., was appointed Lecturer in Anatomy and John Lewis Emery, M.D., D.C.H., Honorary Lecturer in Pathology.

The Council received the resignation by Dr. T. Jones of the post of Demonstrator in Anatomy and thanked him for his services to the University.

ROYAL COLLEGE OF SURGEONS OF EDINBURGH

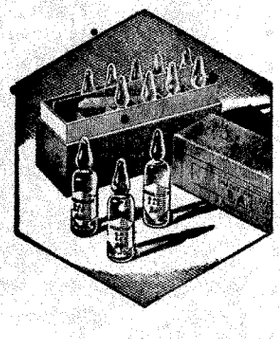
At a meeting of the Royal College of Surgeons of Edinburgh held on Dec. 17, 1947, with Mr. Frank E. Jardine, President, in the chair, the following candidates, having passed the requisite examinations, were admitted Fellows: M. G. Allen-Mersh, N. Ameli, G. S. Anderson, Una Aranha, A. J. S. Burger, B. Z. Claman, T. R. B. Courtney, R. D. Cowan, T. T. Davies, A. L. Deacon, J. L. Douglas, W. Drummond, G. E. Dunkerley, J. R. Elder, C. D. Falconer, W. D. Giffen, J. S. Glennie, J. T. Gray, L. M. Greene, G. I. Henderson, N. G. C. Hendry, S. Henson, F. G. Hibbert, W. P. Hirsch, J. R. Hughes, T. B. Hutton, H. B. Jackson, I. Jacobson, J. Jankowitz, J. H. Jordan, P. F. King, R. G. R. Langford, M. D. Leitch, G. S. Lester, A. M. Loughran, A. Lurie, W. A. McAlpine, J. N. W. McCagie, V. V. McCusker, A. McDougall, J. A. Macfarlane, J. G. McFetridge, K. MacI. MacKenzie, G. C. McKinlay, L. A. H. McShine, W. A. W. Maney, M. J. Maxwell, L. Mirkin, W. Murdie, D. S. Murray, J. F. Neil, M. W. Paterson, R. H. Purnell, B. Ramamurthi, J. I. Rossman, J. E. Rowlands, M. P. Shapiro, E. G. F. Shaw, R. H. Simpson, S. R. Sinclair, M. S. Sindhu, T. S. Stewart, C. R. Strother-Stewart, S. D. Stock, I. S. D. Thomson, J. D. Thomson, A. K. Toufeeq, W. A. L. Tucker, H. P. Watson, A. L. Webster, T. B. Whiston, G. W. Wigg, H. W. G. Williams, H. O. Williams, J. E. Wilson, H. C. Worrall, Margaret P. Yeoman, G. B. Young, I. S. Young, H. Zalin.

SOCIETY OF APOTHECARIES OF LONDON

Meetings of the Court of Assistants of the Society were held on Oct. 28 and Dec. 16, 1947, with the Master, Prof. E. C. Dodds, F.R.S., in the chair. Past Masters' Medals were conferred upon Dr. J. Prescott Hedley and Dr. Hugh Powell. The reports of the deaths of Dr. Russell E. Palmer, a retired Member of the Court, and Group Captain Henry Cooper, late Clerk and Registrar of the Society, were received with great regret. The following were appointed representatives of the Society: on the General Medical Council, Dr. Hedley; on the Committee of Honour of the Fourth International Congress of Otolaryngology, Prof. Dodds; on the Central Council for District Nursing in London, Mr. George Wynn-Williams. Dr. Archibald Gilpin was appointed Archivist to the Society in succession to the late Dr. Cecil Wall.

The diploma of M.M.S.A. was granted, upon examination, to A. M. Michaelowsky.

The diploma of L.M.S.S.A. was granted, upon examination, to the following successful candidates: J. N. Phillips, H. R. Mohammed, F. A. R. Bateman, H. Burns-Price, A. A. Collis, M. E. Cowan, J. M. Cowan, G. R. Davies, R. Worsley, R. J. Helyer, D. M. H. Bickmore, D. G. Buchanan, J. C. Bradley, P. Benham, D. G. Walworth-Furness, J. M. Scott, K. Y. Khong, D. M. Strange, E. Wales, C. J. Burrows, H. S. Baar.



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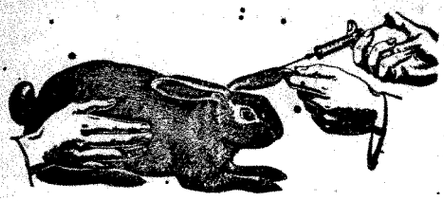

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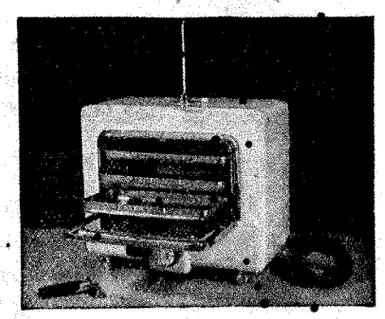

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No. 50.

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Dec. 13.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1947					1946 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	64	6	18	1	—	31	3	25	—	1
Deaths		2	—				2	—		
Diphtheria	233	19	67	14	10	328	16	87	33	14
Deaths	4	—	—	2	—	3	—	3	3	—
Dysentery	106	7	28	1	—	68	13	16	4	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	1	—	—	—	—	—	—	—	—	—
Deaths		—					—			
Erysipelas			29	14	2			51	9	3
Deaths		—					—			
Infective enteritis or diarrhoea under 2 years				22					36	
Deaths	62	7	19	3	2	63	7	14	17	1
Measles*	3,379	156	410	192	20	6,957	243	318	50	219
Deaths	1	—	—	—	—	6	—	3	1	1
Ophthalmia neonatorum	58	4	8	1	—	43	3	10	—	—
Deaths										
Paratyphoid fever	3	1	—	—	—	5	1	1 (B)	2 (B)	—
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal	723	29	8	3	5	693	62	12	6	6
Deaths (from influenza)†	23	2	5	2	—	22	2	2	—	—
Pneumonia, primary			319	22				335	29	
Deaths		53		11	14		35			7
Polio-encephalitis, acute	7	3				—	—			
Deaths		—					—			
Poliomyelitis, acute	77	4	11	4	5	14	—	2	5	1
Deaths		—					—			
Puerperal fever		2	10		—		3	7		—
Deaths										
Puerperal pyrexia‡	116	9	9	4	—	148	8	16	1	—
Deaths		1					—			
Relapsing fever	—	—			—	—	—			—
Deaths										
Scarlet fever	1,939	131	296	32	44	1,392	101	332	35	41
Deaths	2	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	10	—	4	4	—	7	1	—	5	1
Deaths	—	—	1	—	—	1	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	1,737	92	38	29	5	1,664	96	273	57	40
Deaths	4	—	—	—	—	7	1	1	—	—
Deaths (0–1 year)	389	41	79	19	25	495	61	69	53	13
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	5,493	817	804	200	159	5,297	887	649	249	127
Annual death rate (per 1,000 persons living)			16·7	12·6				14·3		
Live births	8,044	1367	945	419	252	9,440	1464	1102	416	279
Annual rate per 1,000 persons living			19·0	26·4				22·2		
Stillbirths	236	36	26			296	42	39		
Rate per 1,000 total births (including stillborn)			27					34		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

‡ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Poliomyelitis

For the first time since the peak figure of the week ended Sept. 6, notifications of poliomyelitis in England and Wales for the week ended Dec. 13, 77 (70), and of polio-encephalitis 7 (6), were slightly higher than in the preceding week. Figures for the week ended Dec. 6 are given in parentheses. The only county showing a definite rise was Somerset 5 (0), otherwise the increases were in ones and twos and were scattered throughout the country. A further fall was shown, however, in the figures for the week ended Dec. 20, when there were notified 55 cases of poliomyelitis and 5 cases of polio-encephalitis.

Discussion of Table

In *England and Wales* infectious diseases were more prevalent during the week. A rise in the number of notifications was recorded for every disease except scarlet fever, which declined by 88. There were increases in the incidence of measles 580, whooping-cough 249, acute pneumonia 193, diphtheria 28, cerebrospinal fever 18, dysentery 13, and typhoid 10.

The largest increases in the local incidence of measles were Yorkshire West Riding 88, Cornwall 46, Glamorgan 74, and Staffordshire 70; the only large decrease was Surrey 86. The incidence of whooping-cough increased in each region except in the south-western counties and Wales; the most notable rise was Lancashire 62.

The largest increases in the notifications of pneumonia were those of Yorkshire West Riding 42 and Lancashire 30. The only significant variation in the local trends of diphtheria was a rise of 14 in Essex. No changes of any size occurred in the local trends of scarlet fever.

Of the 10 cases of typhoid fever 6 were notified in Lancashire, Warrington R.D. An outbreak of dysentery involving 9 persons was reported from Sussex, Petworth R.D. A rise in the notifications of dysentery occurred in Yorkshire West Riding, from 3 to 27; the cases were scattered throughout the county.

The notifications of acute poliomyelitis after declining for thirteen consecutive weeks showed a rise of 7. The chief feature of the returns for poliomyelitis was a rise from 17 to 32 in the combined areas of London and the south-eastern and south-western counties.

In *Scotland* increases were recorded in the notifications of measles 39 and diphtheria 29, and decreases were reported for scarlet fever 41, acute primary pneumonia 21, and whooping-cough 15. A small increase in the incidence of diphtheria was recorded in most regions; the largest local rise was in Glasgow, where the cases rose from 16 to 30.

In *Eire* there were decreases in the incidence of scarlet fever 23, whooping-cough 19, diphtheria 14, and measles 12. In contrast to the general trend increases in the notifications of measles were recorded from Wicklow, Bray U.D. 15, Wexford, Enniscarthy 16, and Dublin C.B. 16.

In *Northern Ireland* the notifications of measles increased by 19 and those of scarlet fever fell by 15. The rise in the notifications of measles was mainly due to an outbreak in the urban district of Portrush with 15 cases.

Medical News

I.S.T.D.

A course of six lectures on "Delinquency and the Educator" will be given by Miss Barbara Low at the Institute for the Scientific Treatment of Delinquency, 8, Bourdon Street, London, W., on Jan. 27 and Feb. 3, 13, and 24, and March 2 and 9, 1948, at 6.30 p.m. The fee for the course is 15s. (single lecture, 3s.).

Ulster Medical Society

After a lapse of nine years the Ulster Medical Society held its Annual Dinner on Dec. 11, Mr. G. R. B. Purce, the president, being in the chair. The attendance of Fellows and guests was limited by Ministry of Food regulations, and many who would have welcomed the opportunity of resuming this happy annual occasion were unable to be present. The Honorary Fellowship of the Society was conferred upon Prof. F. J. Browne, Mr. James A. Craig, Mr. S. T. Irwin, Prof. C. G. Lowry, Mr. Howard Stevenson, M.P., and Sir Henry Tidy.

Tubercle

The Tuberculosis Association has adopted *Tubercle* as its official organ; the January issue of the journal carries notice of the change on its cover and includes Dr. Frederick Heaf's Presidential Address to the Association.

H.S.A. Scholarships for Nurses

The Hospital Saving Association will award scholarships in 1948 for trained nurses as follows, the approximate values being shown: Nursing administrators, £196 each; nursing administrators (public health), £196 each; nurse dietitians, £340 each; sister tutors, £203 each; tutors to health visitors, £203 each; health visitors, £126 each; industrial nurses, £143 each; midwife teachers, £78 each. The H.S.A. will later determine the number of each kind of scholarship to be awarded and reserves the right to withhold any scholarship if there are too few suitable candidates. The scholarships will be available for the courses at any of the recognized training centres. They are open to nurses who (*a*) are registered on the general part of the State Register and (*b*) have graduated in a voluntary or local-authority hospital within the area of King Edward's Hospital Fund for London. Applications must be made before Jan. 31, 1948. Particulars may be obtained from: The Director in the Education Department, Royal College of Nursing, 1a, Henrietta Place, Cavendish Square, London, W.1.

Donations to Institute of Child Health

The province of Natal has recently given £106,888 to the Institute of Child Health of the University of London, and an anonymous donor has given £5,000 to establish a lectureship in memory of the late Mr. A. Simpson-Smith, formerly surgeon to the Hospital for Sick Children, Great Ormond Street. The Institute was established in 1946 and is accommodated at the Hospital for Sick Children. The demand for postgraduate teaching considerably exceeds the facilities available, but it has been met in part by clinical out-patient teaching at the Queen Elizabeth Hospital for Children, Hackney Road. Teaching on the new-born baby is given at the British Postgraduate Medical School, Hammersmith. The Institute also conducts research at the Great Ormond Street Hospital, and recently a genetics department has been established to study hereditary disorders. It is proposed to have a new building for the Institute as near as possible to the Great Ormond Street Hospital. These munificent gifts are especially timely, for plans are being made to expand the Institute.

COMING EVENTS

Socialist Medical Association

An inaugural meeting of the North-west Middlesex Branch of the Socialist Medical Association will be held at Wembley Town Hall on Jan. 8 at 7.30. Dr. Eileen Warren will speak on "The Socialist Medical Association and the New National Health Service."

St. George's Hospital Medical School

A series of neurological and psychiatric lecture-demonstrations, which began at St. George's Hospital Medical School, Hyde Park Corner, London, S.W., on Jan. 1, will be continued weekly on Thursdays, at 4.30 p.m., until March 18. The lecture-demonstrations are open to all medical practitioners and senior students, without fee.

National Congress on Cancer

The third National Congress on Cancer will be held in Havana from Feb. 23–28, 1948. Further information may be obtained from the Organizing Committee of the Anti-Cancer League, whose offices are at F.Y. 29, Vedado, Havana. Among other contributions papers will be read at the Congress on cancer of the lung, bladder, and uterus.

SOCIETIES AND LECTURES

Sunday

LONDON JEWISH HOSPITAL MEDICAL SOCIETY.—At Woburn House, Tavistock Square, London, W.C., Jan. 4, 3 p.m. "*Some Chemical and Biological Properties of Antibiotics.*" E. Chain, M.A., Ph.D.

Tuesday

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, W.C.—Jan. 6, 5 p.m. *Pathological Demonstrations.* Dr. I. Muende.

Thursday

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, London, S.W.—Jan. 8, 4.30 p.m. *Neurological Lecture-demonstration.* Dr. A. Feiling.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, W.C.—Jan. 8, 5 p.m. "*Cutaneous Tuberculosis.*" Dr. G. B. Dowling.

Friday

LONDON CHEST HOSPITAL, Victoria Park, E.—Jan. 9, 5 p.m. "*Spontaneous Pneumothorax.*" Dr. J. Smart.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—Jan. 9, 8 p.m. "*Some Physical Signs in Clinical Surgery.*" Address by Mr Hamilton Bailey.

APPOINTMENTS

LONDON COUNTY COUNCIL.—The following appointments have been made at the hospitals indicated in parentheses: *Senior Physicians (Superintendents)* J. C. Evans, M.R.C.S., M.R.C.P. (St. Charles'); W. Feldman, M.D., M.R.C.P. (St. Giles); W. G. Sears, M.D., M.R.C.P. (Mile End); B. A. Young, M.D., M.R.C.P. (St. Alfege's). *Physician Superintendents:* J. S. Anderson, M.D. (Grove); J. V. Armstrong, M.D. (Brook); H. S. Banks, M.D., F.R.C.P. (Park); N. D. Begg, M.D. (North-Eastern); F. J. Bentley, M.D., F.R.C.P. (High Wood Hospital for Children); J. C. Blake, M.B., B.S. (South-Western); W. C. Fowler, M.D. (Pinewood Sanatorium); W. Gunn, M.B., Ch.B., F.R.C.P. (North-Western); W. H. Kelleher, M.D. (Western); M. H. Logg, M.D. (Grove Park); G. W. Ronaldson, M.D. (Eastern); W. E. Snell, M.D., F.R.C.P. (Colindale); J. Watt, M.D. (King George V Sanatorium). *Surgeon Specialists (Superintendents):* W. P. Greenwood, M.D., F.R.C.S. (Bethnal Green); R. A. V. Lewys-Lloyd, F.R.C.S. (St. Olaves); J. McN. Milloy, F.R.C.S. (St. Mary Abbots); J. E. Piercy, F.R.C.S.Ed (New End); J. R. M. Whigham, F.R.C.S. (St. Andrew's). *Senior Physicians (Deputy to Superintendents):* H. C. Aston, M.B., Ch.B., M.R.C.P. (Bethnal Green); R. D. Green, M.D., M.R.C.P. (Paddington); T. St. M. Norris, M.B., B.Chir., M.R.C.P. (Archway Group of Hospitals, Highgate); D. W. G. Smith, M.B., Ch.B., M.R.C.P. (St. Andrew's); M. Toohey, M.D., M.R.C.P. (New End); C. E. W. Wheaton, M.D., M.R.C.P. (Lambeth). *Assistant Senior Physicians (Deputy to Physician Superintendents):* G. E. Breen, M.D. (Brook); J. W. Healy, M.D. (Eastern); L. J. M. Laurent, M.D., M.R.C.P. (Park); W. J. P. Lillis, L.R.C.P.I. and L.M. (Western); J. J. McCann, M.B., B.S., M.R.C.P. (Pinewood Sanatorium); J. C. J. McEntee, M.D., M.R.C.P. (Grove); D. Porter, B.M., Ch.B (King George V Sanatorium); A. M. Ramsay, M.D. (North-Western); W. F. Richards, M.B., B.Ch., M.R.C.P. (High Wood); R. Swyer, M.R.C.S., L.R.C.P. (North-Eastern). *Surgeon Specialists (Deputy to Superintendents):* H. L. Cochrane, F.R.C.S. (Fulham); G. S. Ferraby, M.S., F.R.C.S. (St. Charles'); J. Gabe, F.R.C.S. (St. Alfege's); J. C. Gillies, F.R.C.S.Ed. (Hackney); S. W. Holmes, F.R.C.S. (Mile End); I. W. Matheson, F.R.C.S. (St. Giles); I. I. Price, F.R.C.S. (Archway Group of Hospitals, Highgate); K. F. D. Waters, F.R.C.S.Ed. (St. Stephen's). *Senior Physicians:* J. A. Cardno, M.D. (Hackney); B. Freedman, M.B., B.S., M.R.C.P. (Dulwich); B. Gottlieb, M.D., M.R.C.P. (St. Mary Abbots); P. Harvey, M.D., M.R.C.P. (St. Stephen's); A. Kahan, M.D. (St. James); J. H. G. Mason, M.D., M.R.C.P. (St. Olaves); H. E. S. Pearson, M.D., M.R.C.P. (Archway Group of Hospitals, Highgate). *Surgeon Specialists:* T. J. Eason, F.R.C.S. (Lambeth); A. N. McCrea, F.R.C.S. (Dulwich); H. K. Vernon, M.S., F.R.C.S. (St. James); R. H. Metcalfe, M.Chir., F.R.C.S. (St. James, and Queen Mary's Hospital for Children, Carshalton); R. C. F. Catterall, M.Chir., F.R.C.S. (St. Alfege's, and Queen Mary's, Sidcup). *Assistant Surgeon Specialist:* R. Glyn Thomas, F.R.C.S. (Queen Mary's Hospital for Children, Carshalton, and St. James (deputy at the former)).

JONES, T. B., M.R.C.S., L.R.C.P., D.P.M., Deputy Medical Superintendent, Royal Eastern Counties Institution, Ltd., Abbeygate House, Colchester.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Bintcliffe.—On Dec. 19, 1947, to the wife of Lieutenant-Colonel E. W. Bintcliffe M.B.E., M.S., F.R.C.S., a son.

Holloway.—On Dec. 19, 1947, at Selly Oak Hospital, Birmingham, to Dulcie (*née* Callis), wife of Dr. H. J. Holloway, a daughter—Ann Michele.

Laurie.—On Dec. 17, 1947, at Gwyn Mor Nursing Home, Cardiff, to Sybil, wife of Lieutenant-Colonel W. Laurie, D.S.O., I.M.S., a son.

Peberdy.—On Dec. 25, 1947, at 5, Tankerville Place, Newcastle-upon-Tyne, 2, to Mary (*née* Laws), wife of Dr. Geoffrey Peberdy, a sister for Karen—Noel Marion.

DEATHS

Beatty.—On Dec. 24, 1947, Robert Moorhead Beatty, M.B., B.Ch., of Westfield House, Heckmondwike, Yorks, aged 82.

Broughton-Alcock.—On Dec. 23, 1947, at Chiswick, William Broughton-Alcock, M.B.

Collins.—On Dec. 23, 1947, Henry Nathan Warner Collins, M.D., D.M.R.E., of 50, Putney Hill, London, S.W.

Davies.—On Dec. 16, 1947, at 176, Hamstead Road, Handsworth, Birmingham, Arthur James Davies, M.B., Ch.B., M.R.C.P., aged 50.

Goitein.—On Dec. 17, 1947, at 7a, Basing Hill, London, N.W., Bernard Goitein, L.S.A., aged 76.

Ingram.—On Dec. 20, 1947, at 42, Westby Road, Bournemouth, Arthur Charles Ingram, M.D.

Jobson.—On Dec. 19, 1947, at St. Thomas's Hospital, London, S.E., Eric William Charles Jobson, M.B., Ch.B., Colonial Medical Service.

Johns.—On Dec. 23, 1947, at Netherleigh, Lansdown Road, Cheltenham, John Francis Johns, M.D.

Johnstone.—On Dec. 20, 1947, at King's College Hospital, London, S.E., Frederick John Carlyle Johnstone, M.D., late Colonial Medical Service.

Jones.—On Dec. 22, 1947, Herbert Saunders Wansbrough Jones, M.B., C.M.

Masina.—On Dec. 17, 1947, at Masina Hospital, Bombay, Ardeshir Hormasji Masina, M.D., M.R.C.P., aged 36.

Mitchell.—On Dec. 18, 1947, John Malcom Lamont Mitchell, M.B., Ch.B., of 10, Claremont Gardens, Upminster.

Pilcher.—On Dec. 26, 1947, at Thirty Trees, Ashtead, Surrey, Edgar Montagu Pilcher, C.B., C.B.E., D.S.O., F.R.C.S., Major-General, late R.A.M.C., aged 82.

Ramsden.—On Dec. 23, 1947, at Briarfield, Dobcross, Oldham, Herbert Ramsden, M.D., J.P.

Robson.—On Dec. 19, 1947, at Inverness, Briton Smallman Robson, M.B., B.S., Surgeon Captain, R.N., retired.

Sealy.—On Dec. 18, 1947, at Old Orchard, Chardstock, Humfrey Newnham Sealy, M.R.C.S., L.R.C.P., Colonel, late R.A.M.C., aged 60.

Sheldon.—On Dec. 25, 1947, Arthur Izod Sheldon, M.R.C.S., L.R.C.P., Surgeon Captain, R.N., of Landrail, 1, Craneswater Park, Southsea.

Stebbing.—On Dec. 22, 1947, at 38, Telford Avenue, London, S.W., George French Stebbing, F.R.C.S., F.F.R.

Stringer.—On Dec. 13, 1947, at Port-Alberni, B.C., Wilfred Isaac Bompas Stringer, M.D., M.C.P.S.

Wagner.—On Dec. 17, 1947, at 1, Albemarle Villas, Stoke, Robert Bird Wagner, M.B., B.Ch.

Watson.—On Dec. 24, 1947, James Watson, M.B., C.M., of Hollybank, Thingwall, Wirral.

Willoughby.—On Dec. 17, 1947, at 2, Church Street, Southwell, James Frederick Digby Willoughby, O.B.E., M.R.C.S., L.R.C.P., aged 91.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Chronic Mastitis

Q.—*What treatment do you suggest for chronic mastitis, and what is your opinion of injections of testosterone propionate in these cases?*

A.—The hormone treatment of chronic mastitis is based on the view that the condition is due to excessive stimulation by endogenous oestrogens. Testosterone propionate, if given in large doses, can prevent ovarian follicle development and ovulation by inhibition of the pituitary gonadotrophic hormone secretion. Such a dosage—in the neighbourhood of 200 mg. weekly—is likely to produce hirsutism and acne. On the favourable side it results, in many cases, in relief of pain, and sometimes in disappearance or diminution of painful nodules. Smaller doses than this—for example, 25 mg. injected twice weekly—may ameliorate the symptoms of chronic mastitis without producing amenorrhoea or virilism. It is noteworthy, however, that Spence (*Lancet*, 1939, **2**, 820) found that pain was relieved in 13 of 24 patients by injection of sterile olive oil, indicating the importance of a psychological factor in some cases. Nevertheless, both he and Atkins (ibid., 1940, **2**, 412) found that benefit from androgens was probably real, although the effect was not permanent.

Tallqvist Method of Haemoglobin Estimation

Q.—*As a matter of interest, I have made a rough Tallqvist estimation of haemoglobin on my panel patients. Of 200 estimations only one is over 60%; many are as low as 40%. Can this be due to rationing?*

A.—The Tallqvist method of estimating haemoglobin is generally agreed to be grossly inaccurate, and incidentally to give low values. The method is so unreliable that it is impossible to interpret the information supplied. It seems most unlikely that anaemia is becoming widespread, since a committee of the Medical Research Council which carried out a large-scale investigation in 1943 found no apparent increase in anaemia despite rationing.

Vaginal Pruritus

Q.—*Can there be any connexion between oestrogen treatment and vaginal pruritus? A woman aged 38, living in India, has for the past year suffered from pruritus limited to a small patch of erythema on the posterior vaginal wall just internal to the carunculae hymenales. The itching is sporadic, occurring once a month and lasting about ten days, but is unconnected with menstruation. During an attack the erythema does not spread to the surrounding tissues. Glycosuria and cervical erosion have been excluded. The patient has had courses of oestrogen by injection, repeated at intervals of two to three months, for sterility. These have now been discontinued with no change in the pruritic condition. What further treatment is recommended?*

A.—Although allergic reactions to various oestrogens are described (see Zondek and Bromberg, *J. Obstet. Gynaec. Brit. Emp.*, 1947, **54**, 1) the clinical features of this case do not suggest this as a likely explanation. The strictly limited nature of the lesion prompts a search for something different from the usual causes of diffuse pruritus vulvae—for example, trichomonas vaginitis, achlorhydria, anaemia, avitaminosis—although these should be excluded. Has the possibility of self-inflicted trauma been considered? In order to establish the diagnosis and to determine the appropriate treatment it will probably be necessary to excise a small portion of the affected area for histological examination; in particular Bowen's disease (intra-epidermal carcinoma) should be kept in mind. This is rare, but the description given, although not typical, is in keeping with this diagnosis.

Occupational Leucoderma

Q.—*In March, 1941, it was reported from Washington that negro workers in tanneries noticed that the skin of their hands was turning white. This was said to be due to the presence of monobenzyl ether of hydroquinone, which was used to preserve the rubber gloves worn by the workers. I would be grateful for any concrete information about the above and any references to the literature.*

A.—Monobenzyl ether of hydroquinone (quinol) is a powerful reducing agent, and as an anti-oxidant has been used in rubbber compounding. It was the causative agent in an outbreak of occupational leucoderma among negroes working in a tannery in 1938; they wore a heavy gauntlet-type glove which had been treated with 0.2% of this anti-oxidant to preserve the rubber (Schwartz, Oliver, *et al.*, *Publ. Hlth. Rep., Wash.*, 1940, **55**, 1111). White spots appeared on the areas of skin of the forearms and hands which were covered by the rubber gloves; there was itching with in some cases a mild dermatitis preceding the appearance of depigmentation, but there was no great discomfort or any disability. Hydroquinone monobenzyl ether is not a pigment bleach—that is, it does not decolorize melanin but simply prevents its formation. Repigmentation of the leucodermic areas followed cessation of the use of the anti-oxidant. The general health of the workers was not affected. Other references are: Schwartz, *Publ. Hlth. Bull., Wash.*, 1939, **249**, 25; Schwartz, Tulipan, and Peck, *Occupational Diseases of the Skin*, 2nd ed., 1947, 153, 451.

Inheritance of Deaf-mutism

Q.—*What are the chances of a second deaf-mute occurring in a family? The first child is a deaf-mute boy; the second is a normal boy. There is no history of deaf-mutism on the wife's side, but two cases are known on the husband's side—a male three generations back (a great-grand-uncle of the husband) and a female collateral (a direct descendant of the husband's great-grandmother). Can the chances be estimated with any degree of certainty?*

A.—Hereditary deaf-mutism is due to a recessive gene. The absence (presumably) of any extraneous cause for the child's condition and the history of the defect in the father's family leave little doubt in this particular instance. The chance that any subsequent child will be similarly affected is 1 in 4. When the time comes for the children to marry there is no reason why the deaf-mute and the normal brother should not have children. Always provided that they do not marry blood relatives or women with a family history of deaf-mutism, the chance of the defect's appearing in the next generation is very small.

Sterilization of Rubber Gloves in Midwifery

Q.—*Is it satisfactory bacteriologically to sterilize rubber gloves for use in midwifery by washing them on the hands in soap and water, drying, and then rubbing in "dettol" obstetric cream for five minutes? Will you discuss this in relation to intact gloves, patched gloves, or "holed" but unpatched gloves?*

A.—The only really satisfactory procedure is to sterilize intact gloves by boiling or autoclaving and to apply them after the usual scrubbing of the hands. Except in emergency anything short of this is indefensible. If the wearing of damaged gloves is unavoidable they should be carefully patched, and if the patches are kept to the inside there is less risk of their becoming disturbed during operations. Procedures to be adopted in emergency will vary with the circumstances, but should be worked out with the ideal in mind, and with the knowledge that rinsing in antiseptic solutions or smearing with antiseptic cream, though better than nothing, is not very efficient. One of the difficulties in removing all bacteria by washing and scrubbing the bare hands is the surface irregularities. Provided care is taken where the gloves wrinkle at the wrist, this disadvantage is to some extent minimized by thorough washing of the gloved hands. If the gloves are patched, however, this advantage is lost and the procedure becomes less efficient. In any case the gloves should not be dried afterwards unless sterile towels are available. Punctured but unpatched gloves should not be used under any circumstances.

Undulant Fever

Q.—*A veterinary surgeon working with S 19 anti-abortus vaccine developed pustules on his forearm. Later he was clinically proved to have abortus fever. Shortly afterwards his wife developed the condition and aborted. (a) Is it reasonable to suppose that the husband's infection was caused by the vaccine? (b) Is it possible that he transmitted the condition to his wife? (c) Does it follow that her abortion was caused by the infection?*

A.—(*a*) The S 19 *Brucella abortus* vaccine is living but attenuated; whether the organisms contained in it could produce infection in man is not positively known. On the other hand, their reduced pathogenicity is likely to operate in man as well as in cattle, and a veterinary surgeon is in any case much more likely to have acquired the disease in the usual way from infected animals.

(*b*) Case-to-case transmission of undulant fever has not been observed; presumably it could occur, since the organism may be found in faeces and urine. Transmission by coitus is theoretically possible, but perhaps improbable, since coitus is unlikely in the acute stage, when the organism may be found in the urinary tract. The wife, of course, may also have acquired the disease from an infected animal or from milk. Further information about dates of onset and the existence of other possible sources of infection would be necessary in elucidating this interesting occurrence.

(*c*) *Br. abortus* can cause human abortion, but there can be no proof, short of demonstrating the organism in the uterus or placenta at the time, that it did so in any particular case.

Intractable Tinnitus

Q.—*About seven months ago I developed tinnitus in my left ear; it is high-pitched and continuous, and is worse on waking. There is no pain, vertigo, or deafness, and no history of previous ear trouble. I am 50 years of age, highly strung, and a "worrier,"—but except for a mucoid nasal and post-nasal catarrh, particularly in the morning, I am healthy and free from any cardiovascular abnormality. Blood pressure 140/80 mm. Hg; red cell count 5.7 millions per c.mm.; haemoglobin 102%. Clinical examination of the ear shows no evidence of disease and the Eustachian tube is patent. X-ray films of the teeth and sinuses are negative, though there is an unerupted upper canine on the left side. The tinnitus is most distressing and I find it difficult to get to sleep. Bromides and phenobarbitone give me a disturbed rest and a depressing carry-over the next day. What is the cause of the condition and what is the immediate and ultimate prognosis? Is there any treatment?*

A.—Tinnitus is considered to be due to some irritation of the inner ear or auditory nerve, but in many cases the cause is not discovered, and in others the damage is irreversible, and so not amenable to treatment. All the usual causes seem to have been eliminated in this case. Lempert has described a small series of cases (*Arch. Otolaryng.*, Chicago, March, 1946) in which he divided the tympanic plexus of nerves. In most cases the tinnitus was alleviated, but the series was too small for any convincing conclusions to be drawn. Acid. hydrobrom. dil. or ammon. brom. are the most generally useful sedatives. In the present case the tinnitus will probably be permanent but become more bearable as time goes on.

NOTES AND COMMENTS

Food Allergy.—Mr. ERIC C. WOOD, Ph.D. (London, W.), writes: May I add one further comment on the subject of sensitivity to egg in a child (Nov. 29, 1947, p. 896)? It is far more likely if a child is genuinely sensitive to egg that the allergy is to egg *white* rather than egg *yolk*. Marriott, W. M., and Jeans, P. C., in their book *Infant Nutrition*, London (3rd edition, 1942, pp. 224 and 225), say: "A fear that formerly existed that the effect of egg in early infancy might lead to the development of sensitivity to egg protein seems unfounded in the light of extended clinical experience in instances in which only the yolk has been fed. It is desirable that the egg be cooked." While they suggest that egg yolk may be added to the diet of the infant at as early an age as three months, they state that whole egg may be given toward the end of the first year. "The chief reason it is not commonly given earlier is the possibility that sensitivity to protein of egg white may develop as a result of the feeding. . . . At whatever age the feeding of egg white is started, it should be given cautiously and in small amounts at first." The point is of importance, since egg yolk is a most important food providing valuable quantities of many essential nutrients, not the least important of which is iron. Moreover, most babies find egg yolk extremely palatable. It would be a great pity if babies were deprived of a toothsome delicacy which is also an excellent food because they are allergic to egg albumen.

Ringworm of Scalp.—Col. W. H. CRICHTON, C.I.E., I.M.S. (ret.), writes from Sittingbourne, Kent, with reference to Dr. J. T. Duncan's letter (Nov. 29, 1947, p. 896): The causative fungus in all the cases I had in North Devon was reported by the Devon County Laboratory to be the *Microsporum felinum*. I refer to cases which occurred between February and May, 1947.

Superfluous Hair.—J. M. writes: The problem of superfluous hair becomes of the utmost importance to some women. Personally, I greeted the original *B.M.J.* answer (Nov. 15, p. 805) with approval as giving sensible and practical advice. To my mind it is quite impractical to advise electrolysis as a routine measure and usually unnecessary, except in those cases where there are a small number of exceedingly stiff hairs. The commonest problem arises with a woman, say in the early thirties, who feels that she has become unsightly through a generalized growth of hair. Clearly the trouble will be progressive, and to embark on electrolysis would be endlessly tedious and costly. Her choice of methods is either depilatory wax or an occasional shave. The advantage that wax offers is that since the hair is pulled out from the follicle the new growth of hair, when after several days it comes through, is soft and quite unlike the cut-off, bristly quality of a shaved hair. Most women who begin with depilatory wax in the twenties or thirties do not ever require to use it more than once in several days; the process takes some five or ten minutes, and the results are frequently perfect. On the other hand, shaving may sometimes become a daily necessity for a fastidious woman; but even so it is always wise to assure her that her growth will never become that of the average masculine skin. To my mind it is the way in which advice is administered which is the important factor; many middle-aged women feel that they are the only sufferers, and experience intense humiliation. They are greatly relieved to have it pointed out that their friends with immaculate skin have probably been using wax for a decade and that it is high time that they themselves followed suit. The really difficult part of this procedure is relieving the patient of her humiliation and her masochistic impression that she must expect to endure and suffer!

Constipation in an Infant.—Dr. ANN MOWER WHITE (London, W.) writes: I have only just seen the question and answer (Nov. 29, 1947, p. 896) about "Constipation in an Infant," and I am rather surprised at the reply. In the first place the questioner does not state whether the 4-month-old male infant is breast- or artificially fed. In a breast-fed baby an interval of seven days between bowel actions is not at all uncommon, and may be called "false" constipation in contradistinction to "true" constipation, when the stools are infrequent and hard. For "false" constipation no treatment is required beyond reassuring the mother that her milk is suiting her baby so well that there is little rubbish to pass out. If more active advice is needed, she should be told to give the baby more free kicking exercise with napkin removed and to give more water to drink in the daily routine. In an artificially fed baby "true" constipation is a more likely occurrence. The psychological trauma likely to be incurred by the daily anal insertion of a soap stick or a vaselined glass rod (as advised in the answer to the question) is a remedy fraught with too grave a risk to allow any mother to use it. More sugar added to the feeds, more water during the day, and a mild laxative such as milk of magnesia would be the more harmless procedure.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated.

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SUPPLEMENT TO THE

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SUPERANNUATION SCHEME FOR PRACTITIONERS

BY

HORACE KEAST, D.P.A.

Establishment Officer, Cornwall County Council

Under the provisions of the National Health Service Act, 1946, the Minister of Health is empowered to make regulations for the setting up of a comprehensive superannuation scheme for officers of the various bodies established under that Act, including medical practitioners providing general medical services. These regulations, which constitute an elaborate superannuation code, have recently been issued and are entitled the National Health Service (Superannuation) Regulations, 1947. The staffs of Regional Hospital Boards and Management Committees, as well as those of Executive Councils, are covered by these regulations, and there are special provisions for the granting of benefits on a contributory basis to practitioners rendering general medical services under the Act—i.e., medical practitioners on the lists of Executive Councils. The regulations consist of 88 pages of statutory phraseology, and a brief outline of the salient features affecting such practitioners may therefore be helpful.

The benefits provided for medical practitioners employed by Executive Councils include retirement pensions plus lump-sum capital retiring allowances, short-service gratuities in special cases, widows' pensions, and death gratuities. The granting of a pension to the widow of such a practitioner, irrespective of whether he dies before or after his own retirement, is a particularly valuable part of the scheme.

The superannuation allowance of a medical practitioner so far as his employment with an Executive Council is concerned will be based on the formula : "in respect of each year of contributing service as a practitioner, 1½% of his remuneration for that year." That is to say, the pension will be calculated by taking 1½% of the net remuneration of the practitioner payable by the Executive Council for each year of his contributing service, and the aggregate of these amounts will form an annual allowance, payable as from the first day of retirement. In addition to this annual pension there will also be a lump-sum capital payment, payable on retirement. In the case of a female practitioner or an unmarried male practitioner on the lists of an Executive Council, this capital sum will be based on the formula : "in respect of each year of contributing service as a practitioner, 4½% of his remuneration for that year." The aggregate sum will be computed in the same manner as the annual pension rate.

In the case of a married practitioner on the lists of an Executive Council, in respect of whose service a widow's pension may become payable, however, the capital sum will be based on 1½% of remuneration instead of 4½%. Generally, the amount of a widow's pension will be one-third of the amount earned by the service and remuneration of her husband in his Executive-Council employment up to the date of his death, subject, however, to an adjustment if the age of the widow is less than that of her husband. There will also be a death gratuity payable to the widow, calculated by reference to 1½% of the remuneration for each year of contributing service of the practitioner up to the date of death. Widows' pensions and gratuities are not payable when the marriage takes place after the husband attains pensionable age, and a widow in receipt of a pension gives up that allowance on remarriage. In the case of an unmarried practitioner a death gratuity, based on 4½% of the remuneration of each year of contributing service, may be payable to his legal personal representatives. The regulations also contain provisions for injury allowances where the officer is permanently incapacitated by injury suffered in the course of duty, short-service gratuities for those who have completed more than five but less than ten years' service, and special provisions for grants to widows whose husbands cease their employment with an Executive Council after completing five years' service and die within twelve months after so ceasing.

Pensionable Age

The normal pensionable age of a medical practitioner to retire from the employment of an Executive Council shall be sixty-five years or such later age as the Minister of Health may allow in any particular case. In the event of such a practitioner having more than forty years' contributing service the pension shall be calculated by reference to "the last forty years' contributing service." The earliest age that a contributor can retire, however, is 60 years, provided that he has by that age completed ten years' service. If, however, a contributor has completed ten years' contributing service and is incapable of discharging efficiently the duties of his employment by reason of permanent ill-health or infirmity of mind or body, he thereupon becomes entitled to the benefits earned up to that date.

So far as medical practitioners on the lists of Executive Councils are concerned the word "remuneration" in these regulations has a prescribed meaning. The definition is "all payments made to the practitioners in respect of general medical services provided by him, and of pharmaceutical services provided by him, less such sum on account of practice expenses as may be appropriate in accordance with a formula laid down by the Minister for the purpose, and less the remuneration approved by the Minister of any assistant practitioner in his employment." In cases of partnerships the remuneration of the practitioners is calculated by reference to their respective shares in the partnership agreement. The regulations granting pension rights of all types apply, of course, to assistant practitioners in practices rendering general medical service under the Act, save that their remuneration may mean either their whole salary and emoluments or such part thereof as the Minister may approve.

Where a practitioner has also been employed in any of the public services, as, for example, part-time medical officer to a local authority, there are regulations dealing with such previous public service. So far as medical officers who have no such previous public service, and who are employed by no other bodies than executive councils, are concerned, however, service will generally be confined to contributing service.

The contributions which a practitioner employed by an Executive Council will have to pay to qualify for the foregoing range of benefits will be 6% of his remuneration, as calculated by the formula already quoted. In addition to this contribution the Executive Council, acting as the employing authority, must pay to the central funds an additional 8% of the remuneration of each practitioner. While the employing authority of practitioners on the lists of Executive Councils will be those Councils, the practitioner himself is regarded as the employing authority of any assistant practitioner in his employ. The contributions deducted from the assistant's salary, together with the employing practitioner's 8% contribution, must be sent to the Executive Council.

Effect of Insurance Scheme

The National Insurance Act, 1946, the central statute in the social security legislation, will come into operation on July 5, 1948. Every person in the country between school-leaving age and pensionable age will be compulsory contributors under that scheme, save that wives will be insured by virtue of their husbands' contributions, and there will be differential contribution rates for males and females in the three categories of employed, self-employed, and non-employed persons. All medical practitioners, including those employed by Executive Councils, will be compulsory contributors to this State scheme, and the benefits will include a personal pension of 26s. a week at age 65 or £2 2s. a week for a married couple. There are also provisions for pensions for widows. There can be no exceptions to this State scheme; every person, irrespective of income levels, must be compulsorily insured.

It has been enacted, however, that contributors to such schemes as the Health Service Superannuation Scheme shall have a small reduction, generally £3 0s. 8d. a year, in their contributions to such schemes. This will result in an appropriate reduction in the eventual superannuation allowance payable under the Health Service Superannuation Scheme. The amount of this reduction depends on the age of the person concerned at the commencement of the scheme and the number of years' service before retirement, but in no case will it exceed 26s. a week, which is the minimum pension the person concerned will be receiving from the State scheme on retirement after attaining the pensionable age of 65. Certain classes of officers who are already subject to the superannuation enactments relating to local-authority or public-service employment and practitioners who enter Executive Council lists on the appointed day will be exempt from this modification, thus enabling them to pay full contributions to both pension schemes and hence receive both pensions in full, unless they individually elect to come under the modified scheme within a prescribed time limit. Medical practitioners to whom this right of option applies will be informed by the appropriate authority in due course.

It will be appreciated that the foregoing is only an outline of the main features of the National Health Service Superannuation Scheme so far as it affects practitioners on the lists of Executive Councils. It is not possible within the limits of a single article to deal with all the complicated qualifications which affect special circumstances and eventualities, such as the preservation of rights during any period of national service or when a practitioner receives no remuneration in consequence of an extensive period of sick leave. There are a large number of special provisions dealing with particular conditions. It is anticipated that explanatory booklets and leaflets will eventually be issued by the Ministry, and these should be studied in detail by practitioners to whom they apply.

Finally, there is one regulation which may be of exceptional importance to certain practitioners on the lists of Executive Councils. It states that, "where any person holding a contract or policy of insurance with any of the life assurance companies becomes a practitioner on the appointed day, then if he so requests the Executive Council in writing within three months after the appointed day, the Minister may agree that the practitioner shall not, so long as he continues to be a practitioner, become subject to any provisions of these regulations except this provision, and in that event the Minister shall, subject to such terms and conditions as the Minister may determine, pay to him as a contribution towards the maintenance of the contract or policy an amount equal to 8% of his remuneration as a practitioner as defined in paragraph (2) of this regulation." That definition of remuneration has already been explained earlier in this article. If this option is exercised, the Minister's contribution towards the premium of the policy or contract takes the place of any of the benefits provided by the Health Service Superannuation Scheme.

Dr. Walter Asten, of Bournemouth, who has been chairman of the health committee of the local county borough council for nearly 20 years, has been elected Vice-chairman of the Bournemouth Executive Council.

HEARD AT HEADQUARTERS

The Battle of the Documents

The Council has given careful consideration to the form of question to be used in the plebiscite and to the size of the majority that would justify action. These will come forward as recommendations to the Special Representative Meeting on Jan. 8, and forms in the plebiscite will be issued at the end of that month.

Unhappy Endings

Unhappy endings have attended the Four-Power talks at Lancaster House and equally the Negotiating Committee's talks with the Minister of Health in Whitehall, but there is one difference between the two breakdowns which is to the disadvantage of the doctors. In the case of the Four-Power talks the Press was present every day, and the public was able to judge the issue as the proceedings developed, so that not only was it prepared for the final calamity but it was able to judge where the responsibility lay. The talks with the medical profession, on the other hand, were conducted in secrecy, and even when they ended—the Negotiating Committee well knowing that the Minister was not going to concede an inch—a further silence was imposed upon them for sixteen days until the Minister had his very clever last word. The public, perhaps unaware even that talks have been proceeding, and knowing nothing of the stone wall against which the Negotiating Committee have been beating their heads, may well feel bewildered and unable to say whether an obstinate Minister or a "reactionary" profession is the more to blame.

Months Ahead

The next three months bid fair to being the most strenuous time since the dawn of medical politics. Much planning and executive work are involved in the arrangements of a plebiscite, in the organization of meetings near and far, and in the guidance of inquirers, all in addition to the normal turning of Association machinery. Many Divisions of course have their own speakers, but a request from any Division for a speaker from Headquarters, whether an officer of the Association or a member of the Council, will be met wherever possible.

Roping in Voluntaries

The L.C.C. seems to be genuinely anxious to ensure the continuance of the many voluntary health organizations in which the metropolis abounds. The chairman of the Hospital and Medical Services Committee told his Press conference the other day that all voluntary organizations at present doing useful work are being invited to continue that work under the new auspices, subject to the Council having the power to look at it from time to time and having also a small representation on the governing body. Mr. Stamp declared that a great measure of good will had already been shown on the part of these voluntary bodies, though a few of them have thrown in their hand and asked the Council to undertake the provision which hitherto they have been making. Home nursing is a field of service not undertaken up to now either by the L.C.C. or by the metropolitan boroughs whose health services are being taken over; it has been carried on solely by voluntary institutions, gathered under the general umbrella of the Central Council for District Nursing, and the L.C.C. intends to act through that excellent agency.

The Subacute Hospital Problem

In a document presented at the last meeting of the Hospitals Committee by one of its members, Dr. W. S. Macdonald, of Leeds, with a supplementary note by Dr. H. Joules, Dr. Macdonald suggested that some form of central bureau may soon be essential in each hospital district. Not only must there be a limitation of admissions, especially in subacute cases, but methods will have to be thought out for expediting discharge to convalescent homes and hostels as well as to normal domestic surroundings. Such bureaux could play a very real part in ensuring the closest co-operation between the hospital, the practitioner, and the general public on behalf of the particular patient.

Social Medicine No New Thing

A very interesting description of the many activities of the Institute of Social Medicine at Oxford was given by Prof. J. A. Ryle, who is at its head, to the Medical Society of London the other evening, but in the subsequent discussion some feeling was expressed that social medicine might become too academic. One or two medical men said that during their student days or just after qualification they learned their social medicine—although it was not called by that name—on the district, perhaps in Bermondsey, in the neighbourhood of Guy's, or in Whitechapel, in the neighbourhood of the London, or in Lisson Grove, in the neighbourhood of St. Mary's, where they had gone into the homes of the people and had learned things of great value to them in their subsequent career, whether in consultant or general practice. One of the early exponents of social medicine was Abercrombie, who set up his public dispensary in Edinburgh, where he and his students obtained an intimate knowledge of the moral and physical condition of the poor. There was also Lettsom, whose general dispensary in Aldersgate Street was the first of its kind in London. One general practitioner remarked at the meeting that he had been practising social medicine for a lifetime without being aware of it.

MEDICAL WAR RELIEF FUND: SEVENTH ANNUAL REPORT

1. This report covers the period of twelve months from Sept. 1, 1946, to Aug. 31, 1947. Appended to the report is the audited statement of accounts of the Fund for the same period.

2. The number of awards made during the year was 49. Ten of these were loans and the remainder gifts. In addition a loan awarded during a previous year was converted into a gift. The total amount of the awards made during the year is approximately £11,000, and the total of all awards since the inauguration of the Fund is nearly £62,000. The administrative expenses incurred since the Fund was established seven years ago amount only to £1,042.

3. As in the previous year, most of the applications came from ex-Service medical officers who needed temporary assistance on their return to civilian practice. Their difficulties were due in some cases to the bombing of their professional premises during the war, and in others to ill-health or disability resulting from military service.

4. The Fund has continued to make suitable provision for widows and children of doctors who lost their lives in the war. It gladly voted a substantial sum to defray the travelling expenses to and from Switzerland of three parties of children of doctors killed or incapacitated during war service. The children were thus enabled to benefit from a rehabilitation scheme generously promoted by the Swiss medical profession.

5. It is with deep regret that the Committee records the death of one of its members, Sir Arnold Lawson, who held the office of Vice-Chairman of the Distribution Subcommittee. His wholehearted interest in the work and unfailing sympathy and judgment were of the greatest value.

6. The Committee has accepted with regret the resignation of Dr. J. W. Bone from the office of Honorary Treasurer, in which he has rendered notable service to the Fund since its inauguration. The Committee records with gratitude its indebtedness to him. It has appointed Dr. C. L. Batteson to succeed him as Honorary Treasurer.

7. The Committee wishes to express thanks to those subscribers who have continued their generous support of the Fund during the past year. As has already been announced, it now considers that further contributions are unnecessary. Thanks are due also to the British Medical Association for its assistance in providing accommodation for meetings and in other ways; and once again the Committee records its deep appreciation of the indispensable co-operation received from the Royal Medical Benevolent Fund and the ever-ready help and interest of Mr. E. C. Pennefather, whose experience in the work of the R.M.B.F. has been of the greatest service. Finally, the Committee acknowledges with gratitude its continued indebtedness to Messrs. Price, Waterhouse and Co., who have again generously given their services as Honorary Auditors.

H. GUY DAIN,
Chairman.

STATEMENT OF ACCOUNTS FOR THE TWELVE MONTHS ENDED AUG. 31, 1947

	£ s. d.	£ s. d.	£ s. d.
To Balance Brought Forward:			
£7,000 3% Savings Bonds, 1955/65	7,000 0 0		
£10,000 2½% Savings Bonds, 1964/67	9,985 18 9		
£4,000 2½% National War Bonds, 1951/53	4,000 0 0		
£1,000 3% Defence Bonds (P.O. Issue)	1,000 0 0		
500 National Savings Certificates	375 0 0		
Deposit with P.O. Savings Bank and Accrued Interest	186 1 9		
Cash at Bank on Current Account	11,265 5 6		
Cash in Hand	2 8 1		
	33,814 14 1		
Less Amount due to R.M.B.F. (Clerical Assistance) £18 0 0			
Amount earmarked for Books for Prisoners of War 67 3 11			
	85 3 11		
		33,729 10 2	
,, Donations (including Transfer of Balance from Books for Prisoners of War)		2,281 11 4	
,, Interest on Investments (Gross)		539 13 1	
,, Interest on Deposit with Post Office Savings Bank (including Accrued Interest to Aug. 31, 1947)		4 10 3	
		£36,555 4 10	

NOTE.—Since the inception of the Fund loans to a total of £16,009 have been voted; of this sum £1,122 was repaid prior to Aug. 31, 1947, and £220 converted into a gift.

	£ s. d.	£ s. d.	£ s. d.
By Loans Advanced during Year		2,300 0 0	
Less Repayments during year 275 0 0			
Converted into Loan as per Minutes 220 0 0			
		495 0 0	
			1,805 0 0
,, Gifts (including £840 to be administered by R.M.B.F. and £1,114 10s. 1d. to the Swiss Rehabilitation Scheme for Children of Doctors killed in the war)		8,744 10 1	
Add: Transferred from Loans during year		220 0 0	
		8,964 10 1	
Less Amounts Refunded		25 0 0	
			8,939 10 1
,, Petty Cash Expenses			6 17 2
,, Cheque Book			1 0 0
,, Clerical Assistance			104 0 0
,, Honorarium to Secretary of Distribution Subcommittee			191 13 4
,, Balance Carried Forward at Aug. 31, 1947:			
£7,000 3% Savings Bonds, 1955/65		7,000 0 0	
£10,000 2½% Savings Bonds, 1964/67		9,985 18 9	
£4,000 2½% National War Bonds, 1951/53		4,000 0 0	
£1,000 3% Defence Bonds, P.O. Issue		1,000 0 0	
500 National Savings Certificates		375 0 0	
Deposit with P.O. Savings Bank and Accrued Interest		190 12 0	
Cash at Bank—Current Account		3,025 2 7	
Cash in Hand		10 11	
		25,577 4 3	
Less Amount due to R.M.B.F. for Clerical Assistance		70 0 0	
			25,507 4 3
			£36,555 4 10

Examined with the books and vouchers and found correct.

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Honorary Auditors.

Nov. 14, 1947.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

County Borough Councils.—Barnsley, Gateshead.

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Leyton, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

RELEASE OF MEDICAL OFFICERS FROM H.M. FORCES

The Central Medical War Committee has been notified of the following arrangements for the release in Class A of medical officers during the first quarter of 1948:

Royal Navy

January	Group 66
February	Groups 67 and 68
March	Groups 69, 70, 71, 72, and 73

Royal Army Medical Corps

General Duty Officers	
January	Group 64
February	Group 65
March	Group 66
Physicians, Surgeons, Gynaecologists	
January	Group 59
February	Group 60
March	Group 61
Other Specialists	
January	Group 57
February	Group 58
March	Group 59

Royal Air Force

January	Groups 65, 66, and 67
February	No release
March	Group 68

Association Notices

NATIONAL ASSISTANCE BILL

As was reported in the *Supplement* of Dec. 20, 1947 (p. 164), the Special Committee which is considering the National Assistance Bill requested that the Minister of Health receive a deputation to hear the Committee's views on the question of compensation for Public Assistance District Medical Officers who will suffer loss of emoluments attributable to the passing of the Act. The Ministry has stated in reply that no useful purpose would be served by such a meeting on the grounds that the Government's views on the matter are quite clear—namely, that there should be no compensation in the case of part-time officers.

Arrangements are now in hand for discussions between members of the Committee and the Parliamentary Medical Group. It is expected that a meeting with the Group will take place at the House of Commons on Jan. 27.

SCHOLARSHIPS IN AID OF SCIENTIFIC RESEARCH

The Council of the British Medical Association is prepared to receive applications for Research Scholarships as follows: An Ernest Hart Memorial Scholarship of the value of £200 per annum, a Walter Dixon Scholarship of the value of £200 per annum, and four Research Scholarships each of the value of £150 per annum. These scholarships are given to candidates whom the Science Committee of the Association recommends as qualified to undertake research in any subject (including State medicine) relating to the causation, prevention, or treatment of disease. Preference will be given, other things being equal, to members of the medical profession.

Each scholarship is tenable for one year starting on Oct. 1, 1948. The scholar may be reappointed for not more than two additional terms. A scholar is not necessarily required to devote the whole of his or her time to the work of research but may hold an appointment at a university, medical school, or hospital, provided the duties of such an appointment do not interfere with his or her work as a scholar.

In addition, applications are invited for the first award of the Insole Scholarship of the value of £250 for research into the causes and cure of venereal disease.

Conditions of Award: Applications

Applications for scholarships must be made not later than Friday, April 30, 1948, on the prescribed form, a copy of which will be supplied on application to the Secretary of the Association, B.M.A. House, Tavistock Square, London, W.C.1. Applicants will be required to furnish the names of three referees who are competent to speak of their capacity for the research contemplated.

Diary of Central Meetings

JANUARY

8 Thurs. **Special Representative Meeting,** 11 a.m.

21 Wed. **Council,** 10 a.m.

Branch and Division Meetings to be Held

EAST HERTS DIVISION.—At County Hall, Hertford, Sunday, Jan. 4, 2.30 p.m. Dr. E. A. Gregg: The National Health Act. All medical practitioners in the area of the Division are invited.

LEEDS DIVISION.—At Philosophical Hall, City Museum, Park Row, Leeds, Sunday, Jan. 4, 2 p.m. Special general meeting. Discussion: (1) The Negotiating Committee's Statement to the Minister of Health. (2) The Minister of Health's Reply. All medical practitioners in the area of the Division are invited.

METROPOLITAN COUNTIES BRANCH.—At B.M.A. House, Tavistock Square, London, W.C., Tuesday, Jan. 6, 5 p.m. Lecture by Dr. C. Keith Simpson: Crime and the Doctor. All senior students and newly qualified practitioners in the London area are invited to attend.

SOUTHAMPTON DIVISION.—At Royal South Hants and Southampton Hospital, Monday, Jan. 5, 8.30 p.m. Dr. Charles Hill (Secretary, B.M.A.) will address an open meeting of the profession. All medical practitioners in the area of the Southern Branch are invited to attend.

STOCKTON DIVISION.—At Stockton and Thornaby Hospital, Bowesfield Lane, Stockton-on-Tees, Monday, Jan. 5, 8.30 p.m. Address by Mr. W. Grant Waugh.

WESTMINSTER AND HOLBORN DIVISION.—At City Hall, Charing Cross Road, W.C., Thursday, Jan. 8, 8 p.m. Special meeting. 8.15 p.m. Meeting of all medical practitioners in the area of the Division to discuss present position of the negotiations concerning the National Health Service Regulations.

WINCHESTER DIVISION.—At Nurses' Home, Royal Hants County Hospital, Winchester, Sunday, Jan. 4, 11 a.m. Discussion: The Profession and the National Health Service Act, 1946. (i) The Negotiating Committee's Statement to the Minister of Health. (ii) The Minister of Health's Reply.

Meetings of Branches and Divisions

HASTINGS DIVISION

Addressing a meeting of the Hastings Division on Dec. 2 on "The Catarrhal Child," Dr. E. A. Wood read case notes to illustrate chronic or recurrent bronchitis, often punctuated by attacks of pulmonary consolidation or atelectasis—of which, with the sequels bronchiectasis, emphysema, and chest deformities, he showed *x*-ray photographs. Prevention was by adequate convalescence from measles, whooping-cough, or pneumonia, and care of upper respiratory infection. Treatment was based on pathology. Loss of cilia and bronchial ulceration demanded thin sputum (achieved by iodide and alkali), which would flow with postural drainage. Atelectasis, emphysema, asthma, and chest deformities required breathing exercises. Correct posture for drainage of bronchiectasis was ensured by bronchography. Lobectomy might cure. Whooping-cough vaccine should be given to susceptibles; and contacts who had not had measles should be given convalescent serum.

SALISBURY DIVISION

The Salisbury Division held one of its most successful meetings on Nov. 26 at Salisbury. It had been decided to invite the members of the legal profession, and 71 members and visitors dined together, including about 20 lawyers. Dr. A. D. H. Simpson was in the chair. After dinner Mr. W. Bentley Purchase delivered a B.M.A. lecture on "Some Medico-legal Experiences of a London Coroner." A vote of thanks was proposed by Mr. A. Duff and carried with acclamation.

Correction.—Dr. Thomas Scott was erroneously described as Mr. Thomas Scott in the list of members of the Scottish Regional Hospital Boards printed in the *Supplement* of Nov. 8 (p. 111).

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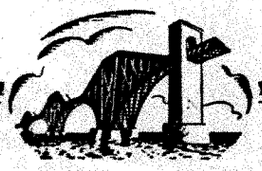

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Applicants should, except where otherwise specified, state name, address, age, nationality, qualifications, and enclose copies of 3 recent testimonials★ with short statement of experience and appointments held. Unless closing date is stated applications should be sent at once.

★ *SERVICE MEMBERS may have difficulty in supplying recent testimonials, but this should not deter them from applying*

A—Whole-time resident house appointments open to practitioners without previous experience.
B1—Whole-time appointments, usually resident within the senior establishment—e.g., Registrar, R.S.O., etc.
B2—Whole-time house appointments not within the senior establishment, usually resident, and usually held by practitioners with six months' experience.
R—Male, liable to military service under the National Service Acts.
W—Women practitioners.

APPOINTMENTS

HIS MAJESTY'S COLONIAL SERVICE
COLONIAL MEDICAL SERVICE

The Colonial Medical Service offers an interesting career and provides unique opportunities for applying medical science in territories which are undergoing rapid development. There are immediate openings in many parts of the Colonial Empire and applications are invited from both men and women doctors who are British subjects and possess qualifications registrable in the United Kingdom. Medical Officers are usually appointed in the first instance for general duties. This implies all-round ability with a balanced outlook upon both preventive and curative medicine. Officers are also required for public health duties, in which case the D.P.H. or some experience of health work is necessary. Ample opportunities exist for field investigation, while officers with special aptitude are encouraged to obtain such higher qualifications as will enhance their value to the Service. Officers are from time to time seconded or appointed to medical laboratories in the larger territories. In the West African territories improved salary scales and conditions of service have recently been introduced. In most of the other territories the terms of service are being actively reviewed, and meanwhile temporary cost-of-living allowances are being paid over and above the existing salaries. At present initial *basic* salaries, i.e. irrespective of any cost-of-living allowance and of any credit that may be allowable for war service or professional experience, vary between £600 and £925 according to locality. There are, in addition, numbers of super-scale posts in the administrative and specialist grades which are normally filled by promotion within the Service. Free passages for an officer and wife are generally provided both on first appointment and when travelling on leave of absence. Where Government quarters are provided a small rent is usually payable. Good leave conditions and an adequate pension scheme are in force. The Colonial Medical Service is a unified service and members are eligible for transfer from one territory to another, either with or without promotion. Selected candidates may be required to take a course in tropical medicine either before proceeding overseas (in which case they would receive an allowance) or on first leave. Candidates for permanent service must have been born on or after January 1, 1907. Contract appointments are also available in certain territories for doctors born before this date. Further particulars may be obtained from, and applications should be addressed to, the Director of Recruitment (Colonial Service), Colonial Office, 15, Victoria Street, London, S.W.1.

ST. JOSEPH'S HOSPITAL
Victoria, British Columbia, Canada
HOUSE PHYSICIAN AND SURGEON

Applications are invited from duly qualified medical practitioners for the above post at a salary of $1,800 per year (approximately £450). The appointment is for six months in the first instance and is renewable up to two years. Duties will include work in the medical, surgical and gynaecological wards, and assisting surgeons at operations. The hospital consists of 325 beds. Travelling expenses will be repaid up to $100. Applicant should state age, married or single, qualifications, previous experience if any, and enclose not more than three copies of recent testimonials; also, approximate date when duties could be commenced. This appointment is open to applicants registered with the General Medical Council of the United Kingdom, but before being allowed to enter private practice on completion of the appointment it will be necessary for them to register with the College of Physicians and Surgeons of British Columbia. Further details can be obtained from Mr. H. F. E. Smith, Industrial and Trade Representative, British Columbia House, 1 and 3, Regent Street, London, W.1; or direct from Sister Superior, St. Joseph's Hospital, Victoria, British Columbia, Canada.

UNIVERSITY OF ST. ANDREWS
TWO MEDICAL OFFICERS

The University Court of the University of St. Andrews invites applications for appointment of two Medical Officers in connection with the Student Health Scheme to be operated by the University. One of these officers will be located in St. Andrews and the other in Dundee. The salary attached to each appointment is £1,200 per annum together with F.S.S.U. benefits. The University operates a scheme of family allowances and a grant towards expenses of removal may be made. Further particulars of the appointment may be obtained from the undersigned with whom one copy of the application, together with the names of three referees, should be submitted not later than February 28, 1948.—David T. B. Ritchie, Secretary, The University, St. Andrews.

BRITISH COUNCIL
SCIENCE OFFICER (MEDICINE), Belgrade

The British Council invites applications from registered medical practitioners for the post of Science Officer (Medicine), Belgrade. Candidates should be aged between 33 and 45, and must have good administrative experience; knowledge of public health work will be an advantage. Duties include co-operation with Yugoslav medical authorities, supplying them with information on modern British technique and equipment, and lecturing (in English) on selected medical topics. Contract for one year, renewable. Basic salary £700 to £850 per annum according to age, qualifications and experience; plus free accommodation and rations for official (and wife if applicable), or equivalent allowances. Return fares paid. Application forms, and further particulars may be obtained from the Director, Personnel Department, The British Council, 3, Hanover Street, W.1, to whom completed forms should be returned before January 24, 1948.

AMENDED ADVERTISEMENT
ISLE OF MAN MENTAL HOSPITAL
Douglas, Isle of Man
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered male medical practitioners for the post of A.M.O. (B1). Suitably qualified R practitioners holding B2 appointments and R practitioners holding B2 appointments who are ineligible for service in His Majesty's Forces may apply. Salary £495 rising by annual increments of £25 to £555 with full residential emoluments, valued for superannuation purposes at £200 per annum. Additional £50 will be paid for possession of the D.P.M. *Low rate of Income Tax* (current year's tax begins at 2/- in the £1). A small furnished flat is available for a married man with domestic services including food, in which case the above emoluments will be adjusted. A car is available for the reasonable use of the successful candidate, who will be required to pass a medical examination. The appointment is pensionable under the I.O.M. Superannuation Acts and is terminable by two months' notice on either side. Applications, accompanied by copies of three recent testimonials or the names of three professional persons to whom reference may be made, should be sent to the Medical Superintendent not later than January 7, 1948. Canvassing in any form will disqualify.

CITY OF LEICESTER EDUCATION COMMITTEE
DENTAL OFFICER

The Education Committee invite applications from registered and fully qualified Dental Surgeons. The duties will be mainly concerned with the inspection and treatment of school-children, but will also include work under the Maternity and Child Welfare Scheme and other ancillary services. The person appointed will be required to devote his or her whole time to the duties of the office. The salary will be according to the scale which rises from a minimum of £650 per annum by annual increments of £25 to a maximum of £750 per annum, plus cost-of-living bonus. Previous experience will be taken into account in determining commencing salary. The appointment will be subject to three months' notice in writing on either side. The post is subject to the provision of the Local Government Superannuation Act, 1937, and the candidate appointed will be required to contribute 6 per cent of the salary received (or 5 per cent if already contributory employee under the Act). In this connexion the candidate appointed must pass an examination by the Committee's Medical Officer. Application should be made to the undersigned by January 19, 1948.—Elfed Thomas, Director of Education, Education Department, Newarke Street, Leicester.

SOUTH-WEST METROPOLITAN REGIONAL HOSPITAL BOARD
ASSISTANT SENIOR MEDICAL OFFICER

The South-West Metropolitan Regional Hospital Board invites applications for the appointment of Assistant Senior Medical Officer to deal, under the general direction of the Senior Administrative Medical Officer, with matters relating to the Western Area of the Region, which comprises Hampshire, Dorset, South-East Wiltshire, the Isle of Wight, and the County Boroughs of Bournemouth, Portsmouth and Southampton. The successful candidate will be required to reside in the Western area of the Region. The approved salary scale is £1,450 × 50—£1,650. The appointment is subject to the provisions of the National Health Service (Superannuation) Regulations, 1947, and is terminable by three months' notice on either side.

Applications should be addressed to the Secretary, South-West Metropolitan Regional Hospital Board, 32, Queen Anne Street, W.1, and envelopes should be endorsed "Assistant Senior Medical Officer." Applications should include a brief statement of the candidate's qualifications and experience, together with the names of three referees, and should be received not later than January 21, 1948.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT THORACIC HOUSE PHYSICIAN
(A) OR (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Thoracic House Physician (A or B2), now vacant, for work in the Thoracic Centre (112 beds) of the above Hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of one year. The salary payable will be, in the case of an A appointment, £120 per annum and for a B2 appointment at £200 per annum, together with full residential emoluments. The hospital, in addition to the Thoracic Unit, accommodates acute medical and surgical Service and Civilian patients and has an Orthopaedic Centre (300 beds). Total beds, 1,000. Applications should be forwarded to the Medical Superintendent, Pinderfields Emergency Hospital, Wakefield, forthwith.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

MINISTRY OF HEALTH
Regional Blood Transfusion Service
JUNIOR MEDICAL OFFICER
in the South West Region

Applications are invited from registered medical practitioners for the post of Junior Medical Officer in the Ministry of Health Blood Transfusion Service with Headquarters at Southmead Hospital, Bristol. The appointment is for six months in the first instance. The salary is at the rate of £428 to £528 per annum. Duties include work in the laboratory, clinical work at Southmead Hospital and the collection of blood from donors. Applications, stating age, qualifications with dates, present post, and copies of two recent testimonials, should be sent immediately to the Regional Blood Transfusion Officer, Southmead Hospital, Bristol.

BLOOD TRANSFUSION SERVICE
JOINT REGIONAL DIRECTOR (South East Scotland) and DIRECTOR OF CENTRAL DEPOT
(Eastern Area)

Applications are invited from persons with suitable qualifications (preferably medical) for the joint position of Regional Director (South-east Scotland) and Director of Central Depot (Eastern Area) (embodying Plasma Drying Unit at Edinburgh). Salary for joint position £1,100 by £25 to £1,200 maximum. Superannuation. Applications in writing to Charles S. Gumley, W.S., Secretary, The Scottish National Blood Transfusion Association, 10, Duke Street, Edinburgh, 1.

RAMPTON STATE MENTAL INSTITUTION
Near Retford, Notts.
MEDICAL OFFICER

Applications are invited from suitably qualified R practitioners holding B2 appointments for the post of Temporary Medical Officer. The successful applicant would be considered for the permanent appointment at a later date. R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The Institution, which is a modern one, provides for some 1,200 patients, male and female, suffering from conduct disorders associated with mental deficiency. There is every opportunity for general clinical experience and the study and treatment of psychopathic disorders and other mental conditions. Salary £950, rising to £1,300 by increments of £30, with a deduction of £30 for each year below the age of 35 and a corresponding increment for each year over 35 up to the age of 40. A deduction of 27s. 6d. per week is made for board, laundry, etc., and a charge of £70 per annum is made for accommodation. When the appointment is filled on a permanent basis a house will be available. Applications, with a copy of recent testimonials and references, to the Medical Superintendent, from whom further particulars may be obtained if required.

BUCKS COUNTY COUNCIL
AMERSHAM GENERAL HOSPITAL
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable for service under the National Service Acts, for the post of Resident Medical Officer (A) at the above Hospital. The appointment, which is at present vacant, is tenable for a period of six months and salary is at the rate of £200 per annum plus residential emoluments. Applications should be sent to the Medical Director as soon as possible.

ADMINISTRATIVE COUNTY OF NORFOLK
Combined appointment of
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH
for the
ERPINGHAM RURAL DISTRICT
CROMER URBAN DISTRICT
NORTH WALSHAM URBAN DISTRICT
SHERINGHAM URBAN DISTRICT and
MEDICAL OFFICER
to the EAST NORFOLK JOINT ISOLATION HOSPITAL AT ROUGHTON

The Norfolk County Council and the District Councils concerned invite applications from medical practitioners (including those at present serving in H.M. Forces) qualified to hold such an office by reason of the terms of the Sanitary Officers (outside London) Regulations, 1935, for the combined whole-time appointment of Assistant County Medical Officer and Medical Officer of Health for the above-mentioned Districts. Population of the combined area is now about 29,615. The salary for the combined appointment will be £960 per annum, plus bonus (at present £59 16s. per annum) with travelling expenses in accordance with the County Council's scale. The post will be designated under the Local Government Superannuation Act, 1937, and the salary will be subject to the statutory deductions for this purpose. The successful applicant will be required to pass a medical examination.

The officer will act under the direction of the County Medical Officer as Assistant School Medical Officer and Medical Officer to Infant Welfare Centres, and will also be required to perform such others duties as may be assigned to him by the County Council. As regards his duties as Medical Officer of Health, he will be subject to the control of the District Councils concerned, and will be required to live at an approved centre within the area. Resignation of the appointment will be subject to three months' notice to be received by the Clerk of the County Council. Applications must be made on the prescribed form, which can be obtained from the County Medical Officer, Public Health Department, 29, Thorpe Road, Norwich, to whom they should be returned, accompanied by copies of not more than three recent testimonials, not later than January 22, 1948. Canvassing in any form will be a disqualification.—H. Oswald Brown, Clerk of the County Council.

ADMINISTRATIVE COUNTY OF LONDON
School Health Service
PSYCHIATRIST

Applications are invited from registered medical practitioners of appropriate professional standing and qualifications for the appointment of Psychiatrist (whole-time) on the central medical staff. Salary £1,160 by £50 to £1,360. Duties are concerned with the scheme for child psychiatry in the School Health Service. Forms of application, containing details of duties, etc., from the Clerk of the Council, the County Hall, Westminster Bridge, S.E.1 (stamped addressed foolscap envelope necessary), and should be returned not later than January 24. Canvassing disqualifies. (3909)

ABERDEEN ROYAL INFIRMARY
CO-ORDINATING OFFICER

The Board of Directors invites applications for the full-time post of Co-ordinating Officer for the arrangements for the diagnosis and treatment of malignant diseases meantime in process of expansion to cover the North-East and Northern Areas of Scotland. Candidates should have considerable experience in surgery and in the diagnosis of malignant disease and the assessment of the possibilities of treatment both by surgery and radiotherapy. They should also have experience in the maintenance of standardized records and in the organization of "follow-up" clinics. Salary will be within the range of £1,750 to £2,000 per annum, according to qualifications and experience. There is no provision for superannuation at present, but this is subject to review with the inception of the National Health Service. A copy of the conditions of appointment may be had on application to the undersigned with whom applications and testimonials and the names of two persons for reference, should be lodged on or before January 24, 1948.—John A. McConachie, Clerk and Treasurer, 1, Albyn Place, Aberdeen.

BOROUGH OF BARKING
BARKING AND UPNEY (MATERNITY) HOSPITAL
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from qualified medical practitioners for the above-mentioned appointment. Previous medical appointments of this nature are desirable. Salary scale £455 per annum, rising by annual increments of £25 per annum to a maximum of £555 per annum, plus cost of living bonus and emoluments valued at £150 per annum. The appointment is subject to the provisions of the Local Government and Other Officers' Superannuation Act, 1937, and to satisfactory medical examination. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Application forms and conditions of service may be obtained from the Medical Officer of Health, Town Hall, Barking, Essex, and should be returned to the undersigned not later than Saturday, January 31, 1948.—E. R. Farr, Town Clerk, Town Hall, Barking, Essex.

ABERDEEN ROYAL INFIRMARY
HONORARY ASSISTANT PHYSICIAN

The Board of Directors invites applications for the Post of Honorary Assistant Physician. The holder will, however, have the option of drawing a salary from the date of his appointment until the establishment of the National Health Service, but in that case the post will be regarded as a full-time one and the holder will be precluded from engaging in private practice during that time. The salary during the period will be within the range of £750 to £900 per annum according to qualifications and experience. Three copies of application giving full particulars of qualifications and experience and submitting the names of three referees should be lodged with the undersigned not later than January 10, 1948.—John A. McConachie, Clerk and Treasurer, 1, Albyn Place, Aberdeen.

DIVISIONAL ADMINISTRATION OF THE PREVENTIVE MEDICAL SERVICES IN THE ADMINISTRATIVE COUNTY OF THE WEST RIDING OF YORKSHIRE
JOINT APPOINTMENT OF MEDICAL OFFICER OF HEALTH AND DIVISIONAL MEDICAL OFFICER
for the Borough of Pudsey, Urban Districts of Aireborough and Horsforth and the County Council of the West Riding of Yorkshire

Applications are invited from registered medical practitioners, who must also be registered in the medical register as the holder of a diploma in sanitary science, public health or State medicine, for the above-mentioned whole-time appointment. The effect of the joint appointment will be to secure that the planning day to day administration and execution of all, or practically all, public health matters of the division will be in the hands of one person, the Medical Officer of Health locally. A divisional public health office with necessary staff will be provided. There are to be 31 such divisions within the Administrative County. The salary attached to the post is £1,300 per annum, plus cost-of-living bonus according to the County Council Scale, advancing subject to satisfactory service, by annual increments of £50, to a maximum of £1,450 per annum. In addition there will be a travelling and subsistence allowance of £90 per annum. The appointment will be made jointly by the District Councils and the County Council, and the person appointed will not be permitted to engage in private practice and will be required:—

(a) To reside in the Division comprising the above County Districts or within such distance therefrom as may be approved.

(b) As Medical Officer of Health of the Borough of Pudsey and the Aireborough and Horsforth Urban Districts to act under the control and direction of the respective district councils, and to perform all the duties imposed on a Medical Officer of Health by the relevant Acts and Orders.

(c) As Divisional Medical Officer, to act as Administrative Officer for County Council Services including Child Welfare and School Medical Services in the same districts for which he is Medical Officer of Health.

(d) To undertake such other duties, not being incompatible with the above, as the Councils may jointly decide upon.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination as to his physical fitness. Forms of application and terms and conditions of service may be obtained from Dr. Fraser Brockington, County Medical Officer, County Hall, Wakefield, to whom completed forms must be delivered not later than January 12, 1948. Applications are invited from medical practitioners at present serving in H.M. Forces. Canvassing of members of the appointing bodies, directly or indirectly, will disqualify any candidate for the appointment.—W. R. Cruse, Town Clerk, Pudsey. F. L. Parker, Clerk to the Aireborough Urban District Council. G. W. Boyes, Clerk to the Horsforth Urban District Council. Fraser Brockington, County Medical Officer.

BOROUGH GENERAL HOSPITAL
Shirley Warren, Southampton
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from medical practitioners for appointment as Junior Resident Medical Officer, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointments will be for a period of six months, otherwise twelve months. Salary is at the rate of £260 per annum, with full residential emoluments. Applications, giving full particulars, should be addressed to the undersigned.—H. C. Maurice Williams, Medical Officer of Health.

BOROUGH ISOLATION HOSPITAL
Millbrook, Southampton
SENIOR RESIDENT MEDICAL OFFICER (B1)
(Male or female)

Applications are invited from suitably qualified R practitioners holding B2 appointments, R practitioners holding B1 appointments, and rejected by the R.A.M.C., or practitioners discharged from H.M Forces, for the above position Salary £455 per annum, rising by annual increments of £25 to £555 per annum, with full residential emoluments. Applications, giving full particulars, should be addressed to the undersigned.—H. C. Maurice Williams, Medical Officer of Health.

BOROUGH OF EALING
MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners who are also holders of a degree or Diploma in Sanitary Science, Public Health or State Medicine. The appointment is subject to approval by the Ministry of Health and the provisions of Section 110 of the Local Government Act, 1933, and the Sanitary Officers' (Outside London) Regulations, 1935. The person appointed will be required to devote his whole time to the duties of the office, not to accept any other office without the previous consent of the Council or take any private practice, but to be in the exclusive employment of the Council. He will be required to act as Medical Superintendent at the Clayponds Isolation Hospital and the Perivale Maternity Hospital as and when directed to do so by the Council. The salary will be at the rate of £1,320, rising to £1,600 by yearly increments of £50, plus National Whitley Council cost-of-living bonus. (This salary will be reconsidered if an amendment of the Asquith Memorandum is received. The population of Ealing is 185,000.) A car allowance at the rate of £125 per annum is payable to the Medical Officer of Health to cover all expenses in maintaining a car for the purpose of his duties. Canvassing, either directly or indirectly is strictly prohibited and will be deemed to be a disqualification. Copies of the application form and terms of appointment can be obtained from the undersigned, to whom applications, accompanied by copies of testimonials, must be delivered not later than January 28, 1948.—E. J. Cope-Brown, Town Clerk, Town Hall, Ealing, W.5.

BOROUGH OF FINCHLEY
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners (men and women) for a whole-time appointment of Assistant Medical Officer of Health. The salary will be within the scale £650 × £25—£850, plus cost of living bonus. The commencing salary will be fixed having regard to previous service in a similar post. A car allowance according to the Council's scale will also be payable. The duties will consist mainly of Maternity and Child Welfare and School Health Service Work, but may include such other duties as the Council determine. The appointment so far as concerns School Health work will be part-time to the service of the Middlesex County Council. Possession of the D.P.H. or D.C.H. will be an advantage. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to a satisfactory medical examination. Applications must reach the Medical Officer of Health, 308, Regents Park Road, N 3, by not later than January 24, 1948. Canvassing directly or indirectly, will disqualify.—R. M. Franklin, Town Clerk, Municipal Offices, Finchley, N.3.

BOROUGH OF BEXHILL
MEDICAL OFFICER OF HEALTH AND ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from registered medical practitioners for the above appointment. By arrangement with the East Sussex County Council the duties will include work in the School Health Services. Candidates must have had experience in Public Health work and hold the Diploma in Public Health or similar qualifications. The salary attached to the post is £960 per annum, rising by annual increments of £100 to £1,160 per annum, plus cost-of-living bonus, together with a car allowance in accordance with the Council's scale. The actual position on the scale will depend upon experience and length of service of the selected candidate. The appointment will be subject to the Local Government Superannuation Act, 1937, and the successful candidate passing a medical examination as to his physical fitness. The person appointed will not be permitted to engage in private practice. Applications, together with the names of three persons to whom reference may be made, should be sent to the undersigned not later than January 21, 1948, endorsed "Medical Officer of Health." Canvassing, directly or indirectly, will disqualify.—Edward Smith, Town Clerk, Town Hall, Bexhill, Sussex.

BUCKS COUNTY COUNCIL
TINDAL GENERAL HOSPITAL, Aylesbury
(125 beds, Resident Medical Staff, 4)
HOUSE SURGEON (B2) (Male)

Applications are invited from duly registered medical practitioners (male), including R practitioners holding A posts, for the post of House Surgeon (B2). The appointment is for a period of six months at a salary of £250 per annum, with full residential emoluments. The post is vacant on January 21, 1948. Good experience of general surgical work is obtainable: post-graduate teaching for Fellowship examinations is available. Applications, stating date free to commence duty, together with copies of two recent testimonials, should be submitted to the Medical Superintendent by January 15, 1948.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

BOROUGH OF WESTON-SUPER-MARE
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited from suitably qualified practitioners for appointment as Deputy Medical Officer of Health at a salary of £650 per annum, rising by annual increments of £50 per annum to a maximum of £850 per annum. A bonus is payable in addition and, at the present time, this amounts to £59 16s. per annum. Applicants must possess the Diploma in Public Health or a degree in Sanitary Science and will be required to pass a medical examination and contribute to the Council's Superannuation Scheme. Full particulars and form of application may be obtained from the undersigned, to whom applications should be returned, accompanied by copies of not more than three testimonials, by January 10, 1948. Canvassing, either directly or indirectly, will disqualify.—Cyril G. Eastwood, Medical Officer of Health, Town Hall, Weston-super-Mare.

CORPORATION OF DUNDEE
Public Health Department
WESTGREEN MENTAL HOSPITAL
RESIDENT JUNIOR ASSISTANT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of a Resident Junior Assistant Medical Officer (A), now vacant. R practitioners within three months of qualification may apply when appointment will be for a period of six months. Salary at the rate of £300 per annum, plus war bonus with full residential emoluments (no married quarters available). Applications should be sent to the Medical Superintendent.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
NEWCASTLE GENERAL HOSPITAL

Applications are invited from registered medical practitioners (male and female) for the following posts, tenable for six months and vacant on February 1, 1948.

TWO HOUSE PHYSICIANS (A) and FOUR HOUSE SURGEONS (A). Salary at the rate of £150 per annum.

HOUSE PHYSICIAN (A) to the Children's Department. The department is actively associated with, and shares staff with, the Department of Child Health of Durham University, and the post offers exceptional opportunities for gaining experience in many aspects of paediatrics. Salary at the rate of £150 per annum.

HOUSE SURGEON (A) to the Neurosurgical Department. Vacant February 14, 1948. Salary at the rate of £150 per annum.

For the above posts, practitioners within three months of qualification and liable under the National Service Acts may apply.

HOUSE SURGEON (B2) to the Neurosurgical Department. Vacant February 14, 1948. Tenable for six months with salary at the rate of £250 per annum. R practitioners holding A posts may apply.

Each of the above appointments carries cost-of-living bonus and residential emoluments. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne 1, as soon as possible.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne 1.

CITY OF SALFORD
Health Department
ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications for this post are invited from qualified medical practitioners (male or female) preferably in possession of the Diploma in Public Health and with experience of Maternity and Child Welfare and School Health work. The appointment will be permanent and whole-time, and the salary will be £650, rising by annual increments of £25 to £850 per annum, plus cost-of-living bonus. The commencing salary will be fixed within this scale according to qualifications and experience. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. Form of application and other particulars relating to the appointment may be obtained from the Medical Officer of Health, 143, Regent Road, Salford, 5, by whom applications (including the names of two referees) must be received not later than January 17, 1948.—H. H. Tomson, Town Clerk.

CITY OF BRADFORD
Joint Hospitals Council
TWO WHOLE-TIME RADIOLOGISTS

The Council invite applications for two appointments of Radiologist (whole-time), each at a salary of £500 per annum, plus share of private fees, with a minimum guaranteed remuneration of £1,750 per annum. The private fees will be divided equally between all the radiologists after deduction of one-third of the cost to the hospital, whichever is the greater. The duties of the appointment will normally be carried out at the Royal Infirmary, Bradford, but attendance at other hospitals in the group may be required. The hospitals together draw from a population of approximately 900,000. Applications should be sent to the undersigned as soon as possible.—Hy. Trusson, House Governor and Secretary, The Royal Infirmary, Bradford.

CITY OF BIRMINGHAM MENTAL HOSPITALS
RUBERY HILL DIVISION
ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from unmarried, male or female, medical practitioners for the whole-time appointment of Assistant Medical Officer (B1) at the above hospital. Salary £455 per annum rising by £25 to £555, plus full residential emoluments valued at £150 per annum, plus cost-of-living bonus. An additional £50 will be paid to holders of the D.P.M. The appointment will be subject to the Asylums Officers' Superannuation Act, 1909. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications to be sent in writing to the Medical Superintendent, Rubery Hill Mental Hospital, Birmingham, by Saturday, January 17, 1948. Previous experience of mental hospital work not essential.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL
(Municipal General Hospital with 1,050 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for appointment as House Surgeon (A), at the above hospital. Two vacancies are now available, and a third will become vacant at the end of January. The salary is at the rate of £250 per annum, plus residential emoluments, and they are approved as resident posts required for the final F.R.C.S. (Eng.). Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for six months, otherwise for one year. Applications should be sent to the Medical Superintendent, Dudley Road Hospital, Birmingham, 18.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL
(Municipal General Hospital with 1,050 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male or female) for appointment as House Physician (A), at the above Hospital. The salary is at the rate of £250 per annum, plus residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for six months; otherwise for one year. Applications should be sent to the Medical Supt., Dudley Road Hospital, Birmingham, 18.

CITY OF BIRMINGHAM
SELLY OAK HOSPITAL
HOUSE PHYSICIANS (A). Two vacancies
HOUSE SURGEONS (A). Three vacancies
GYNAECOLOGICAL AND OBSTETRICAL HOUSE SURGEON (A). One vacancy

Applications are invited from registered medical practitioners, male or female, for the above appointments. The salary is at the rate of £250 per annum, plus residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointments will be for six months, otherwise for one year. Applications should be sent to the Medical Superintendent, Selly Oak Hospital, Birmingham, 29.

CITY OF SHEFFIELD
Public Health Department
PUBLIC HEALTH LABORATORY
at the City General Hospital
ASSISTANT CLINICAL PATHOLOGIST

Applications are invited from clinical pathologists with experience in bacteriology who have served with H.M. Forces, for the position of Assistant Clinical Pathologist (non-resident) at the Public Health Laboratory at the City General Hospital. The appointment will be made under the terms of Ministry of Health Circular 202/46. The salary will be £900 per annum; with bonus, in addition, at present £59 16s. per annum. Applications to be despatched to the undersigned.—Llywelyn Roberts, Medical Officer of Health, Town Hall, Sheffield, 1.

CITY AND COUNTY OF NEWCASTLE-UPON TYNE
NEWCASTLE GENERAL HOSPITAL
HOUSE SURGEON (A)
Accident and Admissions Department

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A) to the Accident and Admissions Department, vacant on March 1, 1948. The appointment will be for a period of six months. Salary at the rate of £150 per annum, with residential emoluments and cost-of-living bonus. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.—J. Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

COUNTY BOROUGH OF WALSALL
MANOR HOSPITAL (333 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners who now hold A posts, for the position of House Physician (B2) (additional appointment). If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £350 per annum, with full residential emoluments. Applications should be sent as soon as possible to the Medical Superintendent

CITY OF NOTTINGHAM MENTAL HEALTH SERVICE
MAPPERLEY HOSPITAL
HOUSE PHYSICIAN (A)

A vacancy exists at this hospital for the post of House Physician (A). The post offers opportunities to become acquainted with all modern forms of mental treatment and to gain knowledge of the neuroses and psychoses. The appointment will be, in the first instance, for six months at a salary of £350 per annum all found. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be sent to the Medical Superintendent.

COUNTY OF BUCKS
RURAL AND URBAN DISTRICTS OF ETON
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners holding the qualifications prescribed by the Sanitary Officers (Outside London) Regulations, 1935, for the whole-time joint appointment of Assistant County Medical Officer and Medical Officer of Health for the Eton Rural and Urban Districts. Salary at the rate of £1,000 per annum rising by annual increments of £25 per annum to a maximum of £1,100, plus cost-of-living bonus. Travelling and subsistence allowances will be paid on the appropriate Council's scale. The appointment is superannuable and subject to medical examination. Further particulars and forms of application may be obtained from the undersigned to whom applications must be delivered by January 24, 1948. Canvassing will be a disqualification.—Guy R. Crouch, Clerk of the Bucks County Council, County Hall, Aylesbury.

COUNTY BOROUGH OF STOCKPORT
Public Health Department
MASS MINIATURE RADIOGRAPHY SERVICE
MEDICAL DIRECTOR

Applications are invited from suitably qualified medical practitioners for appointment as Medical Director of the Mass Miniature Radiography Service shortly to be inaugurated. The Unit is mobile and will operate in any part of the Council's administrative area. Applicants should have experience in, and be thoroughly conversant with, the radiological appearance of all forms of chest disease; if necessary this experience will be supplemented by attendance at the special course of instruction arranged by the Ministry of Health. The salary will be £900 per annum rising by annual increments of £25 to £1,000 per annum, plus cost-of-living bonus. This appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate appointed will be required to pass a medical examination. Applications should be sent forthwith to the Medical Officer of Health, Town Hall, Stockport.—Public Health Department, Stockport.

COUNTY BOROUGH OF DERBY
DERBY CITY HOSPITAL
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (B2), including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it may be extended to twelve months. The salary is at the rate of £200 per annum with full residential emoluments, plus war bonus. The hospital is an acute general hospital with a normal complement of 312 beds for acute medical and surgical cases, and with a large obstetrical department. Applications should be sent to the Medical Superintendent, City Hospital, Derby, before January 6, 1948.—C. Ashton, Town Clerk, Town Hall, Derby.

COUNTY BOROUGH OF WEST HAM
DAGENHAM SANATORIUM, Dagenham, Essex
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for an Assistant Medical Officer (B1) from registered medical practitioners (male or female). Suitably qualified R practitioners holding B2 appointments may apply. R practitioners holding B1 appointments cannot apply unless they have been rejected by R.A.M.C. Salary £455 per annum, by annual increments of £25 to £555 per annum, plus temporary cost-of-living bonus, with full emoluments. Further particulars and application forms from Medical Officer of Health, 225, Romford Road, West Ham, E.7, to be returned to him by January 15, 1948.—E. E. King, Town Clerk, West Ham Town Hall, Stratford, London, E.15.

COUNTY BOROUGH OF BLACKBURN
ASSISTANT MEDICAL OFFICER OF HEALTH
(Female)

Applications are invited from registered women medical practitioners for the above appointment. The duties will be mainly connected with Maternity and Child Welfare. A Diploma in Public Health, though not essential, will be considered an additional qualification for the position. Salary £650 rising by annual increments of £25 to a maximum of £850 per annum plus war bonus (£48 2s. per annum). The commencing salary may be fixed at a rate higher than £650 in the case of a candidate who has had previous experience as an Assistant Medical Officer of Health. Forms of application may be obtained from the Medical Officer of Health, Victoria Street, Blackburn, and should be returned to him not later than January 15, 1948.—Chas. S. Robinson, Town Clerk.

COUNTY BOROUGH OF WEST HAM
SENIOR ASSISTANT MEDICAL OFFICER

Applications are invited from qualified medical practitioners for the post of Senior Assistant Medical Officer. Duties will be mainly concerned with the Council's Maternity and Child Welfare Service, but the person appointed must be prepared to undertake duties in any section of the Health Services under the direction of the Medical Officer of Health. Salary is £900 by biennial increments of £50 to a maximum of £1,000 per annum, plus temporary cost-of-living bonus, and a car allowance of £50 per annum. Applicants must have had previous experience in Maternity and Child Welfare Work, and possess a Diploma of Public Health; The Diploma of Child Health will be an advantage. Form of application together with list of duties can be obtained from Medical Officer of Health, 223/225, Romford Road, West Ham, E.7, and must be returned to him not later than January 8, 1948. —E. E. King, Town Clerk, West Ham Town Hall, Stratford, E.15.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE
STAINCLIFFE COUNTY HOSPITAL
Dewsbury (286 beds)
RESIDENT ANAESTHETIST (B1)

Applications are invited from male registered medical practitioners for the whole-time appointment of Resident Anaesthetist (B1) at the above-named hospital, which is recognized by the Examining Board for postgraduate study for the Diploma in Anaesthetics and the Diploma in Child Health. The appointment will commence on March 1, 1948. Applicants should have held house appointments and had considerable experience in the administration of anaesthetics, and possession of the Diploma in Anaesthetics will be an additional advantage. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for service in H.M. Forces. The salary scale will be £455 by £25 to £555 per annum, with full residential emoluments and cost-of-living bonus in accordance with the County Council's scale. Applications should be forwarded to the undersigned as soon as possible. —C. Fraser Brockington, County Medical Officer, County Hall, Wakefield.

COUNTY BOROUGH OF MIDDLESBROUGH
HEMLINGTON EMERGENCY HOSPITAL
(200 beds)
Assistant RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Medical Officer (B2) at the above hospital. Duties are mainly surgical but the successful candidate will be required to assist in the administration of anaesthetics and general duties in the hospital. The salary is at the rate of £200 per annum plus cost-of-living bonus, together with full residential emoluments, and the successful candidate will be required to pass a medical examination. R practitioners who now hold A posts may apply, when the appointment will be limited to a period of six months, otherwise it will be for a period of twelve months. Applications should be sent to the Medical Officer of Health, Municipal Buildings, Middlesbrough, not later than Wednesday, January 7, 1948.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough.

COUNTY BOROUGH OF SUNDERLAND
CHERRY KNOWLE (EMERGENCY) HOSPITAL
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the above appointment. R practitioners holding A posts may apply, when the appointment will be restricted to six months' duration. Salary will be at the rate of £200 per annum, with full residential emoluments, valued at £100 per annum, and cost-of-living bonus of £29 19s. 7d. per annum. The selected candidate will be required to pass a medical examination and the appointment will be determinable by one month's notice given in writing at any time by either party to the other of them. Applications must be forwarded immediately to the undersigned, endorsed on cover "House Surgeon (B2)."—G. S. McInnire, Town Clerk, Town Clerk's Office, Town Hall, Sunderland.

COUNTY BOROUGH OF NEWPORT
Social Welfare Committee
WOOLOSTON HOUSE HOSPITAL
Newport, Mon.
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the temporary appointment of Junior Resident Medical Officer (A), at Wooloston House Hospital, Newport, Mon. Salary £200 per annum, with full residential emoluments. All fees, with the exception of coroners' fees, are payable to the Social Welfare Committee. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months; otherwise for a period of twelve months. Applications, accompanied by copies of two recent testimonials, should be sent at once to Tom Kay, Director of Social Welfare, Social Welfare Department, Town Hall, Newport, Mon.

COUNTY COUNCIL OF CUMBERLAND
RURAL DISTRICT COUNCIL OF MILLOM
DISTRICT MEDICAL OFFICER OF HEALTH AND ASSISTANT COUNTY MEDICAL OFFICER

The County Council of Cumberland and the Rural District Council of Millom invite applications for the above combined appointment. Salary £960 per annum by £50 to a maximum of £1,110, plus cost-of-living bonus. Travelling and subsistence allowance on the County Scale for the time being in force. Applicants must be registered medical practitioners holding the Diploma in Public Health or corresponding qualification. Further particulars and forms of application may be obtained from the County Medical Officer, 11, Portland Square, Carlisle, to whom applications should be submitted before January 24, 1948.—G. N. C. Swift, Clerk to the County Council. W. N. Kitchin, Clerk to the Millom Rural District.

ESSEX COUNTY COUNCIL AND ROMFORD BOROUGH COUNCIL
Combined appointments of
ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH AND ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified medical practitioners for the above combined appointments. Preference will be given to applicants possessing a Diploma or Certificate in Public Health. The Borough is an Excepted District under the Education Act, 1944. The person appointed will be required to devote whole-time service to the combined appointments. The duties of the County Council appointment will be chiefly in relation to the School Health Service and the duties of the Borough Council appointment will include those relating to Maternity and Child Welfare and other Public Health work. As respects both appointments the person appointed will, however, be required to undertake such other duties as may be necessary. The salary attaching to the combined appointments will be at the rate of £750 a year rising by annual increments of £25 to £950 a year, plus bonus and travelling allowances as from time to time decided. The combined appointments, which will not be severable, will be held during the pleasure of the respective employing Authorities and will be determinable by the officer by not less than three months' notice in writing. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate selected for appointment will be required to pass a medical examination. Application forms may be obtained from the Clerk of the County Council, to whom they should be returned, accompanied by copies of not more than three recent testimonials, as soon as possible. Canvassing directly or indirectly will disqualify.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford; J. Twinn, Town Clerk, Town Hall, Romford.

ESSEX COUNTY COUNCIL
OPHTHALMIC SPECIALISTS

Applications are invited from registered medical practitioners for the following appointments. Applicants should have special experience in all branches of Ophthalmology and should be in possession of the Diploma in Ophthalmic Medicine and Surgery.

SENIOR ASSISTANT COUNTY MEDICAL OFFICER for Ophthalmic work. Salary £900 a year rising by annual increments of £50 to £1,200 a year.

ASSISTANT COUNTY MEDICAL OFFICER for Ophthalmic work. Salary £750 a year, rising by annual increments of £25 to £950 a year.

Bonus is now paid in addition. Applications (on the prescribed form obtainable from the County Medical Officer of Health at the undermentioned address), accompanied by non-returnable copies of three recent testimonials, should be received by me at County Hall, Chelmsford, not later than January 19, 1948. Canvassing, whether directly or indirectly, will disqualify a candidate.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

AMENDED ADVERTISEMENT
HAMPSHIRE COUNTY COUNCIL
DEPUTY COUNTY MEDICAL OFFICER

Applications are invited for the post of Deputy County Medical Officer. The successful candidate will be required to assist the County Medical Officer in all branches of the Health Service both physical and mental. Candidates must have a Diploma in Public Health and have had experience of the administration of the general public health and the school health services. Knowledge of the administration of the Lunacy and Mental Treatment Acts and the Mental Deficiency Acts will be an advantage. The appointment will be at a salary of £1,100, rising by annual increments of £50 to £1,200, together with a cost-of-living allowance amounting at present to £69 16s. a year (for a man). The successful candidate will be required to contribute to the Superannuation Fund, under the provisions of the Local Government Superannuation Act, 1937, and to pass a medical examination. The officer will be required to live in or near to Winchester and may be given the opportunity of renting a flat. A car is necessary for the appointment and an officer using his own car in the County service will receive travelling allowances on the County scale for the time being in force. Applications on forms to be obtained from the County Medical Officer, The Castle, Winchester, should be returned so as to reach him not later than January 31, 1948.—G. A. Wheatley, Clerk of the County Council, The Castle, Winchester.

HERTFORDSHIRE COUNTY COUNCIL
HAYMEADS HOSPITAL, Bishop's Stortford, Herts
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2) at Haymeads Hospital, Bishop's Stortford, Herts, now vacant, including R practitioners now holding A posts. Salary at the rate of £240 per annum with full residential emoluments; the appointment to be for six months in the first place. General surgery and fractures. Applications to the Medical Superintendent of the Hospital.

HERTFORDSHIRE COUNTY COUNCIL
HAYMEADS HOSPITAL, Bishop's Stortford, Herts
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) at Haymeads Hospital, Bishop's Stortford, Herts, now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. Salary at the rate of £150 per annum with full residential emoluments; the appointment to be for six months. Applications, together with names and addresses of referees, to the Medical Superintendent of the Hospital.

KENT COUNTY COUNCIL
COUNTY HOSPITAL, Farnborough, near Bromley
(935 beds)
RESIDENT MEDICAL OFFICERS

Applications are invited from suitably qualified registered medical practitioners (male or female) for the following appointments at the above-named hospital:—

(a) **JUNIOR ASSISTANT MEDICAL OFFICER** (B2) for medical duties.
(b) **JUNIOR ASSISTANT MEDICAL OFFICER** (B2) for surgical duties.
(c) **JUNIOR ASSISTANT MEDICAL OFFICER** (B2) for Paediatric duties.
(d) **JUNIOR ASSISTANT MEDICAL OFFICERS** (B2) (Two) for Obstetric duties.
(e) **JUNIOR ASSISTANT MEDICAL OFFICERS** (A) (Two) for medical duties.
(f) **JUNIOR ASSISTANT MEDICAL OFFICERS** (A) (Two) for surgical duties.

Salary £200 a year with full residential emoluments, plus a cost-of-living allowance in all these posts. (a), (b), (c), and (d) R practitioners who now hold A posts are invited to apply, when the appointment will be limited to six months. Otherwise, it will not exceed one year. (e) and (f) Practitioners within three months of qualification and liable under the National Service Acts may apply for these posts when the appointments will be for a period of six months. Medical examination necessary and superannuation can be arranged. Applications, stating age, qualifications, experience and the names and addresses of two responsible persons to whom reference may be made as to professional ability and character, should be addressed to the Medical Superintendent at the Hospital, as soon as possible.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, nr. Liverpool
HOUSE SURGEON (B2) (E.N.T.)
HOUSE SURGEON (B2) (Orthopaedic)

Applications are invited for the above appointments from registered medical practitioners (male and female), including R practitioners who now hold A posts. The Hospital is approved for the D.L.O. If held by an R practitioner, the appointments will be limited to a period of six months. Otherwise the successful applicants will be eligible for re-appointment for a further period of six months. Salary for each appointment is at the rate of £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital the Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, January 12, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL
Ashton-under-Lyne, nr. Manchester
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the above appointment including R practitioners who now hold A posts. If the successful applicant is an R practitioner, the appointment will be limited to six months, otherwise it may be renewed for a further period of six months. Salary is at the rate of £250 per annum, together with a cost-of-living bonus and full residential emoluments. The appointment is subject to medical examination and is superannuable. Forms of application may be obtained from the County Medical Officer of Health, Hospital, and Medical Department, County Offices, Preston, to whom all applications must be forwarded not later than Monday, January 12, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL, Ormskirk, near Liverpool
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from male and female registered medical practitioners for the above appointment, which will be tenable for a period of twelve months. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £350 per annum, plus cost-of-living bonus and residential emoluments. The appointment is subject to medical examination and is superannuable. Full particulars and forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom applications must be returned not later than Monday, January 12, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LONDON COUNTY COUNCIL

Medical practitioners required for the undermentioned positions:—

ASSISTANT MEDICAL OFFICERS, Class I (B1)

Salary £455 a year, rising by £25 to £555 a year, plus the appropriate cost-of-living addition. The appointment will not exceed four years unless the officer's name is placed on promotion list. Hospital: Paddington Hospital, Harrow Road, W.9. Duties: Casualty Officer. Hospital: St. Alfege's Hospital, 48, Vanbrugh Hill, Greenwich, S.E.10 (two positions). Duties: (*a*) Medical; (*b*) Traumatic and Orthopaedic Surgeon. Hospital: St. George-in-the-East Hospital, Raine Street, Wapping, E.1. Duties: Medical. Hospital: Hackney Hospital, High Street, Homerton, E.9. Duties: Medical. Hospital: Lewisham Hospital, Lewisham, S.E.13. Duties: Surgical.

ASSISTANT MEDICAL OFFICERS, Class II (B2)

Salary £325 a year, plus appropriate cost-of-living addition. Appointment for one year only in first instance, renewable for second year under certain conditions Hospital: St. Alfege's Hospital, 48, Vanbrugh Hill, Greenwich, S.E.10. Duties: Casualty Officer. Hospital: St. George-in-the-East Hospital, Raine Street, Wapping, E.1. Duties: Casualty Officer. Hospital: Lambeth Hospital, Brook Drive, Kennington Road, S.E.11 (two positions). Duties: (*a*) Obstetrics. (*b*) General Medical. Hospital: St. Mary, Islington, Hospital, Highgate Hill, N.19. Duties: Obstetrics. Hospital: St. Giles' Hospital, St. Giles' Road, Camberwell, S.E.5. Duties: Obstetrics. Hospital: Queen Mary's Hospital for Children, Carshalton, Surrey. Duties: Surgical. Hospital: Bethnal Green Hospital, Cambridge Heath Road, E.2. Duties: Medical and Anaesthetics. Hospital: Mile End Hospital, Bancroft Road, Mile End, E.1. Duties: General Medical.

All the above positions are with board, lodging and washing. Married quarters are not available, but in certain instances non-residence with the appropriate allowance is permitted. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply for the B1 positions, and R practitioners holding A posts may apply for B2 appointments, which will be limited to six months Application forms, obtainable from Medical Officer of Health, S.D.2, County Hall, S.E.1 (stamped foolscap envelope necessary), must be returned by January 19, 1948. Canvassing disqualifies. (3886)

LONDON COUNTY COUNCIL
LABORATORY TECHNICIAN

Laboratory Technician required at the Teaching and Research Laboratory, Maudsley Hospital, Denmark Hill, S.E.5. Candidates should have had experience in biochemistry and in general clinical laboratory technique. Salary scale £250, rising to £325 a year, plus interim increase of £50 a year pending review of salary scale, and cost-of-living addition (at present £78 a year (men), £63 to £72 a year (women)). Commencing salary according to experience. For application form, returnable by January 30, 1948, send stamped addressed foolscap envelope to Medical Officer of Health (MHS/1), County Hall, Westminster Bridge, S.E.1. (3917)

MIDDLESEX COUNTY COUNCIL
CENTRAL MIDDLESEX COUNTY HOSPITAL
Park Royal, N.W.10
CHIEF ASSISTANT
Obstetric and Gynaecology Dept.

Chief Assistant required. Experienced, with higher degree or Diploma in Obstetrics and Gynaecology. Maternity unit 58 beds, gynaecological unit 50 beds. General scope of duties arranged by Medical Director and Senior Obstetrician may include teaching. Inclusive salary £750 by £50 to £950 per annum, plus any temporary bonus (now £60 per annum). Appointment renewable annually up to three years with possible extension. First increment payable from April 1 following completion of six months' service. Non-resident, whole-time, subject to medical examination. Application to the undersigned by January 10, 1948. No forms (quoting D279, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
NORTH MIDDLESEX COUNTY HOSPITAL
Edmonton, N.18

(1) **OUT-PATIENT MEDICAL OFFICER (B2) (Resident)** required. Duties: medical, surgical and casualty cases, with minor surgery. R practitioners holding A posts may apply. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash).

(2) **OBSTETRIC HOUSE SURGEON (B2) (Resident).** Salary £250 per annum, plus any temporary bonus (now £30 per annum cash). Must have held house appointments in either medicine or surgery. Hospital has large Obstetric and Gynaecological Dept. Post approved for R.C.O.G. R. practitioners holding A posts may apply.

(3) **HOUSE SURGEON (A) (Resident).** Registered medical practitioners within three months of qualification and liable under the National Service Acts eligible. Salary £150 per annum, plus any temporary bonus (now £30 per annum cash).

(1), (2), and (3) Board, lodging, laundry. (2) and (3) Whole-time duties such as Council may require under supervision of Medical Director. Vacant, February 1, 1948. All six months' appointments. Applications to Medical Director of Hospital: (1) by January 6, 1948; (2) and (3) by January 10, 1948. No forms (quoting D282, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CENTRAL MIDDLESEX COUNTY HOSPITAL
Park Royal, N.W.10
CASUALTY OFFICER (B2) (Resident)

Casualty Officer (B2) (Resident) required at Central Middlesex County Hospital, Park Royal, N.W.10. Registered medical practitioner, preferably one who has held hospital appointments. R practitioners holding A posts may apply. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash); board, lodging, laundry. Whole-time duties such as Council may require under supervision of Medical Director. Appointment subject to medical examination is for six to twelve months (except for R practitioners). Applications to Medical Director of Hospital by January 10, 1948 No forms (quoting D281, B.M.J.).—C W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W 1.

MANCHESTER CORPORATION
CRUMPSALL HOSPITAL (1,400 beds)
RESIDENT ASSISTANT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners (male or female), including those in H M Forces and R practitioners who now hold A posts for the above-mentioned appointment which is vacant now. If held by an R practitioner the appointment will be for a period of six months, otherwise it will be for a period of twelve months. The basic salary is £250 per annum with board, residence and laundry in addition, subject to the Manchester Corporation conditions of service. A temporary bonus is payable in addition to the salary stated. Applications stating the full name, age (giving date of birth), nationality, professional qualifications (with dates), particulars of present appointment and past hospital appointments are to be addressed to the Medical Superintendent, Crumpsall Hospital, Crumpsall, Manchester, 8, as soon as possible. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

MANCHESTER CORPORATION
WITHINGTON HOSPITAL
(adult, general, 1,156 beds)
RESIDENT JUNIOR ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, including those serving in H M. Forces and R practitioners who now hold A posts, for the above-mentioned appointment. If held by an R practitioner the appointment will be for a period of six months, otherwise it will be for a period of twelve months. The basic salary is £250 per annum with board, residence and laundry in addition valued at £120 per annum, subject to the Manchester Corporation conditions of service. A temporary bonus is payable in addition to the salary stated. Applications stating full name, age (giving date of birth), nationality, qualifications (with dates) particulars of present appointment and past hospital appointments are to be addressed, as soon as possible, to the Medical Superintendent, Withington Hospital, West Didsbury, Manchester, 20. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk.

STAFFORDSHIRE COUNTY COUNCIL
WORDSLEY EMERGENCY HOSPITAL,
near Stourbridge (450 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from suitably qualified registered medical practitioners for the above-mentioned post which is now vacant. Acute medical cases are received at the hospital and the other departments include a Fracture A Department, Thoracic Surgery and Maternity Units. The appointment, which will be subject to one calendar month's notice in writing on either side, will be for a period of one year, with salary at the rate of £455 per annum, plus full residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless the candidates are ineligible for H.M. Forces. Applications must reach the undersigned by January 19, 1948.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN
PAEDIATRIC SPECIALIST

Applications are invited from ex-Service medical practitioners for the above-mentioned appointment made in accordance with the Department of Health for Scotland letter of November 9, 1946. Salary up to the rate of £1,000 per annum (non-resident). The appointment is a full-time one and the holder will not be allowed to engage in private practice. Applications, giving full particulars of qualifications and experience, including the names of three referees, and stating whether a Class III appointment has been held, should reach the Secretary, 9, Sciennes Road, Edinburgh, 9, not later than January 24, 1948.

STAFFORDSHIRE COUNTY COUNCIL
TAMWORTH BOROUGH COUNCIL
LICHFIELD CITY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited for the combined whole-time appointment of an Assistant County Medical Officer for the Administrative County of Stafford and Medical Officer of Health of the Tamworth Borough and Lichfield City (estimated populations, 12,300 and 10,500 respectively) at a salary at the rate of £960 per annum, plus cost-of-living bonus. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to provide a motor car, the allowances for which will be in accordance with the County Council scale. Applicants must be fully qualified medical men with experience in public health duties, and must hold the Diploma of Public Health. The candidate appointed will, as regards his duties as Assistant County Medical Officer, act under the direction of the County Medical Officer of Health and will be required to perform such duties as may from time to time be prescribed. As regards his duties as District Medical Officer of Health, he will be subject to the sole control and direction of the local Sanitary Authorities. The appointment is subject to the approval of the Ministers of Health and Education, and also, as far as the offices of District Medical Officer are concerned, to the provisions of the Sanitary Officers' (Outside London) Regulations, 1935. The combined appointment will be subject to three calendar months' notice in writing on either side, which, as far as the offices of District Medical Officer of Health are concerned, will also be subject to the consent of the Minister of Health. The successful candidate will be required to pass a medical examination and produce his birth certificate. Forms of application may be obtained from the Clerk of the County Council, County Buildings, Stafford, and should be returned to him by first post on January 19, 1948, together with copies of not more than three recent testimonials.—T H Evans, Clerk of the County Council, County Buildings, Stafford. H. Wood, Town Clerk, Tamworth. A. N. Ballard, Town Clerk, Lichfield.

SALOP COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited for the appointment of Assistant County Medical Officer on the County Medical Staff. The duties will be mainly in connection with the School Health and Maternity and Child Welfare Services. Applicants should hold a qualification in Public Health, and preference will be given to applicants who have been approved for the purposes of giving certificates under the Mental Deficiency Acts, and for the ascertainment of "Handicapped Pupils." The salary scale is £650, rising by annual increments of £25 to £850 per annum, plus bonus (at present £59 16s.), and the point of commencement on the scale will depend upon previous experience. The successful applicant will be expected to provide a car, and travelling and subsistence allowances will be paid on the county scale. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Forms of application with the conditions of service may be obtained from the undersigned, and should be returned with copies of three recent testimonials, so that they are received not later than January 17, 1948.—William Taylor, County Medical Officer, College Hill House, Shrewsbury.

SURREY COUNTY COUNCIL
FARNHAM COUNTY HOSPITAL
Hale Road, Farnham (210 beds)
ASSISTANT SURGEON

Applications, including those from suitably qualified practitioners serving in H.M. Forces, are invited for the above full-time appointment. Candidates must possess a higher surgical qualification and have considerable experience of general surgery. The commencing salary will be at a point according to qualifications and experience on the scale £950 per annum inclusive by annual increments of £50 to £1,150 per annum inclusive. The appointment is for a period not exceeding seven years. The successful candidate will be required to reside within reasonable distance of the Hospital. Applications with a copy of not more than three recent testimonials and/or the names of three referees should reach the County Medical Officer, County Hall Kingston-upon-Thames by January 10, 1948.

ST. PANCRAS BOROUGH COUNCIL
ASSISTANT MEDICAL OFFICER (Female)

Applications are invited for the above appointment. Candidates must be qualified medical practitioners and preference will be given to those possessing the Diploma in Child Health and/or the Diploma in Public Health, or those having expert experience in maternity and child welfare work. The commencing salary of the person appointed will be £700 per annum, rising by six annual increments of £25 to £850 per annum, plus the appropriate cost-of-living addition (at present £48 2s. per annum). The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination by the Council's Medical Officer of Health. The Council are unable to assist the successful applicant in the provision of housing accommodation. Forms of application, containing further particulars of the appointment, may be obtained from the undersigned on receipt of a stamped addressed foolscap envelope, and must be returned, together with copies of three recent testimonials, not later than January 31, 1948.—R. C. E. Austin, Town Clerk, St. Pancras Town Hall, Euston Road, London, N.W.1.

ALTRINCHAM GENERAL HOSPITAL
near Manchester (100 beds, 3 Residents)
HOUSE SURGEON (A)

House Surgeon (A), male or female, including practitioners within three months of qualification who are liable under the National Service Acts. Salary £150 per annum, usual emoluments. To commence February 1, 1948. If held by an R practitioner appointment will be limited to six months, otherwise renewable for a further period. Applications to General Superintendent as soon as possible.

ANCOATS HOSPITAL, Manchester, 4
FOUR HOUSE SURGEONS (A)

Vacancies will occur for four House Surgeons (A) on or about January 18 next. Applications are invited from registered medical practitioners, male or female, including those within three months of qualification and liable under the National Service Acts. Salary at the rate of £160 per annum, with full residential emoluments. Appointment will be for a period of six months. Applications to be forwarded to the General Superintendent and Secretary on or before January 6, 1948.

BIRMINGHAM MATERNITY HOSPITAL
(Associated Teaching Hospital of the University of Birmingham)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant March 1, 1948. The appointment is for twelve months and the holder will be eligible for reappointment. The post is recognized for the examinations of the Royal College of Obstetricians and Gynaecologists. Applicants should have held house appointments and at least one previous obstetrical post. Preference will be given to candidates holding the M.R.C.O.G., or reading for this examination. Salary at the rate of £200 per annum, with full residential emoluments. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces may apply. Applications should be sent as soon as possible to Bernard Sylvester, House Governor, Loveday Street, Birmingham, 4.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also Incorporating the Queen's Hospital 1840-1941)
Teaching Hospital of 1,000 beds
(in association with the Birmingham University)

Applications are invited for the following posts:

TWO RESIDENT ANAESTHETIC REGISTRARS (B1). Salary £350 per annum, with full residential emoluments.

ONE NON-RESIDENT ANAESTHETIC REGISTRAR (B1). Salary £450 per annum.

Candidates must be registered medical practitioners, and have had experience in the Anaesthetic Department of a general hospital. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications should be sent to the undersigned, from whom all further information may be obtained, at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM AND MIDLAND EYE HOSPITAL
REFRACTIONIST

Applications are invited from registered medical practitioners for the post of Refractionist, on a sessional basis. Sessional fee £2 17s. 6d. Applications to be sent immediately addressed to the House Governor, Eye Hospital, Church Street, Birmingham, 3.

BROMLEY AND DISTRICT HOSPITAL
Cromwell Avenue, Bromley, Kent (215 beds)
SENIOR HOUSE SURGEON (B1)

Applications are invited for the post of Senior House Surgeon (B1). Commencing salary £350 per annum, with full residential emoluments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applicants should write to the House Governor.

BRISTOL CHILDREN'S HOSPITAL
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited for this post, which falls vacant on March 1, 1948. Candidates must have had previous experience in a Children's Hospital and should preferably have higher qualifications—M.R.C.P., or D.P.H. Salary at the rate of £250 per annum, with full board residence and laundry provided. Applications from practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

TWO ASSISTANT RESIDENT MEDICAL OFFICERS (B2)

Applications are invited for these posts, which fall vacant on March 1, 1948, including R practitioners who hold A posts. Salary at the rate of £120 per annum and full board residence and laundry provided. Duties of each Medical Officer include care of medical and surgical patients. The hospital is an integral part of the Department of Child Health, Bristol University. Applications for all the above posts to be forwarded to the undersigned as soon as possible and in any case not later than January 10, 1948.—Reginald C. Thomas, F.C.I.S., Secretary.

BEARSTED MEMORIAL HOSPITAL
London, N.16
PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
WHOLE-TIME REGISTRAR (B1)
Gynaecological and Obstetric Departments

Applications are invited for the appointment of Whole-time Registrar (B1) to the Gynaecological and Obstetric Departments. Applicants must be Fellows of one of the Royal Colleges, preferably Royal College of Surgeons of England, and must be M.R.C.O.G. The appointment is for a period of six months. Applications from R practitioners who hold B1 appointments cannot be considered unless they have been rejected for H.M. Forces. Salary £750 per annum. Applications, with recent testimonials, by January 24, 1948, to J. C. Burdett, Director and House Governor, The Prince of Wales's General Hospital.

BRADFORD ROYAL INFIRMARY

Applications are invited for the following posts:

HOUSE SURGEON (B2) (Orthopaedic), including practitioners who hold A posts. Vacant immediately.

HOUSE SURGEON (A) (General), including practitioners within three months of qualification who are liable under the National Service Acts. Vacant February 1, 1948.

Six months' appointment. Salary £200 per annum, with full residential emoluments. There are 372 beds and 14 resident officers. Applications should be sent immediately to Hy. Trusson, House Governor and Secretary.

BELGRAVE HOSPITAL FOR CHILDREN
1, Clapham Road, S.W.9
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (male or female) including R practitioners holding A posts for the appointment of House Physician (B2) Appointment is for six months commencing February 1, 1948. Salary £150 per annum with full residental emoluments. Demobilized Medical Officers may apply for the higher rate of salary under the Government Scheme for Postgraduate Education. Applications should reach the undersigned not later than Wednesday, January 7, 1948.—A. L. Fell, Secretary.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (B1) vacant January 14, 1948. Applicants should have held house appointments and had surgical experience. Capability to perform emergency operations a recommendation. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, are invited to apply. Salary £350 per annum with full residential emoluments. Applications should be sent to the undersigned.—Arthur L. Bourne, Secretary-Superintendent.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male, for the post of House Physician (B2), including R practitioners who hold B1 appointments. Salary £225 per annum, with full residential emoluments. To R practitioners appointment is for six months. Applications should be sent immediately to A. L. Bourne, Secretary-Superintendent.

BOOTLE GENERAL HOSPITAL, Liverpool, 20
CASUALTY OFFICER (A)
TWO HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners, men and women, for the above appointments, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointments are for the period ending June 30, 1948. Salary for each position is at the rate of £200 per annum, with full residential emoluments. Applications should be sent as soon as possible to the Superintendent.

BOLTON ROYAL INFIRMARY
(245 beds) (Resident Medical Staff 7)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, for the appointment of Resident Anaesthetist (B2). Suitable post in preparation for D.A. qualification. R practitioners holding A posts may apply, when appointment will be limited to six months. Salary £225 per annum, with full residential emoluments. Applications to be forwarded to the undersigned as soon as possible.—H. P. Travis, General Superintendent.

BATTERSEA GENERAL HOSPITAL
Battersea Park, S.W.11
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable for service under the National Service Acts for the above appointment. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications, accompanied by two recent testimonials, should be sent to the Secretary of the Hospital.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Resident Surgical Officer (B1), vacant on February 1, 1948 (including R practitioners who now hold B2 posts). Applications from R practitioners who hold B1 posts cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

COUNTY MENTAL HOSPITAL
Lancaster (3,000 beds)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Medical Officer (B1). R practitioners holding B2 appointments and those holding B1 posts and ineligible for H.M. Forces may apply. Preference given to candidates with previous psychiatric experience who have held a house appointment. Salary £465 per annum, rising by annual increments of £30 to £555 per annum, and if unmarried with residential emoluments valued at £200 per annum. Variable cost-of-living bonus is payable in addition which at present is £59 16s. per annum, half of which is paid in cash, the other half added to the value of the emoluments. A further £50 per annum is payable to holders of the D.P.M. An unfurnished flat is available for a married man in which case the gross salary would be paid in cash less £60 per annum (emolument for flat). The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909, and conditional on the candidate passing a medical examination. Applications, together with the names of two referees, to be sent immediately to the Medical Superintendent.

CROYDON GENERAL HOSPITAL
(A Voluntary Hospital of 200 beds)
RESIDENT SENIOR AND JUNIOR CASUALTY OFFICERS (B1)

The Board of Management invite applications for the posts of:—

SENIOR CASUALTY OFFICER (male). Salary £500 per annum, together with usual residential emoluments. Appointment to commence February 1, but consideration will be given to commencing before if desired by selected candidate. Appointment will be for period of six months ending July 31, or subject to two months' notice on either side, with possibility of extension at increased salary. Successful candidate will be responsible for the surgical work of department under direction of Principal Surgical Officer.

JUNIOR CASUALTY OFFICER (male). Salary £350 per annum, together with usual residential emoluments. Appointment to commence as soon as possible. Appointment will be for period of six months.

Suitably qualified R practitioners holding B2 appointments and particularly those who are ineligible for H.M. Forces and have had considerable previous experience should apply. Applications to be sent immediately to George A. Paines, House Governor.

CITY HOSPITAL, Chester
RESIDENT MEDICAL OFFICER
(HOUSE SURGEON) (Female)

Applications are invited for the post of Resident Medical Officer (House Surgeon) (female), for the above general hospital. Applications, stating qualifications and experience, together with copies of three recent testimonials, should be sent to the Medical Officer of Health, Town Hall, Chester, not later than Wednesday, January 14, 1948. Salary £200, plus residential war bonus. Relationship to members or senior officials of the Council must be disclosed.—G. Burkinshaw, Town Clerk, Town Hall, Chester.

Have you read the notice at top of page 12?

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CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
PAEDIATRIC SURGEON

Applications are invited for the post of Paediatric Surgeon. Applicants will be required to devote their entire time to paediatric surgery and associated teaching and research. The remuneration for a full-time appointment would be £2,000 per annum, but consideration might be given to a part-time appointment at £1,500 per annum, allowing of private practice in paediatric surgery. Applicants must be Fellows of the Royal College of Surgeons and have had experience in the surgery of childhood. Applications with the names of three referees should be submitted to the Superintendent and Secretary, The Children's Hospital, Western Bank, Sheffield, 10, not later than January 19, 1948.

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required immediately. R practitioners holding A posts are invited to apply. Salary £450 non-resident. Limited to six months to R practitioners. Successful candidate must be a member of a Medical Defence Society. Applications to T. H. G. Gartland, Superintendent and Secretary.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth, Cornwall
HOUSE SURGEON (A)
Obstetric and Gynaecological Department

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) to the Obstetric and Gynaecological Departments, vacant February 1, 1948, tenable for six months. Salary at the rate of £200 per annum, with the usual residential emoluments. This appointment is recognized by the Royal College of Obstetricians and Gynaecologists for the Diploma in Obstetrics. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be addressed to J. C. Field, Secretary-Superintendent.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth, Cornwall
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant immediately. Salary at the rate of £200 per annum, with the usual residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications to be addressed to J. C. Field, Secretary-Superintendent.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL (220 beds)
HONORARY PSYCHIATRIST

A vacancy occurs on the staff of the above hospital for an Honorary Psychiatrist. Applicants must have a good knowledge and wide experience of Psychiatry. The person appointed will be required to carry out the organization and administration of the newly created department and will be expected to co-operate with clinics held at the Gloucestershire Royal Infirmary, and the general arrangements for Mental Services in the County of Gloucestershire. Applications should reach the undersigned not later than fourteen days following the insertion of this advertisement.—Stanley T. Davis, Secretary-Superintendent.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL (215 beds)

Applications are invited from registered medical practitioners (male) for the following appointments:
HOUSE PHYSICIAN (A)
HOUSE SURGEON (A)

Practitioners within three months of qualification and liable for service under the National Service Acts may apply, when the appointment will be for six months, otherwise renewable. Salary £175 per annum, with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

COVENTRY AND WARWICKSHIRE HOSPITAL
HOUSE SURGEON (A)

House Surgeon (A) for Fracture and Accident Wards now about to be re-opened. Salary at the rate of £200 per annum with full residential emoluments. Appointment is for six months in the first instance. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications with full details to the House Governor, Coventry and Warwickshire Hospital, Coventry.

CHARING CROSS HOSPITAL
CLINICAL ASSISTANT (Male)
to the Obstetric Department

The Council invite applications for the post of Clinical Assistant (male) to the Obstetric Department. Honorarium £50 per annum. Applications should be sent to the undersigned not later than first post, January 26, 1948.—George J. Jones, House Governor, Charing Cross Hospital, W.C.2.

DONCASTER ROYAL INFIRMARY
(330 beds)
HOUSE SURGEON (A) (Male)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) (Male), including R practitioners within three months of qualification. If held by an R practitioner appointment will be for a period of six months. Salary is at the rate of £225 per annum, with full residential emoluments. The successful candidate will be required to take up his duties towards the end of January. Applications should be sent immediately addressed to the Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, for the above appointment, vacant January 21, 1948. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from medical practitioners (male and female) for the post of Junior Resident Medical Officer (A) for six months from January 25, 1948. Salary £150 per annum with full emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply. Application to be sent not later than January 5, 1948, or as soon as possible thereafter, to Louise Gillespie, Secretary.

EAST SUFFOLK AND IPSWICH HOSPITAL
(389 beds)
HOUSE SURGEON (A)
to the Gynaecological and Obstetrical Department

Applications are invited from registered medical practitioners liable to service under the National Service Acts and within three months of qualification for the post of House Surgeon (A) to the Gynaecological and Obstetrical Department, vacant January 25, 1948. Appointment is for six months. Salary at the rate of £250 per annum, with the usual residential emoluments.—Arthur Griffiths, Secretary, The Hospital, Ipswich.

EAST SUFFOLK AND IPSWICH HOSPITAL
(389 beds)

Applications are invited from registered medical practitioners, including R practitioners now holding A posts, for the following appointments:—

HOUSE SURGEON (B2) to the Senior Surgeon. Vacant immediately.

HOUSE SURGEON (B2) to the Orthopaedic and Fracture Department. Vacant immediately.

Salary for each post at the rate of £250 per annum, with full residential emoluments.—Arthur Griffiths, Secretary, The Hospital, Ipswich.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, London, E.7
CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer and Orthopaedic House Surgeon (A) for the six months commencing February 11, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. Salary at the rate of £150 per annum with board, residence, and laundry. Applications should be sent to the undersigned by January 16, 1948.—Reginald Perry, Secretary-Superintendent.

ECCLES AND PATRICROFT HOSPITAL
Eccles, Manchester
HOUSE SURGEON (A or B2)

House Surgeon (A or B2) required as soon as possible. Practitioners within three months of qualification and those holding A posts may apply. If held by an R practitioner the appointment will be limited to six months. Salary at rate of £300 per annum, plus residential emoluments. Apply Secretary as above.

EAST SUSSEX COUNTY MENTAL HOSPITAL
Hellingly, Sussex
SENIOR TECHNICIAN

Senior Technician required for duty in charge of Mental Hospital Laboratory under direction of visiting Pathologist. The laboratory duties include general clinical pathology for the Mental Hospital and also Public Health work for East Sussex. Salary and conditions of service as recommended by the Joint Committee on Salaries and Wages (Hospital Staffs): Laboratory Technicians. Applications should be sent to the Medical Superintendent, East Sussex County Mental Hospital, Hellingly, Hailsham, Sussex.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required to commence immediately. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £200, with full residential emoluments. Applications to be sent to the undersigned.—H. J. Johnson, General Superintendent and Secretary.

GUEST HOSPITAL, Dudley (153 beds)

Applications are invited from registered medical practitioners for the following resident appointments. Full residential emoluments apply to all posts which are tenable for six months:—

RESIDENT SURGICAL OFFICER (B1) Salary £350 per annum, vacant February 13, 1948.

Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Fellowship of one of the Royal Colleges. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

TWO HOUSE SURGEONS (B2). Salary £200 per annum, vacant January 31, 1948, and February 7, 1948. Practitioners holding A posts are invited to apply.

RESIDENT ANAESTHETIST (B2). Salary £200 per annum, vacant now. Successful candidate may be called upon to undertake other medical duties. Practitioners holding A posts are invited to apply.

CASUALTY HOUSE SURGEON (A). Salary £200 per annum, now vacant. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply.—H. Raymond Hurst, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham
(589 beds, including "The Cedars" Branch Hospital)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners, male and female, for the appointment of a Resident Anaesthetist (B1). Applications from male R practitioners who hold B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. If held by a practitioner who is liable under the National Service Acts, the appointment will be for a period of twelve months. The salary is at the rate of £400 per annum, with full residential emoluments, and duties will commence on or about January 15, 1948. Applications should be sent to Henry M. Stanley, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham (589 beds)
TWO CASUALTY OFFICERS (A)

Applications are invited from registered medical practitioners (male), including practitioners within three months of qualification who are liable to service under the National Service Acts for the appointment of two Casualty Officers (A) for the above hospital. Duties to commence about February 24, 1948. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £300 per annum, with full residential emoluments. Applications to be sent to the undersigned.—Henry M. Stanley, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham
EX-SERVICE MEDICAL SPECIALIST

Applications are invited for a whole-time ex-Service Medical Specialist under the Ministry of Health Scheme for additional Specialist appointments. Salary £1,000 per annum. The duration of the appointment will be limited to the interim period pending the establishment of the National Health Service Act (April 1, 1948). The successful candidate will be expected to carry out duties at other hospitals in the area if so desired. Applications should be sent to the undersigned as soon as possible.—Henry M. Stanley, House Governor and Secretary.

GORDON HOSPITAL FOR RECTAL AND GASTRO-INTESTINAL DISEASES
Vauxhall Bridge Road, S.W.1 (102 beds)
HONORARY DENTAL SURGEON

Applications are invited from registered dental surgeons for the post of Honorary Dental Surgeon to the hospital from candidates who have had considerable experience in dental surgery. Applications should be sent to reach the undersigned as soon as possible, and in any event not later than January 8, 1948.—R. E. Lawson, House Governor and Secretary.

GORDON HOSPITAL FOR RECTAL AND GASTRO-INTESTINAL DISEASES
Vauxhall Bridge Road, S.W.1 (102 beds)
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of Pathologist to attend on four sessions per week at a remuneration of £5 5s. per session. Candidates must have had considerable experience in Clinical Pathology. Applications should be sent to reach the undersigned as soon as possible, and in any event not later than January 8, 1948.—R. E. Lawson, House Governor and Secretary.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts:—

RESIDENT SURGICAL OFFICER (B1). Previous surgical experience essential. R practitioners holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary £250 per annum.

RESIDENT JUNIOR HOUSE SURGEON (A). In charge of Casualty, Ear, Nose, and Throat, and Fracture Departments. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. Salary £200 per annum.

The appointments are for twelve and six months respectively. Applications should be sent to T. W. Upton, Secretary.

GUY'S HOSPITAL, S.E.1
ASSISTANT PHYSICIAN

Applications are invited from Service candidates and others for the appointment of Assistant Physician to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent, to whom letters of application (20 copies), together with names of three referees, should be submitted not later than January 31, 1948, and from whom any further information desired can be obtained.

GUY'S HOSPITAL, S.E.1
ASSISTANT OBSTETRIC SURGEON

Applications are invited from Service candidates and others for the appointment of Assistant Obstetric Surgeon to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent, to whom letters of application (20 copies), together with the names of three referees, should be submitted not later than January 31, 1948, and from whom any further information desired can be obtained.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HULL ROYAL INFIRMARY
FIRST AND SECOND HOUSE SURGEONS (B2)

Applications are invited for the posts of First and Second House Surgeons (B2) (2 posts) vacant January. Suitably qualified R practitioners who now hold A posts may apply. Salary £200 per annum with full residential emoluments. The appointments will be for six months in the first instance, but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

KENT AND CANTERBURY HOSPITAL
Canterbury (226 beds)
HOUSE SURGEON (B2)

Applications are invited from male registered medical practitioners for the appointment of a House Surgeon (B2), including R practitioners who now hold A posts. Commencing February 1, 1948. If held by an R practitioner the appointment will be limited to six months. The salary is £200 per annum, with full residential emoluments. The duties include care of maternity patients and casualty service. Applications should be sent to the Superintendent and Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton, S.W.3

Applications are invited for the following appointments from registered medical practitioners, male and female, including R practitioners holding A posts:—

HOUSE PHYSICIANS (B2), for which there are three vacancies. The duties include work in the Out-patient Department as well as in the wards, and the appointments are for six months, commencing February 1, 1948, with an honorarium of £100 and board and residence.

HOUSE PHYSICIAN (B2) at the sanatorium at Frimley. The appointment is for six months, commencing February 1, 1948, with an honorarium of £100 and board and residence. Applications, accompanied by copies of one or more recent testimonials, should reach the undersigned not later than Saturday, January 10, 1948.—F. G. Rouvray, House Governor.

HARTLEPOOLS HOSPITAL
Hartlepool, Co. Durham
(126 beds, including Maternity Unit)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male or female, for the post of House Physician (A), including practitioners within three months of qualification who are liable under the National Service Acts. The appointment is for a period of six months from January 28, 1948. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent to the Superintendent, Hartlepools Hospital, Hartlepool, Co. Durham.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
CASUALTY SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, for the resident post of Casualty Surgical Officer (B2) at the Out-patient Department, Bayham Street, N.W.1, vacant February 1, 1948, tenable for six months. Salary £200 per annum, with board, lodging and laundry. R practitioners holding A posts may apply. Applications on the prescribed form, with copies of three recent testimonials, to be returned to the undersigned by January 8.—Kenneth A. F. Miles, House Governor.

LINCOLN COUNTY HOSPITAL
(Voluntary Hospital, 200 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (A), now vacant. Salary is at the rate of £225 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be sent to Ronald W. Howick, Secretary-Superintendent.

KING EDWARD MEMORIAL HOSPITAL
Ealing
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A) to the second Surgeon and the Ear, Nose and Throat Surgeons, to become vacant on February 1, 1948. Six months' appointment. Salary at the rate of £175 per annum, with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned by January 16, 1948.—R. A. Mickelwright, House Governor.

LIVERPOOL RADIUM INSTITUTE
RESIDENT MEDICAL OFFICER (B2) (Male)

Applications are invited for the appointment of Resident Medical Officer (B2) (male). Salary £350 per annum, with full residential emoluments. The position is suitable for applicants desiring to obtain experience of radiotherapy. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications should be sent to Frank Dean, F.C.I.S., Secretary-Superintendent.

LYMINGTON AND DISTRICT HOSPITAL
Hampshire (107 beds)
HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Appointment for six months. Salary £150 per annum, full residential emoluments. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. Applications immediately to N. P. Wood, Secretary.

LONDON CHEST HOSPITAL, E.2
THREE OUT-PATIENT MEDICAL REGISTRARS
(part-time)

Applications are invited for three vacancies as Out-Patient Medical Registrars, each to attend three sessions a week, including one Refill Clinic. Salary £300 per annum. Applications should reach the undersigned by January 17, 1948.—Thomas Brown, Secretary.

LONDON CHEST HOSPITAL, E.2
HONORARY PHYSICIAN

The Board of Management invite applications for the post of Honorary Physician. Candidates must be Members of the Royal College of Physicians of England. Applications should be sent to the undersigned (from whom further particulars may be obtained), to arrive not later than January 31, 1948.—Thomas Brown, Secretary.

Have you read the notice at top of page 12 ?

ABSTRACTS OF WORLD MEDICINE

Published monthly, subscription £3 3s. 0d. p.a.

ABSTRACTS OF WORLD SURGERY, OBSTETRICS AND GYNAECOLOGY

Published monthly, subscription £2 2s. 0d. p.a.

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Have you read the notice at top of page 12 ?

LEICESTER ROYAL INFIRMARY AND CITY GENERAL HOSPITAL
ASSISTANT RADIOLOGIST

The Board of Governors of Leicester Royal Infirmary and the City of Leicester Health Committee, invite applications for a joint appointment as Assistant Radiologist. The appointment will be made under the Ministry of Health Special Appointment Scheme. The post will be a whole time one and the salary £1,000 per annum, non-residential. Candidates must have served in H.M. Forces. Applications should be forwarded to the House Governor and Secretary, Royal Infirmary, Leicester, on or before January 14, 1948.

METROPOLITAN HOSPITAL
Kingsland Road, E.8
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male or female, for the post of Casualty Officer (A). Salary will be £150 per annum, with full residential emoluments. The appointment will be for six months and practitioners within three months of qualification and liable under the National Service Acts may apply. The post will fall vacant on January 30, 1948, and applications should be sent immediately to the undersigned.—Frank Chambers, House Governor.

METROPOLITAN HOSPITAL
Kingsland Road, London, E.8
PART-TIME ASSISTANT RADIOLOGIST

Applications are invited for the post of Part-time Assistant Radiologist. The appointment is a temporary one, and will be for the period that the present holder is serving with the Armed Forces. The candidate appointed will be expected to do two sessions weekly. Payment will be at the rate of £4 4s. a session. One copy of application, enclosing the fullest particulars of experience, together with copy testimonials should be sent forthwith to the House Governor.

MILLER GENERAL HOSPITAL
Greenwich High Road, S.E.10
CASUALTY OFFICER (B1) (Non-Resident)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (B1) (Non-Resident), to commence on February 1, 1948. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £350 plus £100 per annum board allowance. Form of application can be obtained from the Secretary and must be returned not later than January 7, 1948.

MUNICIPAL GENERAL HOSPITAL
Gulson Road, Coventry
RESIDENT MEDICAL OFFICERS (A and B2)

Duties general. No married quarters. Salary £250, £350 or £450 according to experience and qualifications, plus bonus and full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply for an A post; R practitioners holding A posts may apply for a B2 post. Appointment for six months in the first instance. Applications with copies of two testimonials to be sent direct to the Medical Superintendent immediately.

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL, Cheetham, Manchester, 8
(Non-Sectarian. 102 beds)
CASUALTY OFFICER & HOUSE SURGEON (A)

Applications are invited for the post of Casualty Officer and House Surgeon (A). Salary at the rate of £175 per annum, with full residential emoluments. The appointment will be for a period of six months. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be addressed to the undersigned at the Hospital.—C. D. Drake, General Superintendent.

MONTAGU HOSPITAL, Mexborough, Yorks
(122 beds) Voluntary, with Visiting Consultant Staff
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male, for the appointment of House Surgeon (B2). Commencing salary £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications to A. R. C. Renner, Secretary-Superintendent.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of full-time Pathologist at the above hospital. Applicants should be exclusively engaged in the practice of Pathology, with wide training in Clinical Pathology and Morbid Anatomy. The post will be non-resident, with a commencing salary of £1,100, the successful candidate being permitted to engage in private practice, restricted to the private wing of the hospital, at present 23 beds. Applications should reach the Secretary not later than February 28, 1948.

MARIE CURIE HOSPITAL
(Centre for Radiotherapy)
66, Fitzjohn's Avenue, N.W.3
HOUSE SURGEON (A)

Applications are invited from registered medical women practitioners for the post of House Surgeon (A). Duties to commence as soon as possible. Salary at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the Secretary.

MAIDENHEAD HOSPITAL, Berkshire (100 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2), vacant now. Salary at the rate of £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be for six months, otherwise for one year. Applications should be sent to the Superintendent-Secretary.

NORTHAMPTON GENERAL HOSPITAL
(410 beds)

Applications are invited from registered medical practitioners for the following posts:—

HOUSE SURGEON (A) to the Ear, Nose and Throat Department. Post recognized for the D.L.O.

HOUSE SURGEON (A) to the Obstetric and Gynaecological Department. Post recognized for the M.R.C.O.G.

Salary at the rate of £200 per annum, with full residential emoluments.

Appointments will run until September 30, 1948. Any further employment at the hospital beyond that date will be at the rate of £225 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, in which case the appointments will be for a period of six months. Applications should be sent as soon as possible to the undersigned.—S. G. Hill, Superintendent.

NORTHAMPTON COUNTY MENTAL HOSPITAL, Berrywood, Northampton
ASSISTANT MEDICAL OFFICER (B1)

Assistant Medical Officer (B1) required. Commencing salary £455, rising by annual increments of £25 to £555 per annum, plus cost-of-living bonus (at present £30 per annum), and board, lodging, and laundry valued for superannuation purposes at £180 per annum. An additional £50 per annum will be given if the officer holds or obtains the Diploma in Psychological Medicine. The post is a whole-time appointment and is subject to the provisions of the Asylums Officers Superannuation Act, 1909. Married quarters available. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply. Applications, accompanied by two testimonials, to be addressed to the Medical Superintendent.

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke-on-Trent (475 beds)
HOUSE SURGEON (A) (Orthopaedic Department)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) to the Orthopaedic Department, including practitioners within three months of qualification who are liable to service under the National Service Acts. The post is tenable for six months and offers exceptional experience in traumatic surgery and accident service. Salary is at the rate of £250 per annum, with full residential emoluments. Applications to the House Governor.

NORTH DEVON INFIRMARY, Barnstaple
(Voluntary Hospital, 110 beds)
RESIDENT HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male and female, for the above appointment to become vacant on February 1, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. If liable under these Acts, appointment will be for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned.—A. W. Bond, Secretary.

NEW SUSSEX HOSPITAL FOR WOMEN AND CHILDREN, Brighton (Incorporated)
(Officered by Women Doctors)
Windlesham Road, Brighton, 1
HOUSE SURGEON (B2)
General Surgery and Gynaecology

Applications are invited from medical women practitioners for the post of House Surgeon (B2) (General Surgery and Gynaecology). Salary £150 per annum, resident. The appointment is for six months. Applications must be submitted to the undersigned immediately.—Percy F. Spooner, Secretary.

NORFOLK AND NORWICH HOSPITAL
Norwich
RESIDENT ANAESTHETIST (A)

Applications are invited for the appointment of Resident Anaesthetist (A). Salary is at the rate of £250 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications to be addressed to F. L. Gatfield, House Governor and Secretary.

NORFOLK AND NORWICH HOSPITAL
Norwich
RESIDENT ANAESTHETIST (B2)

Applications are invited for the post of Resident Anaesthetist (B2). Salary £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications should be addressed to F. L. Gatfield, House Governor and Secretary.

OLDHAM ROYAL INFIRMARY (203 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Gynaecologist, the Aural Surgeon, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRINCESS BEATRICE HOSPITAL
Earl's Court, S.W.5
(General Hospital, 92 beds)
OBSTETRIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of an Obstetric House Surgeon (B2), to become vacant on January 31, 1948, including R practitioners who hold A appointments. If held by an R practitioner, appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Obstetric experience essential. Applications should be sent to the House Governor not later than January 17, 1948.

PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), vacant February 25, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent.

PECKHAM HOUSE MENTAL HOSPITAL
112, Peckham Road, Peckham, London, S.E.15
JUNIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Junior Assistant Medical Officer (B1) at the above hospital. Applicants should be male and single. Salary £400 per annum with usual emoluments. Apply to Physician Superintendent.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, London, E.15
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), including R practitioners. Salary will be at the rate of £200 per annum, with residential emoluments, lodging being provided temporarily outside the hospital pending the extension of residential accommodation. The appointment will be for a period of six months. Candidates should send their applications to the undersigned not later than January 14, 1948.—M. J. Huntley, House Governor and Secretary.

ROYAL VICTORIA INFIRMARY
Newcastle-upon-Tyne and
KING'S COLLEGE, University of Durham
SENIOR MEDICAL REGISTRAR (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Medical Registrar (B1) to one of the medical clinics at the Royal Victoria Infirmary. The post is a whole-time one and the successful candidate will be responsible for carrying out those duties, clinical and teaching, allocated to him by the Head of the Clinic. There will be ample opportunity for clinical experience in out-patient and in-patient work, with responsibility for clinical emergency duty. Applicants should have held house appointments and be of Membership status of the Royal College of Physicians, London. Applications from R practitioners who hold a B1 appointment cannot be considered unless they are ineligible for H.M. Forces. The Royal Victoria Infirmary is the Teaching Hospital for the University of Durham and the appointment will be made jointly by the Infirmary and the University. The appointment is for one year in the first instance and may be renewed to a maximum of three years. The inclusive salary is at the rate of £750 per annum, non-resident. Applications with the names and addresses of three referees should be sent to the undersigned within two weeks of the date of appearance of this advertisement.—A. W. Sanderson, House Governor.

ROYAL WEST SUSSEX HOSPITAL
Chichester (212 beds, including 50 E.M.S.)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the appointment of Resident Medical Officer (B2) vacant for six months from February 1, 1948. R practitioners holding A posts may apply. Salary £225 per annum, with full residential emoluments. Applications should be sent to the Secretary not later than January 14, 1948.

ROYAL HALIFAX INFIRMARY (283 beds)
ORTHOPAEDIC REGISTRAR (B1), male (non-resident) required. Vacancy early January. Salary according to experience, but not less than £750 per annum commencing. Candidates should be well trained in Orthopaedics, and the possession of higher qualifications will be an advantage. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

FIRST HOUSE SURGEON (B2), male, required. Six months', post. Vacant January 1948. Salary £250 per annum, with full residential emoluments. Practitioners holding A posts are invited to apply.

OPHTHALMIC, E.N.T. HOUSE SURGEON (A or B2), male, required. Six months' post. Vacant now. Salary for A candidate £200 per annum, and for B2 candidate £250 per annum, with full residential emoluments.

Applications, accompanied by copies of three recent testimonials, and the names of three referees to be sent to the Secretary as soon as possible.

ROYAL DEVON AND EXETER HOSPITAL
Exeter
HONORARY ASSISTANT SURGEON
to the Obstetric and Gynaecological Department

Applications are invited for the post of Honorary Assistant Surgeon to the Obstetric and Gynaecological Department. Candidates must be Fellows or Members of the Royal College of Obstetricians and Gynaecologists and special consideration will be given to those who are Fellows of one of the Royal Colleges of Surgeons or Masters of Surgery of one of the Universities of Oxford, Cambridge or London. Applications, with certificates of birth and registration and not less than three original testimonials, with 30 copies, should be delivered to the undersigned on or before February 18, 1948. —By order of the Committee, L. Parkhouse, Secretary and Manager.

ROYAL HOSPITAL, Richmond, Surrey
HOUSE SURGEON (A) AND HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the appointments of (a) House Surgeon (A) to become vacant on February 7, 1948. Salary £175 per annum, with full residential emoluments; (b) House Physician and Casualty Officer (A) to become vacant on February 3, 1948. Salary £175, with full residential emoluments. If held by practitioners who are liable under the National Service Acts, appointments will be for a period of six months. Applications to be made to the House Governor as soon as possible.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch 310 beds
HOUSE SURGEON (A) AND HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) and a House Physician (A), vacant now, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary is at the rate of £150 per annum, with full residential emoluments.—W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (310 beds)
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners, male, for the appointment of Casualty Officer (B2) vacant now, including R practitioners who hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments.—W. Cockburn, House Governor.

ROYAL MASONIC HOSPITAL
Ravenscourt Park, London, W.6
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the appointment of Resident Surgical Officer (B1), vacant on February 1, 1948. Applicants should have held house appointments and should have had surgical experience. Preference will be given to candidates holding Diploma F.R.C.S. Salary at the rate of £350 per annum together with full board, lodging and laundry. Suitably qualified R practitioners holding B2 appointments and also holding B1 appointments and ineligible for H.M. Forces are invited to apply. Please apply in writing, sending copies of testimonials immediately and to arrive not later than January 12, 1948, to the Honorary Secretary at the Hospital.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM

COUNTY BOROUGH OF BARNSLEY
(Non-resident Whole-time Pathologist; Assistant Medical Officer of Health and School Medical Officer.)

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM

By Order of the Council,
CHARLES HILL,
December 30, 1947. Secretary.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
THE ROYAL HOSPITAL UNIT
ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of Orthopaedic House Surgeon (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Otherwise it may be extended. Salary is at the rate of £80 per annum, with full residential emoluments. A bonus of £20 will be payable after six months' satisfactory service and a further bonus of £10 after a second six months' satisfactory service. Applications to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, at The Royal Hospital, Sheffield, 1.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL HOSPITAL
ASSISTANT PATHOLOGIST (B1)

Applications are invited from registered medical practitioners for the appointment of Assistant Pathologist (B1), vacant shortly. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £450 per annum, non-resident. Applications to be forwarded immediately to General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL PORTSMOUTH HOSPITAL, Portsmouth
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male), including R practitioners holding A posts, for appointment as House Surgeon (B2). Salary at rate of £225 per annum, with full residential emoluments. Six months' appointment. Applications to be sent immediately to G. A. Hughes, Secretary.

ROYAL FREE HOSPITAL
Gray's Inn Road, W.C.1
HONORARY ASSISTANT SURGEON
Ophthalmic Department

Applications are invited for the appointment of Honorary Assistant Surgeon to the Ophthalmic Department. Candidates must possess the qualifications of (Eng.) F.R.C.S. or F.R.C.S. (Oph.). Applications, together with copies of three recent testimonials and a photograph, should be sent to the undersigned not later than January 24, 1948. Applicants are also required to call on each member of the Honorary Medical Staff approximately forty for interview, leaving a copy of application and testimonials.—R. G. Heppell, House Governor.

ROYAL FREE HOSPITAL
Gray's Inn Road, London, W.C.1
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (men and women) for the appointment of Resident Medical Officer (B1) to become vacant March 1, 1948. Salary at the rate of £350 per annum. Suitably qualified practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications accompanied by a photograph should be sent to the undersigned on or before January 31, 1948.—R. G. Heppell, House Governor.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
Myrtle Street, Liverpool
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the above appointment for a period of six months. Salary £120 to £180 per annum, according to experience, with full residential emoluments. R practitioners within three months of qualification who are liable to service under the National Service Acts may apply. Applications, accompanied by copies of three recent testimonials and the name of a referee, should be sent to Secretary immediately.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
RESIDENT SURGICAL OFFICER (A)

Applications are invited for the above appointment at the Heswall (Country) Branch of the hospital (242 beds). Salary £120 to £180 per annum, according to experience. R practitioners within three months of qualification who are liable to service under the National Service Acts may apply. The appointment will be for six months. Full residential emoluments. Applications, accompanied by copies of three recent testimonials and the name of a referee, should be sent immediately to the Secretary, The Royal Liverpool Children's Hospital, Myrtle Street, Liverpool, 7.

ROYAL SURREY COUNTY HOSPITAL
Guildford (228 beds)
HOUSE SURGEON (A)

Applications are invited for the post of House Surgeon (A) for Orthopaedic and General Surgery now vacant, from registered medical practitioners, including those within three months of qualification who are liable for service under the National Service Acts. The appointment, which is recognized in connexion with the F.R.C.S. examination is for six months, salary at the rate of £175 per annum, with full residential emoluments. Applications should be sent to the Secretary-Superintendent as soon as possible.

ROYAL BERKSHIRE HOSPITAL, Reading
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners (male) for the following appointment: Casualty Officer (A) to become vacant immediately. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROCHDALE INFIRMARY, Lancashire
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female), for the appointment of Resident Surgical Officer (B1). Salary £350 per annum. Suitably qualified R and W practitioners holding B2 appointments, also R practitioners holding B1 and rejected by the R.A.M.C., may apply. Applications to the Superintendent-Secretary.

(Continued on page 24)

Have you read the notice at top of page 12?

THE Medical Defence Union

Established 1885 — *MUSeum 1337*

Annual Subscription £1 — **MEMBERSHIP EXCEEDS 31,500** — *Assets exceed £170,000*

Protection is essential for every practitioner engaged in any form of practice

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Square, London, W.C.1

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)

Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 6s. for each six words *or less* thereafter.

(2) To all other advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

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Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.

Telephone: Euston 2111.

Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 12

PERSONAL

ADOPTION OF CHILDREN.—To overcome the risk inherent in privately-arranged adoptions, the Church of England Children's Society, which is a registered Adoption Society, is ready at all times to help those wishing to offer a child for adoption, and who deserve such assistance.—Church of England Children's Society, Old Town Hall, Kennington, S.E.11.

GLOS.—MATRON HAS VACANCIES in her exclusive Nursing Home, central heating, log fires, gardens, own produce, excellent nursing (S.R.N.) and domestic staff; private bathrooms, lounge, dining room. Fees from 10½ guineas.—Upton Grove, Tetbury.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

BRITISH POSTGRADUATE MEDICAL FEDERATION. University of London. POSTGRADUATE TRAVELLING FELLOWSHIPS.—The Governing Body of the British Postgraduate Medical Federation invites applications from registered medical practitioners for Travelling Fellowships, to enable graduates who are in the course of training as specialists in one of the pre-clinical or clinical branches of medicine to obtain experience of the methods of practice, education and research at Universities or centres in the United Kingdom and abroad. Candidates must be British subjects who are engaged in postgraduate study at one of the undergraduate or postgraduate Medical Schools of the University of London. The Fellowship will be tenable for one year and the value will normally be not less than £500, depending on the country where it is proposed to study. Travelling expenses will be paid in addition. Applications must be received before February 29, 1948, and application forms and further particulars may be obtained from the Secretary, Central Office, British Postgraduate Medical Federation, 2, Gordon Square, London, W.C.1.

CITY OF BIRMINGHAM GAS DEPARTMENT.—Applications are invited from registered medical practitioners for the post of **INDUSTRIAL MEDICAL OFFICER** in the City of Birmingham Gas Department. This is a new post and the successful candidate will be responsible for the development and operation of a health service for approximately 4,500 workers. The salary, which will be fixed according to qualifications and experience, will be from £1,000 to £1,500 per annum, (plus bonus) which is at present £59 19s. and will be subject to periodic review. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to passing the Corporation medical examination. Applications, stating age, training, qualifications and experience, together with the names of three persons from whom references can be obtained, should be addressed to the undersigned to arrive not later than January 31, 1948.—Alex W. Lee, General Manager and Secretary, The Council House, Birmingham, 3.

EXAMINING SURGEONS: FACTORIES ACT, 1937.—The following appointments as Examining Surgeons under the Factories Act, 1937, are vacant: Pitlochry, in the County of Perth; Turriff, in the County of Aberdeen; Crowborough, in the County of Sussex. Applications, which should be received not later than January 17, 1948, should be sent to the Chief Inspector of Factories, 8, St. James's Square, London, S.W.1.

EXAMINING SURGEONS: FACTORIES ACT, 1937.—The following appointment as Examining Surgeon under the Factories Act, 1937, is vacant: Birmingham East in the County of Warwick. Applications, which should be received not later than January 24, 1948, should be sent to the Chief Inspector of Factories, 8, St. James's Square, London, S.W.1.

IMPERIAL CHEMICAL INDUSTRIES LTD., invite applications for the post of **MEDICAL OFFICER** (male), at their Billingham Division. The existing medical staff consists of one Division Medical Officer and two Assistant Medical Officers. The present post offers prospects of advancement with salary according to qualifications and experience commencing with a minimum of £850. Candidates should apply for the necessary application form to Central Staff Department, 2, Grosvenor Place, Hyde Park Corner, London, S.W.1.

ROYAL CANCER HOSPITAL (FREE) (Incorporated under Royal Charter), Fulham Road, London, S.W.3.—Applications are invited for a **RESEARCH FELLOWSHIP** promoted by the Association of British Chemical Manufacturers for the purposes of a field and experimental investigation of papilloma of the bladder in industry. The Fellowship will be full-time and is tenable at the Chester Beatty Research Institute of the Royal Cancer Hospital (Free). Applicants should hold a medical degree, and preference will be given to those with additional scientific qualifications or interests, especially in chemistry or statistics. Salary at the rate of £1,000 per annum, plus travelling and other expenses. The appointment is superannuable under the F.S.S.U., and subject to conditions will be made for a period of five years. Applications should be addressed to reach the Secretary, The Royal Cancer Hospital (Free), Fulham Road, London, S.W.3, by Monday, January 19, 1948.

WELSH NATIONAL SCHOOL OF MEDICINE (University of Wales).—Applications are invited for the **PROFESSORSHIP OF PATHOLOGY AND BACTERIOLOGY.** The appointment is a full-time one and the salary will be at the rate of £1,850 per annum with participation in the Superannuation Scheme. Further particulars may be obtained from the undersigned, by whom applications should be received not later than Saturday, February 21, 1948.—S. C. Edwards, Secretary, 10, The Parade, Cardiff.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

COURSE OF INSTRUCTION IN TROPICAL MEDICINE AND HYGIENE.—The next Course will begin on March 1, 1948, and will cover a period of five months. It is primarily designed to prepare students for the examination of the English Conjoint Board for the Diploma in Tropical Medicine and Hygiene, but students not wishing to take the Diploma are accepted for the course which includes theoretical and practical instruction in Protozoology, Helminthology, Bacteriology, Clinical Pathology and Haematology, Tropical Medicine and Surgery, Principles of Nutrition, Medical Entomology, Vital Statistics, Sanitation, and the Principles of Preventive Medicine including the prevention of specific diseases in relation to the tropics. The fee for the course is £40. Cheques should be made payable to the London School of Hygiene and Tropical Medicine. Space permitting, candidates who do not wish to take the whole course may be admitted to certain parts of it separately. The fee for short periods of instruction is £2 2s. per week. Any intending students are advised to apply for registration at once. Further information regarding the course may be obtained from the Registration Office, London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London, W.C.1. Telephone number: Museum 3041.

Balfour Memorial Fund

A small sum is available annually for the payment or partial payment of fees for a student wishing to attend the course but unable to do so for financial reasons. In making allotments from the fund attention will be paid to: (a) proof that the candidate is, or will be, employed in an approved manner in the practice of Tropical Medicine overseas, (b) ability, and (c) financial need. Applications should be forwarded to the Dean.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

INTERNAL MEDICINE

A course lasting twelve weeks, suitable for graduates wishing a refresher course, or to specialize in medicine, begins on Monday, April 12, 1948. A similar class commences on October 4, 1948. These courses consist of 300 hours instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five-months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for Surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. Twenty hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment. Fifty hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Internal Medicine and Surgery should supply particulars of qualifications and postgraduate experience.

MEDICAL CORRESPONDENCE COLLEGE, 19, Welbeck Street, London, W.1, provides Coaching for all Medical Examinations. D.A., D.P.M., D.O.M.S., D.L.O., D.C.H., D.M.R.D., and D.M.R.T., M.R.C.P., F.R.C.S., M.D., thesis, and all qualifying exams. by a staff of highly qualified Tutors, Honoursmen, and Gold Medallists. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested.

MAIDA VALE HOSPITAL FOR NERVOUS DISEASES, W.9.—The Spring term for clinical clerking will begin on Monday, January 5, 1948. **WEEKLY DEMONSTRATIONS in CLINICAL NEUROLOGY** will be held in this term on ten successive Fridays at 4 p.m., beginning January 16. The fee for the course of clinical demonstrations will be 2½ guineas. Apply to the Dean of the Medical School.

NORTH LONDON POSTGRADUATE MEDICAL INSTITUTE, Bearsted Memorial Hospital, N.16; Chase Farm Hospital, Enfield; North Eastern Hospital, Tottenham, N.15; North Middlesex County Hospital, Edmonton, N.18; The Prince of Wales's General Hospital, Tottenham, N.15.—A TWO WEEKS' COURSE IN OBSTETRICS, suitable for those taking the D.Obst.R.C.O.G., will be held commencing on February 9, 1948. Fee for the course 10 guineas. Please apply, with details of qualifications and experience, to the Dean, The Prince of Wales's General Hospital, Tottenham, N.15.

GUY'S HOSPITAL MEDICAL SCHOOL.—A COURSE OF INSTRUCTION for Part I of the Diploma in Physical Medicine will be given between January and July, 1948 (if a sufficient number apply) starting on Monday, January 26, 1948. Further particulars may be obtained from the Dean, Medical School Office, Guy's Hospital, S.E.1.

NORTH LONDON POSTGRADUATE MEDICAL INSTITUTE, Bearsted Memorial Hospital, N.16; Chase Farm Hospital, Enfield; North Eastern Hospital, Tottenham, N.15; North Middlesex County Hospital, Edmonton, N.18; The Prince of Wales's General Hospital, Tottenham, N.15.—A COURSE IN ADVANCED SURGERY will be held from March 1, 1948, to April 23, 1948, including lectures, clinical demonstrations and tutorials in surgical anatomy. Fee 25 guineas. Kindly send applications and details of qualifications and experience to the Dean, at The Prince of Wales's General Hospital, N.15.

POSTGRADUATE COURSE OF UROLOGICAL INSTRUCTION at St. Peter's and St. Paul's Hospitals, January 13 to April 15, 1948.—The Course will include systematic lectures covering the whole subject of Urology, out-patient sessions, ward visits, operation sessions, and tutorial demonstrations. All postgraduates taking the course are expected to attend lectures, and may attend all the tutorial demonstrations. They will be allotted individually to certain out-patient sessions, ward visits and operation sessions. The fee for the course is fifteen guineas, payable in advance. Applications should be made to The Secretary, St. Peter's Hospital for Stone, Henrietta Street, London, W.C.2. Envelopes should be marked "Postgraduate Course."

POSTAL COACHING for all Medical Examinations. Examination Successes 1901-46; M.D.Lond., 450; M.B., B.S.Lond., Final, 405; F.R.C.S.Eng., Primary, 357; F.R.C.S.Eng., Final, 282; M.R.C.P. Lond., 386; M.R.C.S., L.R.C.P., Final, 859; D.A. (1936-46). 110. F.R.C.S.Edin., D.Obst.R.C.O.G. M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17 Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

POSTGRADUATE COURSE IN OBSTETRICS AND GYNAECOLOGY. Royal Northern, and City of London Maternity Hospitals (Obstetrics): Soho and Samaritan Hospitals (Gynaecology).—A Course of training for higher qualifications in obstetrics and gynaecology (M.R.C.O.G., M.D., etc.) will be given by Prof. F. J. Browne and the combined staffs of the above hospitals, beginning on January 6. Details from Prof. F. J. Browne, Director of Postgraduate Studies, Hospital for Women, Soho Square, London, W.1.

THE COMBINED POSTGRADUATE TEACHING SCHOOL IN OBSTETRICS AND GYNAECOLOGY. D.OBST.R.C.O.G. EXAMINATION.—The following facilities are available for postgraduates intending to take the D.Obst.R.C.O.G. examination. Two weeks' attendance on the practice of Queen Charlotte's Maternity Hospital from February 9 to 22, followed by one week's general Refresher Course in Obstetrics and Gynaecology from February 23 to 28. Fee for the whole period £9 9s. Fee for Refresher Course only £5 5s. Postgraduates may also attend the practice of Queen Charlotte's Maternity Hospital for longer periods if desired, for a fee of £2 2s. a week. Limited accommodation can be provided near the hospital for a further three and a half guineas a week. Applications to the Secretary, The Combined Postgraduate Teaching School, Chelsea Hospital for Women, Dovehouse Street, Chelsea, S.W.3.

UNIVERSITY OF GLASGOW. Postgraduate Medical Education.—INTENSIVE COURSE IN MEDICINE. An intensive postgraduate course in Medicine will be conducted from April 12 to June 4, 1948. The Course will consist of clinical meetings, pathological demonstrations and lectures. Fee: Twenty-five guineas. Since numbers will be restricted, those wishing to attend should make early application to the Director of Postgraduae Medical Education, The University, Glasgow, W.2, from whom further particulars may be obtained.

LECTURES

PRIMARY F.R.C.S. Course of Lecture-Demonstrations in Anatomy, Physiology, Pathology and Bacteriology on Monday and Thursday evenings, 7.30 to 10 p.m., February 9 to June 3, 1948. Lecture room, Royal Cancer Hospital.—Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The Royal College of Physicians is giving a **COURSE OF POSTGRADUATE LECTURES IN MEDICINE** which will begin on February 2, and continue until March 25, 1948. There will be approximately 26 lectures. The full programme is not yet completed but preliminary details can be obtained from the College. The inclusive fee for the course will be 7 guineas and the total entry will be limited to 200. Fees are payable in advance and must be received at the College by January 26. 1948.—H. E. A. Boldero, D.M., Registrar, Pall Mall East, London, S.W.1.

D.OBST.R.C.O.G. A COURSE OF LECTURES AND TUTORIALS for the March Examination will commence Monday, January 19, 1948.—Apply Box 6305, B.M.J.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Charles Montague Fletcher, Esq., M.D., F.R.C.P., will deliver the **GOULSTONIAN LECTURES** on Tuesday, January 13, 1948, and Thursday, January 15, 1948, at 5 p.m. at the College, Pall Mall East, S.W.1. Subject: Pneumokoniosis of Coal Miners. Any member of the medical profession admitted on presentation of card. By Order of the President.—H. E. A. Boldero, Registrar.

THE TAVISTOCK CLINIC, 2, Beaumont Street, W.1.—A course of **SIX LECTURES ON PSYCHOSOMATIC MEDICINE** by Dr. Eric Wittkower will be given at the Clinic on Thursdays at 7.30 p.m., beginning January 22, 1948. The course will be open only to registered medical practitioners and the number attending will be limited. Tickets, £2 2s. for the course, obtainable only in advance from the Secretary. Cheques payable to the Tavistock Clinic.

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Wanted immediately, Indoor, Unmarried Assistant, English, Scotch or Irish. Good mixed practice, Midland town. Hospital appointments essential. Experience G.P. preferred. £650 per annum plus car allowance.—Box 6319, B.M.J.

Wanted immediately, Indoor Male Assistant, single, English or Scotch. Hertfordshire. Car provided. G.P. experience. Salary £650 per annum. Interview essential.—Box 6337, B.M.J.

Wanted, an Assistant for good-class suburban practice. Furnished accommodation available. Prospects of partnership. A good salary will be paid to a well-qualified, experienced and presentable man. Box 6346, B.M.J.

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Wanted, Assistant or Locum in colliery practice near Durham city for a few months. With or without car, recently qualified would suit. Salary by arrangement.—Box 6313, B.M.J.

Wanted, Male Assistant, single, young, long term outdoor, must be experienced and well qualified, mixed general practice Bristol. Commencing about March 1. References, usual bond. Car supplied. Salary by arrangement.—Box 6317, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Wanted, Outdoor Assistant. Mixed rural practice. Salary £800. Must own car.—Dr. Legge, Albrighton, nr. Wolverhampton.

Wanted, Assistant, indoor or outdoor, Southern coastal town. Salary by arrangement.—Box 6024, B.M.J.

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Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

WANTED

Wanted, Assistantship, with or without View, Glasgow or Central Scottish area. M.B., Ch.B., aged 32. Married, one child. H.P., H.S., G.P. experience. Own car. Free February.—Box 6323, B.M.J.

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Assistantship wanted, with or without View, London or suburbs, by experienced ex-R.A.M.C., Jewish, 34, married, no children (wife midwife), own car, furniture. Accommodation essential.—Box 6324, B.M.J.

Assistantship with View to Partnership or Succession wanted by lady doctor. Hospital and G.P. experience.—Box 6338, B.M.J.

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Scot wishes Assistantship, L.R.C.P.&S., 31, married, hospital, R.A.F., G.P. experience. Car owner.—Box 6340, B.M.J.

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Wanted, reliable and experienced Locums for town and country practices. State full particulars. —British Medical Bureau, 33, Cross Street, Manchester, 2.

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Birmingham area, Third share Partnership initially worth £1,300. Panel 4,000. Suitable house with garden for sale at valuation. Premium 1½ years'. Applicants are requested to give full particulars.—Box P6342, B.M.J.

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Scottish G..unte, 32, with public health, industrial, and aviation medical experience, desires similar appointment, full- or part-time. Would organise works medical service. London, Woolwich, Sidcup, N. Kent areas.—Box 6010, B.M.J.

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Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool. Telephones: Royal 8116 and Royal 7480. Telegrams: "Organic," Liverpool.

Rapidly expanding Mixed Practice on Kentish border of London. Last year's income approx. £2,500. Unfurnished house to rent. Appointments, midwifery. Premium, £3,750.—Box P6307, B.M.J.

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Wanted immediately, Town Practice, Partnership or Assistantship with View. Income £1,500 to £1,800. Good panel. Capital available. House to rent preferred. Replies strictly confidential.—Box P6330, B.M.J.

Wanted, Town or Country Practice of View Succession. Northern Counties, preferably Northumberland, by young, energetic, experienced M.B. Capital available.—Box P6345, B.M.J.

Wanted. Non-industrial Practice, with scope, small town or semi-country, anywhere south of Birmingham, M.B., M.R.C.S., D.R.C.O.G., aged 28, married (wife M.B., Ch.B.). Good references. Capital available.—Box P5801, B.M.J.

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Dispenser-Bookkeeper, male or female, wanted to commence duty immediately. Salary according to experience, minimum £5 5s. per week. Apply Dr. Urquhart, College Court, Shrewsbury.

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TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

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TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

AVAILABLE

The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

Duplicating, Typewriting, Testimonials, Applications. Lecture Papers, Reports, etc. expertly duplicated or typewritten. Recommended.—Miss Stone, 6, Duke Street, S.W.1. Whitehall 9682.

Ex-Quartermaster, aged 44, knowledge Dispensing, Bookkeeping. Typing. Gardening. Handyman. Southern Counties, country preferred. Free February 3.—Box 6304, B M.J.

Typewriting, Duplicating, Medical Manuscripts, testimonials, etc. Immediate service, ex-R.A.M.C. staff. Satisfaction guaranteed.—Specialist Typewriting Bureau, 30, City Road, E.C.1. Mon. 4881. Mal. 6344.

Typewriting Service, Testimonials, Theses, Notes, etc., accurately and speedily typed.—Phone HAMpstead 7949 after 1 p.m. daily.

Widow (over 40) requires Part-time Post as Nurse Receptionist to West End physician or surgeon (British). No typing. Small salary.—Box 6303, B.M.J.

MISCELLANEOUS

PRIVATE

Wanted for Private Practice, Secondhand Weighing Machine (short stem or dial). Must be accurate. —Box 6347, B.M J.

Guillotines, two; Curettes, two; Short Gag S.W. forceps. Sale or Exchange Rugs Camel, Iraq. Asiatic; also B.M.J. 45, 46.—Selbie, 92, London Road, Reading.

Microscope, "Swift" Portable. Nearly new condition, in mahogany case. Mechanical stage. Abbé condenser, 3 Zeiss objectives—N.A. 1.25 O.I. —D.D.—A.A., Zeiss dovetailed objective changers. What offers?—Box 6312, B.M.J.

Slide Cabinet, mahogany, 36 drawers, capacity 1,200. 15 guineas. Microtome Minot rotary, accessories, perfect condition, £50.—Box 6310, B.M.J.

Skeleton for Sale. Good condition, disarticulated. Seen London. £12 10s.—Box 6309, B.M.J.

Monocular or Binocular Microscope required of recent make, preferably Ziess or Leitz model. 2/3rds; 1/6th; and 1/12th Oil Immersion Lens, with moving stage. Forward details and price required to R. E. Lawson, House Governor and Secretary, The Gordon Hospital, Vauxhall Bridge Road, S.W.1.

TRADE

A ready market for Microscopes. We pay the highest prices obtainable for fine modern apparatus. —Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. Mayfair 7511

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire.

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept. B.M.J.), 3, Railton Road, London, S.E.24.

Savile Row Overcoats, Suits, etc. Purchased direct from all the eminent tailors, viz: Lesley & Roberts, Sullivan Williams, P. G. Anderson, etc. New or slightly worn. Regent Dress Co., 17, Shaftesbury Avenue, 2nd Floor next Café Monico. Coupons required. No post orders. Ladies' Department, 1st Floor. GERrard 7180.

Your "objective" Cash? Then sell us your Microscope. Good prices offered for high grade instruments.—City Sale and Exchange (1929) Ltd., 23, St. Mary Axe, London, E.C.3.

APARTMENTS, BOARD, ETC.

VACANT

Furnished Flat to Let, North London, 2 rooms, kitchen, separate bathroom, with light. 4 guineas weekly, heat extra. Single applicant preferred.—Box 6311, B.M.J.

London. Furnished Accommodation available in quiet Flat, private sitting-room. Amenities. Convenient all principal hospitals. Buses at door. Terms moderate. Ring North 2046.

Residential Service Rooms with telephone at Osborne Court, 6, Cornwall Gardens, Kensington, S.W.7. Single room now available, terms including breakfast, 5 guineas weekly. Other meals to order. Write or telephone Manager, WEStern 1663.

S.W.3, near Sloane Square, Furnished Service Rooms with Breakfast from 3 guineas weekly.—Phone Kensington 4435, or write Box 5228, B.M.J.

St. John's Wood, near Lord's, Sitting, two medium and one small Bedroom, Kitchenette, Bath, Carpets, Linoleum, Curtains, etc. State family when replying.—Box 6348, B.M.J.

Sutton. Single or double room with breakfast and evening meal offered in doctor's house, easy reach S.R. station.—Box 6334, B.M J.

HOTELS

Cotswold.—Residential Hotel, excellent cooking, well heated, old-world garden, own poultry, bracing, restful, near church, shops, buses, 5-6 guineas —Old Red Lion, Stow-in-the-Wold, Gloucester. Tel.: 66.

Knappe Cross Hotel, near Exmouth, S. Devon. Healthy situation, mild climate and faces south Appeals specially to those with beautiful homes of their own. Every room is a sheer delight. Central heating throughout. Entrancing views over sea and country. 28 acres grounds. Licensed. Golf, riding, tennis, etc. Trains met Tel.: Exmouth 3643.

Recuperate in the lovely Eden Valley. Charming country house. Every modern comfort. Log fires. Books. Fishing. Appetizing menus. Own produce. Main line. Taxi.—Salkeld Hall, near Penrith. Telephone: Langwathby 224.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild, allowing visitors to be out in the wonderful air The Hotel is central heated, individual heating in bedrooms. H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

The ideal situation for the Convalescent and for those with tired and jaded nerves. **Nailzee Point Hotel, Looe, Cornwall.** (Phone: Looe 24). Every comfort, personal service, and really good food will restore you to perfect health.

HOUSES, CONSULTING ROOMS

Furnished Consulting Rooms to let full- or part-time. All amenities. 9, Queen Anne Street, Harley St., W.1. Also large basement suitable laboratory.

Harley Street, W.1. Modern rooms, ground floor, available. Decorated and all services installed. —Box 6042, B.M.J.

Harley Street, W. House with Mews Premises for sale, 960 years' lease. Ground rent £110 per annum. Redecorated. Ready for development for consulting and residential use. 5 consulting rooms, waiting room, 8 residential, 2 bathrooms and offices. Central heating. Full details. Sole Agents, Ley Clark and Partners, 3, Wimpole Street, W. Langham 1095

MOTOR CARS

OVERSEAS CARS LIMITED offer the following selected used cars: 1946 Armstrong Siddeley "Hurricane" D/H Coupe; 1945 Austin 10; 1939 Austin Big Seven; 1939 Hillman Minx D/H Coupe; 1937 2½ litre S.S. Jaguar; 1939 2½ litre Jaguar D/H Coupe; 1939 1½ litre Jaguar; 1937 2 litre M.G.; 1947 Morris 8; 1937 1½ litre Riley; 1939 Rover 12; 1939 Standard 8; 1939 Vauxhall 10, and many others. Full particulars from 227 Brompton Road, S.W.3. Telephone KENsington 7475; or Service Station: Telephone FULham 7669.

Gentleman urgently requires 1946-7 Car or low-mileage pre-war model.—King, The Crest, Ragglewood, Chislehurst, Kent. Imperial 3527.

NURSING HOMES

First class Nursing Home (registered) providing every comfort, warmth, good food and refinement for convalescents (bedridden or otherwise) and aged gentlefolk. Lovely modern residence standing in own grounds of 4½ acres. Own produce, eggs, gardens, orchard. Doctor and wife in residence. Fees from 9 guineas weekly.—L. B. Reeves, L.R.C.P.&S.Ed., Whistley House, Axtown Lane, Yelverton, South Devon. Phone: Yelverton 149.

Munster-Royal Nursing Home (Kingston 0111), Teddington, within easy reach of London, has private accommodation for medical, surgical or maternity cases, and a few chronic invalids from 5½ guineas. Children for tonsillectomy specially accepted at 10 guineas inclusive, without undue delay. Reduced terms to doctors' families.

Nursing Home run like first-class private house. Resident medical man and wife. Certificated nurses. Rest Cures, Neurasthenics and Convalescents (not certified, malignant nor tubercular). Guests also received. Lounge hall, large dining-room, lovely drawing-room. Own poultry kept. Private garden. Beautiful country. Shops four minutes. London 40 minutes. Very comfortable. Quiet. Good catering and cooking. Consultants and other medicals can visit their own patients.—C. F. Fothergill, M.B., B.Ch., Hensol, Chorley Wood, Herts. ('Phone; Chorley Wood 24).

The Woburn Clinic, Bucks, has immediate vacancies obstetrics, surgery, arthritis, and convalescents. X-ray and pathological facilities. Consultant and resident medical services. Ambulance and car service available for radius of 50 miles. Fees 10 to 20 guineas.—Tel. Secretary, Woburn 242.

APPOINTMENTS

(*Continued from page* 21)

ST. MARY'S HOSPITAL FOR WOMEN AND CHILDREN, Plaistow, E.13
(General Hospital, no maternity)

Applications are invited from registered medical practitioners for the following appointment:—

RESIDENT PHYSICIAN (B2), vacant immediately Salary £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications to be sent to the Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (330 beds)
HOUSE PHYSICIAN (A)
to the Maternity Department

Applications are invited from registered medical practitioners, men or women, for the appointment of House Physician (A) to the Maternity Department, vacant February 28, 1948. Salary at the rate of £175 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be for a period of six months. Applications should be sent to R. Morrison Smith, Superintendent and Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (330 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, men and women, for the appointment of House Surgeon (A), vacant February 12, 1948. Salary at the rate of £175 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply when appointment will be for a period of six months. Applications should be sent to R. Morrison Smith, Superintendent and Secretary.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), vacant January 12, 1948. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months; otherwise it may be extended for a further period Applications should be sent to the undersigned as soon as possible.—A. Stanley Brunt, General Superintendent and Secretary.

SALISBURY GENERAL INFIRMARY
ASSISTANT PATHOLOGIST

Candidates should have a thorough and recent experience in general Clinical Pathology; additional specialized experience, either in bacteriology or in morbid anatomy, would be advantageous. The laboratory carries out an area pathological service based upon a central laboratory at Salisbury, and undertakes the work of a number of neighbouring hospitals, some of which have branch laboratories. It is the Wiltshire County Laboratory, and an associated unit of the Public Health Laboratory Service. Salary £1,200 per annum, rising by £50 per annum to £1,700; candidates should be preferably under 35 years of age. Applications, along with recent testimonials, or the names of two referees to whom application can be made, should be sent as soon as possible to the Secretary, Department of Pathology, Salisbury General Infirmary.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant. Salary is at the rate of £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent immediately to the Secretary, H. F. Donald, The Infirmary, Stamford.

SOUTHPORT GENERAL INFIRMARY

Applications are invited for the following appointment, from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, viz.:—

JUNIOR HOUSE SURGEON (A), vacant on January 12, 1948.

The appointment is for six months duration. Salary at the rate of £200 per annum, with full residential emoluments. Applications should be sent as early as possible to the Superintendent and Secretary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary hospital 200 beds)
ASSISTANT PATHOLOGIST

Applications are invited for this new whole-time appointment from registered medical practitioners with suitable pathological experience. Salary £1,000 per annum, non-resident, and the holder will not be allowed to engage in private practice. Applications to be forwarded to the undersigned, from whom further details may be obtained, not later than January 29, 1948.—T. Rhodes, Superintendent-Secretary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary hospital 200 beds)
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, for post of Casualty Officer (A) vacant February 1, 1948. Salary £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be for six months. Applications to be forwarded to the Superintendent-Secretary as soon as possible.

ST. THOMAS'S HOSPITAL, S.E.1
HONORARY SURGEON

Applications are invited for the post of Honorary Surgeon to the hospital One of the present surgeons to out-patients will be a candidate and, if he is appointed, there will be a vacancy for an Honorary Surgeon to Out-patients. Candidates must be Fellows of the Royal College of Surgeons. Twenty copies of applications, which should include details of age, qualifications and experience, and the names and addresses of three referees to whom the hospital may write, should be sent by January 15, 1948, to the Clerk of the Governors, to whom any inquiries should be addressed.

ST. VINCENT'S ORTHOPAEDIC HOSPITAL
Pinner, Middlesex
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (B2), vacant February 1, 1948. Salary £200 per annum, with full board and residence. R practitioners holding A appointments may apply. Applications, stating previous experience, if any, should be addressed to the Secretary and forwarded immediately.

TILBURY HOSPITAL, Essex

The Committee of Management of The Seamen's Hospital Society invite applications for the following appointments now vacant on the Honorary Visiting Staff of the Tilbury Hospital:

(a) **GYNAECOLOGIST**
(b) **LARYNGOLOGIST**
(c) **DERMATOLOGIST**

Applicants must be in consulting practice in the speciality concerned. The successful candidate will be required to attend the hospital once a week. Applications to be sent on or before January 20 to the Secretary, from whom further particulars may be obtained.

VICTORIA HOSPITAL FOR CHILDREN
Tite Street, Chelsea, S.W.3
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of a House Physician (A) to become vacant on February 1 next, including practitioners within three months of qualification who are liable under the National Service Acts. The appointment is for a period of six months. Salary at the rate of £150 per annum. Applications should reach the Secretary not later than the first post on Wednesday, January 7, 1948.—D. St.John Bamford, Secretary.

VICTORIA HOSPITAL FOR SICK CHILDREN
Park Street, Hull
RESIDENT HOUSE SURGEON (A)
HOUSE PHYSICIAN (A)

The Board of the above hospital requires a Resident House Surgeon and House Physician (female, A posts), vacant on January 22, 1948. Salary £200 per annum, with board, residence and laundry. Applications to the Secretary not later than January 17, 1948.

WILLESDEN GENERAL HOSPITAL
Harlesden Road, N.W.10

Applications are invited from registered practitioners for the following resident appointments:—

HOUSE SURGEON (A) AND HOUSE PHYSICIAN (A)

including practitioners within three months of qualification, who are liable to service under the National Service Acts. Salary at the rate of £150 per annum, plus full residential emoluments. The appointments will be for a period of six months from February 1, 1948. Applications, with dates, should be sent to the undersigned not later than January 10, 1948.—J. N. Drake, Secretary.

WEST KENT GENERAL HOSPITAL
(Incorporated), Maidstone (135 beds)
HOUSE PHYSICIAN AND RESIDENT ACCOUCHEUR (B2)

Applications are invited from registered medical practitioners, female, for the appointment of House Physician to the hospital and Resident Accoucheur (B2) for the 16-bed maternity block, vacant January 16, 1948. Practitioners who hold A posts are invited to apply. Applicants should have some postgraduate midwifery experience. The appointment will be limited to six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications should reach the undersigned forthwith.—Edward J. Gregg, House Governor and Secretary.

WREXHAM AND EAST DENBIGHSHIRE WAR MEMORIAL HOSPITAL
RESIDENT HOUSE SURGEON (B2)
Casualty and Fracture Dept.

Applications are invited from registered medical practitioners, male and female, including those holding A posts, for the six months' appointment of Resident House Surgeon (B2), Casualty and Fracture Department, to commence on January 10, 1948. Salary £350 per annum, with full residential emoluments. Applications to Leslie Spencer, Secretary

WESTON-SUPER-MARE GENERAL HOSPITAL
(100 beds)
HOUSE SURGEON (A)

Applications are invited from medical practitioners for the appointment of House Surgeon (A). Duties to commence on February 1, 1948. Salary at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary.

WORCESTER ROYAL INFIRMARY

Applications are invited for the following appointments, vacant on January 31, 1948, tenable for six months.

RESIDENT ANAESTHETIST AND HOUSE SURGEON (B2), including R practitioners, who hold A posts.

GENERAL AND OBSTETRICAL HOUSE SURGEON (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by an R practitioner the appointments will be limited to six months.

Salaries at the rate of £170 per annum, with full residential emoluments. Applications should be addressed to J. S. Rippier, House Governor.

WESTMINSTER HOSPITAL
St. John's Gardens, London, S.W.1
THIRD ASSISTANT OBSTETRIC SURGEON

A vacancy has been declared in the office of Third Assistant Obstetric Surgeon. Gentlemen desirous of becoming candidates must be Fellows of the Royal College of Surgeons of England, practising exclusively in Gynaecology and Obstetrics. The House Committee will meet to receive applications and declare candidates on Tuesday, February 10, 1948. Each candidate will be required to submit a certificate of his age and forty copies of his application, with forty copies of each of three testimonials, to the undersigned not later than February 9, 1948. By order of the House Committee.—Charles M. Power, House Governor and Secretary.

WORTHING HOSPITAL (200 beds)
RESIDENT SURGICAL OFFICER AND REGISTRAR (B1)

Applications are invited for the post of Resident Surgical Officer and Registrar (B1). Salary £600 per annum. Appointment in the first instance to be for six months. Candidates are expected to do a considerable amount of emergency and other surgery. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Preference will be given to candidates holding the F.R.C.S. Applications, and the names of three persons to whom reference may be made, to be addressed, not later than January 22, 1948, to A. V. Oakton, House Governor.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL, Watford, Herts (206 beds)
RESIDENT ANAESTHETIST AND CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the post of Resident Anaesthetist and Casualty Officer (B2), vacant now. R practitioners who hold A posts may also apply, when appointment will be limited to six months. Salary will be at the rate of £200 per annum, with full residential emoluments. Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M. Maskell, Administrator.

WALSALL GENERAL HOSPITAL (181 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A), vacant February. Salary £150 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Salary is at the rate specified above with full residential emoluments. Applications should be forwarded to the House Governor and Secretary.

WEST LONDON HOSPITAL
Hammersmith, W.6 (241 beds)
ASSISTANT RADIOLOGIST (Diagnosis)

There is a vacancy for the post of Assistant Radiologist (Diagnosis). Candidates must be duly qualified medical practitioners and possess a Diploma in Radiology. Duties include teaching in the Medical School. The Assistant Radiologist will be required to attend at least three sessions each week. Payment is on a sessional basis at the rate of £220 per annum for one weekly session. Applications (without testimonials) should be sent to the undersigned before Wednesday, January 14, 1948, giving full particulars of age, qualifications, experience, and the names and addresses of two referees.—C. R. Lockhart, Secretary.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

WEST LONDON HOSPITAL
Hammersmith, W.6 (241 beds)
SURGEON to the Throat, Nose and Ear Dept.

Applications are invited for the post of Surgeon to the Throat, Nose and Ear Department. Duties include the charge of beds and out-patients and teaching in the medical school. Candidates must hold one of the higher surgical qualifications. Payment is on a sessional basis at the rate of £220 per annum for one weekly session. Applications (without testimonials) should be sent to the undersigned before Wednesday, January 14, 1948, giving full particulars of age, qualifications, experience, and the names and addresses of three referees.—C. R. Lockhart, Secretary.

WEST LONDON HOSPITAL
Hammersmith, W.6 (241 beds)
ASSISTANT ANAESTHETIST

A vacancy is announced for the post of Assistant Anaesthetist, for which the present senior Clinical Assistant is an applicant. Payment is on a sessional basis at the rate of £220 per annum for one weekly session.—C. R. Lockhart, Secretary.

WHITE LODGE HOSPITAL
Newmarket, Suffolk
HOUSE PHYSICIAN/ANAESTHETIST (A)

Applications are invited for the post of House Physician/Anaesthetist (A) at the above hospital Salary at the rate of £150 per annum. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months Applications should be sent to the Medical Superintendent.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B1), vacant on February 1, 1948 Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M Forces. The appointment is for twelve months. Salary £350 per annum, with full residential emoluments. Applications should be sent to the undersigned not later than January 17, 1948.—J R. Mackrill, Secretary.

HOMES

The Psychoneuroses and Neurasthenia

BOWDEN HOUSE
Harrow-on-the-Hill

Diagnostic Week.—All patients spend the first week of their stay in undergoing a careful investigation. Clinical, pathological, and radiological diagnoses are used as routine, and each patient has at least one session of narco-analysis. For this an inclusive fee of 25 guineas is made. The patients come in with no commitment on either side for further treatment.

Those who are anxious to remain, and appear to the staff to be suitable, undergo intensive psychotherapy as before. The fees for this are 12 to 20 guineas a week, inclusive of regular specialist treatment.

Medical Director: H. Crichton-Miller, M.A., M.D., F.R.C.P.
Deputy Director: Grace H. Nicolle, M.A., M.B
Assistant Psychiatrist: W. A. H. Stevenson, B.A., B.M., B.Ch.
Consulting Physician: J. Bartie Murray, M.A., M.D., M.R.C.P.
Warden: Miss Winifred Sherwood, S.R.N.

THE OLD MANOR, SALISBURY
Telephone: 3216 and 3217

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS. Extensive grounds. Detached villas. Chapel. Garden produce from own gardens. Terms moderate.

Convalescent Home at Bournemouth

standing in 12 acres of ornamental grounds with separate villas, tennis courts, etc. Patients or Boarders may visit the Home by arrangement. Illustrated Brochure on application to the Medical Superintendent. The Old Manor, Salisbury.

WYE HOUSE, BUXTON

A Private Hospital for the treatment and care of Nervous and Mental Disorders in both sexes Voluntary, Temporary, and Certified patients received. Apply to E. Howard Kitching, M.D., M.R.C.P., D.P.M. Tel.: Buxton 130.

CITY OF LONDON MENTAL HOSPITAL
DARTFORD, KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of £3 3s. and upwards.

ST. ANDREW'S HOSPITAL, NORTHAMPTON
For Nervous and Mental Disorders

President: The Most Hon the MARQUESS OF EXETER, K.G., C.M.G., A.D.C. Medical Supt.: Thomas Tennent, M.D., F.R.C.P., D.P.H., D.P.M. This Registered Hospital is situated in 130 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or who wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in Hospital or in one of the numerous villas in grounds of the various branches can be provided.

WANTAGE HOUSE.—This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped with all the apparatus for the complete investigation and treatment of Mental and Nervous Disorders by the most modern methods; insulin treatment is available for suitable cases. It contains special departments for Hydrotherapy by various methods, including Turkish and Russian baths, the prolonged immersion bath. Vichy Douche, Scotch Douche, Electrical baths, Plombières treatment, etc. There is an Operating Theatre, a Dental Surgery, an X-ray Room, an Ultra-Violet Apparatus, and a Department for Diathermy and High-frequency Treatment It also contains laboratories for biochemical, bacteriological, and pathological research. Psychotherapeutic treatment is employed when indicated.

MOULTON PARK.—Two miles from the main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres Milk, meat, fruit, and vegetables are supplied to the Hospital from the farm, gardens and orchards of Moulton Park. Occupational Therapy is a feature of this branch, and patients are given every facility for occupying themselves in farming, gardening and fruit-growing

BRYN-Y-NEUADD HALL.—The seaside house of St. Andrew's Hospital is beautifully situated in a park of 330 acres at Llanfairfechan amidst the finest scenery in North Wales. On the North-West side of the Estate, a mile of sea-coast forms the boundary. Patients may visit this branch for a short seaside change or for longer periods. The hospital has its own private bathing house on the seashore. There is trout-fishing in the park.

At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts (grass and hard courts), croquet grounds, golf courses, and bowling greens. Ladies and gentlemen have their own garden, and facilities are provided for handicrafts such as carpentry, etc.

For terms and further particulars apply to the Medical Superintendent (Telephone Nos.: 2356 and 2357 Northampton), who can be seen in London by appointment.

LAVERSTOCK HOUSE, nr. SALISBURY, WILTS

Private Mental Home for Certified and Uncertified Ladies and Gentlemen. Lovely house and garden (18 acres). ESTABLISHED 200 YEARS, MODERN TREATMENTS. Illustrated brochure may be obtained from Dr. Horace Hill, M.R.C.P., Physician-Superintendent. Tel.: Salisbury 2612.

CHEADLE ROYAL, CHEADLE, CHESHIRE

A registered Hospital for MENTAL DISEASES, and its Seaside Branch, GLAN-Y-DON, Colwyn Bay, N. Wales. The object of this Hospital is to provide the most efficient means for the treatment and care of Patients of both Sexes suffering from MENTAL and NERVOUS DISEASES. The Hospital is governed by a Committee appointed by the Trustees of the Manchester Royal Infirmary. VOLUNTARY, TEMPORARY, AND CERTIFIED PATIENTS RECEIVED. For terms and further information apply to the Medical Superintendent. Telephone: Gatey 2231.

ASHENDENE, BAYFORD
Nr. HERTFORD, HERTS
(Formerly at Epping House, Little Berkhamsted)

An attractive and comfortable PRIVATE HOME beautifully situated in its own grounds, 400 ft. above sea-level. Exceptionally healthy air and position affords every facility for convalescence. Treatment for Ladies and Gentlemen suffering from Insomnia, Functional, Nervous Disorders, Alcohol and Drug Habits, Chronic Heart and Kidney Disease, also Elderly and Convalescing Cases.—Apply J. C. Baker, M.B. Telephone: Bayford 262. Station: Bayford (L.N.E.Ry.).

THE COPPICE, NOTTINGHAM
Hospital for Mental Diseases

This institution is exclusively for the reception of a limited number of Private Patients of both sexes at moderate rates of payment. It is beautifully situated in its own grounds on an eminence a short distance from Nottingham, and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted. Occupational Therapy. Voluntary and Temporary Patients received. Tel.: 64117. For terms etc., apply to the Medical Superintendent

BETHLEM ROYAL HOSPITAL
FOR NERVOUS AND MENTAL DISORDERS
MONKS ORCHARD, MONKS ORCHARD ROAD, EDEN PARK, BECKENHAM, KENT

Reg. Tel. Address: Bethlem, Beckenham
Station: Eden Park (Southern Railway)
Telephone: Springpark 1180-1181

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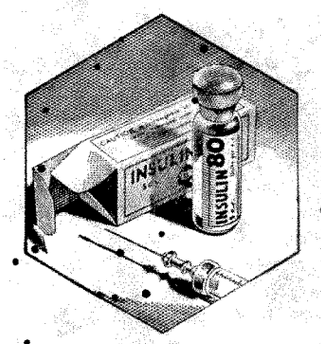

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ANAEMIA ASSOCIATED WITH TRAUMA AND SEPSIS*

BY

JANET VAUGHAN, D.M., F.R.C.P.

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Since the Goulstonian Lecturer in 1932 took as his subject the "pathology and treatment of anaemia" great advances have been made in our understanding of the aetiology and treatment of many blood diseases. There are, however, two extremely common anaemias the cause of which remains obscure and the treatment unsatisfactory—namely, the anaemia found in association with infection and the anaemia found in association with trauma.

My reasons for considering these two conditions together are: (1) The morphological character of the anaemia is the same and there are striking similarities in the metabolic findings. (2) There is no effective treatment of the anaemia beyond supplying already matured red cells in the form of transfusions while awaiting improvement in the underlying infection or healing of the injured tissues. (3) The available evidence suggests that in both conditions the synthesis of haemoglobin is in some way at fault and that this failure of haemoglobin synthesis is responsible for the anaemia.

In discussing the anaemia both of trauma and of infection it must be remembered that in recent years the picture has almost invariably been complicated by treatment with the sulphonamides, which may themselves affect haemopoiesis (Rimington, 1939). Further, trauma is likely to be complicated by infection, and in some instances the reverse may occur—for example, the presence of osteomyelitis or empyema may necessitate operative intervention. However, relatively simple cases of each have been recorded (Saifi and Vaughan, 1944; Howard, 1945) in which anaemia is still found.

Anaemia of Sepsis: Morphological Characteristics

In considering the morphological character of anaemia associated with sepsis it is probably important to differentiate between acute and severe infections and more chronic infections, though it is difficult to know how best to make the distinction. In a previous study (Saifi and Vaughan, 1944) the presence of an infection of longer than three months was regarded as chronic, while anything less than three months was regarded as acute. It might be wiser to make the distinction depend rather on the virulence and nature of the infectious process than on its duration.

Anaemia Associated with Virulent Infection

In certain fulminating infections, such as with *Clostridium welchii*, the anaemia is certainly haemolytic and often megalocytic. Other scattered examples of proved haemolytic anaemia associated with severe infection characterized by a high colour index and sometimes increased red-cell fragility have been described (Brown *et al.*, 1944; Mollison, 1947). Such cases, however, occur as interesting rarities meriting special description. Mollison (1947) reported two unusual cases of hyperchromic anaemia and sepsis—one associated with advanced bilateral tuberculosis, the other with acute osteomyelitis. In both the anaemia was severe—in one there was increased red-cell fragility, in the other it was not recorded. A few similar cases associated with severe sepsis in burns have been described (Brown *et al.*, 1944). Rare cases of hyperchromic megalocytic anaemia unassociated with lesions of the gastro-intestinal tract have also been reported in tertiary syphilis (Tauber and Goldman, 1935).

Blackfan and Diamond (1944) observed 15 infants between the ages of 4 and 16 months in whom a severe megalocytic anaemia developed in association with acute infection and was corrected by the parenteral administration of liver extract. In only one was a prolonged course of liver therapy needed. The remaining children recovered completely after a single course of treatment. The anaemia was associated with a temporary complete achlorhydria. Unfortunately no details are given. Since the anaemia responded to treatment apparently in the presence of infection, it seems possible that it was primary in origin, though even in primary anaemias infection often has an inhibiting effect on the action of haemopoietic factors. Zuelzer and Ogden (1946) reported 26 presumably similar cases in infants 2 to 11 months old in which the bone marrow resembled that of pernicious anaemia—megaloblasts and giant metamyelocytes being present in large numbers. The anaemia was not always megalocytic, but was often associated with leucopenia, neutropenia, and thrombocytopenia. Such cases responded to folic acid or liver extract. It is, however, not altogether clear whether the anaemia followed the infection, or vice versa.

The anaemia associated with Brucella infections also merits special mention. It has been recorded by Calder *et al.* (1939) as being macrocytic and hyperchromic, and by Harris (1941) as being sometimes like pernicious anaemia. I have seen it on at least four occasions with a high colour index and young red and white cells in the peripheral blood—in fact, a leuco-erythroblastic type of anaemia, which caused considerable confusion in diagnosis. Characteristically it is of the normocytic hypochromic type (Cartwright *et al.*, 1946a).

Anaemia Associated with Chronic Infections

The anaemia associated with chronic or non-fulminating infections is normocytic and normochromic in the majority of cases, though it may become somewhat microcytic and

*The Bradshaw Lecture given at the Royal College of Physicians of London on Nov. 6, 1947.

hypochromic if the infection is of long standing. In 24 cases of infective endocarditis Pepper (1927) recorded a hypochromic type of anaemia associated with both a *Streptococcus viridans* and a haemolytic streptococcal infection. Horder (1926) alone claimed to have found a high colour index in infective endocarditis, but he gave no numerical data. In tertiary syphilis moderate hypochromic anaemia may occur, particularly in untreated cases. It is less pronounced than in the primary and secondary stages (Rosahn and Pearce, 1934; Tauber and Goldman, 1935).

In rheumatic fever the cell size, the mean corpuscular haemoglobin, and the mean corpuscular haemoglobin concentration in one large series varied from low to normal values (Hubbard and McKee, 1939). In chronic rheumatic conditions, especially in women, a hypochromic type of anaemia is common, and is often but not necessarily associated with achlorhydria (Collins, 1935). The severer grades are found in cases of atrophic rheumatoid or infective arthritis.

Josephs (1936) stated that in infants the anaemia tends to be hypochromic and that extreme hypochromia is rare. Blackfan and Diamond (1944) also described a microcytic hypochromic anaemia in infants and a mixed type showing microcytosis and macrocytosis, the latter responding to liver and to iron after recovery from the infectious process, suggesting that there is a deficiency of both.

Rasmussen (1936), reviewing the blood picture in 460 patients with pulmonary tuberculosis, noted a hypochromic type of anaemia in 12% of cases. In 34 non-febrile cases the anaemia responded to liver therapy. In 13 there was widespread tuberculosis involving the intestinal canal, presumably therefore interfering with intestinal absorption. In 10 cases other forms of infection, such as with haemolytic streptococci, were present. Braverman (1938, 1942), from a review both of his own cases and of the literature, concluded that the anaemia in tuberculosis, if present, is usually mild, most commonly hypochromic and microcytic, but sometimes normochromic and normocytic. He found such anaemias in 46% of a series of 509 patients.

Saifi and Vaughan (1944) in 34 cases and Cartwright *et al.* (1946a) in 16 cases of anaemia associated with such infections as osteomyelitis, empyema, infective endocarditis, chronic nephritis, and pneumonia failed to find a macrocytic type of anaemia. The anaemia was mild, normocytic, and normochromic, or slightly microcytic and hypochromic. In a series of 464 cases Wintrobe (1934) found no case of a megalocytic type of anaemia, and hypochromia was observed only in association with blood loss or nutritional deficiency. The anaemia was normocytic or slightly microcytic. Under experimental conditions in animals an anaemia with exactly the same morphological features is produced by the injection of bacteria or by the production of a sterile abscess by turpentine (Robscheit-Robbins and Whipple, 1936; Cartwright *et al.*, 1946b). The injection of bacterial toxins alone does not cause anaemia, suggesting, as will be discussed later, that the essential factor in infections responsible for the anaemia is inflammatory tissue reaction.

Bone Marrow.—The accounts of bone-marrow findings in anaemia associated with sepsis are largely unsatisfactory, as only very partial examination of the skeleton is usually made. In both acute and chronic infections in which we examined the long bones from arm and leg and wedges from sternum, vertebral column, and pelvis we found active marrow often in excess of normal. All patients showed considerable erythroblastic activity though there was excessive leucopoiesis. In some instances there was myeloid activity of the spleen (Saifi and Vaughan, 1944).

Metabolic Characteristics of the Anaemia of Sepsis

In recent years there has been an increasing amount of data concerning what may be described as the metabolic characteristics of the common anaemia found in association with sepsis.

Serum bilirubin is within normal limits (Vaughan and Saifi, 1939; Saifi and Vaughan, 1944; Cartwright *et al.*, 1946a).

Plasma iron is low (Heilmeyer and Plötner, 1937; Schafer, 1940; Hirvonen, 1941; Bröchner-Mortensen and Stein, 1942; Cartwright *et al.*, 1946a). The fall in plasma iron immediately follows the infectious process even in those cases in which no anaemia develops. The normal range for humans is 120±30 μg. per 100 ml., while in 16 cases of anaemia associated with infections recorded by Cartwright *et al.* (1946a) the values ranged from 15 to 40 μg. The hypoferraemia persists so long as the infection continues, and returns to normal more slowly than the haemoglobin or red cells.

Serum Copper.—On the other hand the serum copper is raised. The normal range determined by Cartwright *et al.* (1946a) was 116±20 μg. per 100 ml. The value in the 16 patients already mentioned was 200–262 μg. with two exceptions.

Erythrocyte Protoporphyrin.—This porphyrin—protoporphyrin type III, from which haematin is formed by conjunction with iron—was with one exception increased in 11 cases studied by Cartwright *et al.* (1946a). The normal range is 20–50 μg. per 100 ml. of red cells. In the patients studied it was increased two to fourteen times above normal, reaching a maximum in one instance of 634 μg. per 100 ml. of red cells. This rise occurs slowly during the development of anaemia and returns slowly to normal after recovery.

Urinary and Faecal Coproporphyrin.—Vaughan and Saifi (1939) recorded an increase of both coproporphyrin I and III in the urine: an average of 427.1 μg. daily was found in one patient; in another there was an increase of coproporphyrin I with only a trace of III; in a third there was an increase in urinary porphyrin but not enough for identification. The faecal porphyrin consisted of a chloroform-soluble fraction (protoporphyrin deuteroporphyrin) and an insoluble coproporphyrin fraction containing coproporphyrin III. Cartwright *et al.* (1946a) also reported an increase in urinary coproporphyrin but did not differentiate the type. A similar increase in coproporphyrin III excreted in infections in the urine has been noted by Rimington and Hemmings (1938), by Curphey and Solomon (1938), and by Watson and Larson (1947), particularly in acute poliomyelitis. The last-named workers recorded an increase of coproporphyrin I in certain infections, particularly infectious hepatitis.

Faecal Urobilinogen.—There are relatively few data available on urobilinogen excretion in anaemia associated with infection. Eppinger and Charnas (1913) noted a normal figure in a patient with anaemia and pulmonary tuberculosis. Bauman (1921), using a rather unsatisfactory method of estimating, recorded normal figures in two cases of infectious endocarditis. Weiss (1930) noted a patient with tuberculous glands who excreted 56 μg. of urobilinogen daily and three cases of pulmonary tuberculosis with figures ranging from 54 to 132 μg. daily. Paschkis (1933) recorded a case of infective endocarditis with a daily excretion of 228 μg., and Heilmeyer and Plötner (1937) quoted a case of rheumatic polyarthritis with an absolute excretion of 77 μg. daily. Watson (1938) recorded a patient with chronic infectious arthritis in whom the excretion was 60 μg. daily. Our own series of eight cases, the largest available, showed no increase above normal in seven patients and in the eighth an increase so slight as to be insignificant, the upper figure for normal in men being taken as 280 μg. (Vaughan and Saifi, 1939). The same results were obtained when excretion was related to the total circulating mass of haemoglobin rather than expressed in absolute amounts.

Urobilinogen in Urine.—We (Vaughan and Saifi, 1939) observed no increase in urinary urobilinogen, but increases have been noted by other workers (Harris, 1927; Weiss, 1930; Watson, 1938; Curphey and Solomon, 1938; Hubbard and McKee, 1939).

Plasma Proteins.—In the series of cases investigated by Cartwright *et al.* (1946a) the plasma proteins were within the

normal range, varying from 5.9 to 7.4 g.%, and in those patients examined the relative proportions of albumin and globulin were not disturbed. Peters and van Slyke (1931) reported, however, that in chronic infection the plasma albumin concentration may be low, and one or two instances of low total protein are recorded in association with rheumatic fever and tuberculosis by Bing (1946) in his study of hypoproteinaemia. Grossman *et al.* (1945) in a series of patients with known negative nitrogen balance found normal levels for both total protein and plasma albumin. Wintrobe *et al.* (1947b) also stated, without giving evidence, that the albumin may be low.

Nitrogen Excretion.—A negative nitrogen balance develops in the presence of infection (Peters, 1944; Grossman *et al.*, 1945). Nitrogen excretion is very greatly increased in acute infections and to a considerable but less extent in chronic infections (Grossman *et al.*, 1945). The increased nitrogen is excreted in the urine in the form of urea and ammonia. Excretion of creatinine is unchanged. This loss of nitrogen is not definitely related to the febrile reaction (Grossman *et al.*, 1945) in acute infections; it may continue after the patient has become afebrile, and in certain chronic infections it may not continue in spite of continued fever.

Similar changes in blood chemistry are found in experimental animals after the production of a sterile abscess by turpentine injections (Cartwright *et al.*, 1946b). The significance of these metabolic changes in explaining the aetiology of the anaemia is discussed later.

Anaemia of Trauma

During the war observers investigating the blood picture of air-raid and battle casualties were struck by the fall in haemoglobin level that occurred after injury. It was repeatedly discussed, though with the exception of cases of severe burns it received little comment in the literature (Freebody, 1943–4; Vaughan *et al.*, 1946). A similar anaemia may occur after operative intervention which is not preceded by injury (Seaman and Ponder, 1943) and which, as in the cases studied, is not complicated by sepsis or treatment with sulphonamides; the latter often disturbs the picture of trauma. The available data on which to base a description of the anaemia are scanty—in our own series there were only 14 cases, and in none were blood volumes estimated. The picture, however, was similar to that seen in sepsis: a normocytic normochromic anaemia which in some instances became hypochromic and microcytic. This anaemia occurred even with slight trauma—for instance, in a man with a simple fracture of the patella.

During the period of falling haemoglobin the reticulocyte count is not raised, but during the period of regeneration there is a rise, often only within normal limits. In the few observations made on red-cell fragility it was not increased. Increased red-cell fragility has been described in the anaemia following severe burns (Shen and Ham, 1943), but it is possible that this results from actual injury to the red cells at the time of burning (Shen and Ham, 1943; Brown *et al.*, 1944). In such cases typical spherocytosis is found in the stained films.

Bone Marrow.—No quantitative or qualitative studies have been made of the bone marrow in anaemia associated with trauma.

Metabolic Characteristics

With the exception of nitrogen metabolism little is known of the metabolic characteristics of anaemia associated with trauma.

Serum Bilirubin.—In the few patients we studied the plasma bilirubin was normal (Vaughan *et al.*, 1946), though directly after the injury it tended to be higher than it was during the period of a rising haemoglobin.

There is no information about the level of the plasma iron or copper, the erythrocyte content of coproporphyrin, or the excretion of coproporphyrin. Observations on faecal urobilinogen are unconvincing (Maclagan, 1945).

Urinary Urobilinogen.—Though in studying air-raid and other civilian casualties quantitative examinations were not made, we were struck with the frequency with which we found considerable quantities of urobilinogen in the urine.

Nitrogen Excretion.—The negative nitrogen balance found in association with trauma is a striking and constant feature emphasized by many observers (Cuthbertson, 1935–6, 1944; Howard, 1945; Stevenson and Bensley, 1947). It occurs after injury or in post-operative conditions. It cannot be entirely prevented by giving high-protein diets, though it can be decreased in severity (Stevenson and Bensley, 1947). During the first ten days after injury nitrogen corresponding to more than 8% of the total body protein may be excreted (Himsworth, 1946–7). On a good diet with approximately 120 g. of protein and 3,000 total calories the average loss of nitrogen in a series of fracture cases was 225 g., or in terms of total protein 1,400 g. This negative balance lasted for an average of 35 days, reaching its maximum at about the sixth day. The recovery was slow. In a group of operative cases the same occurred, but the average loss was only 45 g. and the duration averaged nine days (Howard, 1945). The great difference from patient to patient is noticeable. The excretion is much less in those ill-nourished.

Blood Urea.—Immediately following injury there is a rise in blood urea, which falls to normal levels within the next few days (Vaughan, 1943; Taylor *et al.*, 1943).

Plasma Protein.—After injury, burns, or operative intervention there is often a fall in total plasma protein, but even in those cases in which the total plasma protein remains normal there is a fall in albumin, compensated by a rise in globulin and a rise in fibrinogen (Chanutin *et al.*, 1938; Taylor *et al.*, 1943; Elman, 1944; Croft and Peters, 1945; Vaughan *et al.*, 1946). This finding occurs after slight injury and is associated with only mild degrees of anaemia.

There are thus many striking points of similarity in the morphological and biochemical characteristics in the anaemia associated with sepsis, with sterile inflammatory abscesses produced experimentally, and with trauma. For instance, the anaemia is usually normochromic and normocytic, though it may become hypochromic and microcytic; there is no significant reticulocytosis; red-cell fragility is normal; and in all points on which evidence is available the striking changes noted in metabolism are similar (see Table).

Haemopoietic and Metabolic Findings in the Anaemia Associated with Sepsis and Trauma

	Sepsis	Trauma
Type of anaemia	Normochromic normocytic; hypochromic microcytic	Normochromic and normocytic
Reticulocytes	Raised after recovery from sepsis	Tend to rise with increasing Hb
Red-cell fragility	Normal	Normal (except some burns)
Bone marrow	Active	Unknown
Plasma proteins	Scanty data; low; albumin down?	Normal or low; albumin down; globulin up
Plasma bilirubin	Normal	Normal
Serum iron	Low	?
Serum copper	High	?
Erythrocyte coproporphyrin	,,	?
Urinary and faecal coproporphyrin	,,	?
Faecal urobilinogen ..	Normal	?
Urinary urobilinogen ..	May be high	May be high
Nitrogen excretion ..	Raised; negative balance	Raised; negative balance
Blood urea	Not known	Increased
Treatment	Transfusion; ? cobalt	Transfusion
Survival transfused cells ..	Normal	Normal?

Treatment

Iron and liver are in general ineffective in the treatment of either condition. There are certain cases of megalocytic hyperchromic anaemia in infants associated with sepsis

which are reported to respond to treatment with liver extract or folic acid. There are cases of hypochromic anaemia associated with both tuberculosis and "rheumatism" which respond to iron, but such cases are exceptional. Recent experimental results on animals suggest that cobalt is worthy of trial (Wintrobe *et al.*, 1947b). Cobalt has long been recognized as a haemopoietic factor in certain anaemias of sheep (Underwood and Filmer, 1935), and it has proved possible to produce experimental polycythemia in many experimental animals by administration of this metal. Wintrobe and his colleagues (1947b) found that rats which became anaemic after the formation of turpentine abscesses—a condition which appears in its metabolic findings to be comparable to infection—responded well to treatment with cobalt. The anaemia was cured though plasma protein and iron remained low. If cobalt was given simultaneously with the turpentine no anaemia developed. The significance of this finding is discussed later.

There is some evidence that a high-calorie high-protein diet may be of value in treating certain aspects of the disturbed biochemistry of trauma (Taylor *et al.*, 1943; Croft and Peters, 1945; Stevenson and Bensley, 1947). Howard (1945) and Stevenson and Bensley (1947) have shown that a high-protein high-calorie diet exerts some sparing action upon protein breakdown, but however much protein is given a negative balance cannot be prevented.

Transfusion of compatible whole blood is at present the only means of restoring haemoglobin and red-cell levels in both types of anaemia.

Aetiology of the Anaemia

What is the cause of this anaemia which is found clinically in association with either sepsis or trauma and which can be produced experimentally by sepsis, by trauma, and by sterile abscesses? It might be claimed that the anaemia of trauma was due to blood loss at the time of injury, but this alone is not sufficient to account for the fall of haemoglobin, though possibly it may be a contributory factor. For instance, the anaemia occurs after a slight injury such as fracture of the patella when there is no obvious blood loss, and it is progressive. Seaman and Ponder (1943) in a study of anaemia following operative intervention estimated the amount of blood lost by measuring the haemoglobin content of all swabs used and found that the fall in haemoglobin was greater than that accounted for by operative loss.

These three conditions have in common the breakdown of body tissues. It is tempting, therefore, to consider the possibility that the anaemia and accompanying metabolic disturbances are in some way dependent upon this common factor. Tissue breakdown is known to liberate many foreign substances, and one or more of these might exert a disturbing effect upon the erythron, causing aplasia, haemolysis, or dyserythropoiesis. On the other hand, the increased demand for tissue-building materials might result in a conditioned deficiency of haemopoietic factors and of other disturbances in metabolism.

It is justifiable to conclude that the anaemia is not dependent upon aplasia of the marrow, since such aplasia is not found, or upon haemolysis, since except in rare instances no destruction of red cells can be demonstrated. In these exceptional cases (Brown *et al.*, 1944; Mollison, 1947) the patient destroys not only his own red cells but also the transfused red cells from a healthy donor unduly fast. In the majority of cases there is no evidence of increased haemolysis. The serum bilirubin level is normal; there is no increased excretion of faecal urobilinogen (Vaughan and Saifi, 1939), which is present invariably in haemolytic anaemias; and there is no increased detectable destruction of transfused healthy red cells (Brown *et al.*, 1944; Mollison, 1947). The increased urinary excretion of coproporphyrin III already noted (Vaughan and Saifi, 1939) might on theoretical grounds be derived from red-cell breakdown, since only coproporphyrin III is incorporated in the haemoglobin molecule, coproporphyrin I being probably a side-product in the formation of coproporphyrin III. Coproporphyrin III, however, is believed not to be found under any circumstances as a breakdown product of haemoglobin (Watson and Larson, 1947). In known haemolytic anaemias coproporphyrin I is recorded in excess only in the urine (Watson, 1938). The amounts of coproporphyrin III found are also small and are not sufficient to account for the degree of anaemia. It would therefore appear more likely that a disturbance of synthesis at a later stage accounts for the increased excretion of coproporphyrin III (Dobriner *et al.*, 1937; Rimington, 1938).

Dyserythropoiesis, or faulty red-cell production, may be brought about by a variety of means, the commonest of which is a deficiency of haemopoietic factors. There clearly is no lack of the well-recognized haemopoietic factors, since they are ineffective in treatment. The response to cobalt of experimentally produced anaemia of sepsis in rats, mentioned above, suggests that a deficiency of cobalt may be of aetiological significance; further that there may be a conditioned deficiency of one or more amino-acids. Analysis of the facts concerning the metabolic disturbances present in this type of anaemia, details of which have already been given, points to a disturbance in the synthesis of haemoglobin which may prove to be due to such amino-acid deficiencies.

The stages in the synthesis of haemoglobin can be roughly shown as follows:

1. Precursor pyrrole substance → Copro I. / → Copro III.
2. Coproporphyrin III + iron ⟶ haematin.
3. Haematin + globin ⟶ haemoglobin.

Traces of both copper and cobalt may play a part in either stage 2 or 3.

In the anaemia under consideration there appears to be no failure in stage 1—the formation of coproporphyrin from a precursor—since there is an excess of coproporphyrin in the red cells (Cartwright *et al.*, 1946a). The evidence suggests rather that there is a failure in stage 2 (the junction of iron and coproporphyrin to form haematin) or in stage 3 (the junction of haematin and globulin).

What is known of stage 2? There is an excess of coproporphyrin III excreted in the urine, which may well be due to failure to complete the formation of haematin. There is a lack of iron in the circulating plasma, as shown by the persistent hypoferraemia which precedes the development of the anaemia (Cartwright *et al.*, 1946a). This hypoferraemia is *not* due to an actual lack of iron. Continuous infusion of iron sufficient to maintain a normal plasma iron is unable to bring about haemoglobin synthesis in the presence of infection (Greenberg *et al.*, 1947a). Wintrobe and his colleagues (1947a) by the use of radioactive iron found that iron administered intravenously to a pig with iron deficiency is readily taken up into the haemoglobin molecule, but in the presence of inflammation the uptake of iron to form haemoglobin is greatly decreased, though it returns rapidly to normal if the inflammatory process is checked. The iron is, however, taken up by the liver and spleen—the normal storage depots—in greatly increased quantities. No significant quantity is found in

the inflamed tissues (Greenberg *et al.*, 1947b). Iron is therefore not the limiting factor in the anaemia, though the diversion of iron from the plasma to the storage depots occurs. Wintrobe (1947b) suggested that this diversion is due to lack of cobalt, which they assume is essential to stage 2, the synthesis of haematin. In some way, therefore, not yet clear, the presence of infection necessitates the presence of abnormal amounts of cobalt for the synthesis of haematin. This is, however, extremely speculative. Cobalt might equally well be required in stage 3 of haemoglobin synthesis—namely, the junction of haematin and globin.

In dealing with the anaemia of trauma the hypothesis was advanced from a consideration of a different series of facts that possibly a failure of protein synthesis, presumably globulin, was responsible for this anaemia so affecting the third stage of haemoglobin synthesis (Vaughan *et al.*, 1946). We were impressed by the association of anaemia with a striking fall of albumin and rise of globulin in the plasma in patients without necessarily altering the total circulating protein. This change in relative protein levels is accompanied by greatly increased nitrogen excretion. How far it is related, if at all, to the remarkable changes in at least one proteolytic system of the blood —namely, that concerned with fibrinolysis—also occurring after injury is not yet clear (Macfarlane and Biggs, 1946; Biggs *et al.*, 1947). We must, however, include the anaemia of trauma and of sepsis among the many symptoms indicative of a wide disturbance of protein metabolism.

The cause of this disturbance is obscure. It may be due to disordered liver function following the action of tissue breakdown products—the presence of urobilinogen in the urine and the change in level of albumin and globulin so characteristic of this type of anaemia being also characteristic of liver disturbance. It may, however, be dependent upon a raiding of the protein stores of the body for some particular amino-acid required to restore injured tissues (Croft and Peters, 1945; Howard, 1945; Himsworth, 1946–7). In other words, after injury or infection the body suffers from a conditioned deficiency of some particular amino-acid. It is known, for instance, that both methionine (Glynn *et al.*, 1945) and lysine (Harris *et al.*, 1943) are essential for haemopoiesis. The effects on both the disturbed nitrogen balance and the anaemia of feeding these amino-acids (Croft and Peters, 1945) are at present conflicting.

Summary

It is suggested that the anaemia of trauma and sepsis is dependent upon a disturbance of haemoglobin synthesis affecting chiefly the globin element. This deficiency of globin is part of a wider disturbance of protein metabolism dependent upon the action of breakdown products liberated from the injured tissues or by the need of injured tissues for special amino-acids. Preliminary experimental observations suggest that possibly cobalt may be concerned at some point in this chain of events, but at present the importance of cobalt should not be exaggerated until its value in human cases has been confirmed.

From a practical point of view, apart from all theories as to the aetiology of the anaemia, it is important to treat patients with both trauma and sepsis on a high-protein diet, relieving the anaemia when severe with replacement therapy. It must be remembered, however, that it is not sufficient to provide a high-protein diet: the patient with sepsis or injury rarely feels hungry, and competent nursing care is essential in order to ensure that the necessary food is taken.

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The United Nations International Children's Emergency Fund held 14 meetings at Lake Success from Sept. 29 to Oct. 8, 1947. A survey has shown that at least 60 million children in Europe and the Far East need supplementary feeding and other help urgently. The organization now has sufficient funds to start some relief work, though more are still required. Shipments of dried milk, fats, and canned meats from the U.S.A. and Canada have already reached their European destinations.

THE EFFECT OF FOOD SUPPLEMENTS ON POORLY FED WORKERS IN BRUSSELS IN JANUARY, 1945

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In a previous paper (Bastenie, Macrae, Smart, and Yudkin, 1945) the diet of the families of a group of employees at a works in Brussels was described in detail. In order to determine whether the theoretical deficiencies which were found to exist had caused any marked deterioration the effects of the addition of a known supplement to the diet of these men have been investigated. This paper gives an account of the work.

Methods

Experimental Plan

The men, 18 in number, were divided into Groups A and B, containing 10 and 8 subjects respectively. During a preliminary control period of one week two 24-hour samples of urine were collected four and two days before the beginning of the experiment; throughout this period the men were given practice on the use of a dynamometer, and on the last day each man was weighed, the strength of his grip was measured, and an estimate was made of the degree of irritability of his biceps muscle to mechanical stimulation.

A highly nutritious food supplement (Table I) was given to Group A for ten days—designated the first experimental period. During this time Group B received no supplementary food and acted as a control. Four 24-hour samples of urine were collected from each member of both groups on the first, fourth, seventh and tenth days, and at the end of the period the weight, grip strength, and muscle irritability were again determined. At each examination care was taken that the subjects arrived in random order so that the observer did not know to which group they belonged.

For three weeks after the first experimental period none of the men in either group received any supplement. During this time, however, one man in Group B became ill and retired from the experiment, and two new men were allocated to this group. A second experimental period of ten days began at the end of the three-weeks interval. Measurements were made of weight, grip strength, and muscle irritability at the beginning and end of the second experimental period, but no samples of urine were collected. During these ten days the men in Group B received a supplement of food similar to but not identical with that given in the first experimental period (Table II), whereas those in Group A received no supplement and acted as controls. During both periods the supplement was consumed under supervision, and emphatic instructions were given to all the subjects that they must continue to eat the usual amount of food at home. Unfortunately supervision could not be exercised over their intake at home.

Measurement of Weight.—The men were weighed at approximately 10.30 a.m. on each occasion. Trousers, trunks, and stockings were worn, but the rest of the clothes were removed before weighing.

Estimation of Grip Strength.—The strength of the grip of the right hand (all subjects were right-handed) was determined on a grip dynamometer, with the right arm close to but not touching the side of the body, the elbow flexed to a right-angle, and the forearm fully supinated and parallel with the ground. Practice was allowed for several days, and when this appeared to be sufficient the estimations were made. Five readings were taken at intervals of 30 seconds. There was no evidence of tiring.

Estimation of Muscle Irritability.—In order to estimate the irritability of the biceps muscle to mechanical stimulation the elbow was flexed to approximately a right-angle, the forearm supported, and the subject told to relax his arm muscles as fully as possible. The centre of the biceps muscle belly was then gripped transversely and quickly nipped and rolled between the observer's thumb and forefinger, the operation being somewhat painful to the subject.

TABLE I.—*Daily Intake of Nutrients by Subjects Receiving Food Supplement During Period 1*

	Kilo-calories	Protein	Fat	Carbo-hydrate	Calcium	Iron	Vitamin A	Aneurin	Nicotinic Acid	Ribo-flavin
		(g.)	(g.)	(g.)	(mg.)	(mg.)	(i.u.)	(μg.)	(mg.)	(μg.)
Sweet egg block (58 g.)	334	17·1	22·3	15·5	203	3·5	1,055	37	0·4	627
Dehydrated cheese block (58 g.)	394	20·0	33·3	0	626	0·5	1,045	22	0·2	346
Milk block (25 g.)	136	4·9	8·0	11·0	180	0·1	298	48	0·2	250
Egg custard block (44 g.)	255	9·3	16·5	16·4	248	0·8	440	62	0·1	377
Cocoa block (25 g.)	129	5·0	7·0	11·5	3	0·8	205	39	0·2	196
Total from supplement	1,248	56·3	87·1	54·4	1,260	5·7	3,043	208	1·1	1,796
Estimated nutrition value of normal ration*	2,460	74·2	50·0	428·3	488	17·3	6,900	1,887	14·1	1,280
Estimated total intake	3,708	130·5	137·1	482·7	1,748	23·0	9,943	2,095	15·2	3,076

* Calculated from data given in previous publication (Bastenie *et al.*, 1945).

TABLE II.—*Daily Intake of Nutrients by Subjects Receiving Food Supplement During Period 2*

	Kilo-calories	Protein	Fat	Carbo-hydrate	Calcium	Iron	Vitamin A	Aneurin	Nicotinic Acid	Ribo-flavin
		(g.)	(g.)	(g.)	(mg.)	(mg.)	(i.u.)	(μg.)	(mg.)	(μg.)
Sweet egg block (58 g.)	334	17·1	22·3	15·5	203	3·5	1,055	37	0·4	627
Dehydrated cheese block (58 g.)	394	20·0	33·3	0	626	0·5	1,045	22	0·2	346
Milk block (50 g.)	272	9·8	16·0	22·0	360	0·2	596	96	0·3	501
Dehydrated beef (50 g.)	280	25·0	20·0	0	8	6·0	75	15	7·0	700
Total from supplement	1,280	71·9	91·6	37·5	1,197	10·2	2,771	170	7·9	2,174
Estimated nutrition value of normal ration*	2,460	74·2	50·0	428·3	488	17·3	6,900	1,887	14·1	1,280
Estimated total intake	3,740	146·1	141·6	465·8	1,685	27·5	9,671	2,057	22·0	3,454

* Calculated from data given in previous publication (Bastenie *et al.*, 1945).

In all subjects a raised ridge appeared in the region stimulated (see illustration). The time during which this ridge persisted was taken as an index of the irritability of the muscle. Five estimations, all on the right biceps muscle, were made on each occasion.

Photograph showing response of biceps muscle to mechanical stimulation.

Urinary Analysis.—The total volume of each of the 24-hour samples of urine was measured, and after acidification with 4 ml. of 2N. H_2SO_4 per 100 ml., was kept for analysis. The total nitrogen was estimated by the Kjeldahl method.

Food Supplements.—All subjects normally had a small midday meal at the works. During the periods of supplementation the experimental groups received highly nutritious dehydrated foods at midday in addition to their normal factory meal. The food supplements consisted almost entirely of milk, cheese, butter, and eggs; in the second experimental period beef was added. The nutritive value of the supplements given during the two periods is shown in Tables I and II, respectively. The dehydrated food, apart from the beef, was specially prepared by the Low Temperature Research Station, Cambridge. After dehydration the food was moulded into blocks each weighing about 50 g. and suitable for one helping (see de Rousset-Hall and Ingram, 1945). The advantages of this arrangement are many: there is no need to weigh the food before each meal, since it is only necessary to count a suitable number of blocks for reconstitution; there is an assured uniformity in the food given on different days, since the whole of the amount required for the experiment can be prepared in advance; the keeping qualities are excellent; the low weight and small bulk facilitate transport; and the uniformity of the experimental diet enables a great saving to be made in the analysis of foodstuffs.

Results

The average values of weight, grip, and muscle irritability of subjects are shown with the appropriate standard errors in Table III. It will be seen that, whereas there were no significant changes during the experimental periods in the control group, the group which received a supplement in both experimental periods did change, there being an increase in weight and grip and a decrease in the length of time for which local contraction of the biceps muscle persisted after mechanical stimulation.

The results obtained from these measurements may be expressed in a different way. Seventeen of the subjects were on different occasions in both the experimental and the control group. The different changes in these individuals when they acted in each capacity may therefore be compared. Table IV presents the results expressed in this way. It will be seen that the differences are not likely to be due to chance.

TABLE IV.—*Average Difference in Change in Weight, Grip, and Muscle Irritability of 17 Subjects When Acting as Control and When Receiving Supplementary Food*

Observation	I. Average Change While Acting as Controls	II. Average Change While Receiving Food Supplement	Difference in Changes (II–I)	S.E.	t	P
Weight (kg.) ..	+0·159	+1·271	+1·112	0·30	3·71	0·001
Grip (kg.) ..	+0·71	+3·18	+2·47	0·72	2·91	0·01
Muscle irritability (secs.)	−0·43	−1·76	−1·33	0·46	2·84	0·012

The average urinary nitrogen values for the first experimental period are shown in Table V. Two subjects have been excluded from Group A and one from Group B in calculating these averages, since the 24-hour specimens of urine presented by them were obviously false. Both the experimental and the control group showed a significant increase in urinary nitrogen excretion during the experimental period; although the increase was somewhat greater in the experimental group than in the control group, this might possibly have been due to chance.

TABLE V.—*Average Urinary Nitrogen Excretion on Certain Days During the Preliminary Period and Period 1*

Group	No. of Subjects	Before Experimental Period		Experimental Period			
		4th Day	2nd Day	1st Day	4th Day	7th Day	10th Day
		(g.)	(g.)	(g.)	(g.)	(g.)	(g.)
A (experimental)..	8	9·05	7·98	9·92	12·67	10·86	10·15
B (control) ..	7	8·23	10·74	10·97	10·97	10·87	10·57

Significance of differences of changes in Groups A and B: P = 0.053

Discussion

The workers under investigation obtained from their ordinary diet about 12 g. of nitrogen a day (Bastenie *et al.*, 1945). They excreted 9 g. in the urine, and, assuming the faecal excretion to be about 1.5 daily and that the same amount was lost in sweat (Cuthbertson, McCutcheon, and Munro, 1937), it would seem that they were in nitrogen equilibrium.

TABLE III.—*Effect of Food Supplements on Weight, Grip, and Muscle Irritability*

	Group	Period 1 (Group A: Food Supplement) (Group B: Control)				Period 2 (Group A: Control) (Group B: Food Supplement)			
		Mean at Beginning of Period	Mean at End of Period	Mean Change During Period	S.E. of Change	Mean at Beginning of Period	Mean at End of Period	Mean Change During Period	S.E. of Change
Weight (kg.)	A	63·1	64·4	1·3	0·33	64·1	64·3	0·2	0·25
	B	60·6	60·6	0·0	0·27	59·2*	60·5*	1·3	0·29
Grip (kg.)	A	44·8	47·8	3·0	1·11	47·3	48·1	0·8	0·70
	B	42·0	42·1	0·1	0·89	40·6*	44·0*	3·4	0·58
Muscle irritability (secs.)	A	4·65	2·67	−1·98	0·59	2·83	2·75	−0·08	0·25
	B	4·43	3·62	−0·81	0·51	3·87*	1·97*	−1·90	0·40

* One subject is not included in these figures, as he became ill during the second experimental period. Two new subjects are included in Group B for the same period.

While the men were acting as experimental subjects both the protein and the calorie intakes were increased to a theoretical level of about 130–145 g. of protein and 3,700 calories daily. It was of course impossible to guarantee that they ate as much at home as they did when not receiving the supplement, although they were asked to do so: the above values are maxima, and it is probable that the actual total intakes were somewhat lower.

Under the dietary conditions resulting from the consumption of the highly nutritious food supplement the daily urinary output of nitrogen rose from an average of 8.5 g. to 10.9 g., an increase of only 2.4 g.; the control Group B showed an increase from 9.5 g. to 10.8 g. In Group A, allowing for sweat and faecal loss, there must have been a total daily elimination of nitrogen per man of about 14 g. Since, provided the experimental subjects continued to eat the same foods at home when they were receiving the supplement, they had a daily nitrogen intake of about 21 g. per man, they must have retained about 7 g. of nitrogen per man daily. According to Rubner (1898), 1 g. of retained nitrogen gives 33 g. of tissue, mostly muscle. Thus in ten days the experimental subjects (Group A) should have gained 2.3 kg. In fact, they gained on the average 1.3 kg. This difference between the theoretical gain in weight and that which was actually found was not likely to be due to a loss in body fluids, since the 24-hour urinary volumes of subjects in Group A were never significantly different from those of the control subjects or from the volumes obtained during the preliminary period. It is improbable that either the experimental error or inaccuracies in Rubner's factor could account for all the discrepancy, and it seems most likely that the men did not in fact continue to eat the same amount as usual in their homes while receiving the experimental supplement. If we assume that Rubner's factor is reasonably accurate, they should have been receiving 100 g. of protein per man daily; in other words they must have consumed about 60% of the protein in their normal daily ration at home while receiving the food supplement. Cuthbertson *et al.* (1937) and Cuthbertson and Munro (1937) showed that subjects who were adequately fed retained over a period of eight days about 40% of the nitrogen of a milk or similarly constituted food supplement to their normal diet. In the present experiment the food supplement had a calorie-protein ratio similar to that of the supplement fed by Cuthbertson *et al.* The subjects in Group A excreted on the average an extra 2.4 g. of nitrogen per man daily while receiving the supplement and those in Group B (control) 1.3 g. during the same period. Thus it can be considered that the extra food received by Group A resulted in an increase in the daily urinary nitrogen excretion of about 1 g. per man, which on the basis of Cuthbertson's findings would have resulted from an extra intake of about 1.7 g. of nitrogen or about 10 g. of protein. They were, however, supposed to be receiving an extra 56 g. of protein per man daily, and, calculated theoretically on their gain in weight, using Rubner's factor, they received at least 25 g. extra per man daily. The nitrogen retention from the food supplement was thus more than twice as great as that found by Cuthbertson *et al.* (1937) and Cuthbertson and Munro (1937) for normally fed individuals. On these grounds it seems reasonable to conclude that the experimental subjects were in equilibrium on a plane of nitrogen metabolism lower than that encountered in subjects who are considered to be well fed.

There was a gain in grip strength and a decrease in muscle irritability to mechanical stimuli during the experimental period, and it is of interest to consider whether these factors can be related to the gain in weight or to the nitrogen retention. Consideration of the variations in weight, grip, and muscular irritability of each of the subjects in the present investigation revealed no significant correlation between change in weight and change in muscle irritability or change in grip strength, between nitrogen retention and change in muscle irritability or change in grip strength, or between change in muscle irritability and change in grip strength.

The abnormal irritability of muscles to mechanical stimuli was first described by Schiff (1858–9) and later investigated in greater detail by Curschmann (1905), Langley and Hashimoto (1918–19), and Denny-Brown and Pennybacker (1938). There is no very definite evidence that would indicate which biochemical lesion produces the hyperirritability; the most that can be said is that the phenomenon is increased by the conditions which interfere with normal muscle metabolism. There seems to be little doubt that the duration of the ridge in the Belgian workers (about 4.5 seconds) was abnormally long before they received the supplement (the mean duration in healthy R.A.F. subjects has been found to be 2.1 seconds), and that the supplementation did result in a decrease in the duration of the phenomenon. Initially also there was a strikingly significant inverse correlation between the strength of grip and the duration of the ridge of localized contraction following mechanical stimulation ($r = -0.77 \pm 0.092$).

The gain in grip strength which occurred during supplementation is also statistically significant, but unfortunately it is impossible to eliminate the psychological factor. There is likely to be a greater urge to try hard in a subject who is receiving extra food than in one who is living on short rations, and it is impossible to provide a "dummy" substitute for food in control subjects.

In conclusion it has been shown that the addition of supplementary foodstuffs to the defective diet of Belgian workers produced a considerable retention of nitrogen, a gain in weight, an increase in muscle strength, and a decrease in the irritability of muscle to mechanical stimuli. None of these changes, however, could be correlated when consideration was given to the changes occurring in each individual, nor was it possible to correlate any of the changes with the intake of any particular nutrient.

Summary

A group of workers in Brussels in 1945 who were receiving inadequate food were given a supplement to correct the deficiency, and the effects of this supplement on the weight, the grip, the urinary nitrogen excretion, and the irritability of muscle to nipping were measured; their values were compared with those given by a control group receiving no supplement.

The average weight increased significantly in the experimental groups during the ten days of supplementation, as did the strength of the grip; the duration of the local contraction of the biceps muscle which followed mechanical stimulation decreased significantly.

There was a marked retention of nitrogen during the period of supplementation; the large increase in protein nitrogen intake resulting from consumption of the supplement caused no pronounced increase in urinary nitrogen output.

The significance of myotatic irritability has been discussed and an inverse correlation was shown to exist between it and strength of grip.

No relationship could be demonstrated between individual changes in weight, nitrogen retention, grip, or muscle irritability.

We wish to thank Air Marshal Sir H. E. Whittingham, then Director-General of Medical Services, Royal Air Force, and Air Commodore T. McClurkin, Director of Hygiene, for their encouragement in this work; also the Director of the Electro-Gaz Works, Brussels, for permission to carry out the experiments, the social workers there for their invaluable help, and the subjects for so

willingly submitting to the experimental procedures. The determinations of urinary nitrogen were carried out by Flight-Sergeant G. A. Childs under very great difficulties, and we accord him our thanks and appreciation.

An essential for the carrying out of this experiment was the provision of food blocks, and we thank Dr. F. Kidd, the then Director of the Low Temperature Research Station, Cambridge, and Dr. M. Ingram and Mr. O. de Rousset-Hall of his staff, who supervised the manufacture of the blocks.

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VIABILITY OF STRANGULATED BOWEL

INTERIM REPORT OF SURGICAL SUBCOMMITTEE OF THE CLINICAL RESEARCH COMMITTEE OF THE PUBLIC HEALTH DEPARTMENT OF THE LONDON COUNTY COUNCIL*

This committee is at present organizing a study of the condition and fate of strangulated bowel, with the object of determining the correct operative procedure to be undertaken when confronted with recently strangulated bowel of doubtful viability, and the following preliminary conclusions have been drawn from an initial series of 336 operations.

The main statistical tables form appendices to this report. Where statements in the report require more detailed statistical illustrations reference is given (by a letter in parentheses) to the appropriate paragraph of the notes which follow the main tables.

Causes of Strangulation

In the whole series of cases—68 (20.2%) of which were fatal—the percentage distribution of causes of strangulation, which excluded intussusception, was as follows:

Hernia	Inguinal	31·8	91·9
	Femoral	46·9	
	Umbilical	4·5	
	Incisional	4·8	
	Obturator	1·2	
	Internal	2·7	
By band or adhesions			6·0
By volvulus			2·1

Ultimate Condition of Strangulated Bowel

The main object of the research—namely, the discovery of the features which give a clue to the ultimate fate of the strangulated bowel—may be approached in several ways. These may be briefly enumerated and commented on as follows:

1. If a patient dies of bowel gangrene after the strangulated bowel has merely been replaced in the abdomen when dealing with the strangulating agent, and this has been confirmed at necropsy, then the state of the bowel as noted at operation will give valuable information. The following three cases were reported in which this had occurred.

(i) Case A. B., aged 53. Necrotic purulent ulceration of the mucosa was noted at necropsy. Death occurred eight days after operative relief of strangulation. At the operation it was recorded that 400 cm. of the whole circumference of small bowel was involved, partly by strangulation, partly by secondary mesenteric thrombosis, and that it was plum-coloured with white constriction rings. After release of the strangulation it remained plum-coloured. The bowel was flabby but the surface was shiny, and muscular contractions of the wall were seen. Oxygenation of the patient caused no change in the colour of the bowel. Pulsation was present in the mesenteric vessels.

(ii) Case C. D., aged 34. Gangrene of bowel was discovered at necropsy. Death occurred seven days after operative release of the strangulation. At the operation 50 cm. of the whole circumference of small bowel was found to be plum-coloured but shiny, with normal tonus in the wall. Muscular contractions were seen. Pulsation was present in the mesenteric vessels.

(iii) Case E. F., aged 83. Gangrene of bowel was discovered at necropsy. Death occurred 13 days after operative release of the strangulation. At the operation 60 cm. of the whole circumference of small bowel was found to be plum-coloured but shiny, with oedema of the wall. Muscular contractions were seen. Pulsation was present in the mesenteric vessels.

In each of these cases 50 cm. or more of bowel was involved, but the state of the bowel as noted at operation was no worse than that in many cases which recovered. It seems a reasonable conclusion that risk of subsequent gangrene is greater where a long length of bowel is strangulated than where a short length is involved [Appendix II, (*a*)].

2. If a patient has a secondary operation for gangrene or damage of bowel after having had a simple "replacement," "untwist volvulus," or "divide constricting band," then the state of the bowel as noted at the original operation would give important data. No case was reported in which total gangrene of a segment of bowel occurred after replacing it in the peritoneal cavity, but in two cases stenosis of the bowel, with peritoneal adhesions, supervened, suggesting that some degree of mucosal and perhaps peritoneal damage had occurred and that the replaced bowel was on the borderline of viability:

(i) Case G. H., aged 51. Had replacement of bowel 30 hours after the onset of hernial strangulation. State at original operation: 12.5 cm. of small intestine was strangulated, black in colour, with grey constriction rings, improving in colour after release of strangulation. Surface of bowel was shiny, and wall flabby; muscular contractions in bowel wall were absent, and pulsation in mesenteric vessels was present. Thirty-six days later a second operation was necessary and 20 cm. of ileum was resected for adhesion and stenosis.

(ii) Case J. K., aged 44. Had replacement of 7 cm. of small intestine 9½ hours after onset of strangulation. At the operation the bowel was plum-coloured and oedematous, with a shiny surface which became mottled after release of strangulation. There were muscular contractions in the bowel wall and pulsation in the mesenteric vessels. Griping abdominal pains followed after discharge from hospital, and 28 days after the first operation a second operation was necessary and the previously strangulated bowel was seen to be stenosed, with peritoneal adhesions.

3. An examination was made for cases where bowel, coloured before or after release of strangulation black, grey, green, or yellow, was replaced. There were 20 patients with bowel of one of these colours, of whom 14 survived, giving a mortality of 30%. Among 216 "replacement" cases in which the bowel colour was normal the mortality was only 9.7% ($\chi^2 = 7.42$; $P = 0.006$).

*The members of the surgical subcommittee are: Mr. J. E. Piercy, New End Hospital; the late Mr. G. F. Stebbing, Lambeth Hospital; Mr. N. C. Tanner, St. James Hospital; Mr. J. R. M. Whigham, St. Andrew's Hospital; †Mr. C. R. Boland, Mile End Hospital; †Mr. F. D. Murphy, Fulham Hospital. The convener of the subcommittee was Mr. Tanner, who with Mr. Stebbing was mainly responsible for the report. The statistical analysis was made by the staff of the statistical section of the Public Health Department under the direction of Mr. B. Benjamin.

† Left the Council's service before the completion of the report.

4. Twenty-one cases were recorded in which muscular contractions in the bowel wall were absent and the bowel was replaced. Fifteen of these survived, giving a mortality of 28.6%, as compared with a mortality of only 8.6% in 197 "replacement" cases with contractions present ($\chi^2=7.95$; $P=0.005$).

5. If pulsation in mesenteric vessels is absent in the strangulated segment of bowel in "replacement" cases the outcome is important. There were two such cases with pulsation absent and neither survived. In 214 "replacement" cases with pulsation present the mortality was 10.7%. The probability of such a difference in mortality occurring by chance is 0.013.

Other Findings

Other items of interest have emerged which are not directly connected with the main research.

Records of the duration of strangulation at time of operation show that inguinal herniae tend to come to operation earlier than femoral herniae (*b*). While there is no significant difference in average age (*c*), the more obvious nature of the lesion, the more insistent pain in the sac (*d*), and the earlier onset of vomiting (*e*) in inguinal cases make this not unexpected. This shorter duration of strangulation probably accounts for the lower mortality in strangulated inguinal herniae. Taking all strangulations together it is found that the case mortality increases with the duration of strangulation, though a larger series of cases will be required before one can expect to find any significant difference between case mortality at 0–6 and 6–12 hours (*f*).

An analysis of the state of the bowel wall for all cases showed that 20.6% were normal, 52.8% were oedematous, 15.3% were flabby, 16.0% were clearly gangrenous, and 5.8% were perforated. The greater percentage of gangrenous and perforated bowel in the femoral herniae is associated with the increased delay before operation and probably also with the increased frequency of Richter herniae in femoral hernia (*g*):

	Inguinal Hernia	Femoral Hernia
Whole circumference involved	89·9%	77·2%
Part of circumference involved	10·1%	22·8%

Operative Procedure

The figures were investigated to see whether they would provide the surgeon with practical guidance to the best type of anastomosis to perform after resection. Of the cases having a resection, 20 were resections and lateral anastomosis, and 9 died—a mortality of 45%; 32 were resections and end-to-end anastomosis, and 18 died—a mortality of 56.3%.

The figures do not show any statistical difference between lateral anastomosis and end-to-end anastomosis ($\chi^2=0.62$; $P=0.43$), and we must await larger numbers before reliable conclusions can be drawn.

The subcommittee wishes to express its thanks to Sir Allen Daley, County Medical Officer of Health, for the encouragement of this research and to all those who have co-operated.

APPENDIX I

TABLE I.—*Preliminary Survey of Strangulated Bowel Research Cards, 1945–6*

	Hernia														No Hernia				Total		
	Inguinal			Femoral			Umbilical		Incisional		Obturator		Internal		Band		Volvulus				
	Rec.	D.	M.	Rec.	D.	M.	Rec.	D.	Rec.	D.	Rec.	D.	Rec.	D.	Rec.	D.	Rec.	D.	Rec.	D.	M.
			%			%															%
A. Total cases	95	12	11·2	124	34	21·5	9	6	12	4	2	2	6	3	18	2	2	5	268	68	20·2
Necropsy held	—	2	—	—	12	—	—	1	—	1	—	—	—	3	—	1	—	3	—	23	—
B. Duration of strangulation at time of operation:																					
0–6 hours	17	3	15·0	15	—	—	1	—	1	—	—	—	—	—	1	—	1	—	36	3	7·7
6–12 "	26	1	3·7	25	3	10·7	1	—	1	—	1	—	1	1	3	—	—	—	58	5	7·9
12–24 "	12	2	14·3	22	2	8·3	—	1	5	1	—	—	1	—	—	1	—	1	40	8	16·7
24–48 "	23	2	8·0	23	5	17·9	2	—	3	2	—	—	3	1	1	—	1	—	56	10	15·2
Over 48 "	13	4	23·5	29	22	43·1	4	4	2	1	—	2	—	1	7	1	—	4	55	39	41·5
Not stated	4	—	—	10	2	—	1	1	—	—	1	—	1	—	6	—	—	—	23	3	—
C. State of bowel wall—operation findings:																					
Normal	27	—	—	23	1	4·2	4	—	1	—	—	—	2	—	7	—	1	1	65	2	3·1
Oedema	58	5	7·9	67	13	16·3	3	3	8	2	2	1	3	1	6	—	—	—	147	25	14·5
Flabby	6	3	33·3	20	10	33·3	2	1	2	—	—	1	—	—	4	—	—	1	34	16	32·0
Gangrenous	7	5	41·7	11	8	42·1	2	4	2	1	—	—	1	2	3	2	1	3	27	25	48·1
Perforated	4	2	33·3	4	7	63·6	—	1	—	1	—	—	—	—	—	—	—	—	8	11	57·9
Not stated	1	—	—	7	1	—	—	—	—	1	—	—	—	—	—	—	—	—	8	2	—
D. Operative procedure:																					
Replacement	85	5	5·6	107	15	12·3	6	2	8	3	1	1	4	—	3	—	1	1	215	27	11·2
Oversew doubtful area	6	1	14·3	10	5	33·3	—	—	—	—	—	1	—	—	2	—	—	—	18	7	28·0
Oversew constriction ring	—	2	100·0	4	3	42·9	1	—	1	—	1	—	1	—	2	—	—	—	10	5	33·3
Resection (c)	6	5	45·5	8	13	61·9	2	3	4	—	—	—	—	2	4	1	1	3	25	27	51·9
Other operation	1	2	—	1	4	—	—	1	—	1	—	—	2	1	8	1	1	1	13	11	—
E. Post-operative course:			(a)			(a)															(a)
Uninterrupted recovery	80	—	74·8	108	—	68·4	8	—	9	—	2	—	3	—	12	—	2	—	224	—	66·7
Attacks of colic	—	—	—	2	2	2·5	—	—	—	—	—	—	2	—	3	—	—	—	7	2	2·7
Paralytic obstruction	3	—	2·8	3	5	5·1	1	—	1	—	—	—	1	2	1	—	—	3	10	10	6·0
Mechanical obstruction	1	—	0·9	—	2	1·3	—	1	—	—	—	—	—	—	—	—	—	—	1	3	1·2
Peritonitis	2	—	1·9	1	2	1·9	—	—	1	—	—	—	—	—	—	—	—	—	4	2	1·8
Secondary operation	3	—	2·8	—	3	1·9	—	1	—	—	—	—	—	—	—	—	—	—	3	4	2·1
No remarks	7	12	—	10	25	—	—	4	1	4	—	2	1	1	2	2	—	2	21	52	—
F. Cause of death:			(b)			(b)															(b)
Intestinal obstruction	—	6	50·0	—	20	58·9	—	3	—	2	—	1	—	1	—	2	—	2	—	37	54·4
Heart disease	—	2	16·7	—	2	5·9	—	2	—	—	—	1	—	—	—	—	—	1	—	8	11·8
Other circulatory disease	—	2	16·7	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	2	3·0
Diseases of respiratory system	—	1	8·3	—	6	17·6	—	—	—	1	—	—	—	1	—	—	—	—	—	9	13·2
Peritonitis	—	—	—	—	3	8·8	—	1	—	—	—	—	—	—	—	—	—	2	—	6	8·8
Shock	—	1	8·3	—	2	5·9	—	—	—	—	—	—	—	—	—	—	—	—	—	3	4·4
Other causes	—	—	—	—	1	2·9	—	—	—	1	—	—	—	1	—	—	—	—	—	3	4·4

(a) The percentages in the "died" column are those who experienced the conditions before death. Non-intestinal conditions (e.g., pneumonia) have been omitted. Percentages are based on total cases, thus giving rates of incidence. They add up to more than 100, since some cases had more than one condition.
(b) Percentage of deaths within the type of hernia considered.
(c) Includes resection with lateral anastomosis, end-to-end anastomosis, etc.
Rec. = Recovered. D. = Died. M. = Mortality.

GYNAECOLOGY

A Textbook of Gynaecology. By James Young, D.S.O., M.D., F.R.C.S.Ed., F.R.C.O.G. Seventh edition. (Pp. 471; 277 illustrations. 30s.) London: A. and C. Black. 1947.

It reflects great credit on Prof. Young that his textbook has been so widely read, and the seventh edition is admirable. The outstanding features are the superb photographs and photomicrographs—indeed, Fig. 119 is as good as any photograph of a wet specimen that we have seen published. The most striking characters of the book are simplicity of expression, clear classification, and sufficient reference to advanced work to whet the appetite of the intelligent student. The chapter on tuberculosis of the generative organs is exceptionally good.

We can criticize only details—for example, Figs. 31 to 35 are repeated as Figs. 96 to 100. The legends are not all satisfactory; Dierk's layer, though beautifully shown in an illustration, is not described. The author emphasizes Hamblen's work, yet his views have been severely criticized, and few workers claim such good results as he. Prof. Young might have said more about the use of androgens in gynaecological therapeutics. In describing the treatment of dysmenorrhoea he does not mention the use of stilboestrol to inhibit ovulation by giving the drug in the early part of the cycle—a method at least as good as giving oestrogens in the few days before menstruation starts. His account of the endocrines in relation to amenorrhoea is perhaps not adequate to modern needs, and he might have described more fully the adrenogenital syndrome, Cushing's syndrome, and panhypopituitarism. Prof. Young will be congratulated by all gynaecologists on this edition, and we can confidently recommend it to both students and general practitioners.

WILFRED SHAW.

HEALTH SERVICES

Municipal Health Services. By Norman Wilson, M.A., Dipl.P.A. (Pp. 178. 7s. 6d.) The New Town and County Hall Series. London: George Allen and Unwin, Ltd.

This small book of 178 pages is the third volume in "The New Town and County Hall Series." The author's aim is to discuss what are often called personal health services, and in Part I he describes the usual practice of local authorities with regard to maternity and child welfare, the health of the school child, tuberculosis and its treatment, the control of communicable diseases, the care of the mentally afflicted, general hospitals, poor law, and other services. A section of the book is devoted to "The Administrative Machinery," and he gives an account here of the powers and duties of the Ministries of Health and of Education and of the various types of local authorities.

Part III is entitled "A National Health Service" and is most disappointing. In the foreword the author states that the Government's proposals for a national health service had not been made public when the book was going through the press, but he quotes the Government's White Paper on the subject on p. 165, though giving no guidance to the new scheme. Although Part III begins with a section on "National Health Insurance" the author does not refer to the very important White Papers on social insurance (1944) or to the National Insurance Act, 1946, which make such radical changes that discussion of them should not be omitted from a book of this kind. Most of the information contained in this book has been recorded previously, and it is a pity that a volume in such a series is not more up to date.

J. M. MACKINTOSH.

The late Sir Frederick Hobday (1869–1939) was a master of the craft of surgery and of the art of eliciting his patient's trust; an innate tenderness flowed through his fingers. By his qualities and his book, *Hobday's Surgical Diseases of the Dog and Cat*, of which the first edition was published in 1900, Hobday raised the scope and standard of operative surgery on the smaller animals. The book's merits are in its descriptions and illustrations of the operative and after-care techniques, which, for the fifth edition (Baillière, Tindall and Cox, 1947; 21s.), have been brought up to date by Hobday's able disciple, Prof. James McCunn, of the Royal Veterinary College. The book's defect is its account of pathology, which needs a thorough revision.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

Brompton Hospital Reports. Vol. XV. 1946. (Pp. 192. 10s.) Aldershot: Research Department of the Hospital. 1946.

Includes articles on various aspects of chest disease.

Tuberkulose-Probleme im Kanton Zürich. Compiled by P. Press and M. Brunner. (Pp. 125. 10.80 Swiss francs.) Basle: S. Karger. 1947.

A monograph on tuberculosis in Zurich.

Detoxication Mechanisms. By R. Tecwyn Williams, Ph.D., D.Sc. (Pp. 288. 25s.) London: Chapman and Hall, Ltd. 1947.

An account of the metabolism of a number of organic substances used in medicine or industry.

La Psicosis Pelagrosa. By Dr. Bartolomé Llopis. (Pp. 206. No price.) Barcelona: Editorial Cientifico Médica. 1946.

An account of the mental changes that may occur in pellagra.

Chronic Structural Low Backache due to Low-back Structural Derangement. By R. A. Roberts, B.Sc., M.B., Ch.B., D.M.R.E. (Pp. 105. 45s.) London: H. K. Lewis. 1947.

Discusses structural vertebral defects causing backache, their diagnosis and treatment.

The Treasury of Human Inheritance. By Julia Bell, M.A., F.R.C.P. Vol. IV. Part V. Edited by L. S. Penrose, M.D. (Pp. 68. 21s.) Cambridge: University Press. 1947.

An analysis of pedigrees of cases of dystrophia myotonica and allied disorders.

Uncle Xavier. By D. H. Landels. (Pp. 192. 9s. 6d.) London: Hurst and Blackett.

A novel.

Pharmacology, Therapeutics, and Prescription Writing. By Walter Arthur Bastedo, Ph.G., M.D., F.A.C.P. 5th ed. (Pp. 840. 42s.) London and Philadelphia: W. B. Saunders Co. 1947.

This textbook for students and practitioners has been brought up to date and includes new material on BAL, folic acid, anticoagulants, and antibiotics.

Diseases of the Nose and Throat. By Charles J. Imperatori, M.D., F.A.C.S., and Herman J. Burman, M.D., F.A.C.S. 3rd ed. (Pp. 576. 72s.) London: J. B. Lippincott Co. 1947.

This edition includes new material on vitamin deficiencies, chemotherapy, and antibiotics.

Uterine Contractility in Pregnancy. By Douglas P. Murphy, M.D., F.A.C.S. (Pp. 134. 30s.) London: J. B. Lippincott Co. 1947.

A monograph based on uterine contractions in 1,200 pregnant women.

A Textbook of Clinical Neurology. By Israel S. Wechsler, M.D. 6th ed. (Pp. 829. 42s.) London and Philadelphia: W. B. Saunders Co. 1947.

A textbook for student and practitioner.

Selected Papers from the Royal Cancer Hospital (Free) and the Chester Beatty Research Institute. Vol. IV. (Pp. 381. 16s.) London: 1943–4.

Nicolaus Pol Doctor 1494. By Max H. Fisch. (Pp. 235. $7.50.) New York: Herbert Reichner. 1947.

Biographical and bibliographical details, with a translation of Pol's tract on guaiac.

Sir Frederick Banting. By Lloyd Stevenson, M.D. 2nd ed. (Pp. 446. 25s.) London: William Heinemann. 1947.

A biography, with many extracts from Banting's letters.

Bad Hofgastein. By O. E. Zimmermann. (Pp. 64. 4.50 Swiss francs.) Vienna: Springer-Verlag. 1947.

A guide to the spa for medical men. In German.

Terapia Endoarteriosa. By E. Malan and G. Enria. (Pp. 184. 900 lire.) Turin: Edizioni Minerva Medica S.A. 1947.

A monograph on treatment by intra-arterial injection of drugs.

Reviews

ENCEPHALOGRAPHY

Further Studies in Encephalography. By E. Graeme Robertson, M.D., F.R.C.P., F.R.A.C.P. (Pp. 104; 53 illustrations. £2 2s.) Melbourne and London: Macmillan and Co. 1946.

The author describes methods of ensuring—as far as it is possible—that adequate air replacement may be brought about in all the important channels traversed by the cerebrospinal fluid. Excellent radiographs with explanatory diagrams illustrate the text, and he interprets the pictures well. The theories that he propounds to account for the physical processes occurring in these investigations are interesting though unconvincing—as are the ingenious experiments that are supposed to confirm them. He records some noteworthy data, hitherto disregarded, among the observations on cerebrospinal-fluid pressures. Perhaps it will not be considered out of place here to warn the prospective encephalographist that the manometric pressure in the lumbar theca does not always correspond with the intracranial pressure. The author might have mentioned this, as well as the fact that in some cases even absence of papilloedema does not prove that the intracranial pressure is not raised.

On p. 49 is the comment: "It is reasonable to assume that the maintenance of a constant pressure will diminish the risk of investigation when a tumour is present." How justifiable the performance of encephalography may be in a case of suspected tumour is a matter for serious consideration. But the statement on p. 48 that, "when a patient is confused or drowsy and a cerebral tumour is suspected, the employment of an initial sedative is contraindicated," is not applicable, for few, if any, neurosurgeons would sanction this procedure in any patient in such a clinically deteriorated state. The author's work in encephalography is well known, and the present monograph reveals the high standard characteristic of it. The book should be studied by all who intend to employ this method of visualizing changes within the brain and in the associated cerebrospinal-fluid pathways.

HARVEY JACKSON.

INTRODUCTION TO SYPHILOLOGY

Essentials of Syphilology. By Rudolph H. Kampmeier, M.D. With chapters by Alvin E. Keller, M.D., and J. Cyril Peterson, M.D. Second edition. (Pp. 465; 87 illustrations. 25s.) Oxford: Blackwell Scientific Publications. 1946.

The second edition of Dr. Kampmeier's book differs from the first only in the addition of a short chapter on the intensive treatment of syphilis. The first edition was dated 1944, and the second 1946, but it is clear that the latter was actually compiled in 1944, and the author therefore does not discuss the more modern methods of penicillin therapy, the use of BAL in the treatment of toxic effects, the results of recent investigations into the causation of so-called post-arsphenamine jaundice, and other matters. However, such omissions call for no carping criticism, for the treatment of syphilis, in its early stages at any rate, is changing so constantly that any textbook is out of date as soon as it is published. These remarks should detract very little from a book which is exactly what it is meant to be—a short, concise account of the essentials of syphilology, intended not for the expert but for the student and the practitioner.

This account of syphilis presents it as a protean disease. The author stresses the necessity of careful anamnesis and clinical examination, emphasizes the value of dark-ground examination as the best guide to diagnosis in the early stages, warns against regarding a positive serum reaction as diagnostic in itself, and seeks to arouse practitioners' suspicion of the role syphilis may play in chronic disease. Moreover, he rightly points out that the practitioner has a duty beyond that of merely treating his patient. Syphilis control is even more important to the community than treatment of the individual patient, and every infected person must have contracted it from some other infected person, who should be sought and treated. Almost every chapter starts with a historical note which adds interest for the reader, as do the many summarized case reports which help to conjure up a mental picture and so aid the memory. Most of the illustrations are excellent; the type is clear and the format above reproach. In addition to the clinical sections, there are chapters on the sociological and epidemiological aspects by two collaborators. Mistakes appear to be rare, but 1.2 g. of arsenoxide per pound of body weight (p. 441) would infallibly land the patient in the post-mortem room.

In spite of these criticisms we confidently recommend this book to the student.

T. E. OSMOND.

RECENT PSYCHO-ANALYSIS

The Yearbook of Psycho-analysis. Volume 2, 1946. Managing Editor, Sandor Lorand. (Pp. 280. 30s.) London: Imago Publishing Co. 1947.

The aim of this series of *Yearbooks*, as set forth by the publishers, is to keep readers acquainted with modern research in the theory and practice of psycho-analysis; but, to judge from the contents, the editors have on this occasion failed to attain that end. The papers collected here, although very readable and in some respects timely, contain little that is new; the volume might indeed have been more appropriately entitled a "Pot-pourri from a Psycho-analytical Garden."

The most useful and illuminating article for the general practitioner is from the pen of Otto Fenichel, whose recent untimely death was a severe blow to psycho-analysis. He classifies the various forms of psychosomatic disorder—a subject that has provoked interest in recent years but given rise to many misconceptions, particularly over treatment. Fenichel was concerned to correct these misconceptions. Helene Deutsch, who has made a close study of women's disorders, contributes a useful article on problems of conception. Kubie and Margolin give an interesting account of the therapeutic role of drugs in the process of repression, dissociation, and synthesis. Their view is that drugs facilitate the recovery of the repressed material and render the personality less vulnerable to disturbance by exposure to it. They do not, however, indicate the many drawbacks to the use of drugs as an adjuvant to psycho-analysis.

English writers are well represented by articles from Berg on punishment, Ernest Jones on war conditions, and Flugel on problems of war, peace, and morals. Edward Glover contributes an essay in psycho-analytical biography, the subject being the late David Eder. The reprint of an essay by Freud on "Dostoevsky and Parricide" adds greatly to the attractions of the book.

EDWARD GLOVER.

METAL IN BONE

Metallschädigung bei Osteosynthesen. By R. Nicole. (Pp. 74; illustrated. 8 francs.) Basle: Benno Schwabe and Co. 1947.

The clinical and experimental researches described in this monograph on metallic hazards in osteosynthesis have led the author to conclusions generally accepted by orthopaedic surgeons to-day. With modern metals, in particular with vitallium and tantalum, any metallosis or toxic effect on the tissues is negligible, but it is a mistake to conclude that no risks remain. If the open reduction and fixation of a fracture are done faultily, so that intermittent or constant bending and shearing strains continue to act across the fracture interval, these will at the same time cause delayed callus formation with poor ossification—even pseudarthrosis—in the bone, loosening of screws, and bending or breaking of the plate, nail, or other elements in the metallic agent used.

The author makes the attractive comparison between the yielding of a plate under such circumstances and the fatigue fracture of a long bone, and indeed the two are very similar apart from the healing reactions in the latter. He postulates that the changes at the sites of stress in the metal are due to "tension corrosion," which differs from ordinary corrosion in that it is precisely restricted to the zones of fatigue in plates and screws, and he cites convincing clinical evidence that this is the case. With his central thesis there must be general agreement. The chief problem in the treatment of fractures and in osteosynthesis (a term which, incidentally, might be more often used in English) is to ensure that the mechanical arrangement of the fragments and the fracture site are physiologically correct until union has occurred.

DAVID LE VAY.

Medical Memoranda

Primary Carcinoma of the External Auditory Meatus

Primary carcinoma of the external auditory meatus is usually considered a rare disease. It is probably not so rare as is generally thought, but can be diagnosed only by biopsy. The early symptoms are aural discomfort, intense and continuous earache, and aural discharge. Local extension is rapid and glandular metastasis rare. Treatment in the early stage is by excision with the diathermy knife, combined in the later stage with radium beam therapy.

ILLUSTRATIVE CASES

Case 1.—Madame Le S., aged 46, was first seen on May 23, 1944, complaining of rapidly increasing deafness in the right ear, together with a slight purulent aural discharge and mild intermittent pain. Her symptoms were of only one month's duration. There was no history of otitis media. Examination revealed a small papillomatous mass deep in the meatus on the postero-superior wall and hiding the drum. The rest of the meatus was the seat of a chronic eczema. A slight fetid purulent discharge was noted. There was a slight diminution in hearing (transmission deafness). Vestibular apparatus was normal. Radiography was negative. A first biopsy gave a doubtful result, but a second, a fortnight later, revealed the presence of a squamous-celled epithelioma. A radical mastoidectomy was performed at the end of June, the whole of the skin of the posterior wall of the meatus being removed. Some inflammatory granulations were found in the middle ear but no neoplastic tissue. A radium needle was applied to the meatus on July 20, being left in position for five days. The patient was discharged on Aug. 12, 1944. The wound healed slowly by granulation. A small papillomatous lesion appeared on the anterior wall of the meatus in January, 1945, and a wide resection of the area was performed with a diathermy knife on Jan. 25. Histologically, the lesion was a squamous-celled epithelioma. In November, 1945, re-examination revealed no recurrence. Epithelization of the operation cavity was practically complete, but there was some radionecrosis of the tympanic bone, with the presence of a sequestrum (17 months after the radium application).

Case 2.—Madame C., aged 57, was admitted on Feb. 21, 1945, with a history that her left auditory meatus had become blocked by a white hard mass, which was removed by an otologist. She then developed meatal furuncles with intense pain in the ear. This pain had continued unremittingly until her admission. She had been examined as an out-patient in November, 1944, when a small ulcer of the meatus was seen. A fortnight later a sinus in the antero-superior wall was noted, from which pus exuded. Radiography was negative, as was the Wassermann reaction. In spite of local treatment no improvement took place in the symptoms, and some granulations appeared. A biopsy in February showed no signs of neoplasm, and local treatment with silver nitrate was continued. The patient was discharged on March 14, but suppuration and pain continued, and on June 13 a second biopsy revealed a squamous-celled epithelioma. The patient was readmitted on July 3, and a radical mastoidectomy was performed on the 6th. At operation the area of involvement was found to be much more extensive than otoscopy had suggested. The middle ear was filled by a neoplastic mass, and at the level of the roof of the attic the dura was laid bare and covered with very suspicious granulations. A few days later a course of 17 exposures to *x* rays was begun. A facial palsy appeared on the day after operation, but the pain had already disappeared. The patient still has some secretion from the operation cavity, but pain has not returned and the general condition is satisfactory.

Case 3.—Madame D., aged 49, was admitted for radical mastoidectomy on April 4, 1944. She had suffered from left aural discharge since childhood, without acute symptoms and without vertigo. Hearing on the left side had gradually diminished. She had recently noticed a vague discomfort in the ear. In February, 1944, a doctor had curetted some polyps in her left meatus. On examination she was found to have a left facial palsy and a meatus full of polyps. At operation on April 5, 1944, three large sequestra were removed from the antrum, laying bare the dura. There was osteitis of the wall of the facial canal, and a fungoid mass in the middle ear which could not be removed entirely. The patient was discharged on April 20. On May 15 she was admitted to the Hôpital Claude Bernard for erysipelas. She was transferred to the Hôpital Saint-Antoine on June 13, after having had a large abscess of a cervical gland. Her mastoid cavity was discharging freely, and her temperature was 103.3° F. (39.6° C.). Towards the end of June, after sulphonamide and vaccine therapy, her neck condition settled down and her temperature became normal, although the aural discharge persisted. After a flare-up of pyrexia on July 4, a biopsy of granulations in the meatus was performed and revealed a basal-celled epithelioma of the meatus. In spite of the introduction of radium needles and a subsequent course of *x*-ray therapy the patient had a relapse in March, 1945, with large, painful, fluctuant cervical and submaxillary glands and pyrexia, and she died of exhaustion on April 2, 1945.

PAUL DUBS, M.D.,
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A Case of Reversible Papilloedema due to Heart Failure

The following case is sufficiently unusual to make it worthy of record.

CASE REPORT

On Feb. 11, 1947, a man aged 61 was admitted to the Middlesex Hospital under our care with a diagnosis of coal-gas poisoning of two days' duration.

Examination revealed some justification for this view, as he was in a stuporous condition, extremely dyspnoeic, and very cyanosed, the hands and face being a deep blue-plum colour. The blood pressure was 145/95 mm. Hg. Further examination showed that he had marked venous engorgement, a palpable liver, and rales at the base of both lungs. Spectroscopic examination of his blood for abnormal absorption bands was negative. The haemoglobin was 116% and red cells numbered 5,800,000 per c.mm. It was therefore thought that this was a case of left- and right-sided heart failure, probably secondary to long-standing emphysema, bronchitis, and asthma, confirmation of the latter diagnoses being found in a previous history case-sheet giving details of treatment. The blood Wassermann reaction was negative. *X*-ray examination of the chest suggested that there was some pulmonary arteriosclerosis, the report being as follows: "Bronchitic and emphysematous changes. Prominence of the pulmonary artery, and in the lateral film it appears as dense as the aorta." The electrocardiogram showed right axis deviation.

Dr. D. Evan Bedford reported: "This patient has pulmonary hypertension with dilatation of the pulmonary artery and its branches, but no dilatation of the right ventricle visible by radioscopy, though there is probably some hypertrophy. There is no evidence in the film of fibrosis of lung. I should regard this as a case of emphysema in which the dyspnoea and cyanosis are mainly pulmonary in origin, not cardiac."

On routine examination of his eyes by one of us (J. B. H.) he was found to have pronounced papilloedema of both disks, the engorged veins being buried at their point of entry into the oedematous disk margin. Mr. A. V. Cooper Stevens confirmed these findings.

The patient was treated by venesection, "cardophylin," and digitalis, and in seven days all signs of heart failure, with the exception of some residual cyanosis of the extremities of the ears and fingers, had disappeared. The papilloedema gradually cleared, and when Mr. A. J. B. Goldsmith examined the fundi on Feb. 18 he reported: "Lens and vitreous clear, right and left. Both fundi show normal disks. The veins are markedly dilated and there is a little arteriosclerosis. There is no papilloedema."

The patient was discharged when better, the blood pressure having now fallen to 100/75 mm. Hg, but he unfortunately relapsed two months later and died in a further attack of cardiac failure in which the bilateral papilloedema was again present. No post-mortem examination was obtained.

Fishberg (1946) states that retinal haemorrhages and papilloedema may occur in right-sided failure due to pulmonary endarteritis. He records that "in one case an excellent response of the symptoms of right ventricular failure to digitalization was accompanied by complete clearing-up of the retinal haemorrhages and papilledema." The papilloedema is probably due to increased pressure in the venous cranial sinuses interfering with the filtration processes of the arachnoid villi, thus causing a rise in the pressure of the cerebrospinal fluid.

G. E. BEAUMONT, D.M., F.R.C.P.,
Physician to the Middlesex Hospital.
J. B. HEARN, M.B.,
Late House-physician to the Middlesex Hospital.

REFERENCE

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During the past six years over 500 tons of rose hips have been gathered in Scotland and manufactured into rose-hip syrup. Collectors in 1947 broke all previous records by gathering 144 tons of rose hips as against 112 tons in 1946 and 70 tons in 1945. Credit for this result is due to the Women's Voluntary Services, the Scottish Women's Rural Institutes, and the members of youth organizations and similar bodies.

Cystoscopy or the passage of bougies under uncombined thiopentone anaesthesia has in my experience often produced difficulties resolved by the addition of gas–oxygen, and the inference seems to be that the sphincters may also be involved in a spastic process during such anaesthesia, which in these cases is also best combined with inhalation agents.

It is curious that these by no means rare signs should occur with a drug often used to combat convulsions; and in this connexion the hypothesis of Williams and Sweet (1944) seems to be pertinent. In considering anaesthetic convulsions in general, they adduce the probability of a constitutional factor, and suggest that in every case a convulsion is "primarily due to an inborn but latent epileptic liability . . . factors which arise during anaesthesia being merely precipitants of the convulsions." Encephalograms of patients known to have had convulsions during anaesthesia show irregularities supporting this hypothesis. Given the existence of such a type of patient, it should not be too much to suppose that the sudden addition of any potent drug to the blood stream might well act as a "precipitant."

Summary

The convulsant possibilities of thiopentone might be suspected, having regard to its near relationship to other strongly convulsant drugs.

The most common phenomena associated with these properties of the drug are: (*a*) pronatory movements of the arm, sometimes progressing to (*b*) strong shuddering movements, and even to (*c*) clonic spasm of other muscles, mostly those associated with respiration, either normal or forced. Tonic spasm of the glottis or of the entire thoracic musculature is not uncommon, and the sphincters also sometimes seem to be involved in the process.

The time factor suggests that no other exciting agent than the drug itself is responsible for their occurrence; but there is a possibility that an inborn convulsive tendency in the patient may predispose to their appearance.

The onset of convulsive phenomena is favoured by absence of premedication, uncombined thiopentone anaesthesia, and repeated thiopentone anaesthesia.

Convulsive signs are most likely to occur in muscular highly trained males leading an open-air life.

They are easily prevented or ablated by omnopon–scopolamine premedication and early addition of gas–oxygen in 25% or other suitable mixture.

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GRANULOSA-CELL TUMOUR OF OVARY AS ACUTE ABDOMINAL EMERGENCY

BY

A. C. BREWER, F.R.C.S.

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Granulosa-cell tumours of the ovary are usually recognized as a result of their effect on the endometrium, but like other ovarian neoplasms they may give rise to acute surgical complications.

Case Report

A female patient aged 48 years was admitted to hospital complaining of acute abdominal pain of some twelve hours' duration. She had had no previous illnesses. For the last three months she said she had "not been feeling too well," and for the last twelve days she had had a diffuse lower-abdominal pain of a moderately severe nature. There had been no definite colic. During the past five days the pain had become localized in the right iliac fossa and had become more constant; it radiated into both loins. Lying in bed gave some relief. There had been no nausea and no vomiting. The bowels were regular and micturition normal. The menopause had occurred at the age of 44, and since that date the patient had had no vaginal bleeding. She had two children aged 18 and 12 years, and there had been one miscarriage thirteen months before the birth of her eldest child.

On examination the tongue was moist and had a white fur. The abdomen moved freely on respiration. Tenderness and muscle-guarding were present in the right iliac fossa. Vaginal examination revealed tenderness in both fornices, more marked on the right side. Pain was complained of on moving the cervix. The uterus was slightly increased in size. The condition was diagnosed as subacute appendicitis and operation advised.

A split-muscle incision was made. On opening the peritoneal cavity a considerable quantity of blood was evacuated. The exposure was considered to be unsatisfactory, so a further midline incision was made. About 1 pint (568 ml.) of blood and clot was evacuated from the pelvis. An ovarian neoplasm of moderate size was delivered, with blood clot extruding from two places in its capsule. Salpingo-oophorectomy was performed. The uterus and left ovary appeared to be normal. The patient had an uneventful convalescence.

Comment

The specimen consisted of a tumour measuring 9 × 7 × 5 cm. and having a thick whitish capsule, which in places showed a yellowish colour owing to the tissue deep to it. It had ruptured at two points, and blood clot was protruding from these ruptures.

A portion of Fallopian tube was adherent to the tumour at one point. The cut surface showed a uniform whiteness, but with areas of haemorrhage. On section a dense fibrous capsule resembling ovarian stroma was seen. No follicular elements were present, the tumour consisting of sheets of oval cells lying in a loose stroma rich in blood vessels. In places the cells had an acinar arrangement, but nowhere was there follicular formation. In a few areas there were vacuolated cells resembling Call-Exner bodies. There was a considerable degree of necrosis and interstitial haemorrhage. The appearances were those of a granulosa-cell tumour of the diffuse type.

The granulosa-cell tumour is one of the solid gonadal tumours of the ovary in which the cell elements resemble the granulosa cells of the normal Graafian follicle and has the ability to secrete an oestrogenic hormone. The tumours are almost invariably unilateral, maintain the shape of the ovary within a firm fibrous capsule, and vary in weight from a few grammes to several kilograms. The cut surface is a soft whitish pink with yellow zones, sometimes partly cystic, and occasionally there are areas of haemorrhage. Histologically three main types are recognized according to the degree of glandular-tissue differentiation—follicular, trabecular, and diffuse—and as a general rule the least differentiated tumours show the least hormonal activity. In those tumours with oestrogenic properties the uterine endometrium is of the hyperplastic, non-secretory type with cystic dilatation of the gland tubules. Tumours showing evidence of malignancy are extremely rare. The pathology has been well summarized by Harvey, Dawson, and Innes (1939).

Although haemorrhage into a granulosa-cell tumour of the ovary is common, I cannot find any previous report of a case associated with so severe a degree of haemoperitoneum. The fact that the haemorrhage had been severe enough to burst through a capsule so thick as the one in this case shows the severity of the bleeding. There was no evidence of torsion, a complication that has been reported.

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The quantitative and qualitative similarity of this phenomenon in both conditions suggests a common cause for the eosinopenia.

Adrenaline does not affect the eosinophilic content of bone marrow, and the latter accordingly is not the site of eosinophilic retention.

Eosinopenia due to sufficiently high insulin dosage indicates an ability of the organism to meet the emergency of hypoglycaemia by secreting adrenaline, and this, if repeated several times, might explain the improvement reported as being effected in allergic conditions through treatment with insulin hypoglycaemia.

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THE CONVULSIVE PROPERTIES OF THIOPENTONE

BY

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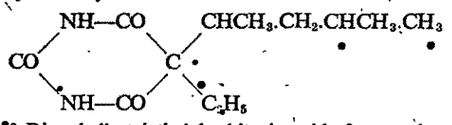
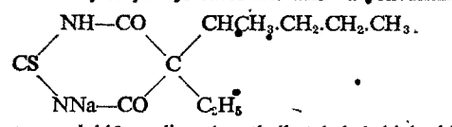
The case of frank convulsions under thiopentone anaesthesia recorded by Bodman and Farr (1947) is of interest inasmuch as such phenomena in slighter form must have been widely observed but hitherto seem to have excited little or no remark in the literature other than an occasional reference to "tremors."

Thiopentone is a drug not distantly related to others—e.g., 1-3-dimethylbutylethyl barbituric acid, and 2-1-methylcrotyl-2-methylallyl-, 1-methylbutyl-2-methylallyl-, and crotyl-*n*-butyl thiobarbituric acids—which have been



1:3-Dimethylbutylethyl barbituric acid—a convulsant.



Thiopentone soluble: sodium 1-methylbutylethyl thiobarbiturate.

described by Swanson and Fry (cited by Adams, 1944) as convulsants having no sedative properties.

The "tremors," or minor convulsive manifestations, of thiopentone occur shortly after consciousness is lost, and consist of: (1) Pronatory spasm of the arm, either spontaneous or readily elicited by pricking, or even simply by withdrawal of the syringe needle. (2) This in some cases progresses to strong clonic contractions of the pectoral and neighbouring muscles, a sign which might perhaps be descriptively named the "shudder reflex." (3) Other muscles, especially those of the glottis and diaphragm, may be involved. The phenomena are in all cases most strongly grouped round the musculature associated with respiration, normal or forced. (4) In some cases the spasm is of tonic rather than clonic nature. These are harder to recognize, since the predominant sign is a cessation of respiration, which more often occurs as indicating a *relaxation* of the musculature consequent on a momentary overdose. The spastic type of respiratory arrest may, however, be differentiated by its occurrence after a relatively small dose and almost invariably in the muscular type of patient, by observation of the rigidly held chest, and by the fact that it often disappears on rapidly administering a further small dose of the drug (though it is not recommended that this last feature be adopted as a routine test).

The following case is cited in illustration.

Case Report

A healthy gunner aged 33 was presented for anaesthesia following a fracture of both bones of the left leg, the date being Oct. 11. After "omnopon"–scopolamine he was given 1 g. of thiopentone intravenously, combined with gas–oxygen, for skeletal traction by a pin through the os calcis, and plaster. No untoward symptoms were noted. On Oct. 29 he was anaesthetized for replastering, again receiving omnopon–scopolamine and 1 g. of thiopentone. This time no inhalation was given, and a further injection of 0.5 g. of thiopentone was found necessary; otherwise there were no unusual features.

On Nov. 2 further manipulation was required and he was once more anaesthetized, on this occasion for some reason without any premedication. He was given 1.5 g. of thiopentone, and definite convulsive phenomena at once developed. Pronatory movements were followed by the "shudder reflex" described above, and this by convulsive inspiratory movements of the respiratory musculature. Respiration became shallow and rapid, the movements being about 60 a minute, and thus frequent enough to ensure adequate oxygenation. During the next five minutes the signs died away, and the patient thereafter progressed without further unusual signs.

On Nov. 5 another anaesthetic was required, and this time, being forewarned, he was given omnopon–scopolamine, and 0.5 g. of thiopentone was injected to see what the response would be. As soon as he became unconscious the same strong convulsive movements were once more observed, and no time was lost in administering gas–oxygen with ether. The administration was rendered difficult by laryngeal spasm, and not until a tracheal tube was passed was the anaesthesia free from difficulty. The patient thereafter progressed normally, and was not seen again.

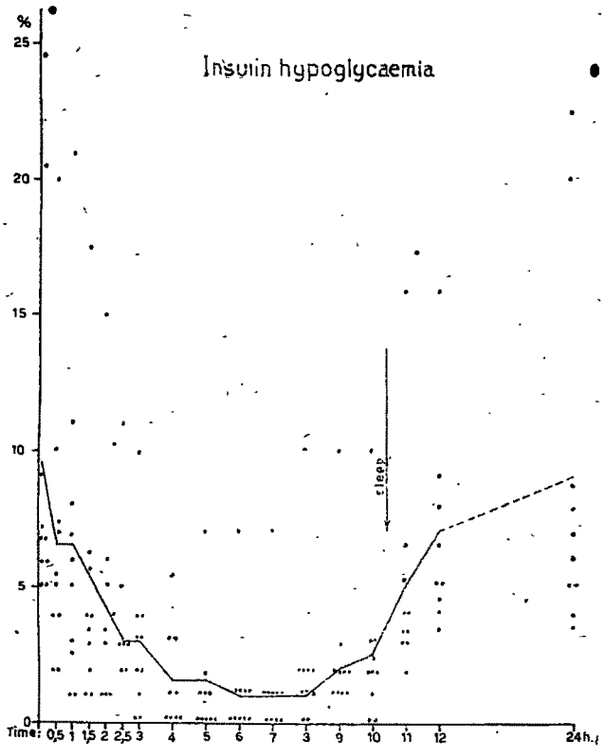
Comment

This case illustrates other features associated with these properties of thiopentone: (1) The untoward signs were not at first elicited, but developed and got worse after several administrations of the drug during a comparatively short period, presumably indicating a progressive intolerance which might possibly be seen in other cases were their apparent tolerance subjected to the same test. (2) Though premedication was not in itself sufficient to prevent the signs, its absence on one occasion was associated with their appearance in fully developed form. (3) The condition was readily controlled by combination with other anaesthetic agents. (4) The condition each time occurred so early that it must be regarded as produced by the direct effect of the drug on the nervous system, and not by ketosis, carbon dioxide excess, or any of the other metabolic factors which have in the past been suspected as causative in other forms of convulsions.

My records contain several cases in which so similar a procession of events occurred that it seems needless to recount them in detail. Army experience taught me to regard the occurrence of any degree of spastic pronation during administration as a warning that the subject was unsuitable for uncombined thiopentone anaesthesia, and to add gas–oxygen inhalation in 25% mixture at the earliest opportunity. I always found that two to five minutes of this would ablate all convulsive phenomena and produce an even anaesthesia which could be managed by ordinary methods. Laryngeal spasm and the "total" respiratory spasm described above can usually be ablated by a further dose of thiopentone, but the "shudder reflex" is never thus amenable without the addition of other agents.

discontinued, remained at the same level, and in the first hour of sleep climbed steeply, but not to its initial level. The pre-experimental value was attained next morning—that is, 24 hours after the start of adrenaline infusion.

Insulin hypoglycaemia (curve 2) was also accompanied by a disappearance of eosinophils from the peripheral blood. This diminution of cells, however, differed from the



eosinopenia of the adrenaline drip in that it began a little later, took place more slowly and steadily, and did not last so long. The curve of mean values then slowly climbed and became very steep in the first two hours of sleep before reaching its initial level next morning.

The quantitative and qualitative similarity of eosinopenia in adrenaline infusion and in insulin hypoglycaemia suggests a common cause for both, particularly in view of the proved fact of adrenaline production in insulin hypoglycaemia both in laboratory (Cannon *et al.*, 1924) and in clinical experiments (Heilbrun and Libert, 1939).

The sternal bone-marrow eosinophilia in seven cases at the time of lowest peripheral eosinophilia remained at its initial level during both adrenaline infusion and insulin hypoglycaemia. The conclusions from this are (*a*) that adrenaline in both cases did not exercise its depressive action on bone-marrow eosinophilia, and (*b*) that bone marrow cannot be the site where eosinophils accumulate during adrenaline infusion and insulin hypoglycaemia.

The question of eosinopenia during adrenaline infusion and insulin hypoglycaemia necessitates a consideration of the following problems: (1) the mode of adrenaline action in the eosinopenia due to exogenous and endogenous hyperadrenalinaemia; (2) the site of eosinophilic retention during that time; and (3) the relation between artificial eosinopenia and sleep.

(1) Adrenaline injected intravenously performs its action almost immediately by stimulating the sympathetic nervous system; but this action is very quickly exhausted, since adrenaline itself is rapidly metabolized by the tissues. The effect of sympathetic stimulation, however, might persist for a prolonged period, as, for example, neutrocytosis (Naegeli, 1931). One of these prolonged sympathetic effects might be eosinopenia, whereas eosinophilia belongs to the so-called vagal symptoms (Eppinger and Hess, 1909a, 1909b). The mechanism of this action of adrenaline cannot itself be explained on the ground of the results of the present observations.

(2) The values obtained for bone-marrow eosinophilia definitely exclude the retention there of both young and mature eosinophils. Bertelli *et al.* (1910) showed that eosinophilia due to intravenous or subcutaneous injection of 5 mg. of adrenaline into a dog produced in three and a half hours a fall in eosinophils from 6.9% with a total white blood count of 12,050 to 3.5% with a total of 20,050, the other white cells being more or less in the same proportion as before injection. A histological search for local eosinophilia after death showed that the liver was the only organ with an abnormally high value for eosinophils. Those authors therefore believe that liver tissue absorbs the surplus adrenaline, and by destroying it rapidly liberates itself from its eosinopenic action, while the eosinopenic influence is still evident in the other organs.

(3) Sleep is accompanied by symptoms of vagal preponderance, and the eosinopenia resulting from transitory artificial sympathetic overactivity accordingly loses its causative stimulus. The return to initial "vagal blood," however, needs a longer vagal action of sleep than two hours.

Continuation of endogenous hyperadrenalinaemia produced by repeated insulin hypoglycaemia might in a certain number of allergic cases result in a more permanent depression of the high eosinophilic count, and this in turn could be regarded as an indication of a return towards the normal. Clinical improvement of bronchial asthma and other allergic conditions (Godlowski, 1946) following the application of insulin hypoglycaemia and accompanied by diminishing eosinophilic count might be due to the increased production of endogenous adrenaline. The eosinopenia occurring during preliminary insulin test, on the other hand, may be regarded as a proof of an ability of the organism to respond by transitory adrenalinaemia. This might be taken as suggesting that the organism is likely to respond to such a treatment.

Summary

A study is made of 11 allergic and eosinophilic subjects to test the suggestion that the eosinopenia occurring during insulin hypoglycaemia is due to the outpouring of adrenaline.

It was found that peripheral blood eosinophilia decreases markedly and to the same extent during prolonged intravenous adrenaline infusion as during insulin hypoglycaemia.

Sternal Bone-marrow Eosinophilia in Adrenaline Infusion and Insulin Hypoglycaemia

No.	Before Treatment				During 8th Hour of Adrenaline Infusion				During 8th Hour of Insulin Hypoglycaemia			
	Young Forms %	Mature Forms %	Total %	Periph. Eo-philia %	Young Forms %	Mature Forms %	Total %	Periph. Eo-philia %	Young Forms %	Mature Forms %	Total %	Periph. Eo-philia %
1	3	2	5	8·5	1·6	6	7·6	0	2·6	5·6	8·2	0
2	7·5	5	12·5	6	2	2·3	4·3	2	2·2	4	6·2	1
3*	8·5	19	27·5	44	9·2	23	32·2	20	11·3	27	38·3	45
4	2·5	6	8·5	7	3	4·5	7·5	0	2·3	5·3	7·6	1
5	4·3	6·3	10·6	6	2·3	5·1	7·4	0	3	3	6	2
6	3·5	6	9·5	9	2·1	5	7·1	1	1·5	2	3·5	1
7	2	7	9	7	4·5	7	11·5	0	3·6	5	8·6	1
	Average:		11·8	12·5			11·0	3·3			11·2	7·3

* A case of allergic dermatitis not included in cases described in text.

(g) Gangrene and Perforation in Femoral Herniae

Type of Hernia	Cases*	Gangrenous and/or Perforated Bowel Wall	
		No.	%
Inguinal	106	13	12·2
Femoral	150	24	16·0

* In which the state of the bowel wall was recorded.

This difference is not quite large enough to be statistically significant ($\chi^2=0.70$; $P=0.40$).

The higher incidence of Richter herniae in femoral hernia recorded in the text of the report (22.8% against 10.1% in inguinal hernia, a difference of 12.7 ± 4.6) is statistically significant.

EOSINOPENIA CAUSED BY ADRENALINE INFUSION AND BY INSULIN HYPOGLYCAEMIA

BY

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Insulin hypoglycaemia was found to have a beneficial effect in the treatment of all except one of a series of cases of allergic bronchial asthma (Godlowski, 1946). The cases which responded were characterized by a fall in the eosinophil count of the blood, whereas no such fall was observed in the remaining cases with early recurrence of symptoms. The return of the blood eosinophils to normal in these responding cases took place in an oscillating fashion. Such an oscillatory return of the blood eosinophils has also been observed by Spangler (1925) during non-specific desensitization of bronchial asthma cases.

The blood eosinophils in the present allergic cases were observed to vary considerably in the same subject during the 24 hours in which hypoglycaemia was induced, and regularly to such an extent as to exclude any error in calculation. The significance of this phenomenon is made clear by two sets of observations. First, Bertelli *et al.* (1910) produced a considerable eosinopenia in dogs by hypodermic or intravenous injections of adrenaline. Secondly, Cannon *et al.* (1924) experimentally, and Heilbrun and Libert (1939) clinically, found that insulin hypoglycaemia is characterized by a liberation of adrenaline in an amount sufficient to meet the emergency of the rapidly falling blood sugar. These observations suggest that the eosinopenia occurring during insulin hypoglycaemia is due to an outpouring of adrenaline. Such a theory was accordingly put to the test by studying 11 allergic and eosinophilic subjects (9 bronchial asthma, 1 urticaria, and 1 dermatitis) along the following lines.

Method

The preliminary examinations of the allergic cases consisted in *x*-ray examination of the chest and sinuses, exploration of the upper part of the respiratory tract, urine analysis, investigation of the sputum for eosinophilia and of stools for parasitic infestation and eosinophils, a test meal, the B.S.R., and white cell and differential counts.

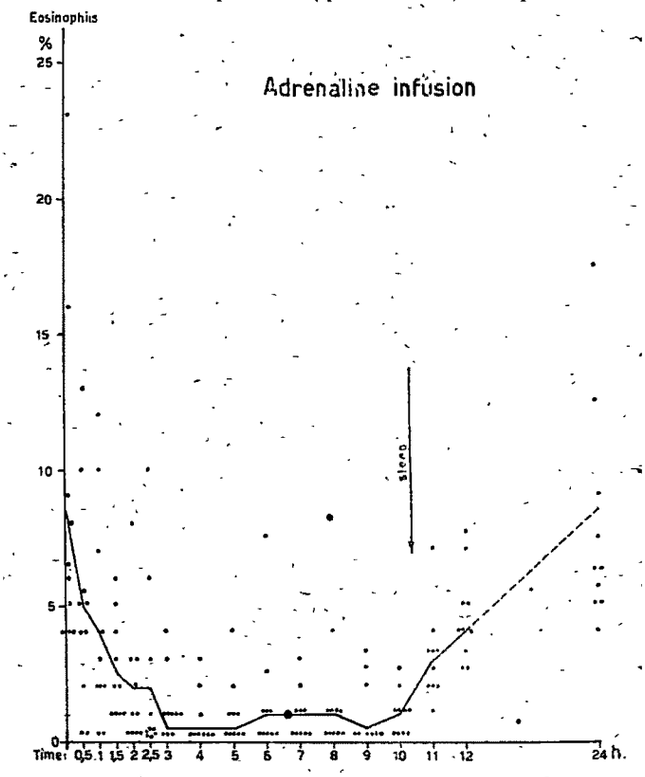
The non-fasting blood eosinophils were estimated before starting the *adrenaline infusion*. The infusion consisted in the intravenous administration of 8 to 10 ml. of 0.1% adrenaline solution (i.e., 8 to 10 mg. of adrenaline) dissolved in 200 to 300 ml. of normal saline at the rate of 6 to 12 drops a minute over a period of 8 to 12 hours. Severe palpitation, headache, or other toxic symptoms of hyperadrenalinaemia were relieved by slowing or stopping the drip for a short time and then gradually increasing up to the limit of tolerance. The blood pressure rose in the first hour and then fell slowly almost to its initial level during the second hour of the drip. A few minutes after the drip started a feeling of relief resulted in severe cases. The eosinophils were estimated half-hourly during the first three hours (by the method used during insulin hypoglycaemia), then hourly until the patient fell asleep; the eosinophil count during the next two hours was taken twice by squeezing the already pricked finger without wakening him.

Two or three days later the *insulin test* was made (after 12 hours' fast) by injecting 100 units of soluble insulin subcutaneously, and the same examinations were carried out as during the adrenaline infusion. The patients were not kept in a state of hypoglycaemia longer than three hours, and hypoglycaemia was stopped by oral or intravenous introduction of glucose (Godlowski, 1946). Counting of the eosinophils and other white cells was done according to the method described by Randolph (1944) or by estimating the differential count of a blood film stained by the May–Grünwald–Giemsa technique.

The first six cases of bronchial asthma and one case of allergic dermatitis were subjected to sternal puncture before and during the eighth hour of adrenaline drip and insulin hypoglycaemia, and the bone marrow obtained thereby was examined for eosinophils in the same way as the peripheral blood.

Results and Discussion

All the cases examined during adrenaline infusion (curve 1) showed a marked eosinopenia amounting in most instances to a complete disappearance of eosinophils from



the blood. Such a disappearance took place within half an hour in two cases, whereas the remainder required a period of several hours to reach the zero level or near it. The lowest level was in the more prolonged cases reached during the fourth hour of adrenaline infusion and oscillated around this for the next six hours. Thereafter the curve of mean values, although the adrenaline infusion was

TABLE II

Duration of Strangulation at Time of Operation (Hours)	Operative Procedure									
	Replacement Only		Oversew Doubtful Area		Oversew Constriction Ring		Resection†		Other Operations‡	
	No.	%*	No.	%	No.	%	No.	%	No.	%
0– 6	36	92·3	2	5·1	—	—	2	5·1	1	2·6
6–12	57	90·5	4	6·3	—	—	3	4·8	1	1·6
12–24	42	87·5	1	2·1	1	2·1	6	12·5	2	4·2
24–48	46	69·7	8	12·1	3	4·5	12	18·2	3	4·5
Over 48	44	46·8	8	8·5	7	7·4	29	30·9	11	11·7
Not stated ..	17	65·4	2	7·7	4	15·4	—	—	6	23·1
Total ..	242	71·6	25	7·4	15	4·4	52	15·4	24	7·1

* Percentages are based on total cases within each duration. They add to more than 100 because some cases had more than one operation.
† Includes resection with lateral anastomosis, end-to-end anastomosis, etc.
‡ Includes untwist volvulus, divide band, free adhesions, etc.

TABLE III

Duration of Strangulation at Time of Operation (Hours)	Operative Procedure								
	Replacement, etc.*			Oversew†			Resection‡		
	Cases§	Dths.	Mort. %	Cases§	Dths.	Mort. %	Cases§	Dths.	Mort. %
0– 6 ..	35	3	8·6	2	—	—	2	—	—
6–12 ..	56	4	7·1	4	—	—	3	1	33·3
12–24 ..	39	4	10·3	2	1	50·0	6	2	33·3
24–48 ..	46	4	8·7	8	1	12·5	12	5	41·7
Over 48 ..	45	11	24·4	15	6	40·0	29	19	65·5

* Includes replacement, divide band, untwist volvulus, etc.
† Includes oversew doubtful area and oversew constriction ring.
‡ Includes resection with lateral anastomosis, end-to-end anastomosis, etc.
§ In which duration of strangulation was stated.

APPENDIX II

Statistical Notes

(a) Length of Bowel Strangulated (Replacement, etc., Cases Only)*

Length of Bowel Strangulated	Cases†	Deaths	Mortality (%)
1– 3 cm.	20	2	10·0
3– 5 „	34	4	11·8
5– 7 „	47	7	14·9
7– 10 „	26	—	—
10– 15 „	35	2	5·7
15– 25 „	34	5	14·7
25– 35 „	14	1	7·1
35– 50 „	6	2	33·3
50–100 „	6	3	50·0
Over 100 cm.	1	1	100·0
Total	223	27	12·1

* Includes replacement, untwist volvulus, divide band, etc.
† In which length of bowel strangulated was stated.

None of the above differences in mortality is statistically significant individually. On grouping, however, the following comparison can be made :

Length of Bowel Strangulated	Cases	Deaths	Mortality (%)
Under 15 cm.	162	15	9·3
Over 15 „	61	12	19·7

This difference is statistically significant ($\chi^2 = 4{\cdot}50$; $P = 0{\cdot}034$).

(b) Duration of Strangulation

Duration (Hours)	Type of Hernia			
	Inguinal		Femoral	
	No.	%	No.	%
0– 6 ..	20	19·4	15	10·3
6–12 ..	27	26·2	28	19·2
12–24 ..	14	13·6	24	16·6
24–48 ..	25	24·3	28	19·3
Over 48 ..	17	16·5	51	35·2
Total ..	103	100·0	146	100·0

Of strangulated inguinal herniae 59.2% came to operation within 24 hours, as compared with 46.1% of strangulated femoral herniae. This difference is statistically significant ($\chi^2 = 4.30$; $P = 0.038$).

(c) Age of Patient

Type of Hernia	Mean Age	Standard Error
Inguinal	63·8 years	1·3
Femoral	63·2 „	1·0

The difference is clearly not statistically significant.

(d) Pain in Sac

Type of Hernia	Cases with Pain Recorded	Cases with Duration of Pain less than 48 Hours at Time of Operation	
		No.	%
Inguinal ..	71	57	80·3
Femoral ..	100	68	68·0

This difference is hardly statistically significant ($\chi^2 = 3.19$; $P = 0.074$) but does suggest that the duration of pain is strongly correlated with the duration of strangulation, and this is consistent with the hypothesis that the more insistent pain in inguinal cases is a factor in bringing them to operation earlier than the femoral cases.

(e) Duration of Vomiting

Much the same argument applies to the experience of onset of vomiting. The coefficient of correlation between duration of strangulation and duration of vomiting is +0.95 for both inguinal and femoral herniae. Alternatively we may approach the problem in this way: if vomiting occurs earlier after strangulation in inguinal herniae then we should expect to find fewer long-duration strangulations associated with short-duration vomiting. This is true, as the following figures show.

Type of Hernia	Cases*	Cases with Strangulation longer than 24 Hours but Duration of Vomiting less than 24 Hours	
		No.	%
Inguinal	73	6	8·2
Femoral	117	14	12·0

* In which both durations were recorded.

This difference is not by itself statistically significant ($\chi^2 = 0.67$; $P = 0.41$), but in view of the alternative evidence of correlation might be accepted.

(f) Case Mortality and Duration of Strangulation

It will be clear from Section B of Table I that there is a progressive rise in mortality as the duration of strangulation increases. The slight reduction after 24 hours (from 16.7 to 15.2) is probably only a sampling irregularity and is not statistically significant.

With regard to Table III, owing to the reduction in the number of cases involved in the classifications of this table the differences in mortality reach statistical significance only when a broad comparison is made between strangulation of less than 48 hours and strangulation of longer duration than 48 hours—viz. :

Duration of Strangulation (Hours)	Operative Procedure								
	Replacement, etc.*			Oversew†			Resection‡		
	Cases§	Dths.	Mort. %	Cases§	Dths.	Mort. %	Cases§	Dths.	Mort. %
Under 48 ..	176	15	8·5	16	2	12·5	23	8	34·8
Over 48 ..	45	11	24·4	15	6	40·0	29	19	65·5

* Includes replacement, untwist volvulus, divide band, etc.
† Includes oversew doubtful area and oversew constriction ring.
‡ Includes resection with lateral anastomosis, end-to-end anastomosis, etc.
§ In which duration of strangulation was stated.

The increase in mortality with longer duration of strangulation is significant for both replacements ($\chi^2 = 8.76$; $P = 0.003$) and for resections ($\chi^2 = 4.85$; $P = 0.028$). The difference in mortality for the small number of oversew cases is not by itself statistically significant, the exact probability being 0.09.

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ARE WE CONVINCED?

The medical profession has lost little time in making an effective rejoinder to Mr. Bevan's reply to the Negotiating Committee. Our correspondence columns show that doctors are now fully alive to the implications of the National Health Service Act and becoming firm in their resolve to say "No" to a Minister whose method of negotiation is to alternate blandishments with threats in his successful attempt to avoid discussing those matters which the Negotiating Committee consider to be fundamental points of disagreement between the medical profession and the Ministry of Health. The Committee which met the Minister on Dec. 2 and 3 were certainly treated to a brilliant exhibition of dialectical skill. But this was not really the purpose of the meeting with the Minister. The purpose was negotiation, and Mr. Bevan once more proved that his interpretation of the meaning of this word differs from that which is usually accepted.

The expression of opinion in our correspondence columns against service under the Act in its present form received resounding support in two large and important meetings held last week in Wimbledon and B.M.A. House, addressed respectively by Dr. H. Guy Dain, the Chairman of Council, and Dr. Charles Hill, the Secretary of the B.M.A. Loud applause greeted Dr. Dain when he said, "We are not prepared to be in a salaried position in which the interference of a State department may come between us and the interests of our patients. With a salary even as small as £300 a year we shall begin to experience control." After a thorough and objective analysis of the Minister's reply Dr. Hill asked, "What does it all add up to?" And he went on:

> "There is one criterion by which as a profession we can measure these matters. It is not, I hope, a financial criterion. It is whether these proposals do or do not bring us closer to a whole-time salaried service of the State. That is the crucial issue, and on that issue we can command the support of the overwhelming majority of our profession."

The meeting was the largest that had ever assembled in B.M.A. House, and it listened with close attention to Dr. Hill's reasoned exposition of the case for over an hour. The loud applause which greeted the statement quoted was, therefore, all the more impressive. The Act, Dr. Hill observed, was the first step to the fulfilment of the Socialist programme for a whole-time State Medical Service. The general practitioner in the proposed new Service will be unable to begin work without the permission of a Committee in Whitehall; he will be paid in part by salary, and at any time the Minister by regulation can decree that payment shall be wholly by salary; he will no longer own the goodwill of his practice and will, therefore, lose the plot of ground which in a free society enables him to preserve his freedom as an individual. The consultant and the specialist will have to work in hospitals owned by the Minister of Health, who can under the terms and definitions of the Act at any time take over any institution in which sick persons are being treated. The sign-posts all point in one direction—control of the medical profession by the State. To make quite sure that the reins of control shall be firmly in one pair of hands the Minister insists upon the appointment by him of the Chairmen of various administrative committees down to the Local Executive Council. On Monday this week he sent a letter to the Secretary of the Negotiating Committee asking the B.M.A. to propose names for the members of the Medical Practices Committee. This letter is another indication that the Minister has banged the door in the face of the profession and is determined to go on with his Act in spite of the fact that he has failed to secure what he has stated to be indispensable—namely, the co-operation of the doctors of this country. And it is for the doctors of this country to decide whether a medical service begun in this way and initiated by a Minister who has shown himself contemptuously indifferent to reasoned arguments shall come into operation in July this year.

One thing is certain, and that is that the Act cannot come into operation if the large majority of medical men and women stand firmly outside the new Service on July 5. The size of this majority will depend upon the strength of the conviction held that a State Medical Service will be harmful to medicine and therefore to the public which the profession of medicine serves. If the profession is so convinced, then it should need but a modicum of courage to hold fast to that conviction. The medical profession is in a strong position and should be more conscious of that fact. Its services are indispensable to the welfare of the community and will, of course, never be withheld. But it can determine the conditions of its work and insist upon maintaining a framework of liberty and freedom which at the same time includes order. That framework of freedom and liberty is not present in the National Health Service Act of 1946, and the Minister has refused to modify its structure. Some medical men have argued that to oppose the Act is to oppose the will of the people as expressed through Parliament. But as Dr. Hill put it in his speech last week: "The Minister has told us of our right as individuals and our right collectively to determine our attitude to this Service. We are within our rights in saying 'No.'"

Mr. Bevan has refused the right of practitioners to appeal to the Courts against the decision of the Minister to remove him from the Public Service—a Public Service which is to include every man, woman, and child in the country. This right of appeal has been included in the Health Service Bill of Northern Ireland. This is "the new despotism"—the execution of justice by the head of an administrative department of State. He refuses to amend Section 35 in spite of the fact that no one knows exactly what it means. He calmly tells the profession that if it does not mean what he thinks it means he will, after the matter has been submitted to the Courts in the future by individual practitioners, amend it in order to make it mean what he thinks

it means. This attitude borders on the irresponsible. Until this Section is amended, as in due course it will have to be, no practitioner in partnership will know how he stands if he enters the Service on the appointed day. The Minister refuses to listen to the Negotiating Committee's objection to the basic salary. It should be clear that no objection has been raised to the use of a salary to attract men into difficult or undesirable areas or even to help the young man entering practice for the first time. During the debate on the third reading of the National Health Service Bill in the House of Lords,[1] the Government was defeated on the basic salary issue by an amendment proposed by Lord Llewellin that remuneration should be by capitation. The real reason for basic salary was given away by the Lord Chancellor when he said: "No one could have been, as I have been, Minister of National Insurance, without realizing that the success or failure of all our schemes depends in a very large measure on our getting satisfactory certification." As we said then, the reason for the basic salary is to control certification. The reason for it is distrust of the doctor. Because some doctors have been lax in certification—and the Lord Chancellor admitted that he had only come across a few instances—all doctors are to be treated as if they were offenders. The Lord Chancellor gave another warning which it is well to take to heart: "If you had abolished this per capita payment altogether and made it a straight out-and-out salary, of course that temptation would have gone." Once the National Health Service Act in its present form is in operation the Lord Chancellor's "out-and-out salary" will be introduced to remove any temptation medical men may have to act as free and responsible individuals.

The analysis made by the Negotiating Committee and again by Dr. Hill last week shows how unsubstantial is the Minister's case for abolishing sale and purchase of practices, for the payment of a basic salary, and for the distribution of doctors through the machinery of the Local Executive Councils and the Medical Practices Committee. The Minister admits that there will be very few areas in which there will be difficulty in providing doctors. Why, therefore, does he set up this expensive and cumbersome machinery for distributing doctors? One reason he has given for abolishing sale and purchase of practices is to secure the even distribution of medical men throughout the country. But if there are so few areas which offer difficulty why again make such expensive and sweeping proposals to deal with such a small problem? On another occasion, it should be recalled, the Minister referred to the sale and purchase of practices as "an intrinsic evil." To Mr. Bevan, no doubt, all private ownership is an intrinsic evil; we believe monopoly State ownership to be a greater evil. There is even a hint in the Minister's reply that he may regard the ownership of the doctors' house as an intrinsic evil when he makes his curious proposal that the Local Executive Council may be able to buy a house for the incoming doctor. Or this may have been another attempt by the Minister to put a favourable gloss on the finances of the medical man in the proposed Health Service. Many men, it would seem, have been misled by his statements into believing that general practitioners in the Public Service of the future will all be receiving an income of about £3,300. In fact, as Dr. Hill points out, the average gross remuneration per year for the general practitioner will be £1,816. The good general practitioner who by his efforts can to-day build up a successful practice will suffer financially under Mr. Bevan's proposals for remuneration. The practitioner whose practice is below the average may benefit financially under Mr. Bevan's proposals. These proposals in effect are part and parcel of the levelling-down process to which this country is being subjected by the present Government on the curiously unbiological thesis that all men are equal. One result of the National Health Service Act is already visible in the big increase in the numbers of those seeking to take special diplomas and in particular the M.R.C.P. The young medical man of to-day who believes that his ability may be above the average is doing all he can to avoid going into general practice under Mr. Bevan's Act. He is, therefore, trying his hardest to secure diplomas that will enable him to practise as a specialist or consultant. Although he will be as much a State servant in the Consultant Service as in the General Practice Service he does at least hope to escape the economic levelling down to which Mr. Bevan's proposals subject the general practitioner of the future.

The Representative Body is holding a special meeting whilst this *Journal* is in the press. We believe that this meeting will offer still another proof that Mr. Bevan has failed to secure the co-operation of the majority of the medical profession in the launching of his new Service. We believe, too, that the plebiscite to be taken on Jan. 31 will show that the majority of the medical men and women of this country will refuse to take service under the Act in its present form. Mr. Bevan still has time to amend the National Health Service Act so as to secure the willing co-operation of the medical profession in making it a success. If he does not seize his chance to act in a statesmanlike fashion then he will put the health services of this country into jeopardy, embitter the relationship between the doctor and the State, and sow among doctors themselves discords that will echo for years to come.

[1] *British Medical Journal*, 1946, 2, 697.

BRITISH TRANSPORT MEDICAL SERVICES

The fourth and largest experiment in nationalization by the present Government was formally launched on Jan. 1, when the British Transport Commission came into being.[1] Throughout the nineteenth century the Houses of Parliament based their railway policy on the need for keeping competition alive.[2] The 1914–18 war brought this policy to an end and led indeed to its complete reversal in the Railways Act of 1921, which forcibly amalgamated practically all the railways into the familiar group of four. The Transport Act of 1947 unifies these into one body with the London Passenger Transport Board. In 1825 when the Stockton and Darlington Railway began to carry passengers there were 26 miles of track. The British Transport Commission takes over 52,000 miles of railway with 20,000 locomotives and 45,000 passenger vehicles. It will employ some 700,000 people. Government spokesmen have

referred to "a very poor bag of physical assets" with all equipment badly worn as the result of intensive wartime usage. The extent to which the railways are in need of new rolling stock is well known to the most infrequent passenger. Public transport whether by train, bus, or tube has a bearing on public health, and this may be the right time to urge upon the newly created British Transport Commission and its various Executives the need for bearing in mind the health as well as the safety of its customers.

Pulvertaft[3] pointed out recently that the maximum risk of air-borne infection, especially through droplets, is present when human beings are closely crowded together, as they are under modern transport conditions. At least twice a day every city worker is exposed to conditions "where no known method of air sterilization could possibly operate." This observation is "probably right,"[4] but that is not to say that modern railway coaches could not be so designed as to minimize these twice-daily hazards. One remedy has already been suggested.[5] American railway coaches provide comfortable high-backed adjustable seats which all face the same way. This makes it difficult for even the most garrulous passengers to project their infected droplets at each other. American coaches are of the one-compartment variety, air-conditioned and warmed, perhaps over-warmed by our standards, and with double doors and small vestibules at each end so that arrivals and departures are not commemorated by blasts of cold air.[6] An obvious question which it should be possible to answer is whether small herds in small box-compartments are less or more at risk than larger herds in larger coaches. It is the fact that some of our railway coaches were designed sixty or more years ago for a public not given to much travelling and in mortal dread of fresh air.[7]

In this country trains are trains and rarely undergo the kind of metamorphosis which became familiar during the war years, when there were few injured men who did not at some time experience the mixed blessings of a hospital train with its M.O. in charge, attached Q.A.I.M.N.S., and occasional V.A.D.s. Less romantic were the railway coaches which became large-scale disinfestors when the line at El Alamein had been held after the long retreat but typhus presented a problem almost as threatening as the Afrika Corps. Disinfestors are, of course, regularly used by all British railways, but these are not hurriedly modified coaches such as had to be used in Egypt. Long before the war the French had converted two coaches into a mobile radiological unit, and recently a new *x*-ray train was completed at Le Landy, just outside Paris.[8] It is now in use in the Northern Region, and since it is equipped to deal with 600 people a day it should be possible to examine radiologically every member of the staff of the Northern Region of the French Railway, and their families, once a year. It should be recalled in this connexion that the French Railway Medical Service is responsible for treatment as well as for examination and diagnosis.

In this country mobile examination coaches are employed on a limited scale, but here railway medical officers, like other industrial medical officers, have been little concerned with the treatment normally given by general practitioners. They co-operate closely with general practitioners but act as a rule in an advisory capacity and particularly on problems of rehabilitation. Each of the main-line railways has employed full-time medical officers for many years—in the case of the Great Western Railway for over 40 years. The London Passenger Transport Board, which was created only in 1933, appointed its first full-time medical officer in 1934. In the case of the main-line railways and of the London Transport, medical services were provided by full-time officers and a number of general practitioners with special railway experience giving part-time services. These services were designed to meet certain special and obvious needs. The over-riding considerations have always been and will continue to be the public safety and the well-being of the railway staff. Out of this there arises the question of fitness for entry into the service, with particular reference to tests of vision, including colour vision. Signalmen and engine drivers, for example, must have normal colour vision. The other work in which transport medical officers were soon involved was in connexion with Workmen's Compensation. It is expected that they will be relieved of much of their responsibility in this connexion when the National Insurance (Industrial Injuries) Act of 1946 comes into operation in July. The changes which will be brought about by this Act were commented on in these columns last year.[9]

Inevitably these medical officers, of whom there are now 30, soon became concerned with industrial medicine in its broader sense. So far as is known at present there are few occupational diseases peculiar to transport workers in anything like the way that there are well-defined occupational hazards in connexion with mining and other industries. There are, of course, some special injuries such as those in shunting accidents. It has also been alleged often enough that peptic ulcer is commoner in transport workers than in the general population, but no convincing evidence has yet been produced on this point.

The Transport Act will lead to a closer integration between what were the four main-line railways and London Transport. It should be recorded, however, that in the past few years there has been a close liaison between medical officers in these groups, discussing particularly such subjects as standards of vision, which previously varied to some extent. There will obviously be greater scope under the new arrangements, for instance, for standardizing records of sickness absence on a scale which may make it possible in future to answer the kind of questions that have been asked about the incidence of peptic ulcer and other conditions in special groups of transport workers.

For some years now the main-line railways and London Transport have had consultant medical advisers and have availed themselves of their specialized knowledge on different problems, but there has not so far been a formal medical research side of the transport medical services. Individual problems have been dealt with as they arose, with,

1 *The Times*, Jan. 1, 1948.
2 *Encyclopaedia Britannica*, 1946, 18, 916.
3 *British Medical Journal*, 1947, 2, 517.
4 Ibid., 1947, 2, 535.
5 *Lancet*, 1946, 1, 94.
6 Ibid., 1946, 1, 104.
7 *Lancet*, 1946, 1, 179.
8 *British Medical Journal*, 1947, 2, 221.
9 Ibid., 1947, 1, 685.
10 Ibid., 1946, 1, 39.
11 Ibid., 1938, 1, 197.
12 *Occupation and Health*, 1934, 2, 1078. I.L.O., Geneva.

where necessary, the assistance and guidance of specialist advisers. We understand that London Transport made an informal approach to Prof. Le Gros Clark and his colleagues at Oxford on the problem of fitting the bus to the bus driver. It will be recalled that Prof. Le Gros Clark was responsible for much of the wartime work on this subject, some of which was reviewed in our columns.[10] This side of industrial health—what may be termed the physiological approach—is obviously one that will develop in the future.

Meanwhile the transport medical services can look back upon a useful record of service to the community and to railwaymen. The G.W.R. Medical Fund Hospital at Swindon, established in 1871, is well known, as are some of the railway convalescent homes. The L.M.S. Railway was early in the field of rehabilitation, establishing before the war a small centre at Crewe for what was then termed the "reconditioning" of injured workers.[11] The Transport Act of 1947 should allow of a closer integration of these medical services and a steady development in industrial health along the lines which are now becoming familiar and which involve job analysis, personnel selection, the provision of first-aid services, and the closer fitting of machines to men. It is unlikely that the present changes will have any immediate effect on railwaymen, on the travelling public, or on the transport medical services, but there are clearly opportunities for future development in which it is important that the health of the passenger should be regarded as second only to his safety in importance. Integrated records over a number of years may make it possible to answer some of the questions that have been asked in the past about particular conditions affecting transport workers. For example, is it true that railway officials in this country show lower mortality rates than the general population, except for diabetes and appendicitis,[12] and if so why? How many upper respiratory infections are contracted on the 8.10 every morning, and is there any reason why this number should not be diminished by investigation and more careful design of railway carriages? For many years it has been suggested that the railways should be nationalized. Now they are nationalized, and it remains to be seen what the future will hold for the travelling public, for transport workers, and for the medical services of British transport.

MYOCARDITIS

Owing largely to the exertions of McKenzie, Lewis, Parkinson, and others, abuse of the term myocarditis has been more or less corrected. Apart from rheumatic and diphtheritic carditis the condition is rarely recognized to-day. The reaction to misuse of the term may, however, have gone too far, as we are reminded by Ira Gore.[1] Auricular fibrillation or flutter, sudden death from ventricular fibrillation, partial heart-block, inverted T waves in the electrocardiogram, and congestive heart failure bear witness to the reality of carditis associated with lobar pneumonia.

1 *Amer. Pract.*, 1947, 1, 292.
2 Brody, H., and Smith, L. W., *Amer. J. Path.*, 1936, 12, 373.
3 Szekely, P., and Snaith, L., *Brit. Heart J.*, 1947, 9, 128.
4 Büchner, F., *Arch. exp. Path. Pharmakol.*, 1934, 176, 59.
5 Hall, G. E., Ettinger, G. H., and Banting, F. G., *Canad. med. Ass. J.*, 1936, 34, 9.
6 Manning, G. W., Banting, F. G., and Hall, G. E., Ibid., 1937, 37, 314

Repeated reports on Fiedler's or isolated myocarditis have testified to the existence of a form of heart disease characterized by focal necrosis, focal cellular reaction, and late focal fibrosis. Gore points out that a similar pathological picture may be found subsequent to streptococcal sore throat or the common cold, and should not then be identified with rheumatic carditis. Focal hyaline or granular necrosis with round-cell infiltration[2] has been demonstrated in many fatal cases of scarlet fever. The occurrence of pulmonary oedema, rise of the venous pressure, and inversion of T waves in acute nephritis and in toxaemia of pregnancy[3] is not satisfactorily explained by left ventricular failure secondary to acute hypertension; for in some of these cases the blood pressure is not nearly high enough to embarrass a healthy heart. The literature is studded with examples of carditis based on clinical, electrocardiographic, and post-mortem evidence in a host of infectious diseases, and it is time their significance was properly assessed. In this respect focal hyaline necrosis produced by digitalis,[4] by acetylcholine, and by vagal stimulation[5,6] should not be forgotten. Toxic carditis from other drugs may occur. Emetine, once regarded as particularly dangerous, was more or less exonerated in the last war, at all events in therapeutic doses. Sulphonamide hypersensitivity, however, provides an example.

Clinically, toxic carditis is not easy to recognize unless there are changes of rhythm or unless the condition is so advanced as to cause heart failure or sudden death. Other signs and symptoms, particularly tachycardia, are difficult to distinguish from those due to emotional disturbance. The electrocardiograph, however, provides a valuable diagnostic aid, and significant changes should be treated with respect.

CHLOROPHYLL AS A BIOGENIC AGENT

The word "biogenic" is employed by some American workers to describe substances which appear to accelerate the healing of wounds. In the past it has been claimed that extracts of heart muscle and of embryonic tissues increased the rate of healing of ulcers and wounds; but controlled experiment has been difficult, and where controls have been devised the effect of these extracts on epithelial growth has been shown to be inconsiderable or even inhibitory. It is now suggested that water-soluble derivatives of chlorophyll exercise a complex but beneficial influence upon the healing of wounds.

Numerous pharmacological effects have been attributed to chlorophyll. Gordonoff and Hosokowa[1] found that an exhausted muscle-nerve preparation will contract when chlorophyll is applied to it. Other authors[2-8] have drawn attention to the chemical relationship between chlorophyll and haemoglobin and have suggested that chlorophyll stimulates erythrocyte formation and the elaboration of haemoglobin. Koenigsfeld[9] and Rydin[10] observed that chlorophyll increases the metabolic rate of tissues. Working in Burgi's laboratory, Rollet[11] reported that extracts of plant pigment stimulated tissue growth, and Gordonoff

1 *Z. ges. exper. Med.*, 1925, 46, 454.
2 Burgi, E., *Schweiz. med. Wschr.*, 1937, 67, 1173.
3 Fischer, H., and Schneller, K., *Z. physiol. Chem.*, 1924, 125, 263.
4 Gordonoff, T., *Z. ges. exper. Med.*, 1927, 54, 294.
5 Rentz, E., *Scand. Arch. Physiol.*, 1929, 57, 121.
6 Zih, A., *Arch. ges. Physiol.*, 1933, 231, 510.
7 Sagastume, C. A., and Pezzani, J. A., *Res. Fac. Ciene Quin.* (Univ. Nac. de la Plata), 1930, 7, 7.
8 Rothemund, P., Inman, O. L., and McNary, R. R., *J. Amer. chem. Soc.*, 1934, 56, 2400.
9 *Klin. Wschr.*, 1922, 1, 322.
10 *C. r. Soc. Biol. Suède*, 1928, 99, 1683.
11 Quoted by Gahan, Kline, and Finkel (1943), *Arch. Derm. Syph.*, 1930, 47, 849.
12 *Z. vitamin Forsch.*, 1935, 4, 213.
13 *J. Lab. clin. Med.*, 1944, 29, 241.
14 *Amer. J. Surg.*, 1945, 47 30.
15 Ibid., 1947, 73, 37.

and Ludwig[12] showed that such extracts increase the rate of growth of fibroblasts *in vitro*. Smith and Sano[13] confirmed this finding and demonstrated that it was not due to the presence of vitamins B and C; Smith and Livingston[14] claimed that the same effect could be obtained by applying chlorophyll to wounds in man.

Bowers[15] now reports that after operations for pilonidal cyst, anal fistula, and empyema, and also in gunshot wounds, fungating tumours, burns, and certain ulcers, healing appeared to be accelerated after the application of water-soluble derivatives of chlorophyll. There was more rapid healing, prompt deodorization, and the growth of saprophytic secondary invaders was inhibited. The flow of pus was lessened when chlorophyll preparations were applied in cases with nasal suppuration and in certain inflammations of the eye. Bowers admits the difficulty of obtaining satisfactory controls in these conditions, but supports his own observations by the unanimous clinical impressions of more than thirty-five colleagues.

ALLERGY AND THE EYE

The part played by sensitization in diseases of the eye has been studied experimentally and clinically for many years. Many disorders of the eye are now attributed to bacterial sensitization and to allergic reactions to foods, inhalants, and contactants. Cooke[1] classifies allergic reactions of the eye into the following types: artificially induced, spontaneously occurring immediate weal, dermatitis, and bacterial sensitization. Walker[2] found that of 17,000 cases a year attending the Oxford Eye Hospital 340 (2%) had been satisfactorily proved to be allergic both by skin tests and by removing the offending allergens and then causing the symptoms to reappear on further contact. Of these 340 cases 55% suffered from conjunctivitis, 36% from migraine, 2.9% from keratitis, 3% from iritis and iridocyclitis, and 0.1% from cataract. However, ophthalmologists and allergists do not all agree on what they mean by allergy.

Duggan[3] defines allergy to include all those aseptic or abacterial lesions in which the common element of the basic morbid process is either increased capillary permeability or excessive contraction of smooth muscle in the arterioles or both. He develops the thesis that an allergic disorder of the ocular tissues can be interpreted as a manifestation of localized vascular dysfunction. Acute congestive glaucoma, herpes zoster ophthalmicus, paralysis of ocular muscles, vascular disturbances of the retina, acute optic and retrobulbar neuritis, uveitis, sympathetic ophthalmia, serous retinopathy, and episcleritis are all discussed on this basis. Treatment is by vasodilators. Duggan has been treating many of these conditions with vasodilators for some ten years with beneficial results. In the article referred to he describes four illustrative cases of herpes zoster ophthalmicus and seven cases of paresis of ocular muscles treated by vasodilators. As he admits, controls are difficult to obtain, but the times taken to cure seem to be much shorter than by the more usual methods of treatment. A man of 47 with herpes zoster ophthalmicus, keratitis profunda, and cyclitis was clinically cured in thirteen days. A woman of 34 with herpes of the left side of the forehead and a vesicle and marked oedema of the left upper lid, who had severe pain unrelieved for five days, was clinically cured in five days. The other two cases of herpes were in a girl aged 9 and a man of 23, both of whom had mild herpetic iritis; both were clinically cured in four days. In previous cases, summaries of which he records, marked benefit was obtained in episcleritis and scleritis, serous retinopathy, acute exudative choroiditis, iritis and iridocyclitis, and acute retrobulbar neuritis. His vasodilator therapy consists in intravenous sodium nitrite, 0.1 g. daily, with erythrityl tetranitrate, 30 mg. once or twice a day. Nicotinic acid, 100 mg. t.d.s., with erythrityl tetranitrate was used in one case.

1 *Allergy in Theory and Practice*, 1947. Philadelphia: W. B. Saunders and Co.
2 *Proc. roy Soc. Med.*, 1947, 40, 582.
3 *Arch. Ophthal.*, Chicago, 1946, 36, 551.

BRONCHO-CONSTRICTION AND ANTI-HISTAMINE DRUGS

The ability of antihistamine substances, sympathetico-mimetic amines, and other drugs to counteract histamine broncho-constriction in animals has received widespread attention, but until recently such tests have not been applied to human subjects because of failure to demonstrate significant broncho-constriction after doses of histamine that could safely be administered. Curry[1] has recently studied the effect of histamine on the respiratory tract in man. In 10 normal subjects and in 10 who had a history of severe allergic disturbances, including 5 with a history of asthma but free from symptoms at the time, no notable reduction of the vital capacity was observed following the administration of histamine intramuscularly or intravenously. In 8 out of 9 patients with active asthma and varying degrees of chronic bronchitis and emphysema, broncho-constriction, as shown by a reduction in the vital capacity, was noted after the administration of histamine. The vital capacity was reduced from 9% to 33% after an intramuscular injection of histamine, the maximum effect appearing 2 to 3 minutes after the injection with a return to normal in 20 to 30 minutes. After intravenous injection the vital capacity was reduced to between 27% and 71%, the maximum effect being observed usually 30 seconds after the injection with a return to normal in 5 to 10 minutes. The effective dose was between 0.08 mg. and 0.2 mg. of histamine base when given intramuscularly and between 0.02 and 0.03 mg. intravenously. Broncho-constriction in these patients could also be produced on administering histamine by nebulization or sublingually. The sensitivity to histamine varied from person to person, and in the same individual it varied with the severity of the asthmatic symptoms. However, during any one period of study the repeated injection of the same quantities of histamine by the same route brought about a similar degree of broncho-constriction.

In a further series of experiments on these histamine-sensitive patients Curry[2] investigated the antihistamine effects of various drugs. "Benadryl," 30 mg. in 50 ml. of normal saline, given intravenously before the injection of histamine, provided marked and rapid protection against the systemic and broncho-constrictive effects of parenteral histamine. Pyrabenzamine, 50 mg. orally, gave a slow and irregular protection, while its effect in different subjects varied, one showing no protection. Adrenaline intramuscularly and "aminophyllin" intravenously produced rapid and complete protection, while with ephedrine intramuscularly it was two hours before the protective action became complete. Atropine gave only partial protection. This "tracheo-bronchial reaction" to histamine in a sensitive subject provides a convenient means of assaying the effectiveness of antihistamine and allied drugs in man and is of especial interest in view of the recent development of the antihistamine group of drugs.

Dr. C. M. Fletcher, F.R.C.P., will deliver the Goulstonian Lectures before the Royal College of Physicians of London (Pall Mall East, S.W.) on Tuesday and Thursday, Jan. 13 and 15, at 5 p.m. His subject is "Pneumoconiosis of Coal Miners."

1 *J. clin. Invest.*, 1946, 25, 785. 2 Ibid., 1946, 25, 792.

THE TIME FOR ACTION

DR. DAIN'S ADDRESS TO SURREY PRACTITIONERS

Wimbledon Town Hall was crowded on Sunday afternoon, Jan. 4, for a meeting of members of the profession from all parts of the county of Surrey which was addressed by Dr. H. Guy Dain, Chairman of Council of the Association. The chair was taken by Wing Commander H. M. Stanley Turner, who was supported on the platform by members of the Branch Council. The success of the meeting was largely due to the excellent work put in by Dr. T. W. Morgan and Dr. J. W. Starkey, honorary secretary of the Branch.

The Chairman, in introducing Dr. Dain, said that this was a meeting of doctors called irrespective of membership of the B.M.A. or any other body. They welcomed the statement of the Minister's reply which the Council of the B.M.A. had published (Dec. 27, p. 1046). It confirmed the views which many of them had held from the beginning that what was intended by the Government was the subjection of the private medical practitioner to the will of the politicians on the pretext of improving the health of the community. This was to be achieved by the conversion of the profession into a class of Civil Servants controlled and supervised from above. Some of them had been present at a meeting at Guildford recently at which German doctors testified that Hitler at the very inception of the Nazi regime imposed almost the same conditions on the profession in Germany.

They had waited long and patiently for some directive from the B.M.A., and it seemed, for a time, in vain. But the result of the recent discussions now published showed that there was no longer any room for doubt or misgiving. The irresistible force was about to encounter the irremovable obstacle. In Surrey they were solidly behind the B.M.A. A member of the Labour Party had told him that the Minister could rely on sufficient disunity in their ranks to be sure of getting what he needed, at any rate in the industrial areas, by the appointed day. The Minister might get a surprise. Control and regimentation were foreign to this country and to the profession. Only by conceding the fair and reasonable conditions asked for by the B.M.A. in the name of a free profession would the Minister get a helpful and co-operative service, and, what should appeal to him, a service without labour troubles.

Meetings with the Minister

Dr. H. Guy Dain, who was received with cheers, said: We have been talking for a long time and we are now faced with the prospect of action. The Minister has had it in his mind from the beginning that he would succeed in dividing us. I met him at various social functions and he never failed to tell me that the medical profession was divided. When he said it the first time I thought he was just being funny; the second time I attributed it to mere repetition; but when he said it the third time I decided that he was afraid we were not so divided as he liked to suggest.

We met the Minister in February, having forced his hand to the extent that he agreed to discussions with the possibility that amendment might follow. We determined not to enter into discussions on regulations but only on the Act as a whole, and he accepted that decision, though, as we think now, with no real intention of amendment. We set up committees and examined the Act from end to end according to the various types of work on which the profession is engaged. The more closely we studied the Act the more convinced we were of the rectitude of our principles and the necessity for their implementation before we could accept service. A close examination of the Act has made it more and more obvious to those who have taken part that it is essential to obtain amendment before service can be entered upon.

Something must be said about the interviews with the Minister himself at the end of the detailed discussions. His tone was very different from what might be inferred from his written reply. In discussing the general practitioner service he was just rude, blustering, and threatening. He left that meeting, no doubt, satisfied that he had given nothing away, and for my part I went away delighted because, not having conceded our principles, he had not offered us any small amendments which would have made our position more difficult and the issue less clear-cut. But when next morning we discussed with him the position of the consultants he was smooth and amiable. He said that he realized that there must be a fourth class of hospital patients, that in addition to those who had hospital services free, those who paid for hospital amenities but not for medical service, and those who paid the full cost of maintenance and a professional fee the amount of which was to be determined by the Minister, there must be a fourth class consisting of those who paid full hospital maintenance and such fee as the consultant thought the patients could afford.

Quite obviously he had the intention of placating the consultant side of the profession while being extremely rude to the general practitioner side. For my part I hope that consultants and specialists as well as general practitioners will have nothing to do with the Service until the proper amendments have been put into the Act. (Hear, hear.) In the document before us he has asked those concerned to co-operate with him and see how it works, and if it is found that things require amendment they can be amended afterwards. "'Will you walk into my parlour,' said the spider to the fly."

Remuneration

I want to take you through some parts of the Minister's statement. First, remuneration. It is said by some people to be a very attractive offer, by others to be not as attractive as it seems. Speaking as a general practitioner I had always supposed that if all my better-off patients were to be absorbed into the National Health Service I should have a much higher capitation fee than obtains in respect of people with limited incomes under National Health Insurance. Any capitation fee of less than £1 is likely to leave me worse off than at present.

This 18s. offer embodies two or three things against which we have set our face all along. One is the sliding capitation fee. As the result of the £300 basic salary, the greater the number of doctors who come in, the smaller the fee. We must have a fixed capitation fee. We shall require also that whatever capitation fee is fixed the mileage fund must be outside it. That is a separate consideration. Mileage does not apply to us all. It applies to certain doctors in certain areas, and it is not proper to allow it to affect the capitation fee applicable to the whole country. Incidentally I do not think the amount set aside from the pool will recompense rural doctors for the additional time their work takes as compared with the town doctor.

In a document which you will receive shortly you will find the capitation fee analysed carefully, and it will tell you exactly what you will be paid in different circumstances. The Minister states that with the maximum number on your list you would get £3,332 a year. This would apply only to very few people. Under N.H.I., which includes half the population, the average number on the list is 1,000; with the whole population included it may be taken at 2,000, so that instead of a gross income of £3,332 the practitioner would on average get a gross income of £1,816, or about £1,200 net. That makes the offer not nearly so attractive as it appears when it is said that instead of the present 15s. 6d. for insured patients the practitioner will get 18s.

The Minister makes great play with the fact that practitioners will earn outside money. But when everybody is provided for there will not be so much from this source. The public assistance doctor will disappear, the police surgeon and the post office doctor will find their work contracted, and there will not be much opportunity in many areas to earn money outside the National Health Service.

To basic salary we have fundamental objections. (Applause.) We are determined that we will not become directly paid salaried servants of the State, and that the control of a paymaster shall not come between ourselves and our patients. So long as the patient pays us, whether directly by fees or indirectly by coming on to our lists as in the N.H.I. arrangement, there is nobody who intervenes with a monetary consideration. We are not prepared to be in a salaried position in which the interference of a State department may come between us and the interests of our patients. Those interests must be primary. With a salary even as small as £300 a year we shall begin to

experience control, and there is nothing in the Act to prevent the Minister by regulation changing it into a full-time salary. Much of the Act will be worked by regulations which the Minister can issue at any time, and the only way of getting such a regulation annulled is by a prayer in the House of Commons, which is a very difficult and extremely unsatisfactory procedure.

Compensation and Goodwill

Two or three years ago, without prejudice, we discussed with the Government, when they said they proposed to do away with the sale of goodwill, the value of practices at that time, and, taking 17,900 general practitioners—principals—the figure of £66 millions was arrived at on the basis of 1938 values at two years' purchase and plus 16% betterment. The figure for betterment is ridiculous to-day, and therefore it is unlikely that £66 millions will go very far. I know doctors who are staying in their practices until the appointed day in order that they may then give up practice and take their compensation. Although you may get your compensation some day you will have to wait a long time for it, for the value of each practice in the country will have to be determined separately and added together before the individual share of the £66 millions can be ascertained. As I see it, that cannot be done in less than two or three years, and even if there is no difficulty over partnerships there will still be a long delay before anybody who retires will actually receive his compensation. Interest on the capital sum will be payable annually according to the Act, but our lawyers say it will be impossible to determine in the case of partnerships what proportion of interest should be paid to each partner until all the terms of the partnership have been completed. Those are quite technical difficulties, but they were made a good deal of in the discussions, though in view of the larger issues we do not want to spend too much time upon them.

We have said that we will not be paid by salary because it will interfere with our relationship with our patients, and for the sake of our patients as well as ourselves we want to retain the goodwill in our practices. I know that some people are apologetic about all this even among ourselves. We know, of course, the absurdity of the contention of Socialist spokesmen that it is a question of "selling" blocks of people. It is a question, not of selling people, but of selling or keeping the goodwill which by good work we have created in our practice, just as goodwill is created and recognized in any other profession. There is no reason why we should be ashamed of our possession of goodwill or want to give it up. Its retention is as much in the public interest as in the doctors'. It represents the capital value of doctors' good work, and the doctor should be able to dispose of it when he wants to go out of practice.

If we retain our goodwill we can retain our present method of distribution of doctors. Present methods have provided a very fair distribution, as is shown by the fact that only once in thirty-four years under N.H.I. has the Minister found it necessary to supplement payments to a doctor in order to persuade him to practise in an undesirable area. If that is so when the conditions of N.H.I. apply only to half the population, the forces of supply and demand with the whole population in the Service may be expected to suffice to fill in any gaps, and the problem should settle itself. If it does not, the Minister still could have power, such as he has to-day under N.H.I., to offer special terms to somebody for a special place.

If we surrender our right to dispose of our goodwill we have the position set out in the Act whereby the Minister retains the power to say that a man shall not practise in a particular area. Remember that with regard to the injunction against practising in a particular area it is not only the people who come in after the appointed day who are affected, but any doctor who wants to change to another district. To such a doctor the Medical Practices Committee could say that there was no room in the area to which he wanted to go. That is the effect of what is called negative direction in the Act. The amount of movement that takes place in the profession is astonishing and at first hardly to be believed. During the war the Association set up at Headquarters a register of all medical practitioners with their jobs and localities, and in order to keep track of the changes of address and the movements of doctors the Association keeps six whole-time clerks fully occupied. Imagine the problem which would face a Medical Practices Committee set up with the object of deciding whether a doctor making an application should be allowed to go to a particular area. The Minister says it would become automatic. We say, well, if it is automatic, it is unnecessary, and whichever way you have it we don't want it.

Permissions and Controls

Having dealt with some of the more personal problems, Dr. Dain touched briefly on the remaining matters. One of these was the point that although all in practice on the appointed day might go into the Service, after that day it was necessary to get permission to go in. In 1911 Mr. Lloyd George made no difficulty on this point, but the present Minister would not concede it. He had said that he must have the right to refuse, if he wished, and he remained tight on that, and said that doctors were free to stay out. Of course they were, but if the Service was the only means of earning one's living there was not much freedom about that.

Again, he had specifically refused any right of appeal to the courts, arguing that if he was to be answerable to Parliament for the success of the Service he must not be put in a position where he had to answer for a doctor whom he was forced to retain. The profession held that there should be a right of appeal from any decision of a tribunal to remove a name from the lists or from an adverse decision of the Minister.

A word or two on the hospital position. How were the staffs going to be affected? Somebody had said that the consultant on the staff of a hospital would have a position of great security and would be very much better off. But he had attended a meeting the other night of the Marylebone Division at which one Harley Street man in a telling speech said that all this talk about security in the Service for consultants was just rubbish, and that his only security was in his own good work. The Minister would have the power to alter the consultant's remuneration and terms of service. He would be in a salaried service.

In general practice they were enabled to adjust fees to changing money values, but when their income or the bulk of it came from a Government department they would have no such freedom. Those who were in insurance practice had known how in a slump the capitation fee was immediately reduced and with what difficulty it was raised again to meet different conditions.

Finally, there was the question of the membership of health committees of local authorities. Under the Education Act there was co-option to education committees of people interested in education, including teachers, but when it was suggested that local authorities should be compelled to co-opt doctors to their health committees the Minister said that he could insist on nothing of the sort and that it was improper to ask for it. But it had been done in the parallel case of teachers, and he hoped that when it came to the amendment of the Act this point would be insisted upon.

The Plebiscite

Dr. Dain continued: On January 8 there will be a meeting of representatives to consider details of the plebiscite and the lead to be given to the profession. On January 31 the forms of plebiscite will be issued, returnable by February 14. We are having prepared a concise statement of the points in the Act to which we are opposed and the reason for which we oppose them. This will be sent to every practitioner on the *Register*.

The plebiscite is not the end but the beginning. We may get an enormous majority against service. The Minister is banking on the supposition that that majority will not be real and that it will dissolve away by July 5, by which time he thinks he will have enough people to enable him to start the Service. That is what I have in mind when I say that action begins when the plebiscite result is out.

I have in front of me the draft form which will be put next Thursday to the Representative Body. I was in favour of the putting of only one question: "Are you willing (unwilling) to enter the Service?" But there are people under contracts of various kinds—whole-time officers of the Ministry and of local authorities and other bodies, medical teachers, and so forth.

We had to reconsider the form of question in the light of that fact and of the distribution of doctors in various types of occupation.

Dr. Dain here read the instructions on the draft plebiscite form and the proposed questions. He explained that the estimate of 13,000 general practitioners as constituting the strength of the vote required to give the necessary majority to justify the Association asking the profession not to accept service was the result of very careful thought. It was estimated what minimum of general practitioners the Minister would require in order to start the Service. It was decided that without more than 8,000 he could not possibly do so. The total number of general practitioners who could be available, after allowing for certain alien practitioners who might by that time be permanently registered, was computed at 21,000. If there were at least 13,000 who said they would not take part it was quite certain that a service could not be started.

We have tried to frame the questions (Dr. Dain went on) in such a way as to avoid any possible ambiguity. I see no reason why we should not have practically 100% of disapprovals. (Applause.) Even the public health medical officers and other people in whole-time employment see the red light in this Act. I have been asked that the plebiscite form should contain a legally binding agreement not to enter the Service. But it is not possible to construct such an agreement applicable to everybody, nor to have it signed and at the same time say that the vote would not be disclosed. In addition we do not want people to give legally binding agreements in this plebiscite. If we have a satisfactory majority in the plebiscite I suggest that each area in its different groups, perhaps through its Panel Committee, should get down to the practising doctor, and that doctors in their own areas should agree with one another on a form which they can sign not with the B.M.A. but between themselves. (Applause.)

If the B.M.A. organization is as good as I think and hope it is we should be able to do that between now and July, and make certain that the Minister will have no ground whatever for supposing that he will have enough doctors to start his Service.

Reassurances

What are the things which make it difficult? Here we come to the horrible word "fear." What are we afraid of? The consultant says, "On July 4 my present appointment to my hospital ceases. The hospital belongs to the Government and I must enter into a new contract. If I do not I shall lose my hospital appointment and with it my consulting practice." Fortunately that fear has little foundation. The Government will not be in a position to offer a contract to any consultant by July 5. The Spens Specialist Committee has still to report. After it has done so, arguments have to take place with the Treasury and with consultants themselves as to how it is to be implemented, and it will certainly be the end of the year before any terms can be offered to consultants. Their fears about replying "No" can be dismissed, and there is no reason why consultants and specialists should not stand in with the whole profession. (Loud applause.)

What about the general practitioner? One of them may say, "I am very much opposed to this Act, but I cannot afford to stay out. I have got boys at public schools, expenses are heavy, I must not take the risk." If one points out to him that being a man in well-established practice, as presumably he is, he stands to lose financially rather than to gain by accepting the new service, he may say, "But what if the panel cheques do not come in so that I may meet pressing liabilities?" Well, the Act provides that National Health Insurance stops when the other Service begins, and if you prevent the other from starting then N.H.I. will not stop and so you need not be afraid.

The general practitioner is in this cleft stick, that if the Act starts and he has not come in, then he loses his right to compensation. But if the profession decides to stay out, then we retain our goodwill, Mr. Bevan can keep his £66 millions, and we shall lose nothing. If there be difficulty of any sort that we have not foreseen then in one form or another we have a reasonable sum of money by which men might be helped over a short period to maintain their income and pay their insurance premiums, but there will, of course, be a great many doctors who will not be affected in that way. We shall go on attending our patients, private and other. Here I am rather inclined to quote a leader from the *Daily Express*, which asks where the public come in. The Service is going to cost £152 millions. But there will be no more doctors than before, no more nurses, no more hospital beds, nothing that anybody will get that he cannot get to-day, although the country will be spending £152 millions to get it.

Dr. Dain concluded: The profession wants a lead. I as Chairman of Council must be the spear-head of the Association in this matter. I say that the new Service as propounded in its present form is entirely unsuitable, entirely improper for us to accept, and we should endeavour to persuade our colleagues to vote against accepting any service under the Act in its present form. The B.M.A., so far as I have any influence, and the Representative Meeting will most certainly stand firm for that position. This is a demand for action—and the action is up to you. (Loud and prolonged cheers.)

QUESTIONS

At the conclusion of the address written questions were handed up to the platform from all parts of the hall, and were answered by Dr. Dain for half an hour or more until the Chairman asked the meeting to have some regard for the speaker's physical resources.

The first question was about partnerships. Dr. Dain said that they had been quite unable to obtain from the Minister's officers or the Minister himself a satisfactory statement on the position of two partners who were receiving by their agreement unequal shares. The wording of the Act seemed to make it impossible to arrive equitably and safely at any distribution of profits between partners except by each just taking what he actually earned himself. They had told the Minister that they considered that the Act would be certain to destroy partnership and to deal a serious blow to group practice in any form.

Asked what was being done to enlighten the general public on the position, Dr. Dain said that as soon as it was known what the answer of the profession was in the plebiscite the public would be approached and fully informed of the position. The most important thing to put to the public was the risk they ran of losing the undivided loyalty of the doctor as a result of the introduction of basic salary.

Another question was, "What percentage of doctors pledged themselves against the Act in 1913 and what proportion of that percentage adhered to their pledge?" Dr. Dain replied "Somebody thinks we do not know what happened in 1911–12. We were then dealing with a more approachable Minister, who had given way to the profession on the principles they stood for, but did not give them enough money to start with, and as he raised the price from 4s. upwards, when he got to 7s. 3d a large number thought that was enough and came over. That position does not arise to-day. Besides, we have better organization now, and we will jolly well see it does not happen this time." (Applause.)

Asked what steps would be taken to inform the public of the true implications, Dr. Dain said that they might take it from him that very effective steps would be taken. In general the Association was now on excellent terms with the Press. The Association had a very efficient public relations staff.

In reply to another question he said that in fixing on the figure of 13,000 general-practitioner votes against entering the Service allowance had been made for men coming out of the Services and newly qualified men finishing their hospital jobs.

What was the position of the whole-time medical officer of a local authority automatically transferred to a Hospital Board on the appointed day? Dr. Dain said that such a man was already in a salaried appointment and would continue to do his work. There was no reason to think that a large number of these men would not express themselves as against the Act.

Would not Mr. Bevan try to implement his scheme whether the doctors were there or not? Well, Mr. Bevan was very determined. He had declared to the dentists that he would start a service on July 5, dentists or no dentists. Were such expressions anything more than hot air?

In reply to one question Dr. Dain explained the position under the Act with regard to midwifery. The Minister had taken power to determine the qualifications of the doctors who

should undertake midwifery under the Act, and the profession had said that that must come out.

In the conversations Mr. Bevan had made it clear that no practitioner would be allowed to charge fees to persons on his list. Such persons could go to another practitioner, who would charge them a fee, but Mr. Bevan seemed to think that this should never be more than a single consultation fee, and that if a patient was dissatisfied with his doctor he should change to another list rather than seek treatment outside the Service. The profession did not assent to that.

When would Mr. Bevan want their answer? He had said that they would have six months to make up their minds. There would remain some months after the result of the plebiscite was known, and if the individual intended to accept service, or if the profession indicated its willingness to accept, this could be done any time up to July 5.

Some questions were asked and answered about the imminent accession of a number of alien doctors, displaced persons, on the permanent *Register*. Allowance had been made for these in the various computations. Incidentally Dr. Dain mentioned that as a member of the Council of the Royal College of Surgeons he was aware that a large number of young men evidently thought they would be better off in the new Service as specialists than as general practitioners and were seeking special diplomas, not always with success.

Might it not nullify the result of the plebiscite if the Minister afterwards made some alterations in the conditions? Well, the Minister had shown no sign of weakness, and if the profession gave an emphatic "No" he would find it difficult to start offering one thing or another between now and July 5.

Why not adopt the policy of passive resistance? The answer was that passive resistance was difficult, and what was wanted was not passive but active resistance as soon as it was known that the vote in the plebiscite had gone in a certain way.

Concerning hours of work, these must depend on the kind of work doctors individually undertook. "We shall never, I hope, expect that doctors under any conditions of employment will do office hours. We must be at the disposal of our patients when they are ill."

What was to prevent the Government enforcing on the State doctor union rules—an eight-hour day, a forty-hour week? "We are the people who will prevent any Government from enforcing orders upon others."

In closing the questions Dr. Dain said that members of the profession in other countries were watching events here. He had been impressed by this when attending the World Medical Association at Paris in September. Representatives of medicine in other countries were most anxious to know whether British doctors could stand for their own freedom.

A hearty vote of thanks to Dr. Dain was proposed by Dr. E. L. K. Sargent (Wimbledon) and seconded by Dr. S. A. Forbes (Croydon) and enthusiastically carried. The proceedings closed with a vote of thanks to the Chairman, moved by Dr. N. E. Waterfield.

THE PROFESSION AND THE MINISTER

DR. HILL'S ADDRESS

What the chairman described as a historic meeting was held in the Great Hall of B.M.A. House, London, on the evening of New Year's Day. It was convened by the Metropolitan Counties Branch and was addressed by Dr. Charles Hill, Secretary of the Association. The gathering was probably the largest ever assembled in the hall, where large numbers had to stand or sit on the floor throughout the proceedings, and, even so, many could not gain entrance and the speech was relayed to other parts of the building.

Dr. Hill spoke for an hour and 25 minutes and answered questions for a further half-hour. He made a careful and dispassionate survey of the Minister's reply to the case which had been put forward by the Negotiating Committee for amendment of the Act. A reminder of the fights of former years was on the platform in the person of Dr. Alfred Cox, for more than twenty years Medical Secretary. The gathering included a relatively large proportion of consultants.

Dr. R. W. Cockshut, chairman of the Metropolitan Counties Branch Council, who presided, said that it was now a considerable time since the Representative Body committed the honour and future of the medical profession into the hands of the Negotiating Committee. During those long months the Committee had met the Minister and his officers, and now the trust was handed back untarnished. Nothing had been given away.

The present great meeting, Dr. Cockshut continued, was the first large meeting of doctors to be addressed by Dr. Hill since the Minister's reply. They had reached a stage when the future of medicine was at stake; but the future of medicine was not in the hands of the Government or of Mr. Bevan, it was in the hands of the doctors themselves, and they had it in their power to ensure that the traditions they inherited and the hopes they held for the future were secured.

The Minister's Reply Examined

Dr. Charles Hill, who was warmly received, said: It is my job to-night to survey the reply that the Minister has given to the Negotiating Committee. That reply is prefaced by a series of observations addressed to individual members of the profession. Those observations are couched in seductive terms, possibly with a faint air of prefabrication about them. But we must not allow personalities to confuse the issue, and equally we must not allow the sweetness of the terms which the Minister uses to obscure our understanding of the real character of his reply. We must be careful not to mistake the gloss, the varnish, the veneer for the substance which lies beneath.

We are told in the Minister's reply that any doctor will be free to enter or not to enter the Service, or partly so and partly not; there is no compulsion. In one sense true, but if this Service comes into being in its present form the vast majority of general practitioners will not find the position to be that of entering or not entering. If the State is paymaster in respect of the bulk of the population many practitioners will find themselves faced with the choice of coming inside or starving outside.

The Minister goes on to say that the word "service" is perhaps a misnomer; but it is the word he himself has used in the designation of the Act. He says we shall not be Civil Servants. True, in the accepted sense of the term, but general practitioners and consultants will be salaried officers of an agency of the State, and, what is more, they will be entering a service which is administered by Civil Servants.

He then tells us how the doctor will be paid, and with a delicacy all his own he begins that summary by quoting the maximum remuneration. With the maximum number of persons on the practitioner's list he gives that remuneration as £3,300 a year. It would have been fairer to have recalled that under National Health Insurance to-day, with a maximum list of 2,500, the average is 1,000 insured persons on the list, and it may be calculated from this that in the future, in a service available to and utilized by 95% of the population, the average list will be approximately 2,000, and the average annual remuneration gross from the Service will be £1,816.

The Minister says there is no rigidity about the figure 4,000. We may infer that there is no rigidity either way, that the number can be increased or reduced by regulation as time goes on. He also says in an attractive phrase that if the doctor who has entered the Service wants later on to stop practice for any reason he can draw his compensation at once. There may be some who have turned over the prospect of entrance into the Service and speedy resignation, collection of compensation, and thereafter concentration upon private practice. I have been at pains to inquire exactly what those words mean. They mean that if a general practitioner emigrates to another country, if he removes himself from general practice altogether and takes up another form of medical practice, or if, leaving his own area, he goes into another to engage in private practice, he will then be able to draw his compensation and continue in private practice in the area in which he resides. I mention this to show that the remarks with which the Minister prefaces his reply should be scrutinized with unusual care.

Direction and Distribution

Passing from this preamble to the more detailed reply of the Minister we notice his statement that he has examined the seven general principles of the profession and does not believe that anything in the new Service is really in conflict with them. I would remind you of our principle which states that anything tending to make the medical profession whole-time salaried officers of central or local government is contrary to the best interests of the public and of the profession itself. The main question which we have soon to answer is whether in fact the proposals do involve such a tendency and, if so, what we are going to do to arrest it.

The Minister goes on to deal with distribution. Existing general practitioners will be permitted to continue in their own areas, but any newcomer into an area will be required to obtain permission. We have said that general practitioners should be free, without the necessity of permission from anyone, to set up in public practice in the area of their choice. We have objected to a state of affairs in which governmental licence is necessary before such choice can be exercised, and we have gone on to argue that by the creation of a comprehensive service and the payment of a capitation fee such errors of distribution as exist to-day will rectify themselves in course of time. We admit that where under-doctoring can be substantially proved it will be the Minister's duty to correct it by appointing to that area a general practitioner who is willing to go there.

But study the Minister's reply on direction or distribution with particular care, because the Minister rests his case for the abolition of ownership of goodwill in general practice upon the necessity for controlling distribution, with resultant interference with sale of goodwill. The Minister's first argument in favour of his distribution proposals is that no doctor in the public service can be allowed to attract to himself public money without public or official permission. Implicit in that argument is the assumption that the doctor would increase the public expenditure by choosing an area where he was not needed. That is not the case. The medical pool of capitation fees will be related to the number of persons who use the Service, and would not involve an increase in public expenditure for doctors to choose the area in which they desired to establish themselves in public practice. At least that would be the case but for the basic salary proposal. Indeed, it is in the distribution paragraph that we begin to see the motive which lies behind basic salary.

The distribution of doctors, says the Minister, would be in the hands of a predominantly medical committee, not subject to his direction—a plausible argument until we study the document lower down, where he tells us that the Medical Practices Committee is only going to find a few areas which are under-doctored. He is doing their work in advance for them, while at the same time he claims that they are an independent professional body.

He states that the Minister intervenes only where a doctor, desiring to go to a particular area, is refused permission by the committee and appeals to the Minister. The most he can do, he says, is to reverse a decision in the doctor's favour. That is a piece of special pleading. The main work of the committee will be to select from among the competing applicants, and when a doctor appeals against a decision he will be in fact appealing against a decision in favour of another doctor.

He tells us that there will be few areas where there is no need for new public practice or replacement. If that be true he is proposing to establish a vast system for the licensing of general practitioners for the solution of what he himself submits will be the problem of a few areas. The whole of his case for the abolition of goodwill is built on the argument for better distribution, and yet he says that the problem, like the servant girl's baby, is only a small one and that this control will be exercised only in a limited field.

Cumbersome Machinery

We stated in our document that the whole machinery was cumbersome. The Minister denies it, but I challenge anyone to deny that this Act lays upon the Medical Practices Committee the obligation in every case in which a doctor seeks to establish himself in public practice anywhere to satisfy itself that the doctor is needed in the area.

He says that the Medical Practices Committee, advised by the Local Executive Councils, will keep itself informed of the state of affairs in general practice throughout the country. This great meeting is a meeting of a proportion of the practitioners of London, and that one committee of wiseacres has to be fully informed of the detailed conditions of the areas in which you practise so that should one of you, unfortunately, die it will be immediately possible for the committee to determine whether the circumstances demand your replacement or not.

The experience of the Central and Local Medical War Committees proved that the problem is an immense and laborious one. There will be placed on the committee a burden which it cannot sustain You may think all this relatively unimportant, but it builds up the picture with which we shall finish, of the unwillingness of the Minister to make any change in this Act in principle or detail whatever the strength and validity of the arguments we advance.

The Ownership of Goodwill

Let me pass on—for I cannot pretend to be comprehensive—to the ownership of goodwill. The Minister declines to shift from his position. During the discussions there emerged the problem of partnership agreements. It is a technical problem, but the examination of it is an indication of the Minister's mind. As ownership of goodwill is abolished, with compensation, the authors of the Act thought it right and proper to define circumstances in which certain transactions would in fact constitute sale and purchase of goodwill. There is a penalty for such transactions—fine and/or imprisonment. For example, it is defined as an offence when two partners working together divide the emoluments in proportions other than those in which the moneys were earned. To that section there is a proviso exempting, according to the Minister, all existing partnership agreements, which agreements remain in operation as if no service had been introduced.

We took legal advice on that, the best we could obtain, from leaders of the Chancery Bar. Those of you who are interested in the legal argument will find intellectual entertainment in counsel's opinion (*Supplement*, Dec. 20, 1947, p. 151). They state that the Minister is wrong in his interpretation, and that only a proportion of partnership agreements, not the whole, are exempt from the disciplinary provisions, and they go on to say:

> "If Sections 35 and 36 are allowed to become operative without amendment the profession and the Ministry alike will labour under embarrassing uncertainty on matters of great importance until the debatable matters have been finally adjudicated upon, and in the meantime steps may have been taken on the footing of a construction which is ultimately found erroneous with unfortunate consequences to all concerned. In our opinion it would involve a real hardship to the practitioners concerned if they were required to submit to such uncertainty when it has been clearly foreseen and can be removed by an amending Act."

That is the opinion given, that the Minister's interpretation is wrong and that in any case such ambiguity exists that it is a matter of embarrassment and danger to members of partnerships to require them to decide whether or not to enter the Service without knowing whether the partnership deeds into which they have entered in different circumstances are still valid after the appointed day.

Counsel go a stage further. Taking the Minister's own interpretation of the Act, they go on to show that the Minister is incapable under the Act of putting his own interpretation into operation, that the Minister is incapable in law of paying the interest upon compensation moneys which the Act has promised shall be paid to individual practitioners. The Minister's reply in effect is this: "If in future I am proved in the courts to be wrong then I shall introduce legislation to put myself right." (Laughter.)

You see the position. It will be fought out in the courts by practitioners at their own expense, perhaps taken to the House of Lords at their own expense, and when that has been done the Minister or his successor, if he decides to observe the promise of the present Minister, will introduce legislation to put it right. But nothing can put right transactions which have

taken place after the appointed day and before such a decision by the House of Lords—transactions which have been undertaken in the mistaken view that the Minister's interpretation was correct.

The significance of this is in the Minister's real intention. Let me tell you what it means if the Minister's interpretation is right. It means that where two partners join the Service and one is required by the partnership agreement in certain circumstances to purchase the share of the other he may still do so, but he may be in the position of putting down £2,000 and registering for compensation £1,500 or less. True, the reverse may obtain. It is theoretically possible for the agreement to provide for a less generous payment than the payment from the compensation fund. But where one partner enters the Service and the other does not—and, mark you, the profession is free to join or not to join—and the one not in the Service dies or retires, the man in the Service may by the agreement be required to buy the practice of the man who had been outside, and having bought it there is nothing in the fund to compensate him for the loss of his capital value, despite the fact that, being a member of the Service, he is precluded from selling what he has bought.

If, on the other hand, circumstances should operate the other way, and the man inside the Service should die or retire, the man outside the Service is required to purchase the practice of the other. He can touch the income from what he buys only by himself entering the Service, and if he enters the Service he loses his power to sell his own practice and the share he has bought, without a penny of compensation. What does the Minister say? He says it is unfortunate that there is no compensation provided in the Act for the practitioner who, being in the Service, is required to buy the share of his partner who was outside the Service, but he has hit upon a way of making some money available to him. Money, after all, is saved in the compensation fund. If a man inside the Service sells the practice to a man outside the Service the Minister will use the money saved to compensate the man inside the Service who has bought the practice outside.

You know what that means. It means that for the man outside the Service who is required to buy a share of a practice inside the Service there will be expropriation, robbery, call it what you like. He is mulcted of a sum of money, he is prevented by law from obtaining it, and the Minister in effect says, "To the extent I have mulcted the man outside the Service I will use the money I have pinched to compensate the man inside the Service." Contributions to the church offertory are evidently welcome, even from the proceeds of picking pockets!

If the Minister is right, the situation I have described is the direct result of his interpretation. If he is wrong—and he waits for us to prove him wrong—he is going to introduce legislation to put himself right. The Minister has proved impervious to argument, legal or other. He is inviting members of partnerships to join the Service without his taking the trouble completely to clarify the position which will obtain if they do join the Service.

It is difficult to be dogmatic in one's estimate of the future but we have felt that this new Service in a number of ways renders it less likely that there will be partnership practice and assistantships with a view. You will realize the peril—safeguarded to some extent by the Medical Practices Committee—in which partners will be placed. For example, if an assistant is paid substantially less than he is held to be worth and is subsequently admitted to partnership it may be held that there has been a concealed sale and purchase of goodwill.

The Doctor's House

I must refer to the doctor's house. Should a doctor die and his widow sell the house to the incoming practitioner it will be an offence if the consideration for the sale is substantially in excess of the consideration which might reasonably have been expected if the premises had not previously been used for the purpose of medical practice. The widow, if successfully prosecuted, is liable to fine or imprisonment. The Minister's reply on this point is significant. He says that there is no risk of committing an offence if the house is put up to auction. The Act does not say anything about auction or method of sale. When the Minister does not like our interpretation of what the Act says he declares that it must be left to the courts to decide, but when the straightforward reading of the Act is inconvenient to him he gives his interpretation and asks us to accept it despite the plain reading of the words.

The Remuneration Proposals

Now for remuneration. You know the general conception. Take 95% of the population of the country, multiply it by 18s., and that is the medical pool. Out of the pool come mileage, temporary resident payments, payments for anaesthetics, emergencies, and so on. Take mileage out, and the pool becomes comparable with the central pool under N.H.I. to-day. That pool will be divided among local executive councils in a proportion, taking as index figure the number of persons in the area who have signed on to doctors' lists, plus one-third of those who have not.

In his illustration the Minister puts the maximum remuneration first. I do want to point out that in a free service which covers the whole population the number of items of service per person will rise. Since the inception of N.H.I. the number of items of service has trebled for the same section of the community. The number is between 5 and 6. If we take 5, then for 4,000 public patients there will be 20,000 items of service a year, considerably more than 100 items a day in the winter months and 60 to 70 in the summer. I mention that in order that it may be appreciated that the maximum on the lists is not to be everybody's prerogative—indeed, it is not within everybody's physical capacity. By analogy with N.H.I. the average is likely to be 2,000.

The Minister says that over and above the payment for the 4,000 public patients there will be lots of other things—public and private fees, maternity payments, mileage payments. What he does not say is that all district medical officer appointments will go, incidentally without a penny of compensation for loss of office; the work of police surgeons and post-office medical officers will contract at first and afterwards go; and that to undertake midwifery in the public service will be inconsistent with a complete list, indeed will inevitably mean a list which is substantially less than the maximum. In many areas private practice will be virtually non-existent.

But take the average—2,000 patients, giving a gross income of £1,816. An issue which arises at once is: Does this conform to Spens? The Spens Committee examined the range of general practitioner remuneration, and the report has been accepted by both sides. The Spens Committee, speaking in terms of pre-war money and net remuneration after allowing for practice expenses, said that 75% of practitioners should obtain over £1,000, 50% over £1,300, 25% over £1,600, and 10% over £2,000. Taking the 50% figure of over £1,300 and adding 30%—a low computation—as the betterment factor to bring pre-war values up to post-war, we get £1,690. Adjust this for practice expenses of 33⅓%—again a rather low figure on the returns prepared for the Spens Committee—and we get for 50% of practitioners a gross income of £2,535 or over. Can this be compared with £1,816 as the Minister's figure for the gross income of the practitioner having the average number of persons on his list? That "average" man is not quite the same as the "middle man" in the Spens figures, but the difference is probably not great; the difference between £1,816 and £2,535, however, is considerable. Even allowing for the value of the Government's contribution to superannuation the Minister's proposals do not appear quite to tally with Spens in the middle ranges. In the upper ranges the gross post-war figures for the Spens 10% group would be £3,900, comparing with £3,332, the Minister's figure for the man who has 4,000 public patients.

The Basic Salary

There is nothing more to be said about remuneration except this: there will be a basic salary of £300 a year, providing there is sufficient speed in the increase of the list. The basic salary is paid on the understanding that you need not have it for long. The effect of it is this, that the capitation fee for the first 1,000 patients is 21s. 2d., and for every patient over 1,000, 15s. 2d. I am taking the assumptions that 95% of the population are on doctors' lists and that 17,900 practitioners join the Service. The curious thing is that the greater the number of practitioners who join the Service the smaller will be the

capitation fee, for a greater number of sums of £300 will have to be taken from the central pool before the rest is distributed. The tapering capitation fee of which we have heard so much comes back in a new form.

Appeal to the Courts

You know the Minister's answer about the right of appeal to the courts. It is "No." He asks how could he be answerable to Parliament for the conduct of a doctor whom the courts had restored? You see the implication. He finds himself unable to accept the position that his verdict or the verdict of the tribunal should be subject to challenge in the courts. We have argued that in a service of these dimensions it must not be possible for a practitioner to find himself unable to earn a living while he is still regarded by the General Medical Council —another arm of the Government—as a fit and proper member of the medical services of the country.

The Hospital Aspect

Having completed this rapid survey of the general practitioner position, Dr. Hill turned to the hospital aspect:

There is one point in our original position which has not been pressed—the ownership of hospitals by the State. It was inevitable from Beveridge onwards that the State should accept financial responsibility for the provision of hospital beds and medical care therein, and the Government took the decision that led inevitably to ownership of hospitals, local authority and voluntary, by the State.

Expressing a personal view, I regret that we have not taken a stronger line in relation to that issue. For too long we have been making the bland assumption that to transfer something to the State is inevitably to ensure that it will be properly, wisely, and soundly administered. But there was no uprising of public or professional opinion on that issue, and the very fact of the passage of the Act so damaged the finance of many voluntary hospitals as to make the change almost inevitable. Therefore our representations were on other issues, the most important being that the Act enables a hospital monopoly to be established, transferring automatically to the State all the non-profit hospitals and giving the Minister also power to acquire land on which he may cast a lustful eye and which may include any hospital buildings. The Minister has also power to take over nursing-homes, so making independent practice difficult if not impossible. The hospital beds will be of three kinds, public, private, and intermediate, in which last the patient makes a payment only in respect of the amenity of the accommodation. There would be grave peril to consultant private practice if it were decided to develop intermediate accommodation at the expense of private.

When we met the Minister—I think I had better draw a veil over his demeanour in the discussion on the general practitioner phase—a strange blandness and friendly accommodation came over him as he turned to the hospital and consultant aspects of his reply. I wonder if he hopes to divide the general practitioners and the consultants in the dispute that lies ahead. Mind you, there was more sweetness of manner than promise to amend. He did not promise to amend anything. He said, "Of course, I shall not take over nursing-homes, subject to what the Regional Board has to say." He said, "I recognize the case for removing the ceiling on fees on a proportion of private beds." He gave other assurances.

I am not casting doubt on the word of the Minister as a man. But I do want to remind you of the danger of regarding ministerial assurances as binding on other Ministers. In November, 1939, a letter from the three Presidents was published in the medical press, saying that there was suspicion amongst some doctors that the Ministry of Health might be proposing to use the E.M.S. as the thin end of the wedge for a post-war State medical service, and assuring the profession, on the highest authority, that nothing was further from the Minister's intention and that all such fears were groundless. "That the voluntary system will continue there is no reason to doubt." That was based on the word of one Minister, an assurance upon which the profession co-operated in the E.M.S. during the war, and it has been—quite naturally—completely ignored by another.

Every hospital, except those he does not want will be the property of the Minister: the Minister will determine by regulation the remuneration of general practitioners and consultants, and can change them when he likes; the Minister can increase the basic salary element in general practitioners' remuneration, and do it by regulation; the Minister can convert the consultants into a whole-time salaried service by regulation; he can make private practice for consultants well-nigh impossible, so compelling them to seek whole-time salaried service, and he has the power to establish a hospital monopoly and to make impossible the development of private hospital services or voluntary endeavours of one kind and another.

The Decision Ahead

After a brief examination of the superannuation proposals, Dr. Hill drew to his conclusion. He had with some necessary labour gone over the main features of the Minister's reply, and he went on to ask:

What does it all add up to? There is one criterion by which as a profession we can measure these matters. It is not, I hope, a financial criterion. It is whether these proposals do or do not bring us closer to a whole-time salaried service of the State. That is the crucial issue, and on that issue we can command the support of the overwhelming majority of our profession.

These proposals taken together add up, if not to a whole-time salaried service, to a form of service which could easily be translated into such State service. The general practitioner will no longer own his goodwill, be unable to enter public practice without the permission of a Whitehall Committee, be compelled to take a proportion of his remuneration in the form of salary, it being left to the Minister to determine in future—by the process of regulation—what that proportion shall be; in the hospital field, there is a possibility of a hospital monopoly; with the future of independent practice in the hands of the Minister, the future of the consultant section of the profession is in the hands of the Minister. Does that add up to a salaried service under the State? Does it lead inevitably to a whole-time salaried service of our profession? What is the evidence?

We have the evidence of the previously announced policy of the party in power as stated from time to time, never more picturesquely than when the Minister said, "You do not pick fruit when it is green, you wait until it is ripe." We have the evidence that these proposals commend themselves to those who honestly believe in a whole-time salaried service. Some of you may have read of the leakage in the *Tribune*. How that leakage arose we do not know. But here is a paragraph which is significant:

> "Politically the Minister's firmness has been most important. If he had been weak in face of this reactionary profession, which is being remarkably generously treated both with regard to compensation and income, it would have increased doubts as to the intention to carry out a Socialist programme."

This is part of the Socialist programme. This is a first step to that end. What are we doing? The Minister has told us of our right as individuals and our right collectively to determine our attitude to this Service. We are within our rights in saying "No." (Prolonged applause.)

The Plebiscite

There will be a plebiscite of the profession. The profession will have a clear opportunity of stating both its wishes and its intentions, and if a sufficient proportion of general practitioners give the necessary indication we shall tell the Minister —in the terms of the returns of the plebiscite—to think again. If we do not get a sufficient majority—a majority which of itself will offer the necessary reassurance to those opposed to this Service—we shall have to advise you that resistance is impossible and we must make the best of the situation. There must be a sufficient majority of the individual members of the profession, and it will be known in advance what that majority must be. Therefore practitioners opposed to the Service will know that they will be called upon to decline to enter the Service only if a sufficient majority of the profession is similarly determined and will act with them.

There will be no question, if that majority is achieved, of asking doctors to discontinue their work. Consultants will be asked to go on with their hospital work, but not to sign any

contract with Regional Boards, no more and no less. They may be reassured that such is the time which the Specialist Spens Committee may take to report and for that report to be examined that it is extremely unlikely that any Government will be in a position to offer them any contract until well after the appointed day. Other members of the profession will also be asked to go on with their work. General practitioners will be asked to go on with their work for their patients, but on a non-contract basis.

If we get a sufficient majority the period of uncertainty will not be prolonged. The first stage is to express yourselves quite plainly in the plebiscite return. It has been said sometimes of the B.M.A. that it has not given a lead. Let there be no mistake on this occasion. The lead is plain. In the view of the Council of the Association this thing is wrong, and its advice is that our profession should stand firm in resisting it. (Loud applause.) There is no ambiguity of any kind there.

A Word to the Consultants

To our consultant colleagues, I would say it may be true that the battle ground is in the field of general practice. To some extent that is inevitable. But it is also true that the freedom of one section of the profession is of paramount importance to the freedom of the whole. We say to our consultant friends, "We need a united profession, a profession in which all its elements, whether consultant or general practitioner, whether directly affected or not, acknowledge their duty in this regard to the public and to the future of the profession to which they all belong." The members of the profession in other countries, especially in the Dominions, are watching events in this country with anxious interest. It is our duty and our opportunity by standing firm to secure that this thing does not come into operation in its present form. (Renewed applause.)

Speaking Personally

In conclusion Dr. Hill took his audience back to a similar meeting in that Great Hall in the summer of 1943:

We were then considering a document which had been produced by Mr. Ernest Brown for a whole-time salaried service under the State. Such was the reaction of that meeting that very soon afterwards Mr. Brown placed those proposals, in his own words, in the discard. At that meeting I necessarily expressed a personal view, because by the sequence of events it was not possible to express an official view.

In the years between it has been my job to try to interpret the different moods of the profession (and they have differed over the years). It is four years to-day since I was appointed to the secretaryship of the Association, and throughout those four years I have been in all the discussions which have taken place. From time to time I have had my doubts on one point or another; at times it has been difficult to see the wood for the trees. All of us in the last few years seem to have had some difficulty, possibly as a result of the war, in seeing big issues in their full clarity.

We were right to undertake discussions during this past year, for we had everything to gain and nothing to lose by frank and detailed criticism and comment. The events of recent months have made it absolutely clear that these proposals mean and are intended to mean a whole-time salaried service under the State. And I have no doubt in my mind that our profession would be right to reject this thing by an overwhelming negative vote in the plebiscite shortly to be taken.

This is the last chance to do so. If we do have to enter the Service in its present form, life will still go on, but medical practice will have changed its character. There will be lost to the profession and to the public a form of practice which by its emphasis on the individual, by its insistence on the doctor-patient relationship, by its human yet efficient character, has been a credit to this country. These will be lost and lost for ever unless the profession forgets its past differences, learns a new loyalty, and stands with firmness for its principles. It is *now or never* for the profession to which we belong.

QUESTIONS

The remaining time of the meeting was occupied with questions sent up from the audience. Among the questions was, "If partnership is fraught with difficulties will not group practice have difficulties still greater?" Dr. Hill said that the fair answer was that if the Act came into operation in its present form there would be an entirely new kind of partnership difficult to envisage at the moment.

"If the B.M.A. considers that the new Service will mean so much extra work for the general practitioner, why is it opposed to regular hours and rota of duties?" Dr. Hill replied that in so far as mutual arrangements between practitioners were concerned it was a matter of common sense that they should be made. A whole-time salaried service might well mean a more ordered and leisurely life, but they could not have it both ways; they could not insist on the freedom of the individual doctor to conduct his practice in his own way and at the same time expect to have the conveniences of a whole-time service.

"What guarantee is there that the vote in the plebiscite will be adhered to by the individual?" In the first stage, none. They had to rely on the integrity of the profession. At the same time organizational steps would be taken to induce in the profession that warm feeling of fellowship which came from the knowledge that individuals were not standing alone. It was necessary to get away from the mentality which assumed that the profession was incapable of loyalty. This was an issue which affected the profession as a whole, and as a united profession they would deal with it.

"What will be the position of the man with specialist qualifications who wishes to continue in general practice?" Such an individual would be able, if he chose, to remain in general practice. There might be a movement to encourage those who were doing both general practice and specialist work to decide to go one way or the other, but there was no need for such a man to fear that he would be required to leave the general practice he preferred.

"What is going to happen with regard to 'displaced persons' on the temporary *Register*?" There would be added to the permanent *Register* within the next few months, as the result of an Act which had just received the Royal Assent, a considerable number of alien practitioners who had been on the temporary *Register* and others who had not. There might be between 3,000 and 4,000 altogether. They would be invited to express their views in the plebiscite, but account would be taken of this body of people in calculating the size of the necessary majority. It must not be assumed that alien practitioners would not stand in with the British profession.

"What is the significance of the Minister's comment that in two years' time the position will be reviewed?" The guess was made that 95% of the community would sooner or later use the new Service. That figure was subject to review in the light of experience after two years, which was right and proper.

Questions were asked about the wording of the question in the plebiscite. Dr. Hill said that this had been the subject of most careful consideration. The wording arrived at might not please some, but he asked that, having been thought out at great length, it should be accepted. "It may not be perfect, but it will give you an opportunity to say you will not touch this thing."

In reply to another question he said that private practices could still be bought and sold if no compensation had been paid in respect of them.

Asked why £300 was chosen as basic salary, he said that he had not the faintest idea. But the insistence on a basic salary furnished the justification for the Minister's distribution proposals. The salary element was a thing that could be increased as the years went by. It was the thin end of a big wedge.

Some questioners were evidently disturbed about the position with regard to N.H.I. if there was no acceptance of service on the appointed day. It was possible, said Dr. Hill, that there might be a period of conflict during which practitioners would provide a service for their patients on a fee-paying basis. It was a risk worth facing provided sufficient strength was shown in the plebiscite returns. "If you believe in a whole-time salaried service, you will express your approval of the Act on the plebiscite form, but if you do not believe in such a service and are willing to prevent its ever happening, then you will vote the other way, and you have the assurance that action will be taken only if a sufficient number of your colleagues think likewise, that number being sufficient to compel the Minister to think again."

MEDICAL NEW YEAR HONOURS

The names of the following members of the medical profession were included in a New Year Honours List published in the *London Gazette* on Jan. 1:

G.B.E. (Civil Division)

Sir EDWARD MELLANBY, K.C.B., M.D., F.R.S., F.R.C.P. Secretary, Medical Research Council.

K.C.S.I.

Major-General (Local Lieutenant-General) TREFFRY OWEN THOMPSON, C.B., C.B.E., M.D., late R.A.M.C. Honorary Physician to the King. Director of Medical Services, India.

K.C.I.E.

Major-General ROBERT HAY, C.I.E., M.B., Ch.B.Ed., I.M.S. Director-General, Indian Medical Service

K.B.E. (Civil Division)

JOSEPH BERNARD DAWSON, M.D., F.R.C.S., F.R.A.C.S., F.R.C.O.G. Professor of Midwifery and Gynaecology in the University of Otago.

Knighthood

Colonel DAVID CLYDE, C.I.E., M.D., I.M.S. Honorary Surgeon to the Viceroy. Surgeon-General with the Government of Bengal.

His Honour TOM EASTHAM, K.C., M.B., Ch.B. Senior Official Referee, Supreme Court of Judicature.

JOHN PARKINSON, M.D., F.R.C.P. Physician in charge of the Cardiac Department, London Hospital.

HARRY PLATT, M.D., M.S., F.R.C.S. Professor of Orthopaedic Surgery in the University of Manchester.

Professor LUIGI PREZIOSI, M.D. President of the National Assembly, Malta.

C.B. (Military Division)

Major-General (temporary) (now Colonel) STANLEY ARNOTT, C.B.E., D.S.O., M.D., late R.A.M.C.

Air Commodore PHILIP CLERMONT LIVINGSTON, C.B.E., A.F.C., F.R.C.S., R.A.F.

Surgeon Rear-Admiral JOSEPH ALOYSIUS O'FLYNN, M.D., R.N. Honorary Physician to the King.

C.B. (Civil Division)

JOHN JARDINE, O.B.E., M.D., F.R.C.S.Ed. Chairman, General Board of Control for Scotland.

C.M.G.

ERNEST MUIR, C.I.E., M.D., F.R.C.S.Ed. Honorary Medical Adviser to the British Empire Leprosy Relief Association.

C.I.E.

Lieutenant-Colonel ALFRED INNES COX, O.B.E., M.R.C.S., L.R.C.P., I.M.S. District Medical Officer, The Nilgiris, and Superintendent, Government Headquarters Hospital, Ootacamund, Madras.

Colonel PAUL HERBERT SHELLEY SMITH, O.B.E., M.B., B.Ch., I.M.S. Inspector-General of Civil Hospitals and Prisons, North-West Frontier Province.

C.B.E. (Military Division)

Brigadier (temporary) RODERIC DUNCAN CAMERON, O.B.E., *M.C.*, M.B., Ch.B., late R.A.M.C.

Surgeon Captain CLAUDE KEATING, M.S.M., L.R.C.P.&S.I., R.N.

C.B.E. (Civil Division)

JOHN BURKE, M.D., C.M. For devoted service as a medical practitioner and surgeon in the districts of Grand Bank and Fortune, Newfoundland.

Professor NORMAN MCOMISH DOTT, M.B., F.R.C.S.Ed. For services as Director in Neurology and Neuro-Surgery, Brain Injuries Unit, Bangour Hospital, Edinburgh.

Lieutenant-Colonel ALBERT EDWARD EVANS, M.B., B.S. Medical Chancery Visitor, Supreme Court of Judicature.

WALTER ALLISON GILMOUR, M.D. Pathologist, Auckland Public Hospital, New Zealand.

Lady (ISABEL ELMSLIE) HUTTON, M.D. Lately Director of Welfare, Indian Red Cross and St. John War Organization.

WILLIAM GORDON MASEFIELD, M.R.C.S., L.R.C.P. Lately Medical Superintendent, Brentwood Mental Hospital, Essex.

GEORGE FRENCH STEBBING, M.B., F.R.C.S. Late member and Honorary Secretary of the Radium Commission (died Dec. 22, 1947).

O.B.E. (Military Division)

Surgeon Lieutenant-Commander JOHN WARD WALKER, M.B., Ch.B., R.N.

Major (temporary Lieutenant-Colonel) FREDERICK WILLIAM WHITEMAN, M.B., Ch.B., I.M.S./R.A.M.C.

O.B.E. (Civil Division)

HARRIET ELIZABETH ACHESON, M.D. Women's Medical Service, India. Vice-Principal and Professor of Obstetrics and Gynaecology, Lady Hardinge Medical College, New Delhi.

VICTORIA MARY CROSSE, M.D. Deputy Senior Assistant Medical Officer of Health, City of Birmingham.

THOMAS FRANK DAVEY, M.D. Medical Officer, Leprosy Service, Owerri Area, Nigeria.

Major GEORGE KENNETH GRAHAM, M.B., B.Ch., I.M.S. Lately Civil Surgeon, Peshawar, North-West Frontier Province.

Major JAMES GUTHRIE, M.B., Ch.B., I.M.S. Civil Surgeon, Tibet and Bhutan.

Major CORNELIUS JEFFCOTT HASSETT, M.B.E., M.B., B.Ch., I.M.S. Civil Surgeon, New Delhi.

NICHOLAS KEATING, L.R.C.P.&S.I. Senior Member, South Wales Panel, Silicosis Medical Board, Ministry of National Insurance.

CHRISTIAN WILLIAM FRASER MACKAY, M.B., Ch.B., Colonial Medical Service. Assistant Director of Medical Services, The Gambia.

HOFEEZUDIN SIRAJUDIN MOONSHI, L.M.S. For public services in Singapore.

Mrs. MARGARET STEWART MUNDAY, M.B., Ch.B. Lately Professor of Physiology, Lady Hardinge Medical College, New Delhi.

Lieutenant-Colonel WALTER SCOTT, M.B., B.Ch., I.M.S. Civil Surgeon, Central Provinces and Berar.

Major ARTHUR MANUS SHERIDAN, F.R.C.S.Ed., I.M.S. Civil Surgeon, Lucknow, United Provinces.

Major SAMUEL SHONE, M.D., M.R.C.P., I.M.S. Superintendent, King George Hospital, and Professor of Medicine, Andhra Medical College, Vizagapatam, Madras.

Major HAROLD STANISLAUS SMITHWICK, M.B., B.Ch., I.M.S.

WILFRED STANLEY WALLIS, M.B., Ch.B., Rotorua, New Zealand For services to returned ex-Servicemen.

OSCAR REGINALD LEWIS WILSON, M.B., B.S. Principal Medical Officer, Ministry of Pensions.

Honorary O.B.E. (Civil Division)

SAMUEL LAYINKA AYODEJI MANUWA, M.D., F.R.C.S.Ed. Specialist in the Medical Department, Nigeria.

M.B.E. (Military Division)

Major (temporary) JOHN BISHOP BORTHWICK, M.B., F.R.C.P Ed., R.A.M.C.

Major ROY THOMSON FLETCHER, M.D., R.A.M.C.

Flight Lieutenant THOMAS HARVEY, M.B., Ch.B., R.A.F.V.R.

Major (temporary) IAN ARCHIBALD JACKSON, M.B., B.Chir., R.A.M.C.

Captain CHEE JUAY POH, L.R.C.P.&S.Ed. Medical Officer, Singapore Volunteer Corps.

M.B.E. (Civil Division)

MARGARET KERR MENZIES ALEXANDER, M.B., Ch.B. Medical Superintendent, Christian Rainy Hospital, Todiarpet, Madras.

PUTHENVELIL MATHAI JOSEPH, M.B., B.S. Medical Officer, Seychelles Hospital, Seychelles.

JOHN ALAN BENNETT NICHOLSON, M.B., Ch.B., Colonial Medical Service. Medical Officer, Nigeria.

Mrs. MARGARET MARY SHEPHERD, M.B., Ch.B., late of Madras. For medical services.

Captain MORTIMER LAWRENCE AXEN STEELE. First Class Military Assistant Surgeon, Indian Medical Department. Medical Officer, Victoria Memorial Hospital, and Quarantine Medical Officer, Bahrain, and Officiating Residency Surgeon, Persian Gulf.

Bar to Kaisar-i-Hind Gold Medal

JEAN MURRAY ORKNEY, M.B., Ch.B. Chief Medical Officer, Women's Medical Service, India.

Kaisar-i-Hind Gold Medal

IVA NOEL GIBBINS, M.D. Medical Superintendent, Philadelphia American Hospital, Ambala City, Punjab.

JANE GRANT, M.B., Ch.B. Medical Officer, Church of Scotland, Seoni, Central Provinces and Berar.

HERBERT KIRBY. Doctor-in-Charge, Jorhat Leper Colony, Jorhat P.O., Assam.

VICTOR CLOUGH RAMBO, M.D., F.A.C.S. Doctor-in-Charge, Mission Eye Hospital, Mungeli, Central Provinces and Berar.

BHAGWANT KISHORE SIKAND, M.B., B.S. Medical Superintendent, New Delhi Tuberculosis Clinic.

RONALD WILSON THOMAS, M.B., B.S. Medical Superintendent, Baptist Mission Hospital, Palwal, Gurgaon District, Punjab.

The Ministry of Transport points out that owners should take particular care to instruct doctors on Scale I ships to make arrangements for the drugs, sundries, and dressings to be replenished regularly, and for the proper maintenance of the surgical instruments and appliances. The medical cabinet of Scale II ships should be replenished by druggists according to the procedure explained in Notice No. M.210, copies of which can be obtained at any mercantile marine office.

THE RED CROSS

WORK IN THE SECOND WORLD WAR

The Seventeenth International Red Cross Conference will be held at Stockholm in August, when a detailed report of wartime activities will be presented. As a preliminary a short account of the work of the International Committee has been published in Geneva under the title *Inter Arma Caritas*. On the day the war broke out the original four belligerents were informed that the International Committee had established the Central Information Agency contemplated under Article 79 of the Prisoners of War Convention signed in Geneva in 1929. During the war this Agency made out and filed 39 million record cards and forwarded 13 million letters. The longed-for parcel from home was received by prisoners on 36 million occasions. The workshop of the Agency was the Palais Electoral at Geneva, which was turned into a huge factory, with benches and business machines and crowds of workers, and there were 27 secondary workshops throughout Switzerland. One hint of the difficulty of tracing prisoners-of-war may be gathered from the statement that from a French village went a soldier named Jean Martin; to his mother there was only one Jean Martin in the world, but in the prisoner-of-war camps of Germany there were 15,000 Martins and 1,400 of them bore the Christian name of Jean.

The Red Cross Convention provides for the health of prisoners. Every prison camp must have its sick ward and every man the medical attention he requires. It is reported that in this respect the Convention was fairly generally observed. "Protected personnel"—persons engaged exclusively in attending wounded and sick—were picked out of the mass of prisoners and an endeavour made to secure their repatriation, but shortage of doctors and orderlies compelled their detention in camps to tend their compatriots, and the International Committee did its best to ensure that they were treated in accordance with the spirit of the Convention. The dispatch of medical relief had to be undertaken and there were frequent shortages of medicaments. Prostheses were in demand everywhere, but the greatest need was for dentures. With the help of instruments and appliances furnished by National Red Cross Societies, 64 dental surgeries were completely fitted out in the camps of Germany.

In the winter of 1941–2 thousands died every day in the Greek famine, and the health of the Greek people seemed to be threatened for a generation. The Turkish Red Crescent offered supplies, and supplies were also found in Switzerland and the Balkan countries. A chain of soup kitchens giving 800,000 helpings a day was improvised, and eventually a scheme was organized for monthly shipments from Canada to the Piraeus of 15,000 tons of wheat and 3,000 tons of other supplies, which were checked at every stage until their issue in the bakeries of the remotest Greek villages.

The difficulties behind this and much other work are not unduly stressed in the narrative. The achievement would have been on a much smaller scale but for the help of Switzerland. From the beginning to the end of the war the work of the International Committee cost 45 million Swiss francs, more than half of which was supplied by the Swiss Government and people. Even that immense sum, spent in six years, was equal only to the cost to all the belligerents of six hours of war. It is a fine record so far as Switzerland is concerned, and to Switzerland, too, fell the honour of providing at Geneva the one rent in the armoured curtain through which all this relief and succour passed. The greatest difficulty of all was the persistent reserve of the Soviet authorities with regard to the International Committee's offers of assistance. Letters sent to Moscow were unanswered, indirect negotiations led to no result, and millions of prisoners in Eastern Europe were deprived of the services which the Committee was anxious to render owing to the persistent silence—the unspoken "No"—of Russia.

A circular from the Ministry of Health requests hospital authorities to renew contracts for supplies and services due to expire before the "appointed day." They should be renewed on the basis and for the period which would have been adopted if no transfer under the Act was impending.

Reports of Societies

PLASMA PROTEIN FRACTIONS

At a meeting of the Section of Experimental Medicine of the Royal Society of Medicine on Dec. 9, 1947, Prof. H. P. HIMSWORTH presiding, the subject of plasma-protein fractions was introduced for discussion.

Dr. R. A. KEKWICK, Director of the Biophysics Division, Lister Institute, said that during the last ten years considerable advances had been made in the knowledge of protein constitution of biological fluids and tissues. These advances had been due chiefly to the application of improved electrophoresis techniques introduced by Tiselius. The scale on which separation of proteins could be carried out by electrophoresis was still very limited, but in conjunction with classical methods for bulk fractionation of protein solutions the method had proved of great service.

By the electrophoretic examination of normal human plasma five components were originally distinguished—namely, albumin, alpha, beta, and gamma globulin, and fibrinogen, the globulins differing in charge but not markedly in molecular weight. Recent studies had indicated the existence of two alpha and two beta globulins. The amounts of the various proteins in normal human plasma were roughly as follows: albumin, 55%; the globulins, 38.5%; and fibrinogen, 6.5%.

After describing the system of fractionation of human plasma with ethanol at low temperature and of the ether fractionation system, Dr. Kekwick discussed the clinical application of plasma fractionation products. Perhaps the most versatile of the products of plasma fractionation were fibrinogen and thrombin. As the clotting time of fibrinogen–thrombin solutions could be accurately controlled, a liquid mixture could be applied locally which subsequently clotted. The tensile strength of fibrin clots increased with fibrinogen concentration, and solutions of fibrinogen up to ten times the corresponding concentration in plasma were readily attainable. The clots formed from such solutions had been used to suture severed nerves by a soldering type of process. Rather lower concentrations of fibrinogen provided, with thrombin, an excellent adhesive for the application and fixing of skin grafts, dispensing with the necessity for pressure dressings. Grafts fixed in this manner vascularized with extraordinary rapidity.

Fibrinogen preparations also contained a material which was effective in reducing the whole-blood clotting time in haemophilia from, say, 75 minutes to about 15 minutes. An injection of 10 ml. of a 2% solution would keep the clotting time at this level for about 48 hours. Fibrin films, resembling sheet cellophane in appearance, had been successfully used as a dural substitute with marked absence of adhesion. The film was eventually replaced by fresh dural growth.

Somewhat less purified fibrinogen solutions were utilized in the production of fibrin foam. By suitable devices these solutions were beaten to a finely dispersed foam which was set by adding thrombin and then dried from the frozen state. Such foams, if wetted again, tended to shrink rapidly, but this could be prevented by baking the dried foam at 130–170° C. The dried foam would absorb almost its own volume of thrombin solution, and was used in conjunction with this for local haemostasis in internal surgery. The foam was allowed to remain *in situ* following operative procedures, and eventually became organized into the tissue without scar formation.

It had been established that the antibodies in many infectious diseases were associated with the gamma globulin of normal adult plasma. Concentrates of this protein had been successfully utilized in the control of measles and might be useful in infective hepatitis. For measles intramuscular injections of up to 5 ml. were required. The use of similar concentrates prepared from convalescent-plasma pools from other infectious diseases—for example, mumps—had been examined. Purified albumin solutions containing 25 g./100 ml. had been satisfactory for transfusion in cases of shock and hypoproteinaemic oedema. Further research might indicate the usefulness clinically of other fractions derived from human plasma.

Electrophoretic Examination of Plasma

Dr. NICHOLAS H. MARTIN, of the Biochemical Laboratory at St. George's Hospital, also referred with appreciation to the electrophoretic technique elaborated by Tiselius, which had proved a convenient method of control in many fractionating processes. Electrophoresis might be defined as the phenomenon of migration of particles in a medium under the influence of a current applied through that medium. The protein mosaic of human plasma was analysable, as Dr. Kekwick had stated, into five main groups: albumins, the three globulins, and fibrinogen. The foetus and the newborn infant appeared to have a relative excess of gamma globulins. The electrophoretic patterns of human serum and plasma were not the patterns of pure protein but of the complexes of proteins with non-protein substances. The albumin fraction might contain carbohydrate and fatty acids; certain of the globulins might contain lipoids and steroids. In other words, electrophoretic homogeneity should never be considered to imply chemical homogeneity.

After discussing the comparison of electrophoretic with salting-out methods, Dr. Martin considered the protein pattern in disease processes. In diseases involving the liver parenchyma the pattern varied with the stage and extent of the disease. In the early stages of simple uncomplicated infective hepatitis there was a relative depression of the albumin, with increase in the gamma globulin. As the patient recovered, the albumin tended to revert to a normal level and the circulating gamma globulin level to drop. The gamma and beta globulins might show some change, notably between the 14th and 30th days, and it had been observed that their deviation from normal was greatest in those patients having a tendency to relapse. He showed an analysis of a simple uncomplicated case of infective hepatitis and pointed out the migration of the "bound" bilirubin in the serum with the alpha globulin. That the actual recovery of the circulating albumin might not be as rapid as superficial examination of the electrophoretic data would lead one to suppose was shown in a table in which the total circulating components had been calculated on two analyses in a moderately sick patient, the first towards the end of the first week, the second early in the fourth week, during the recovery phase. Whereas the level of the gamma globulin had fallen to normal limits, the total amount of circulating albumin was still 15% below normal in the fourth week. In established chronic liver damage analysis showed an absolute diminution in the circulating albumin with an increase in the gamma globulin, which might represent 30% of the total circulating protein.

It must not be imagined that the technique of electrophoresis as at present developed was to be used as a routine tool in diagnostic procedure—on a level with, for example, electroencephalography. Rather did its use lie in throwing light on the mechanism of existing procedure and in suggesting fresh approaches to the study of the fixed and circulating protein complexes in health and disease. It should not be used without an intelligent appreciation of its limitations. Electrophoretic homogeneity implied neither chemical homogeneity nor biological specificity; it was only one step—though a very important one—in the direction of the study of macromolecules.

ACUTE RHEUMATISM

At a meeting of the Devon and Exeter Medico-Chirurgical Society on Dec. 18 Prof. C. BRUCE PERRY gave an address on the aetiology and treatment of acute rheumatism.

Prof. Perry said that rheumatic heart disease accounted annually for 2% of all deaths and for 10% of all deaths under the age of 40. Haemolytic streptococci of no particular strain appeared to be the exciting cause, but the predisposing causes were at least as important. Scarlatinal rheumatism, so-called, was identical with acute rheumatism. "Miniature relapses," only recognizable when the patient was under close observation and indicated perhaps merely by a rise in the sleeping pulse rate, were common. Epidemics of acute rheumatism followed epidemics of sore throat. The disease reached its peak in this country in December and January and was most rare during August and September. In New York it reached its peak in March. In the Arctic regions and in the Tropics it was rare but not unknown. Children between the ages of 5 and 15 were most prone to the disease, and females were more commonly attacked than males, though carditis was often worse in the male and especially aortic endocarditis. There was a clear-cut social factor in the aetiology of acute rheumatism; it was commoner where there was poverty. The familial nature of the disease had often been noted, but it was difficult to balance the relative importance of heredity and environment. During the past 30 years there had been a decline in the incidence of this disease.

Treatment must be directed primarily against the carditis. Rest in bed, not flat but propped up on pillows, for at least six weeks was necessary. If there was any evidence, however slight, of continued infection the rest period must be prolonged for at least a month after all such evidence had disappeared. General hygienic measures must be adopted and local measures for the relief of joint pain. Salicylates in full doses, not necessarily combined with sodium bicarbonate, remained the best drug treatment. Penicillin and tonsillectomy were both valueless, and the results of the experimental prophylactic use of sulphonamides had not been impressive.

MEDICAL SOCIETY OF THE L.C.C. SERVICE

CLINICAL MEETING

At a meeting of the Medical Society of the L.C.C. Service, at Lewisham Hospital on Dec. 4, 1947, Mr. J. GABE opened a discussion on the treatment of undescended testicle. He showed four cases illustrating the results of different methods of treatment. He considered that the operation should be done before the age of 16. Before operation was undertaken the diagnosis must be certain. Testicles often descended into the scrotum as late as the fourteenth year of life, and he thought that a course of "pregnyl" was of value in hastening the descent of a testicle round about puberty. In bilateral cases he had found the Bevin operation valuable, but in unilateral cases generally considered it better to do the Keetley-Torek operation. The chief difficulty in the operation was due to the shortness of the vessels, and great care was necessary to avoid dividing so many vessels that atrophy of the testicle followed.

Thiouracil

Dr. GOTTLIEB read a short paper describing the results of treatment of 22 cases of thyrotoxicosis over the past three years by thiouracil and methyl thiouracil. Of these 22 cases, four had eventually been treated by thyroidectomy owing to the occurrence of severe granulocytopenia. Of the remaining 18 patients, two died; one had had thyroidectomy performed three times, and the other had a severe aortic stenosis and, despite temporary improvement during treatment, died of congestive heart failure. All but three of the cases had been treated with methyl thiouracil. The dosage adopted was 200 mg. three times a day for three weeks while in hospital, then 200 mg. twice a day for two weeks as an out-patient, followed by a maintenance dose of 50 mg. once or twice a day for six months to one year. There had been an invariable improvement clinically, but all except two cases had relapsed within two to twelve months of stopping treatment. He had had two cases with no relapse for one year and fourteen months, respectively, following cessation of treatment. During the treatment a weekly blood count was done, and eight patients in addition to the four already mentioned showed granulocytopenia; his criterion for granulocytopenia was 4,000 w.b.c. and 1,800 granulocytes. He considered that the only drug of any value for granulocytopenia or agranulocytosis was penicillin.

Congenital Intestinal Obstruction

Dr. SIMMONS, after referring to three cases of congenital intestinal obstruction which had been demonstrated, pointed out that this type of obstruction was said to occur in 1 case in 20,000, and was due to malrotation of the mid-gut, causing obstruction by pressure from without. The signs and symptoms were similar to cases of congenital hypertrophic pyloric stenosis, except that no tumour could be felt, the vomit was always bile-stained, and the vomiting started earlier in life.

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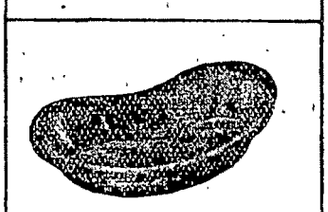

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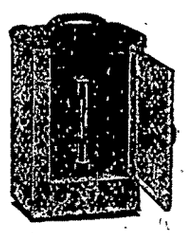

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Mr. JEMSON, who had operated on the three cases, pointed out that the faulty rotation of the mid-gut left adhesions attaching the transverse colon to the duodenum. Referring to the investigations of Ladd and others in America, he said that the best operation in these cases was to divide the adhesions between the colon and the right upper quadrant of the abdomen, and push the whole transverse colon and ascending colon over to the left. This resulted in a broader base being given to the mesentery of the small intestine, which in these cases was practically absent, and thus helped to prevent the later occurrence of the volvulus. Mr. TANNER said that this condition might persist into adult life; he had had two such cases. Simple division of the adhesions was not adequate for cure in adults; a short-circuiting anastomosis was needed.

Correspondence

Censorship

SIR,—Mr. J. Johnston Abraham (Dec. 27, 1947, p. 1053) calls attention to a matter of first-rate importance not merely to the medical profession but to the nation as a whole—namely, will the doctor be free to write and publish under the new Health Act or will he not? It seems extremely doubtful if he will. The following question was asked in the House by Mr. I. J. Pitman:

"What are the general principles under which State employees are allowed or forbidden for payment to write for publication on technical matter peculiar to their specialization; and what differences are there in the particular cases of the Royal Air Force and the Air Ministry, the National Coal Board and decentralized coal units, and the medical services and the Ministry of Health when the appointed day is past?"

Mr. W. Glenvil Hall, Financial Secretary to the Treasury, replied on Nov. 6:

"A Crown servant must obtain the consent of the head of his Department for the publication of any work the subject matter of which is connected with his official duties or those of other public servants. In cases where the work is considered to owe its value exclusively to the author's ability and research, no special financial arrangements are made. In other cases the Government may either arrange for official publication or stipulate that copies should be supplied for the public service at a special rate.

"These rules apply to the Royal Air Force, the Air Ministry, and the Ministry of Health. I have no information about the arrangements in the coal industry, which are a matter for the National Coal Board itself. I understand that no rules have yet been made for employees of the new bodies set up under the National Health Service Act."

From this reply the position of the doctor to be employed under the National Health Service Act is somewhat obscure. If he is classified as a Crown servant then he will apparently rarely, if ever, be entirely free to write, and there is considerable danger that regulations would in due course be laid down by the Treasury for doctors serving under the National Health Service Act, on lines similar to those applying to the Civil and other services. Were such regulations to be applied the present freedom of expression of medical opinion would cease. It therefore appears most urgent that the position should be clarified.—I am, etc.,

London W.C.1. R. F. WEST,
Chairman, Medical Group of the Publishers Association.

National Health Service

SIR,—I append five subjects for G.P.s to consider.

Remuneration.—(*a*) Basic salary opens door to a full-time salaried service, disapproved by the Spens Committee. (*b*) Both salary and capitation rate have never been discussed nor agreed to. They can be altered by the Minister whenever he considers necessary and certainly in two years. (*c*) Capitation rate for 1,000 patients is 21s. 1d.; capitation rate for 4,000 patients is 16s. 8d. This must act as a discouragement to men working in an industrial district, where private practice is likely to be scarce.

Compensation.—(*a*) £66,000,000 computed in 1938 is probably not adequate in 1948. (*b*) It may prove impossible (anyway it will take years) to estimate what any one practice should receive, as all practices have to be investigated before any one can be valued. (*c*) The Minister's decision that a doctor not joining on the appointed day shall forfeit his claim to compensation savours of bribery and intimidation.

Midwifery.—In England and Wales all practitioners must satisfy a local committee that they are adequately qualified to practise midwifery within the Service.

Direction.—The Minister states that a doctor is free to practise where he chooses. This immediately becomes false once the Service is established. Local committees will decide whether an additional doctor may practise in their area and will have the disposal of all Service practices and houses.

Control.—The Minister retains power to appoint *all* chairmen of *all* committees for *all* time, and ultimately to approve all members lay and medical. Under these circumstances what hope is there of amending the Act (save favourably to the Ministry) once the Service is started?

Health Centres are in abeyance. Doctors and their unfortunate wives will be expected to make good the rash promises made by the Ministry. In my opinion G.P.s would be well advised to say "No" to working the unamended Act.—I am, etc.,

Birmingham. WM. WATSON NEWTON.

SIR,—Surely the time for clear thinking has now arrived: we must face facts, and face them unflinchingly. It is obvious that the Minister intends, for political reasons, to have a full salaried service—and that within two years. If we sign on the dotted line to one set-up of regulations, it will be well within his power to alter our remuneration and/or our method of payment at any time he likes. Once we sign we are for ever in the clutches of the Minister, and the freedom of the doctor and patient will be gone for ever. Partnerships the Minister pretends to welcome but obviously intends to destroy, the present Act making all our old partnership deeds quite unworkable. Ministers dislike partnerships; groups tied together by many bonds are always stronger than the same people existing as separate entities.

There are numerous young men in the profession who see in State control some semblance of personal security. I would beg them to realize that their "Yea" for the questionable privilege of doubtful security may well remove from the people of their country almost the last shred of real freedom which still remains to them.

The B.M.A. has had a very difficult task and has lately done it with courage, but many think, as I do, that had their earlier attitude to the Government been firmer they would have received greater support from the profession and more respect from politicians. At all events, it is not too late for them to put the profession on its guard, and when the time for the plebiscite comes let us have no more ambiguity but rather a strong pointer in the direction of freedom, so that they may be blessed not only by the profession as a whole but by all thinking men and women as the champions of independence and liberty.—I am, etc.,

Wokingham, Berks. RALPH ROSE.

SIR,—I entirely agree with Dr. A. F. Chalkley's appeal for plain speaking (*Supplement*, Dec. 13, 1947, p. 139) and for freedom. Let us have the courage of our convictions. Very few in our profession really want State medicine, but they are afraid to back their opinions with action or even to state them clearly. Why? I believe it is due to four things—viz.:

(1) Muddled thinking. One often hears it said, "Probably the Ministry knows what it is about." Yes, but what is it about? Certainly not the highest good of the greatest number. It is out, "by the deadly method of one by one," for State Socialism, which is State monopoly of all the professions, beginning with medicine. Ahead lies supreme political and economic bureaucracy, with slavery for everyone else.

(2) Fear of insecurity. Alas, this un-English craving for security has grown on us. Safety first is a very poor motto, and would never have won the war. Too many younger members of our profession are terribly afraid of insecurity and seem to prefer safety to freedom itself. As an older friend said

to me, "We had the same difficulties and chances when we came out of the Services in 1919. Why can't the modern young man do as we did?"

(3) The habit of obedience. The tragic result of our patriotic obedience during the war has made us all in danger of losing our sense of individual initiative and responsibility. And again it is our younger members who are far too ready to toe the line and become yes-men. Let them have the courage to say no.

(4) Plain disregard of facts. It is *we* who have the whip hand, not the Minister of Health. He can do nothing without us whatever he may say. It is we who are in the strong position *now*, but we are in the middle of a terrific battle, and if we fail we betray the side of freedom in every department of our life in England and the freedom of those who come after us. Let us realize this temporary Minister of Health is only like a very difficult patient determined to get his own way by any means. Let us be more determined ourselves not to be bullied, browbeaten, or fooled. The medical profession has with immense patience tried its best to get Mr. Bevan to co-operate. He has not moved an inch. He never had the slightest intention of co-operating. Mr. Bevan is an extremely ambitious politician. He has failed miserably over his vaunted 1945 housing schemes. Now he is trying desperately by very clever alternations of pay-packet promises, bluster, and pretended care for the health of the people to bolster up his own failing prestige. Let us call his gigantic bluff! Finally, let us remember this all-important fact. Within a fairly short time, possibly this year, this totalitarian Socialist Government will be *superseded* by a *really progressive one*. Then we shall get a Health Bill we can all support freely.

The leading article "Mr. Bevan's Gloss" (Dec. 27, 1947, p. 1037) puts the case very fairly and clearly. Now it is up to each one of us individually. Let us remember our tradition of courage, independence, and self-sacrifice. Let us accept our great responsibility to our nation, our patients, and our profession, and for their sakes as well as our own say in the coming plebiscite a categorical "No, we will not serve in any way under the present Act."—I am, etc.,

London, S.W.1 SYBIL TREMELLEN.

SIR,—May I try to answer a fear which I have heard expressed? "I do not want to join the Service, but I have no alternative. I must support my wife and family." This line would inevitably ensure only a small minority of opposition to the Minister. "It will be all right if we get a good majority." We shall get no majority if we cannot each decide alone to do what we think right. The hope for a good majority shifts the responsibility from ourself to our professional neighbours.

To answer the question, If the worst comes, and I find myself alone outside the Service, how can I earn my living?—First, my panel and contract patients will unwillingly and complainingly overcrowd the waiting-rooms of doctors they have not hitherto wanted to choose. Then some few of my "private" patients will continue to support me. Soon after this my neighbours' duchesses will refuse to wait in their crowded rooms and will transfer to me. Then there are all the regular "nuisances" who are never patient or amenable to the discipline of regular times for sending their "urgent" messages. They will soon find I have time to give them. Of course I shall have to make changes in my hours and find an entirely new and experimental scale of fees, but still, if the worst comes, it will be possible to make a living—perhaps a good one. And if the worst does not come, and we all stay outside together until the Minister learns that "sincere co-operation" entails give as well as take, then the best will have happened.—I am, etc.,

Crowthorne, Berks H. D. FORBES FRASER.

SIR,—At present we enjoy freedom and owe allegiance to none save our patients. The country has a good medical service, but it can be improved upon with the co-operation of the Government. In working for improvement we are not concerned with our own political beliefs or the particular form of government which happens to be in power. Governments will come and go, but medical progress must be directed towards a fixed ideal, aided or hampered perhaps by governments, but certainly not influenced by them.

Since the Socialist Government came into power the necessity of clinging stubbornly to our freedom has become more and more obvious. Socialist authorities have tried to force doctors into trade unions. Why should a professional man be required to associate himself with an organization originally intended for the protection of employees against employers, and legitimately concerned only with industrial matters? When one considers the way in which trade unions have become increasingly powerful, and increasingly preoccupied with political issues—a sphere incidentally in which they are quite undemocratic—then their danger is obvious. Since the inception of the present Government we must all have received communications urging us to join a certain medical union affiliated to the T.U.C. This union disclaims any political affinities and thus, in my opinion, denies the only logical reason for its existence.

The present Government has already given rise to doubts regarding its moral integrity; already we have been given instances where materialistic progress has been the excuse for violation of moral principles. I believe that in spite of the honeyed words of Mr. Bevan he seeks to use the National Health Service Act as a means to a political end—i.e., the confusion and gradual enslavement of a profession whose political views are predominantly anti-Socialist.

It would be well to take heed of Mr. Churchill's pre-election warning of the dangers of totalitarianism in a Socialist state. If we allow ourselves to be lured by Socialist bait into captivity, then we are unworthy of our great heritage and will be cursed by many generations of medical men to come. Politicians can play a clever and often underhand game to gain their own ends, and in dealing with them we must unite in rejecting any plan of any government which involves even the remotest danger of encroachment upon our liberty, and in addition avoid being lured into any suspicious "medical" organizations. "Necessity is the plea for every infringement of human freedom. It is the argument of tyrants; it is the creed of slaves."—I am, etc.,

Edinburgh W. B. LAING.

SIR,—Two years ago the B.M.A. first published what it chose to call the seven principles of the profession in its relation to the new National Health Service Act. The leading article in the issue of Dec. 20, 1947 (p. 1002), concludes with the following paragraph: "Preoccupation with financial and other details . . . must not obscure the main issue which the medical profession now has to face. This issue is summed up in the first of the principles enunciated by the Negotiating Committee exactly two years ago." In two years' time the seven principles, like the ten little nigger boys, have been reduced to one —"the main issue." What about the other six principles? Are they no longer important, or (as I suspect and believe) does the Negotiating Committee agree with the Minister that the Act does no longer conflict with these principles?

Let us examine the first principle, which reads: "The medical profession is, in the public interest, opposed to any form of service which leads directly or indirectly to the profession as a whole becoming full-time salaried servants of the State or local authorities." It is high time that we discarded such phrases as "in the public interest," "desiring to secure for the people the best possible health services," "grave hardship to the patients," as they are mere cant and humbug. Let us at least be honest and state that what we are really studying is our own interest first, last, and always.

Read the Negotiating Committee's case, and especially that part of the case which deals with general practice. This takes up some six pages of the document, and, of these, three pages are taken up with arguments about existing partnership agreements and partnerships after the appointed day. What is this to do with the public interest and how can this "*secure for the people* the best possible health service"? I repeat that this is mere cant and humbug, and that the first principle ought now to read, "The medical profession is *in its own interest* opposed, etc."

The main point at issue between the Negotiating Committee and the Minister at present is the question of buying and selling of practices and the mode of payment by salary or capitation fee. The leading article states that the Minister "refuses to meet the profession's strongly rooted objection to a basic salary." May I remind you of a document which has been discreetly pigeon-holed by the leaders of the B.M.A. since 1944. I refer to the questionary issued in March, 1944, by the B.M.A., the replies to which were published in the *Supplement* on Aug. 5, 1944 (p. 25). These replies give the only definite figures available on the question of payment.

Question 18 (para. 29) asks, "If a doctor is not working in a Health Centre, but in 'separate' practice, how should he be remunerated in a National Health Service?". Reply:

Description of Group	Replies in Percentages		
	Salary	Small Basic Salary plus Capitation Fees	Capitation Fees
All	15	35	44
General practitioners ..	12	28	55

I have not included all groups. It is fair to assume that those who voted for salary only, if given a second choice, would prefer a small basic salary plus capitation fee to payment by capitation fee alone. This gives us a figure in all groups of 50% who are not in favour of payment by capitation fee only. In the general-practitioner group the figure is 40% not in favour of payment by capitation fee alone, but the number of general practitioners who are in favour of payment by capitation fee alone is only 55%, therefore there must be 5% of general practitioners who do not care how they are paid and did not vote. From these figures I fail to see "the profession's strongly rooted objection to the basic salary."

The next point I wish to make concerns the statement in the leading article that the Minister refuses to give in on the question of "the retention of the custom of buying and selling practices, which general practitioners as a whole regard as essential to their freedom." Question 22 (para. 33) asks, "Do you think that the sale and purchase of publicly remunerated practices should continue or cease?" Reply:

Description of Group	Replies in Percentages		
	Continue	Cease	Don't Know
All	33	52	13
General practitioners ..	44	44	10

Question 23 (para. 34) asks, "Should the principle that *all* general practices may be sold and purchased be maintained or abandoned, on the assumption that adequate compensation is paid to existing owners?" Reply:

Description of Group	Replies in Percentages		
	Maintained	Abandoned	Don't Know
All	33	56	10
General practitioners ..	39	53	6

These figures definitely show that general practitioners as a whole *do not* regard the custom of buying and selling practices essential to their freedom.

It is interesting to note that the leading article in the current *Lancet* queries whether the ownership of goodwill is really a vital principle. The figures I have quoted cover "the main issue" as explained by the *B.M.J.* leading article. Will I enter the new Health Service in July, 1948? You bet I will!—I am, etc.,

Machynlleth, Mont. DAN E. DAVIES.

SIR,—In reference to the late discussions with the Minister, it is quite evident that he will give way on nothing of fundamental importance unless he be forced to, and that if we are foolish enough to "walk into his parlour" when he asks us we shall become medical servants under a totalitarian central authority and be lost, body and soul, as far as freedom is concerned and be obliged to bow the knee to whatever that authority likes to order—*or else!*

The burning question now is, What are we to do? We are to have another plebiscite. May I suggest that the questionary be couched in the simplest and most unequivocal form possible, such as the following: "Do you wish to serve under the new Act as it is? If not, are you willing to refuse to do so if a percentage of doctors, sufficient to enable the B.M.A. to deliver an ultimatum of refusal to the Minister, also agrees to do so?"—for I am convinced that, unless the B.M.A. be armed with a sufficient percentage of Noes or, better, a sufficient number of names, and be authorized to present them to the Minister and so force him to amend the Act, we might as well cave in at once. If nothing effective like this can be done I think it almost certain that a large number of general practitioners, loath as they are to join the Service, will, when presented individually by the Minister with a demand for decision and not knowing what the other fellows are going to do, not feel themselves able to refuse to join the Service, simply from fear of subsequent starvation.—I am, etc.,

Thame, Oxon. C. H. BARBER.

SIR,—It is only natural that many practitioners, especially those younger men with heavy financial commitments, should feel anxious regarding their position did the profession decide against accepting service under the new health scheme. I am confident that the B.M.A. has not overlooked such a contingency, but a definite promise that they would be able to survive would help them materially in coming to a decision. They would also feel happier in refusing service could they be assured that the Englishman's word would still be his bond.—I am, etc.,

St. Columb, Cornwall. G. MELCHOIR TORRANCE.

SIR,—After reading Sections 35 and 36 and the negotiations and counsel's comments thereon one comes to the conclusion that whoever drafted these Sections—and others in the Act—must have been suffering from a brain storm or similar kind of mental derangement. There is only one logical way of dealing with the purchase of practices by the State—buy *all* practices at the same time at similar terms and tell us when we are negotiating what price we get—for example, 1, 1½, or 2 years' purchase on the last 3 or 5 years' gross receipts. The 1939 values are useless owing to the advance in fees we have been forced to make to compensate for the increased costs of living and running a practice. So far as partnership agreements are concerned the Act should contain a clause rendering these void on day of purchase, and each partner would get a share of the price received for the partnership according to his share of the practice. In the case of one partner not joining the Service his share of the partnership would not be purchased and he would automatically become a private practitioner and be free from the partnership.

We were given to understand that the new Health Service was to be an advance step, but the Act as it now stands is in every way the reverse. Group practice is definitely discouraged when it ought to be encouraged. There is no provision for encouragement of post-graduate study or taking higher degrees. Holidays and reasonable hours of work are not in the picture, in spite of the fact that these would give practitioners a reasonable chance to keep fit so as to do better work. The only object of the whole Act is to place the medical profession under the thumb of the Minister of Health and finally to turn us into puppets to dance to any tune he cares to play.

The capitation fee proposed is far too small, and any figure under 25s. per head should be definitely refused. As the Act stands at the moment it will only encourage a mad rush to get as many patients on to each panel, by fair means or foul, and then to do as little work as possible for them.

There have been several schemes devised in the past for a service which would be a great advance on our present system. Let us cease trying to negotiate with the present Minister, who evidently does not understand what negotiating means, and turn down the Act completely. Then let the profession get down to the job of providing a really up-to-date and workable scheme and offer to put it into practice. We have the power to do this now. Let us at last show a united front.—I am, etc.,

Wetherby, Yorks. S. T. PYBUS.

Payment of Hospital Staff

SIR,—At a meeting of the Marylebone Division of the B.M.A. held on Dec. 30 to consider the attitude of the profession to the National Health Service one of the speakers criticized the medical staffs of several of the London teaching hospitals for accepting payment for their hospital services. University College Hospital was one of those named, and the implication offered by the speaker seemed to be that the medical staff had as a body thereby declared their intention to accept service under the N.H.S. irrespective of the result of the plebiscite, shortly to be held by the B.M.A.

This implication, if intended, has no substance. The facts are that the governing body of the hospital made an offer to the individual members of the part-time honorary medical staff of a payment for their hospital services during the year 1947.

Some accepted and some declined. Those who accepted doubtless had in mind the advice given in the joint letter from the B.H.A. and B.M.A. dated Aug. 9, 1947. This payment was offered entirely without prejudice to the future of the staff under the N.H.S., and neither the acceptance nor the refusal of that payment carried with it any obligation on the individual, declared or implied, either to accept or to refuse service under the N.H.S. in July next.—I am, etc.,

S. COCHRANE SHANKS,
Dean, University College Hospital Medical School.

The Coming Plebiscite

SIR,—The plebiscite form will soon be in our hands and our answer will determine the future of medicine. One point that is giving concern to those who have in mind to say "No" is the question of support if a sufficient majority of the profession should be of that mind. Could a clause be inserted in the plebiscite form asking if those who will vote "Yes" are prepared to give an undertaking that in the event of their being in the minority they will loyally support their "No" brethren, so that there will be no question should the vote go to the "Yes" side the others will conform.—I am, etc.,

Mumbles, Swansea. J. BURGESS JAMES.

SIR,—Now that the results of negotiations with the Minister of Health are made known to us, we the doctors are to be asked again to vote "Yes" or "No" to the Health Act. Since the Minister has again refused point blank to amend this Act in any particular, there is nothing new to vote on. Why, then, are we asked to vote again? Is it because it is hoped that since the last plebiscite we have lowered our standards? Otherwise there is no point in having another plebiscite.—I am, etc.,

Leigh-on-Sea, Essex. A. H. LEVERS.

Remuneration in N.H.S.

SIR,—It is probable that only a very small minority of general practitioners favour a salary, even a basic one, but there must be a considerable number who hesitate to refuse because of their own limited resources. Could not the B.M.A. publish a scheme, at least in outline, designed to meet their difficulties? That this would be worth while is illustrated by the experience of a young doctor who wrote to the B.M.A. for advice. He was referred to a commercial house, whose terms proved to be as follows: Interest should be at 4%; he should take out a life insurance, and he should repay the capital at 12% per annum—£30 per quarter on £1,000—in ten years. So for £1,000 he would have to pay £1,200 spread over only ten years, as well as 4% interest and a life insurance premium. Obviously such terms could not compete with the offer of the Minister.

It has been suggested that to a man of good character and sound health the B.M.A. might lend or guarantee a suitable sum of money free of interest for a limited period, repayment of capital to begin at the end of that period at a rate varying with individual circumstances.

With respect to the plebiscite, it seems probable that very useful information could be obtained by taking account of district voting. It is likely that a larger number of districts would be for or against acceptance than would appear from the mass voting. A significant difference, especially if generally the majorities in those districts were large, surely would be very important.—I am, etc.,

Beckenham, Kent. W. MAXWELL PENNY.

General Practitioners and the Basic Salary

SIR,—May I be permitted to ask what percentage of general practitioners in active practice has "a strongly rooted objection to a basic salary"? Who gave the Negotiating Committee the authority to say this and is the statement true? If the profession has this strongly rooted objection, how can the payment of a capitation fee of 15s. 2d. to 18s. possibly recompense him for the loss of private fees? Is it reasonable to suppose that a private fee-paying patient who can retain the services of the same practitioner will continue to pay private fees and a State contribution as well?

It may seem fantastic, but no one is going to pay any more than is necessary if it can be avoided; and who will pay £1 1s. if the same service can be obtained from the same source for 5s. or less, even if it can be well afforded? Therefore, so far as I can see, private patients will soon be converted to so-called "public patients." Neither a £300 basic salary nor a capitation fee of 18s. (or less) can possibly compensate for the loss, which is inevitable. The result, so far as I can see, will be that in the smaller and more especially rural practices, where I should say two-thirds of the annual income is derived from private fees, a financial catastrophe faces the practitioner. I could give figures to prove my statement and I expect many more could do so as well.—I am, etc.,

Callander, Perthshire. F. C. M. MCILWRICK.

*** In para. 34 of the Negotiating Committee's document (*Supplement*, Dec. 20, 1947, p. 146) the Committee advocates remuneration by capitation payment and states its opposition to payment by a salary, basic or other. This is in accordance with the first of the "Principles of the Profession" enunciated by the Negotiating Committee and published in the *Journal* of March 30, 1946 (p. 468). The members of the Negotiating Committee were elected by the B.M.A., the Royal Colleges, the Royal Scottish Medical Corporations, the Society of Medical Officers of Health, the Medical Women's Federation, and the Society of Apothecaries, and represent their views. At the Special Representative Meeting held on May 1 and 2, 1946 (*Supplement*, May 11, 1946, p. 126), the motion declaring for capitation fee and against salary or part salary was carried by 209 votes to 8.—ED., *B.M.J.*

Representation on the Negotiating Committee

SIR,—In your leading article (Dec. 20, 1947, p. 1002) you state that "the Negotiating Committee, it is well to point out, is representative of all phases of professional life." May I point out that this is not quite correct, since a small but not insignificant group has not, to my knowledge, been represented on the Negotiating Committee. I refer to the medically qualified preclinical teachers, whose case appears not to have received consideration and is therefore likely to go by default. It is not too late to rectify the omission by adding to the Negotiating Committee a representative of this group.—I am, etc.,

Department of Anatomy, The University, Bristol. J. M. YOFFEY.

Leakage

SIR,—I wonder if any member of Council or of our discussions committee has read an article on p. 5 of the *Tribune* of Dec. 12? It is headed "Bevan and the Doctors," and to say that I was shocked when it was brought to my notice by a colleague is to put it mildly. It viciously attacks the B.M.A. and the Negotiating Committee (*sic*), says that if they ever hoped to gain concessions or admendments to the Act or postponement of the appointed day they must now be bitterly disappointed, and then goes on *to enumerate nearly every point* in the Minister's reply to our case. It exults in his refusal to concede one iota, in his determination to bring in the Service on the appointed day with "the means at his disposal," and particularly in his absolute refusal to give in over direction of doctors or on the matter of the sale and purchase of practices. It says that the B.M.A. has become the instrument of Conservative policy, but that it will not succeed in preventing the establishment of a *Socialist* medical service. It then goes on to suggest that any hope that the B.M.A. has of persuading doctors to refuse to enter the Service will fall to the ground when the enticing financial terms—basic salary, plus a capitation fee of "not less than" 17s. 6d. and "generous" compensation—are circulated within a few days to every doctor in the country.

At the Panel Conference in October I had occasion to say that I felt that the seven months of "discussions" (what an irony!) had been a period of phoney peace during which our wily opponent had had leisure to perfect his plans for a blitzkrieg, and this unsavoury *Tribune* business has confirmed me in that opinion.

Surely, then, the time has now arrived for all medical members of executive councils, regional boards, *et hoc genus omne* to resign; and I should like to suggest that this be done nationally on a set day, and that at the same time it be arranged

for insurance practitioners to put in notices of resignation from the N.H.I. service and for members of National Service and Ministry of Pensions Medical Boards to do likewise. This would serve to show this dictator-minded Minister that we are by no means disposed to walk into his parlour or to succumb to his ruthless threat of force, and that we at last realize that we can place no trust whatever in his word. Having marked our disapproval in this unmistakable fashion, we could then settle down with quieter minds to hold our plebiscite, and to get ready for the inevitable conflict.—I am, etc.,

Wolverhampton. A. VICTOR RUSSELL.

Sulphamerazine Treatment of Pneumonia in Adults

SIR,—The results obtained by Drs. H. Joules and S. D. V. Weller (*Journal*, Dec. 13, 1947, p. 947) are interesting, but we are told little about the type of pneumonia. Radiological details and detailed leucocyte counts are not given, and apparently the pneumococcus was isolated in only 53 cases—28% of the total series. There is no mention of blood cultures in the severe cases. The satisfactory response with such small doses of sulphamerazine would appear to be due in part to the mildness of many of the infections.

Sulphamerazine's easy absorption and slow excretion are noted, but no mention is made of the fact that in the blood 80% is bound to the globulin fraction of the plasma—i.e., only 20% of the blood sulphamerazine is available for antibacterial action (Heffner, 1945). Hence the importance of moderately large doses of the order of 30 g. over 4 to 5 days in order to maintain, as Genecin *et al.* (1945) have found, blood levels of 12 to 16 mg. per 100 ml. In a small personal series of 68 African patients suffering from lobar pneumonia treated with this drug (Johnston, 1947) the advisability of this latter dosage was confirmed. Sulphamerazine is a valuable drug in the treatment of pneumonia, but it should be given in adequate doses, bearing in mind also the recent warning limitations concerning penicillin.—I am, etc.,

Aberdeen. R. N. JOHNSTON.

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SIR,—The article by Drs. Horace Joules and S. D. V. Weller on the sulphamerazine treatment of pneumonia in adults (Dec. 13, 1947, p. 947) attracted my particular interest this week, as we have under treatment at the present moment our second case of anuria in a male, due to obstruction of the lower end of both ureters by concretions of sulphamerazine crystals.

I had in mind to publish full clinical details of these two cases at a later date when full recovery has occurred. It seems timely enough, however, to bring to the notice of your readers that sulphamerazine is capable of producing anuria even when used in reasonable doses, for in both cases to be reported the patients had no more than 1 g. four-hourly for less than a week. This is more than advised by Drs. Joules and Weller, but nevertheless not excessive. Both patients were instructed to take large quantities of fluid, but were not given alkalis. Fortunately, the obstruction was quite easily overcome by ureteric catheterization and lavage with a 5% solution of sodium bicarbonate.

Sulphamerazine is used far less commonly than sulphamezathine, yet so far in our district we have no knowledge of calculosis having occurred from sulphamezathine, and it would appear, therefore, that if the therapeutic effects of the latter compound are as good as those of sulphamerazine the British drug is the safer of the two.—I am, etc.,

Chelmsford, Essex. M. D. SHEPPARD.

Penicillin in Scarlet Fever

SIR,—Your annotation on penicillin in scarlet fever (Dec. 6, 1947, p. 915) is based solely on the work of Meads *et al.* (1945) and Jennings and de Lamater (1947) and ignores every publication by British workers and many important American papers. The penicillin treatment of infections of the oral cavity and upper respiratory tract has followed a logical sequence since Garrod (1944) stressed the sensitivity of a wide range of mouth organisms. The role of penicillin applied locally to the mouth has been investigated by numerous workers. MacGregor and Long (1944) indicated the probable value and limitations of penicillin pastilles in acute and chronic streptococcal tonsillitis. Mowlem (1944) drew attention to the extraneous organisms that invade the mouth during penicillin treatment.

Vollum and Wilson (1945) and MacGregor and Long (1945) discussed the method of spread of drugs in the oral cavity. Symons (1945, 1946), Archer (1945), Dodds (1946), Christie and Preston (1946), Long (1946a, b; 1947a) in this country, and Karelitz *et al.* (1947) in America, have discussed the role of penicillin in the treatment of diphtheria and have provided much information on the effect of the drug on secondary infection. Long (1946a, b; 1947a, b) has compared the effects of local and systemic penicillin on the flora of the mouth and upper respiratory tract and has suggested the need for a dosage of 1,000,000 units a day for three days. Rantz *et al.* (1947) noted that "post-streptococcal disorders were not observed in a small group of patients who received 500,000 to 1,000,000 units of penicillin in 80 hours."

I suggest that to exclude all reference to these publications is to detract from the value of your contribution. For instance, the statement that "the three risks of scarlet fever, then, are the primary toxaemia, the early endogenous invasion, and the late exogenous reinfection, and no one treatment is likely to combat all three" is not compatible with published information on the subject. It would seem to me that if the pathogens can be eliminated in a matter of hours in the early stages of the disease the toxaemia will be halted, local spread prevented, and the patient will be rendered non-infectious.

The work of Jennings and de Lamater from which your contributor obtains most of his information indicated quite clearly that, in spite of a dosage of 400,000 units daily, pathogens were not eliminated from the throat, and complications due to local spread of infection occurred. The obvious conclusion is that this dosage was too small. Since it would be insufficient to remove the highly penicillin-sensitive organisms from the gum pockets it could scarcely be expected to remove the more resistant streptococci from the tonsillar crypts, while the risk of rendering organisms penicillin-resistant by under-treatment cannot be ignored.

It would be unwise to predict the future of penicillin in the treatment of scarlet fever, diphtheria, acute haemolytic streptococcal tonsillitis, and the associated carrier states (for they are one problem, not many). It is probable that when we know what dosage of penicillin will eliminate all pathogens from the oral cavity and upper respiratory tract in the minimum time, and if we can show that in the case of infections associated with toxaemia the level of antitoxin reaches a lower titre in the blood of those treated with penicillin than in a control group receiving no penicillin, we will be on the way towards the solution of our problem.—I am, etc.,

London, W.C.1. DAVID A. LONG.

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Diet and the Nation's Health

SIR,—It is surely time we had some hard facts about the nutritional position to-day, instead of the flood of opinion—usually pessimistic and more or less uninformed, misinformed, or merely malicious—which is obtaining headlines in the public press, and even finds a platform in your own columns.

The speakers for the motion at the recent Hunterian Society debate were doubtless convinced of the worth of their opinions, but, if your report (Nov. 29, 1947, p. 882) is substantially correct, Sir Jack Drummond spoke nothing less than the truth when he claimed that "no concrete facts had been brought forward to support the view that there had been deterioration

of health as a result of diet." Dr. F. M. R. Walshe's scathing retort. (Dec. 13, 1947, p. 971) does nothing to persuade me otherwise; for even a "clinical opinion" should be based on relevant fact.

Dr. G. T. Mills's letter (Dec. 6, 1947, p. 926) has a spurious air of objectivity. Since anyone can calculate the food value of rationed foods and make a reasonable estimate for points foods, his figures for these items may be accepted at their face value. But on what basis was his list of unrationed foods compiled? Either he conjured up these foods and their quantities out of an unspecified "general experience"—always a hazardous, and in this case unjustifiable, procedure—or he based them on actual observation of definite "cases" by a definite method. If the latter I should like to know how he selected his cases and what his technique was. Without this information, I am entitled to assert that his figures prove absolutely nothing. Incidentally, Dr. Mills compares a presumptive total home diet for an adult consumer receiving no priority foods with the reputed consumption per head of the whole population—including women and children as well as the men, heavy workers as well as sedentary workers, invalids as well as the healthy, and so on. Where this peculiar comparison is meant to lead is by no means clear.

Dr. J. G. Bennett (Dec. 20, 1947, p. 1012) says that mothers nowadays "are unable to suckle their own progeny for more than a week or two" owing to underfeeding. If he means *some* mothers, then his statement has probably always been true. At the moment something like 40% of mothers in this part of the country completely breast-feed their babies, and I know of no evidence that this is a worse performance than obtained, say, three or ten years ago. There is no doubt, also, that many of the lactation failures are due to causes other than undernutrition. If Dr. Bennett means *all* mothers in his practice, or if he believes that there has been an appreciable deterioration in recent years, then it is most important that he should report his facts carefully and temperately, in accordance with scientific usage.

I have been at pains to search for factual reports of diets actually consumed during the past few years. The number of published diet surveys can be counted on the fingers of one hand. I know the Ministry of Food carries out surveys routinely, but its reports are not published, and hence official figures cannot be judged in their full context. Why the secrecy? On the clinical side, there is a similar scarcity of published research, except in respect of school-children. Whether or not the country has recently become seriously undernourished, there is certainly a great need for facts, publicly presented in a scientific manner. Does the M.R.C. not think so? One wonders what facts the new B.M.A. Nutrition Committee is going to deal with.

It may not be entirely incorrect to suppose that much of the publicity given to many wild and unsupported opinions of certain medical men and politicians is based on a sincere belief that the present Government is pursuing a misguided policy. Governments, after all, are fair game for critics. But surely the best medical policy would be to deal in facts which speak for themselves, and not to parade half-truths disguised as learning, or violent opinion in the guise of authority? Although medicine is not altogether an exact science, we are generally credited with being a scientific profession, and I am optimist enough to believe that the scientific method pays, even in politics.—I am, etc.,

Foresterhill, Aberdeen. ANGUS M. THOMSON.

Streptomycin and Tuberculous Meningitis

SIR,—It was interesting to read in the *Journal* of Dec. 6, 1947 (p. 897), the account of streptomycin in the treatment of tuberculous meningitis in children by physicians of the Hôpital des Enfants in Paris. Their experiences in technique and dosages will no doubt be of the greatest value to many who are now entrusted with the care of patients suffering from what has been one of the most fatal forms of tuberculous disease. It has recently been my good fortune to observe a series of over 100 cases of tuberculous meningitis and miliary tuberculosis treated with streptomycin, dextrose sodium sulphonate, and vitamin A in the Hospital Meyer in Florence by Prof. Cocchi and his associates, and one can confirm the excellent results which have been claimed by these workers. The technique used in Florence and in other centres, however, varies considerably from that described by Debré and his co-workers in Paris. Indeed, techniques and dosages have still to be studied in much greater detail before final pronouncement can be made on the real value of the drug.

It may be of interest to your readers, therefore, to know that the Interim Commission of the World Health Organization, realizing the importance of the subject, decided at its Fourth Session in Geneva in August, 1947, to call a meeting of a number of international experts who have had practical experience in the use of streptomycin with a view to correlating results so far obtained and, if possible, to make available the most recent data concerning methods of treatment. Evidence from a number of countries points to the need for such guidance as may be forthcoming from such a group of experts. It is anticipated that the Expert Committee of the World Health Organization Interim Commission, which meets in Geneva in February, 1948, will be able to complete the arrangements for this conference so that it may be held not later than April, 1948.—I am, etc.,

World Health Organization. J. B. MCDOUGALL.

Diet and Peptic Ulcer

SIR,—Alkalis and atropine relieve symptoms, but ulcer is a deficiency disease. This is indicated by its historical rise, and by its class distribution up to the war, when rationing put us all on a more just level. Ask any senior surgeon how many "perfs." he used to deal with in his West End practice. Experimentally it was proved long ago by McCarrison's rats, fed on Travancore coolie diet; the findings of Sommerville and others in India are in support; also the recent work of Illingworth in Glasgow, when the incidence in slump-fed workers rose to a peak as soon as war work imposed its added strain. Of course there are other factors, notably strain: we are dealing with men and women, not test-tubes.

Clinically, anyone may convince himself (and cut down his waiting-list) by forgetting all he once learnt about "bland" diet, which means unsupported starch for most people, and feeding his ulcer cases on milk (no matter what anybody says) and a robust whole-cereal diet. If his courage fails him, he should remember that hibernating animals swallow a chunk of wood or something similar to keep the stomach in good tone during the winter fast. In default of a reliable whole-meal bread, and especially in parts where oatmeal porridge is not popular, some preparation of whole wheat germ gives rapid results in healing and freedom from relapse. The coincident spasticity of the colon also disappears. Only the long-standing indurated cases should come to the operating table.—I am, etc.,

Edinburgh. A. G. BADENOCH.

Antral Infection in Children

SIR,—Mr. F. M. Walker (Dec. 6, 1947, p. 908) draws attention to the frequency of antral infection in children with unhealthy tonsils and adenoids. He states that a considerable proportion of the cases which were referred for tonsillectomy had failed to benefit thereby. 1,779 children, from a child population of 70,000, were operated upon by him during the year 1946.

The school population of Cornwall is about 36,000, and in 1946 about 325 operations for removal of tonsils and adenoids were carried out under the county council scheme, of which number we were responsible for 226. We find that the parents of these children are nearly always delighted with their improvement following operation. All the children are seen by one of us on at least one occasion, in the presence of a parent, before operative treatment is advised. They are seen again three months after operation. In many instances their tonsils and adenoids are not removed until the child has been under observation at out-patient clinics for six to twelve months.

The absolute indications for operation are considered to be: (1) Recurring attacks of tonsillitis; (2) persistent enlargement of the tonsils and adenoids sufficient to cause mechanical obstruction. Among resulting symptoms are snoring, difficulty in eating, repeated attacks of earache or deafness, and inability to throw off head colds.

Children are often referred for advice because they catch frequent colds, which, on questioning, are found to clear in a few days. Others are referred because they have nasal obstruction or catarrh which is found to be due to chronic sinusitis or rhinitis, often with a history of allergy or a deflected nasal septum. Removal of these children's tonsils and adenoids will of course lead to disappointment. We also find signs of antral

infection in a number of children selected for operation. As Mr. Walker suggests in his final comments, this resolves in the vast majority of cases after removal of the diseased tonsils and adenoids. He considers that the unsatisfactory results following tonsillectomy and adenoidectomy are due to sinusitis : we consider that they are more likely to be due to an incorrect selection of children for operation.—We are, etc.,

M. R. SHERIDAN.
T. M. BANHAM.

Truro, Cornwall.

Residual Prostatitis

SIR,—We have read with great interest Dr. F. C. Bourgault Du Coudray's excellent article on residual prostatitis (Oct. 25, 1947, p. 651). Such a condition has been observed by us in a large number of cases, and assuredly also by many others, after sulphonamide or penicillin treatment of the urethral-process gonorrhoea. Some cases were treated for months and even years with massage, diathermy, and high supplementary doses of antibiotics notwithstanding the fact that repeated cultures of prostatic fluid and of semen were sterile or showed some diphtheroids or Gram-positive cocci or bacilli. Streptomycin was used without success in 2 cases.

The persistence of pus cells in the prostatic fluid indicated the existence of an infection whose true nature we have cleared up in quite a few cases after dark-field observation of the prostatic fluid. In a recent communication to the III Pan-American Congress of Urology (Rio de Janeiro, Sept. 14–20, 1947) we referred to 50 cases of such a type of prostatitis observed in V.D. clinic patients ; in 6 (12%) we found spirilla, some morphologically similar to *Sp. dentium*. Latterly we have found in 7 other cases spirilla, in 3 *Tr. vaginalis*, and in 2 an association of both these micro-organisms. All cases were cured rapidly with arsenical therapy—trivalent, pentavalent, or arsenoxide.

In 3 out of 10 cases in which we did not find spirochaetes or protozoa we obtained rapid and remarkable results with the arsenical therapy, based on the knowledge that the former micro-organisms may disappear, breaking up into coccoid or granular forms (Dutton, Leishman, Balfour, Nicolle, Coutts, Marchoux, Chorine, etc.).

As regards the negative action of penicillin in cases where spirochaetes have been found, it is of convenience to remark that this drug does not act equally on the different types and that even *Sp. pallida* sometimes requires very large doses in order to be destroyed.

When prostatic fluid contains numerous pus cells we dilute it with tepid normal saline and examine a drop of the dilution. An excess of pus cells impedes the free movements of spirochaetes and of the cilia of trichomonads, rendering their search almost impossible. Following this practice we have frequently been able to demonstrate the presence of these micro-organisms in fluids that had been declared sterile.—We are, etc.,

WALDEMAR E. COUTTS.
EDNA SILVA-INZUNZA.

Santiago de Chile.

Cheaper Heparin

SIR,—Recent correspondence on heparin and dicoumarol prompts me to write on the subject of these anticoagulant drugs. Whatever may be the views held by physicians on the value of anticoagulants in the treatment of coronary thrombosis, surgeons should be in no doubt about the value of anticoagulant therapy, properly managed, in cases of post-operative venous thrombosis and embolism. In view of this fact, it is perhaps surprising that these drugs are not more widely used.

There would seem to be two reasons for the present state of affairs: on the one hand we have heparin, a highly effective, safe, and expensive drug, while on the other hand there is dicoumarol, a cheap, potentially dangerous, but more readily obtainable drug. Experience with dicoumarol seems to vary greatly, and, although one knows some who have used it without experiencing any trouble, there are many who report serious and even fatal complications following its use. While it is clear that the most careful laboratory control is essential in dicoumarol therapy, it is doubtful whether a substance which has been described by no less an authority than Jorpes as exerting "a kind of toxic narcosis of the liver cells, the depth of which it is difficult to control," is really the drug of choice in the treatment of thrombosis.

At the present time an average day's treatment with heparin costs more than five pounds, whereas that with dicoumarol may cost less than a shilling. Under these circumstances it is hardly surprising that dicoumarol is sometimes tried (often, it is true, under inadequate laboratory control), found wanting, and discarded, while heparin, being expensive and in short supply, is used far too little.

Since the great value of heparin should need no emphasis I would like, through your columns, to put in a strong plea for the manufacture of a plentiful, cheap, and reliable brand of heparin. Doubtless other readers will be ready to express their views and, if necessary, to encourage the commercial drug firms to satisfy our needs.—I am, etc.,

REGINALD S. MURLEY.

Radlett, Herts.

Drug Addiction

SIR,—I was interested in your annotation on drug addiction (Dec. 13, 1947, p. 965). The group of opium eaters who appear to be in an "arrested development" stage of addiction must be familiar to medical officers who served with Indian troops in the recent war. It was found that Indian troops, who were able to obtain supplies of opium in India quite easily, presented a problem when posted out of India to countries where opium was not so readily obtainable. At first opium eaters were posted back to India, but later policy was changed, and these men were supplied with a limited amount of crude opium up to a maximum of 300 gr. (20 g.) per month.

In my unit half a dozen men were kept efficient and healthy with such a maintenance dose. Some received 200 gr. (13 g.), the others the full 300 gr. monthly. I followed these men over a period of 2½ years and found that their work was satisfactory in every way ; they did not make frequent appearances at sick parade nor did they seek increasing doses of opium to remain in such equilibrium. I made attempts to break them of the habit, but since they were men over 30 with a history of ten years or more of taking the drug success was neither anticipated nor achieved.

On the other hand, a dozen or more young soldiers posted to the unit direct from India were broken of the habit quite easily by immediate withdrawal of the drug. This group suffered virtually no withdrawal symptoms and emphasizes the point brought out by your annotation—that it is a mistake to apply the term "drug addiction" to all cases in which drugs are taken merely to produce euphoria.—I am etc.,

PHILIP JACOBS.

Bristol.

Child-bearing and Tuberculosis

SIR,—Dr. C. J. Stewart and Dr. F. A. H. Simmonds (Nov. 8, 1947, p. 726) have noted that the majority of physicians who have recent experience in the matter agree that pregnancy does not activate tuberculous disease ; they have confirmed this themselves by a statistical analysis of a large series of patients, and they have drawn the conclusion that abortion is not a therapeutic agent in tuberculosis. Their comment in your issue of Dec. 27, 1947 (p. 1056), that effective advice concerning birth control had not been given to the patients in their series, and their suggestion that such advice is advisable especially for two years after the disease has become quiescent, is less logical, because they have already shown that in spite of lack of such advice, and also the lack of therapeutic abortion, the patients with active disease in their series who were pregnant compared not unfavourably in results with a control group with active disease who were not pregnant. Dr. R. C. Cohen found in his analysis of the Black Notley cases that a woman who became pregnant soon after quiescence of the disease would as likely do well as a woman who became pregnant later.

Admittedly, unlimited pregnancies should not be encouraged in tuberculous women. But the psychosomatic background of tuberculous disease is becoming increasingly perceptible. Conjugal felicity is important for a tuberculous woman, as for others, and if by effective birth control is meant artificial contraception it is interesting to speculate whether our generation, to whom advice in artificial contraception has not been wanting, is the more blessed in happy marriages. Might it not rather be better for the tuberculous woman and her husband to avoid a facile solution and by mutual co-operation and sacrifice to grow in that mutual respect on which happy marriages are built ?

Another point is that I have followed up a number of patients who have suffered from non-pulmonary tuberculosis and who later married, and have found that pregnancies were unusual among them. This difference between patients with phthisis and patients with other forms of tuberculosis offers an interesting commentary on the pathogenesis of the disease.—I am, etc.,

Black Notley, Essex. M. C. WILKINSON.

A Method of Abdominal Palpation

SIR,—The method of abdominal palpation described by Dr. E. W. Price (Nov. 1, 1947, p. 703) is, no doubt, almost the inevitable one when there is no table or chair available and when a number of patients are to be examined. But at a crowded out-patients of an Indian mofussil dispensary, where just a stool and a chair can be improvised, I have found a modification of the method more useful. The patient is seated on a stool on the examiner's right side, facing him and the light. The abdominal palpation is done in the same way as described by Dr. Price, with the patient bending forward. The sitting position of the patient is superior to the standing one for abdominal palpation, as it ensures a more complete relaxation of the abdominal muscles, because the thighs are flexed at right angles to the trunk.—I am, etc.,

Poona City, India. P. L. DESHMUKH.

Prickly Heat: A Simple Remedy

SIR,—Recent references in the *Journal* to prickly heat (Nov. 15, 1947, p. 779; Dec. 20, 1947, p. 1012) make me wonder once again how many of those who interest themselves in this complaint have tried treating it with perchloride of mercury lotion. If a solution of perchloride of mercury in water, 1 in 500, is dabbed twice daily over the affected area and allowed to dry on the skin, the trouble is finished, in my experience, within two or three days, and further occasional applications prevent its return. This simple treatment was told me many years ago by a colleague in the Colonial Medical Service: I have never seen it mentioned in print, and have never known it fail in practice.—I am, etc.,

Nairobi, Kenya. C. J. WILSON.

Relief from Pain in Obstetrics

SIR,—May I, as a woman practitioner, support Dr. John Elam's timely plea (Dec. 27, 1947, p. 1055) for the relief of pain in obstetrics? I have just returned from a most heartening visit to a maternity home in the South of England where "trilene" and air, and gas and air, are available and efficiently administered to all women in labour who desire anaesthesia. What impressed me, however, was not the number of women who made use of this opportunity, but the far greater number who enjoyed—literally enjoyed—bearing their babies without any anaesthetic, drug, or hypnosis.

If anaesthesia is the only way whereby the pain in labour can be relieved, by all means let us have adequate facilities for its effective administration. But if the pain of labour can not merely be relieved but virtually prevented by perfectly simple, straightforward physiological methods, why not employ these, rather than in ignorance allow a "normal" labour to progress in such a manner that anaesthesia, with its accompanying dangers (however small), becomes necessary?

Having read G. Dick Read's *Revelation of Childbirth*, and taken the opportunity of verifying with my own eyes the practical results of the application of his theories, I am convinced beyond any shadow of doubt that the answer to the "scandal of the 'woman in pain'" lies, not in the reduction of pain "to a minimum" by anaesthesia, as Dr. Elam humanely suggests, but in its prevention by education. That such a revolution in the conduct of labour is possible there can be no doubt in the minds of those of us who have been privileged to experience over and over again the peacefulness of a really normal labour, and witness the healthy joy of a mother when, after such a labour, she reaps her reward in full consciousness of her achievement.

Doctors and midwives in many parts of the country to-day are practising, or learning to practise, the methods whereby such results are made possible. But until the principles and practice of Dr. Dick Read's great work become part of the curriculum in *all* medical schools and midwifery training centres instead of, as at present, in an isolated and enlightened few, there will be many who, with me, deplore the grave and tragic injustice that is now being done to the mothers of this country and to humanity in general. For what is callousness or indifference, to extreme suffering but a natural protective reaction towards the acceptance of its inevitability?—I am, etc.,

York. MAHLO J. ELLIS.

Asthma and the Inhaler

SIR,—Dr. James Kay (Dec. 20, 1947, p. 1011) describes the effectiveness of an inhaler in relieving an attack of bronchial asthma. It is true that the method is simple to use and rapid in its effect, and this makes it particularly important that the contraindications to its employment should be recognized. The fluids employed in asthma inhalers usually consist of solutions of vasoconstrictor and antispasmodic drugs such as adrenaline, pituitary extracts, atropine, and papaverine, and the effect of these vaporized solutions on the congested bronchial mucous membrane is to produce a rapid vasoconstriction and paralysis of the cilia. The asthma is relieved by the shrinking of the previously swollen bronchial mucosa, and provided the inhalation is not repeated day after day no harm results. But if an inhaler is used several times daily for weeks or perhaps months at a time the cilia of the bronchial tree become destroyed and the bronchial mucosa becomes thickened. The result of this is that expectoration becomes more difficult, shortness of breath on exertion more pronounced, and the attacks of dyspnoea recur more frequently. These symptoms do not occur as a result of repeated adrenaline injections.

In general the higher the adrenaline concentration in the inhalant solution the more rapid is the relief obtained and the quicker is the bronchial mucosa damaged. There is also a risk of adrenaline poisoning when a strength of 1 in 100 is repeatedly inhaled (*Journal*, 1946, **1**, 671), and I reported such a case (*Journal*, 1946, **1**, 864). Ephedrine is less harmful as an inhalant than is adrenaline, and the suggested prescription of 1% cocaine and 1% ephedrine in 4% glucose saline (*Journal*, 1946, **1**, 671) is preferable to the inhalant solutions usually employed.

It may sometimes be necessary to prescribe an inhaler for patients whose attacks are so severe that relief is not obtained by the usual oral remedies, and when, in addition, adrenaline injections are not practicable; but these patients must be warned of the risks of continued use.

Rhinologists know that spraying the nose with adrenaline produces rapid temporary relief to nasal obstruction by shrinking the nasal mucosa, and that this relief is followed by increasing obstruction. No rhinologist therefore would prescribe an adrenaline nasal spray for constant use. The employment of an inhaler is equally undesirable in chronic asthma.—I am, etc.,

London, W.1. CLEMENT FRANCIS.

Foreign Body in the Vagina

SIR,—Apropos the letter from Dr. G. J. Grainger (Dec. 20, 1947, p. 1011) I can quote a case which I think is worthy of a place alongside the one he describes. I had been attending an old lady of over 80 for a considerable time, when, in November, 1942, she began to complain of a feeling that her insides were falling out. When I came to examine her I found that the perineum simply did not exist. On making a vaginal examination my finger encountered a foreign body which on withdrawal proved to be a dried-up twisted old ring pessary. There were no ulceration and no bleeding. On going into the history more thoroughly the patient was very vague but maintained against all attempts to dissuade her that the ring must have been *in situ* for 41 years.

Perhaps the most interesting feature of this case lies in the subsequent history. I continued to see her at regular monthly intervals. Her only complaint was of dizziness due to a raised blood pressure. In February, 1946, she began to complain of abdominal discomfort accompanied by attacks of diarrhoea. On examination I found her belly to be distended. A rectal examination revealed a hard mass invading the lumen of the

rectum about 3 in. (7.6 cm.) from the anal orifice. This was producing almost complete obstruction. Operation was firmly refused and she died on March 17, 1946. It is tempting to relate the final condition to the ring episode. Unfortunately no post-mortem examination was allowed, so no pathological evidence exists. Certainly I had at the time no doubt that clinically the growth was a carcinoma.—I am, etc.,

Bridlington, Yorks. C. J. GORDON TAYLOR.

SIR,—I was interested to read (Dec. 20, 1947, p. 1011) about Dr. G. J. Grainger's finding a bone nozzle in the vagina. While I agree that it was remarkable that it should be impacted in the pessary, I do not feel that it should be expected to cause any more symptoms than the pessary itself. Surely this is a case of straining at the enema and swallowing the pessary. Perhaps if it were given the chance the patient's cat would oblige by swallowing them both.—I am, etc.,

London, S.W.12. W. P. M. DAVIDSON.

The Lazy Eye

SIR,—Your recent correspondence on "The Lazy Eye" has drawn attention to the significant number of adults who have subnormal visual acuity in one eye. The figures quoted by Dr. G. C. Dansey-Browning (Nov. 15, p. 796) and Dr. Alan Watson (Dec. 6, p. 933) emphasize the seriousness of the problem. Mr. T. Keith Lyle (Sept. 6, p. 398) stressed the need for treatment at an early age, and surely this is the pointer to the root of the trouble.

The present school ophthalmic service is essentially curative, and until it becomes preventive the incidence of visual defects at school-leaving age will continue to rise. A school child does not receive any ophthalmic treatment until the error becomes manifest to teacher or parent, or a drop in acuity is revealed by a medical examination. The Board of Education's 1931 report "On Problems Connected with Defective Vision in School Children" recognized the need for treatment of ocular defects at the earliest possible moment, before faulty visual habits become established in the children. The committee stated that a regular objective ophthalmic examination of every child was desirable in order that visual defects should receive early treatment, but it doubted if financial and administrative difficulties would permit. Now in 1947, sixteen years later, the position is not changed, and it is obvious that until yearly ophthalmic inspection of every school child is begun, coupled with adequate provision for the visual care of pre-school infants, the number of adults with "lazy eye" and other ocular troubles will continue to increase.—I am, etc.,

Henley-on-Thames. S. BLACK.

Sterilization of Syringes

SIR,—The important question of sterilization of syringes, needles, and specula has been discussed recently in your columns, and we should like to make the following comments on the advice given. You state in "Any Questions?" (Oct. 25, 1947, p. 680) that, in the absence of an autoclave, the best method for sterilizing the above articles is to place them in a dry oven at 150° C. for one hour. This time is inadequate. The Medical Research Council War Memorandum No. 15 states: "Syringes and needles are placed in the oven while it is cold; the time of sterilization is not less than one hour after 160° C. has been reached. The oven should be allowed to cool before the syringes and needles are removed." The M.R.C. Memorandum also advises reliable thermostat and temperature control and control tests with infected material containing spores. These latter precautions are important because when, as is usual, syringes are sterilized in wrapped or plugged test tubes, there is a considerable time lag before the whole of the syringe is actually at the temperature of the oven, and this time lag must be allowed for in the time required for sterilization.

There is a comment by Messrs. John Foster and C. H. le May (Nov. 22, 1947, p. 854) on this question of hot-air sterilization. They quote Hanne[1] in support of their contention that sterilization by means of hot air is an unsatisfactory process. In fact, what Hanne's work emphasizes is the inefficiency of most of the hot-air sterilizing ovens which he tested and the inadequacy of the so-called "sterilization" techniques which were being employed. Hanne's failure to kill *B. mesentericus* under the conditions of his experiments should not be quoted as a condemnation of hot-air sterilization in general. His work does, however, call attention to the necessity of ensuring that the temperature shown by the oven thermometer is being maintained equally throughout the oven.

Although many ovens fall short of this ideal, there is one made by a reputable British firm which is stated to have a maximum temperature variation throughout the oven of ± 1° C. The question of hot-air sterilization was discussed very fully in a letter on "The Sterilization of Sulphonamides" which appeared in the *Lancet* (Sept. 12, 1942) from Prof. Long, of the Johns Hopkins University School of Medicine. To quote from this letter:

"We obtained the most heat-resistant spore-formers we could find—one strain of *Cl. novyi* which the suture manufacturers use as a control organism and a strain of *Cl. sporogenes* used by the canners as a control organism. Most of the information in textbooks concerning the heat resistance of spores in hot-air ovens was built up before the present accurate thermo-electric instruments were available. Since the temperature usually given for hot-air sterilization (160° C. for one hour) is so near the melting point of sulphanilamide (163° C.), we decided to restudy the resistance of some of the spores, making use of some of the more modern instruments with extended time as is practised by some canners. It has been found that the most resistant spores of *Cl. novyi* and *Cl. sporogenes* can be killed at a temperature far below the melting point of sulphanilamide if the time element is extended sufficiently: 130° C. kills these organisms in four hours but not in three; 140° C. kills in three hours but not in two; 150° C. kills in two hours. Various types of forced air ovens have been tried, both electric and gas. The above temperatures will not hold for static ovens or ovens improperly baffled so that one obtains cold spots."

Further suggestions on the sterilization technique for the preparation and administration of solutions for intra-spinal anaesthesia are given in a memorandum published recently by the Public Health Laboratory Service and the London Sector Pathologists Committee (*Pharmaceutical Journal*, 1947, 159, 428).

We think that it must be agreed that sterilization by dry heat is a satisfactory method provided that the following requirements are met: (1) An adequate temperature must be maintained for an adequate time. (2) The time of sterilization must begin from the time when the whole article is at the desired temperature. (3) The oven employed must not have "hot" or "cold" spots. (4) Attention must be given to the circulation of the air in the oven if big batches of items are being sterilized. (5) A careful check must be kept by means of thermostat, thermometers, and contaminated controls to ensure that the process is efficient. The controls should be spaced throughout the batches.—We are, etc.,

Hertford. CHARLOTTE RIESENFELD
JOHN C. H. HANSON.

REFERENCE

[1] Hanne, R., *Pharm. Ztg.*, Berlin, 1937, 82, 2.

Space for X-ray Departments

SIR,—I am much obliged to Dr. Douglas Gordon (Dec. 13, 1947, p. 977) for drawing my attention to the recommendations of the British *X*-ray and Radium Protection Committee. The plan which I put forward, as Dr. Gordon agrees, was stated not to attempt perfection in detail, and there is therefore no need to defend it. It is hoped, however, that the interest this plan may arouse may be on general principles rather than concerned with detail. Nevertheless, it is obviously important that attention should be drawn to these regulations, which were not only unknown to me but also to a distinguished architect. As Dr. Gordon has pointed out, even architects of the Ministry of Health are unaware of these regulations, and this emphasizes the need for some co-ordination and specialization in the designing of hospitals.

Many hospitals have been built by excellent architects who have been equally at home in designing a hospital, a house, a hotel, a cinema, a school, or a town hall. Recently the need for some specialist in hospital construction has been brought to my attention in my efforts to improve the lighting of

operating theatres. The amount of contradictory advice I have received from persons of no experience is quite amazing, and I am now trying to find someone who can really give valuable advice on this most important subject.

In this age of planning one hesitates to suggest a further group of planners, but at present in hospital construction the blind are leading the blind, and much time, energy, and money is expended in attempting to remedy the consequences of faults of design that ought never to have occurred. It would appear to me that either the Ministry of Health or the British Institute of Architects should consider this matter with a view to seeing that recommendations of special bodies should not pass into oblivion, and that expert advice on the special problems of hospital construction may be readily available.

Many of our hospitals are now quite out of date, badly sited, and in a poor state of repair. It is obvious that as soon as circumstances permit a great building of hospitals must take place, both to replace worn-out and obsolete buildings, and to provide new beds so urgently needed both for present and future needs. It was with a view to suggesting the general principle of self-contained units as the basis of hospital construction that I submitted my article (*Journal*, Nov. 22, 1947, p. 832). The scheme is still embryonic, and therefore any criticism that may beneficially influence its development is most welcome.—I am, etc.,

Hove, Sussex. H. J. MCCURRICH.

B.C.G. Vaccination

SIR,—May I remind those of my fellow-countrymen who "still linger shivering on the brink and fear to launch away" that in December, 1947, the Norwegian *Storting*, inspired by the Norwegian health authorities, passed a law for compulsory vaccination against tuberculosis? The easy passage of this law through the national legislature was assured by the same public health authorities, whose mustering of the evidence in favour of so radical a step was masterly. May I now suggest that we act on John Hunter's famous advice to Jenner in this way that, instead of weaving out of second-hand material gossamer threads of speculative agnosticism, we visit, in no tip-and-run spirit, the Scandinavian B.C.G. centres and there seriously study the mass of evidence accumulated over a score of years and still in large part not yet published? Quite possibly we might thus retrieve part of the march the Scandinavians have stolen on us! Might not this be a wiser course than to assume that their observations and conclusions are all wrong, and that we must make a fresh start in England on truly intelligent and impeccable lines?—I am, etc.,

Sunnfjord, Norway. CLAUDE LILLINGSTON.

Future of Almoners

SIR,—May I try, however belatedly, to comment on the points raised by Dr. Trevor H. Howell's letter on "The Future of Almoners" (Nov. 22, p. 843)? His contention that almoners spend most, though certainly not all, of their time and energy in caring for patients suffering from short-term acute illness to the detriment of those generally termed the chronic sick is undoubtedly true. There are obvious reasons for this, such as the small number of almoners in most hospitals, which necessitates a limitation of cases dealt with, and the fact that the primary duty of almoners, as an ancillary service to medicine, is to carry out the requirements of the medical staff, which as a rule centre on constructive work for those cases where conditions of home and employment directly affect health.

None the less, few almoners would claim anything but profound dissatisfaction at the present situation. Probably the reason for any apparent lack of interest in these long-term cases is not, as Dr. Trevor Howell suggests, their absorption in administrative and financial duties, but rather a profound feeling of helplessness in the face of a problem so vast that it can only be tackled successfully by a campaign in which the medical and nursing professions, public authorities, social workers, and the community at large all play their part. At present there is a deadlock. Homes for incurables are few, and by their very title suggest that for those who seek their hospitality there is no question of rehabilitation. Small nursing-homes run for profit are often extremely unsatisfactory in every way, while the chronic wards of municipal and county hospitals, housed in many cases in buildings of prison-like grimness, are as a rule overcrowded and understaffed to a deplorable degree.

The long-term case, while awaiting admission to such wards, either remains at home with no nursing at all or else in a general hospital blocks the beds needed for acute cases. If and when they are admitted to these chronic wards they find only too often that in entering they give up all hope of any life which can be called life. There is no feeling of hopefulness, no encouragement to improve, no remedial treatment, no occupational therapy, and, moreover, no selection of cases, with the consequence that the young person with possibly many years to live lies cheek by jowl with the old and senile. If by a miracle they improve sufficiently to be discharged, there is no halfway house to which they can be moved where they can stay long enough to be fitted even for a moderately normal life.

Much-needed interest is now being shown for old people, and admirable plans are being made for them in the future, but one wonders who will raise the standard of care for the younger chronic and for the middle-aged person who is slipping into chronic illness just because of lack of the right accommodation and the right treatment. I would like to assure Dr. Trevor Howell that if any constructive plans can be made he will find almoners as a whole not only ready but eager to play their part.—I am, etc.,

London, W.C.1. C. MORRIS.

Road Accidents

SIR,—In my comment (Nov. 22, p. 843) on Dr. Kenneth Soddy's paper (Oct. 18, p. 623) I conceded the importance of the psychological aspects of accidents but stressed the need for some short-term action. I suggested low speed and strict law enforcement. If Dr. Soddy does not agree, what is his short-term solution while research is going forward? May I remind him that in the latest month for which we have figures another 500 persons have been killed and 14,000 injured on the roads?

If Dr. Soddy considers our solution to be remote from reality, I would point out that its success has already been demonstrated in Providence, U.S.A. In that city, following a black period of accidents, a limit of 25 m.p.h. was introduced in 1938 and strictly enforced. Since then Providence has been the most accident-free city in the U.S.A.

In his research into the psychological causes of accidents perhaps Dr. Soddy will look into the effect on the mentality of many drivers of the propaganda that "speed is not the cause of accidents" and that motorists are "persecuted." Have not those who indulge in such propaganda in the face of the continued slaughter forgotten the debt which they owe to common humanity?—I am, etc.,

The Pedestrians' Association. T. C. FOLEY, Secretary.

British Medical Students' Association

SIR,—Much has been said of late in your columns (Dec. 6, 1947, p. 931, and Dec. 20, p. 1008) and elsewhere concerning the political colour of the British Medical Students' Association. At the last Executive Committee meeting of the Association on Dec. 20, 1947, this question was brought up by the secretary of the London Region. It was decided after discussion to publicize the following points:

(1) The Association does not concern itself with political activities. We do co-operate with the B.M.A. on such matters as curriculum reform, medical films, status of medical students and newly qualified practitioners, etc., and with the International Union of Students on the organization of the Students' International Clinical Congress, to be held by us in July, 1948; but at the same time are in no way influenced by their policies.

(2) The files and correspondence of the Association are at all times open to inspection by students and qualified members of the profession at B.M.A. House, W.C.1, and copies of our Annual General Reports and Constitution will be sent to any interested party on application.

In conclusion, Sir, may I thank you for the use of your columns.—I am, etc.,

S. M. DRANCZ, President, B.M.S.A.

POINTS FROM LETTERS

A Peck of Troubles

Messrs. J. FISHER and R. A. HINDE write: The British Trust for Ornithology is inquiring into the opening of milk bottles by tits and other species of birds. This habit is not universal and may have spread in an orderly way through the tit populations. If so, problems of the greatest interest to students of animal behaviour are involved. In reaching the closing stages of our inquiry, we have reviewed the collected information and are anxious to consult a group of educated observers distributed evenly over the country. Such a group is formed by the medical practitioners of Great Britain. While we fully realize how very busy your readers must be, we would be extremely grateful for postcards, addressed to R. A. Hinde, 31, Mount Pleasant, Norwich, giving the following information: (1) Species of birds; (2) civil parish or county; (3) year in which observer could first have noted the habit (i.e., year since which observer has lived in the district); (4) year since which milk has been available in bottles to tits in the district; (5) year in which opening of milk bottles was first actually observed; (6) type of bottle closer; (7) any other information, method of opening, etc.; (8) name and address of observer.

A Method of Abdominal Palpation

MEDICUS writes: The method described by Dr. E. W. Price (Nov. 1, 1947, p. 703) is not a new one. It can be found in the 3rd edition (1947) of the textbook on *Percussion, Auscultation, and Palpation* by L. Dunner and R. Neumann. The book, written in German, is, it is true, not easily obtainable in this country. I have been using the method for many years and was always very satisfied with the results.

Fluted Vials

Dr. E. SUTHERLAND-RAWLINGS (London, W.2) writes: Frequently there have occurred tragedies from the inadvertent use of poisonous solutions which have been mistaken for therapeutic substances of a less dangerous nature. These mistakes arise chiefly on account of: (1) Ampoules or rubber-capped vials of same manufacture which bear no distinguishable marking whereby the busy practitioner's attention can be drawn immediately to the knowledge that he is using a dangerous drug. (2) In some cases the print is small and liable to become indecipherable through damp, age, or wear. . . . To obviate this I would suggest that all vials and ampoules containing dangerous solutions or tablets be grooved or fluted on the outside so that they are immediately distinguishable to the touch, and that the glass be appropriately marked in vivid colour to arrest the attention. If such a recommendation could be enforced under the D.D.A., I feel sure further tragedies of this kind would be averted.

Penile Carcinoma

Dr. I. GOTTLIEB (Sheffield) writes: With all due respect to Mr. W. Sampson Handley, I wish to point out a gross inaccuracy in his letter (Dec. 20, 1947, p. 1010). Zipporah, who circumcised her son (Exodus iv. 25), was the wife of Moses (Exodus ii. 21) and not the wife of Abraham, though her father, Jethro, was a Midianite and thus a descendant of Keturah, second wife of Abraham (Genesis xxv. 1). Therefore Zipporah could obviously not have taught Abraham the rite of circumcision. Abraham and Ishmael were the first people in the Bible to be circumcised (Genesis xvii. 26), and the Midianites, being descended from Abraham, must also have practised circumcision. My reason for writing is that I cannot allow such a misconception to appear in print above a name as distinguished as that of Mr. W. Sampson Handley.

Early Inoculation

Dr. ROMANA G. BARTELOT (Timsbury, Bath) writes: I found the following extract when turning out my father's old deeds and manuscripts and family papers. Thomas Bartlett, of Holwell, Dorset, was a direct ancestor, and his diaries extend from 1735 to 1750. In the diary for 1743 is this entry, "Memorandum the 17th of January this year, my son and Miss Molly Tregonwell were both inoculated by Mr. Goldwyer, Surgeon of Blandford, whose pay for the said inoculation was 20 guineas." (This when a year's schooling was only 15 guineas and one gallon of brandy 7s.) "The aforesaid operation was performed on Monday, the aforesaid 17th of January, about 3 o'clock in the afternoon at Holwell. The smallpox came out on my son the ninth and tenth days after he was inoculated, but on Miss Molly not until the eleventh and twelfth days after. They both bred it very easy and had it very light and but a five days sore. My son's arms threw off the discharge and got well where they were inoculated in about 3 weeks after the smallpox was turned, but Miss Molly's arms continued the discharge for six weeks."

*** Lady Mary Wortley Montagu introduced inoculation against smallpox into England in 1717.—ED., *B.M.J.*

Obituary

T. W. LIPSCOMB, M.B., M.Ch., F.R.A.C.S.

We announce with regret the death on Nov. 19, 1947, at the age of 72, of Dr. Thomas Walter Lipscomb, chairman of the Australasian Medical Publishing Company, Limited, and former president of the New South Wales Branch Council of the B.M.A.

Thomas Walter Lipscomb was born in 1875, the son of William Griffin Lipscomb, of Maitland, New South Wales, Australia. He qualified M.B., M.Ch. at Sydney, and went into general practice at Leichhardt in Sydney in 1902. He was a foundation Fellow of the Royal Australasian College of Surgeons. Lipscomb's interests were largely surgical, and in 1903 he was appointed to the surgical staff of Lewisham Hospital, Sydney, where he was for many years the senior surgeon. In 1920 he retired from general practice and gave up his time entirely to consultant surgical work. Lipscomb was a man who took a warm interest in all professional matters and gave sterling service to the many causes he had at heart. He was a member of the New South Wales Branch Council from 1913 to 1931, and its President in 1922–3. He took a prominent part in 1913 in negotiations with the friendly societies of New South Wales, and represented the New South Wales Branch at the Annual Representative Meetings. He was one of the joint honorary secretaries of the third session of the Australasian Medical Congress (B.M.A.) held in Sydney in 1929. Lipscomb took a leading part in the organization of postgraduate education and was chairman of the New South Wales Post-Graduate Committee in Medicine from 1939 to 1944; for many years he was a member of the Board of the Prince Henry Hospital while it was functioning as a postgraduate teaching hospital; he was also a member of the Federal Council of the B.M.A. in Australia.

For over 25 years Lipscomb was closely associated with the Australasian Medical Publishing Company, responsible among many other things for the publication of the *Medical Journal of Australia*. He was also chairman of the Board of Directors of *The Maitland Mercury*, a daily paper owned by his family. Lipscomb was rightly very proud of the activities of the Australasian Medical Publishing Company, which has always maintained the highest standard. He was a man of the greatest probity and always spoke his mind simply and clearly yet without aggression. As recently as September last year he was present at the meeting of the World Medical Association in Paris. Lipscomb had a warm affection for England, and he will be missed by the many friends he had here. Of his family of seven, three sons qualified in medicine at the University of Sydney, and two of them are now practising in England.

HERBERT THOMAS HERRING died at his home in Harley Street on Nov. 22. Educated at University College Hospital, he took the M.B., B.S. Durham in 1887, and the M.R.C.S. in the same year. He acted for many years as assistant to Sir Henry Thompson, who was not only the leading genito-urinary surgeon of his day but also a fervent advocate of cremation and founder in 1874 of the Cremation Society. This work was eagerly taken up by Herring, who was active in the development of the Golders Green Crematorium, founded in 1902, of which he became managing director. At Woking he held the same position, and was for many years honorary secretary of the Cremation Society. Beyond doubt the steady expansion of the practice of cremation was due largely to his incessant propaganda. If in the second half of his life he was mainly a man of one idea, at least it was a sound idea and a progressively successful one. After qualifying, he was house-surgeon at University College Hospital. There, and later, when he joined Sir Henry Thompson, the cystoscope and *x* rays were unknown. A large part of a urinary surgeon's work consisted in catheterizing sufferers from enlarged prostate and in combating vesical infections due to faulty catheterization by other people—often the patients themselves. Herring devoted a lot of thought to perfecting a technique which should prevent bladder infection, and forty years ago he published his observations

in a volume entitled *The Sterilization of Urethral Instruments*. The aim of his teaching was self-catheterization by patients sufficiently educated to comprehend the meaning of asepsis and the way to avoid cystitis. At that time the day was just dawning when a vast reduction in the number of catheter cases was to take place, so that eventually the usefulness of his technique was diminished. His long career of public service in connexion with the Cremation Society was recognized in 1920 by the award of the O.B.E. Few men have pursued an ideal as steadily as he did for an equally long period.—H. R.

Dr. ARDESHIR HORMASJI MASINA died suddenly after a short illness on Dec. 17, at the age of 36, at the Masina Hospital, Bombay. He was the youngest son of Dr. Hormasji Masina, the well-known Parsi surgeon who had been the founder and principal managing trustee of the Masina Hospital since 1907, the year in which the institution began its life as one of the first voluntary hospitals in India. Ardeshir, like his brothers and his sister, was educated in this country and later entered the medical profession. He went from the Leys School, Cambridge, to Emmanuel College, and completed his training at St. Bartholomew's Hospital. He qualified in 1936, and took his M.B., B.Chir. at Cambridge in 1938. He became house-physician to the medical professorial unit at St. Bartholomew's for a year and later was house-physician to the London Chest Hospital. He also held the post of R.M.O. at Bradford Royal Infirmary. He took the M.R.C.P. in 1940, and proceeded M.D. in 1943, taking bronchiectasis as the subject of his thesis. It had always been his intention to carry on the hospital work which had rested for so many years on the shoulders of his distinguished father. Arriving in Bombay in 1942, he worked there until his death. When his father, who was more than 80 years of age, died in 1946 additional responsibilities fell to him in connexion with the management of the hospital. He became a leading consulting physician, and though his interests were wide he had special experience in diseases of the chest. He brought to Indian medicine a wealth of medical knowledge and culture from the West which combined with his experience of tropical medicine to give him an exceptional breadth of outlook. His scientific attitude to disease would have been of outstanding value to Bombay and the Parsi community in particular. Like his father, who in the earlier years of this century travelled frequently to European centres of surgical culture, and who many times visited this country, Ardeshir had a great respect for and an exceptional grasp of medical progress in Great Britain. Gifted as he was with an acute and alert mind, he was quickly able to grasp the essentials of any problem and to solve it with tact, wise judgment, and precision. Gentle and approachable in manner, he was kindness itself not only to his patients and his colleagues but to those visitors who were fortunate enough to be invited to visit the Masina Hospital. The writer, who was privileged to be his friend since his days at Cambridge, will always remember with gratitude the generous hospitality extended to him during a fortnight's stay at his hospital in 1943. The Masina family always welcomed to their hospital visitors from this country, and their hospitality was genuine and sincere, as only those who know India will understand. By his passing the Masina Hospital has suffered a crippling blow and the medical profession in India has lost one of its outstanding members. We who had the privilege of knowing him will always remember him with sadness and affection, and to his brothers and his sister our deepest sympathy is extended.—P. H. W.

Dr. JAMES FREDERICK DIGBY WILLOUGHBY died at his home in Southwell on Dec. 17 at the age of 91. Dr. Willoughby was a student at St. George's Hospital, and qualified in 1879. He had lived in Southwell for over 62 years and was in active practice until 1927. In his early days he acted as medical officer to the South Notts Hussars, and during the first world war he was in charge of the V.A.D. hospitals at Burgage Manor and Brackenhurst Hall. For his services in this connexion he was awarded the O.B.E. He had been a J.P. since 1907 and had served on the governing body of the Minster Grammar School for many years. He had always taken the greatest interest in the religious and educational life of the town. He was a member of the British Medical Association for over fifty years, and was chairman of the Nottingham Division in 1926–7. He leaves two sons and one daughter.

Dr. HENRY NATHAN WARNER COLLINS died on Dec. 23, 1947. A student of University College and King's College, London, he graduated B.Sc. in 1915 and qualified in 1919, taking the Cambridge D.M.R.E. in the following year. He then went on to study at the Universities of Paris and Lausanne, and in 1927 took the M.D. of Lausanne University. Recently he had been called to the Bar, and he was well known as a radiologist on the consultant staff of the Weir Hospital and St. James Hospital, Balham; he was consultant physician to the Royal Society of Musicians and to the Children's Rest at Roehampton. He had also been associated with the Chiswick General Hospital and with the Bolingbroke Hospital.

C. A. H. F. writes: By the early decease of Henry N. Warner Collins the Lausanne Medical Graduates' Association loses one of its most distinguished and outstanding members. He was a man of exceptional ability and enterprise. He held many consulting appointments, and his tall and impressive figure will not easily fade from our memories, nor his clear and businesslike script. In his own sphere he will be greatly missed and his place will be difficult to fill. He leaves a widow and one daughter, Cynthia, to whom we extend our sympathy.

A memorial service for Mr. G. F. Stebbing will be held at St. Philip's Church, Kennington, at 12 noon on Monday, Jan. 12.

The Services

In a dispatch submitted to the Secretary of State for War by General Sir Frederick A. Pile, Bt., G.C.B., D.S.O., M.C., General Officer Commanding-in-Chief, Anti-Aircraft Command, and published in a *Supplement* to the *London Gazette* dated Dec. 18, 1947, Major-General P. H. Mitchiner, C.B., C.B.E., T.D., is mentioned as having given outstanding service.

The relevant paragraph reads: "Major-General P. H. Mitchiner, C.B., C.B.E., T.D., organized the medical services in the Command. He was an administrator of a very high order as well as a first-class medical officer. He rendered great services to the State."

The Efficiency Decoration of the Territorial Army has been conferred upon Lieutenant-Colonel T. C. Williams, R.A.M.C.

DEATHS IN THE SERVICES

The death of Group-Captain HENRY COOPER came as a shock to his many friends in the Services and in civilian circles. It is not often that an opportunity occurs for the formation of an entirely new arm of the fighting services. Cooper was one of the little band, which included, among others, Hardy Wells, Nelson Roche, Stanford, Martin Flack, Treadgold, Stanley Turner, and the late T. S. Rippon, who were concerned with Air-Commodore (now Lieut.-General) M. H. G. Fell, in starting the Royal Air Force Medical Branch. The story of those early days cannot yet be told in full. But it was then that Cooper's infinite capacity for taking pains, organizing ability, tireless tact, and kindliness had full play. It was generally hoped and expected that he would occupy the director's chair, but the term of office of the then director was extended, and Cooper had to retire on reaching the age limit. After his period of service at the Air Ministry in the early days of the R.A.F., Cooper served as P.M.O. India, from whence he went to Iraq as P.M.O. On returning to the United Kingdom he was appointed P.M.O., Air Defences of Great Britain, in 1927, which appointment he held until he retired. After his retirement in 1932 he became Clerk and Registrar of the Society of Apothecaries. On the outbreak of war in 1939 Cooper was past the age at which he would be liable to recall. Nevertheless, he volunteered for service, and was appointed P.M.O. Balloon Command. In the 1914–18 war he received the D.S.O. for his services at Dunkirk. He was also made an officer of the Order of St. John of Jerusalem and officer of the Order of the Crown of Belgium. In 1930 he was appointed Honorary Surgeon to His Majesty the King. After leaving Cambridge, Cooper went to the London Hospital and qualified M.R.C.S., L.R.C.P. in 1904, and entered the Royal Navy, from which he transferred to the newly formed R.A.F. He leaves a widow and one daughter, who is herself the widow of a naval officer killed in the last war.

Sir George Henderson, Secretary of the Department of Health for Scotland, opened the new out-patient department at the Dumfries and Galloway Royal Infirmary on Oct. 31, 1947. He recalled that it was almost 200 years since the hospital had been founded, and that it was there in 1846 that the first major operation under a general anaesthetic had been performed in Europe. He reassured his audience that the hospital would not be lost in a huge bureaucratic machine trying to administer it from far away, but that the local people would have as much say as possible in its running.

No. 51

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Dec. 20.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1947					1946 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	33	1	24	—	1	29	4	21		—
Deaths		1	1				—	3		
Diphtheria	209	19	57	11	13	243	20	69		16
Deaths	3	—	—	—	1	3	1	1		—
Dysentery	83	16	34	—	—	62	7	31		—
Deaths				—	—					—
Encephalitis lethargica, acute	—	—	—	—	—	—	—	—		—
Deaths		—					1			
Erysipelas			45	12	5			46		4
Deaths		—					—			
Infective enteritis or diarrhoea under 2 years				30						
Deaths	78	7	11	10	3	91	5	11		6
Measles*	3,209	133	501	139	19	7,769	239	240		349
Deaths	2	—	—	1	—	4	—	2		—
Ophthalmia neonatorum	53	2	5	—	—	79	4	15		—
Deaths										
Paratyphoid fever	6	11	(B)	—	—	6	—	2(B)		—
Deaths	—	—	—	—	—	—	—	—		—
Pneumonia, influenzal	841	61	6	6	23	699	50	12		9
Deaths (from influenza)†	15	2	3	2	4	26	5	4		—
Pneumonia, primary			404	24				365		
Deaths		50		14	16		57			18
Polio-encephalitis, acute	5	—				2	—			
Deaths		—					—			
Poliomyelitis, acute	55	4	13	4	1	13	—	—		—
Deaths		—					1			
Puerperal fever		2	13		—		3	9		—
Deaths										
Puerperal pyrexia‡	135	16	10	—	—	133	22	6		—
Deaths		—					—			
Relapsing fever	—	—			—	—	—	—		—
Deaths										
Scarlet fever	2,063	159	299	44	56	1,201	73	330		42
Deaths	1	—	2	—	—	—	—	—		—
Smallpox	—	—	—	—	—	—	—	—		—
Deaths				—	—					—
Typhoid fever	4	—	2	5	—	4	—	2		—
Deaths	—	—	—		—	—	—	—		—
Typhus fever	—	—	—	—	—	—	—	—		—
Deaths				—	—					—
Whooping-cough*	1,699	122	32	27	9	1,586	103	231		38
Deaths	10	1	1	1	—	18	1	4		2
Deaths (0–1 year)	445	48	68	37	19	539	73	96	34	30
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	5,298	779	704	217	138	5,682	945	721	184	171
Annual death rate (per 1,000 persons living)			15·6	13·7				15·9		
Live births	7,858	1186	953	290	229	9,158	1403	1137	389	259
Annual rate per 1,000 persons living			19·2	18·3				22·9		
Stillbirths	201	24	28			269	29	35		
Rate per 1,000 total births (including stillborn)			29					30		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

‡ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Poliomyelitis

Notifications of poliomyelitis in the week ended Dec. 27, 1947, were 44 (55) and of polio-encephalitis 4 (5). Figures for the previous week are in parentheses. The following counties have had no notifications in December: Cambridge, Cumberland, Huntingdon, Lincs (Holland), the Soke of Peterborough, Rutland, Yorks (N. Riding), Anglesey, Brecknock, Caernarvon, Cardigan, Merioneth, Pembroke, Radnor.

Discussion of Table

In *England and Wales* there was an increased incidence of scarlet fever 124 and acute pneumonia 118, while a decrease was recorded for measles 170, whooping-cough 38, cerebrospinal fever 31, diphtheria 24, dysentery 23, and acute poliomyelitis 22.

There were only small fluctuations in the local trends of scarlet fever except for increases in Staffordshire 40 and Glamorganshire 35. The only appreciable variation in the returns of diphtheria was an increase of 8 in Lancashire.

Every area except the northern counties recorded an increase in cases of pneumonia, and the largest was that of London 32. The only change of any size in the local returns of whooping-cough was an increase of 30 in London.

The decrease in the incidence of measles was mainly contributed by two counties, Northamptonshire and Yorkshire West Riding with decreases of 168 and 106 respectively. Surrey with an increase of 73 in the notifications of measles was the only area with a large change in the trend of this disease.

Half of the total notifications of paratyphoid and typhoid fever were reported from Lancashire. The chief centres of dysentery were Lancashire 29, London 16, and Yorkshire West Riding 13.

After the slight interruption of last week the downward trend of acute poliomyelitis was continued. The only administrative areas with more than one case of poliomyelitis were Lancashire, Manchester C.B. 3; Warwickshire, Birmingham C.B. 3; Yorkshire West Riding, Sheffield C.B. 2; Oxfordshire, Oxford C.B. 2; Norfolk, Norwich C.B. 2; London, St. Pancras 2; and Devonshire, Dawlish M.B. 2.

An outbreak of paratyphoid B has been reported from Ipswich and the surrounding district, and 22 cases had been admitted to Ipswich isolation hospital up to Dec. 30. A suspected carrier who worked in a bakery has been admitted to hospital.

In *Scotland* increases were recorded in the notifications of measles 91 and acute primary pneumonia 85; a decrease of 10 was reported in the returns for diphtheria. The rise in the incidence of pneumonia was general throughout the country

In *Eire* the chief features of the returns were a decrease of 53 in the incidence of measles and an increase of 12 in the notifications of scarlet fever.

In *Northern Ireland* the only variation of any size in the returns of infectious diseases was an increase of 12 in the notifications of scarlet fever.

Quarterly Returns for England and Wales

The birth rate during the September quarter was 20.0 per 1,000, compared with 19.7 for the third quarter of 1946 and an average of 15.7 for the corresponding quarters of 1941–5. The number of births registered was the highest recorded for any third quarter since 1920. The infant mortality was 32 per 1,000 live births; this was 9 below the average rate for the third quarters of the ten preceding years 1937–46. Stillbirths represented 22.7 per 1,000 of the total births, and this rate was the lowest recorded in this country in any quarter. The general death rate was 9.0 per 1,000, compared with 9.3 for the corresponding quarter of 1946 and an average death rate of 9.4 for the third quarters of the five years 1941–5. For the first time an estimate of the population by sex and age is given in this quarterly return.

A survey of sickness in the June quarter of 1947 is tabulated in detail according to the number of illnesses, days of incapacity, and medical consultations for age, sex, occupation, and income groups. No critical analysis of the tables is included in the report. It provides a valuable source of information for the research worker, but in its present form of absolute figures it does not give the general reader an immediate picture of the sickness experience of the nation.

Week Ending December 27

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,469, whooping-cough 1,141, diphtheria 157, measles 2,583, acute pneumonia 690, cerebrospinal fever 26, acute poliomyelitis 44, dysentery 53, paratyphoid 22, and typhoid 2.

Universities and Colleges

UNIVERSITY OF GLASGOW

Stanley Alstead, M.D., F.R.C.P., F.R.F.P.S., has been appointed Regius Professor of Materia Medica and Therapeutics in the University in succession to the late Prof. Noah Morris, M.D., F.R.C.P., F.R.F.P.S.

UNIVERSITY OF DURHAM

John Bright Duguid, M.D., professor of pathology and bacteriology in the University of Wales, has been appointed to the Chair of Pathology, King's College, Newcastle-upon-Tyne, and to the Department of Pathology in the Royal Victoria Infirmary.

UNIVERSITY OF LONDON

The title of Professor of Bacteriology in the University has been conferred on the Rt. Hon. Lord Stamp, M.B., B.Ch., in respect of the post held by him at the British Postgraduate Medical School.

UNIVERSITY OF LIVERPOOL

The Council of the University has appointed John Tertius Morrison, O.B.E., M.B., F.R.C.S., as full-time Dean of the Medical Faculty, in succession to Prof. T. B. Davie, M.D., F.R.C.P.

The following candidates have been approved at the examinations indicated:

M.D.—S. Bender, D. M. I. Freeman, J. D. King, Teresa Lightbound, M. G. McEntegart, R. C. Nairn.

M.Ch.ORTH.—H. G. A. Almond, G. S. Colvin, J. J. Commerell, M. D. Desai, J. Dickie, W. H. Fahmi, C. J. Kaplan, J. G. Kerr, H. K. Lucas, T. B. McMurray, B. F. Miller, N. H. Morgan, A. G. O'Malley, G. V. Osborne, W. Parke, B. Polonsky, T. Price, G. I. Roberts, V. R. Thayumanaswami.

FINAL M.B., Ch.B.—*Part III:* A. J. Borkin, H. C. Endbinder, W. P. Wilson. *Passed in separate subjects:* G. D. Currie (Medicine, Surgery), G. Frew (Medicine, Obstetrics, and Gynaecology), J. C. Humber (Surgery, Obstetrics, and Gynaecology).

D.P.H.—*Part I:* H. O. M. Bryant, A. T. Burn, R. L. J. S. Derham, Jean M. Frazer, E. N. Hugh-Jones, D. E. Jayatunge, D. B. Kennedy, J. D. Munroe, Joan E. M. Potts, R. V. L. Rudolph, R. C. Thomas.

CERTIFICATE IN PUBLIC HEALTH.—A. Griffith.

ROYAL COLLEGE OF PHYSICIANS OF LONDON

The Royal College of Physicians of London is giving a course of postgraduate lectures in medicine from Feb. 2 until March 25. There will be approximately 26 lectures. The full programme is not yet complete but preliminary details can be obtained from the College. The inclusive fee for the course is £7 7s. and the total entry will be limited to 200. Fees are payable in advance and must be received at the College (Pall Mall East, S.W.) by Jan. 26.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

A course of lectures on anatomy, applied physiology, and pathology in their application to dental surgery will be held at the College (Lincoln's Inn Fields, London, W.C.) daily from Jan. 12 to Feb. 6 (Saturdays and Sundays excepted), and a course of lectures on general, oral, and dental surgery will be held at the College daily from Feb. 9 to March 5 (Saturdays and Sundays excepted).

The admission fee for each course is £12 12s.; Fellows and Members of the College and Fellows and Licentiates in Dental Surgery will be admitted for £10 10s. Admission cards may be obtained from the secretary of the Faculty of Dental Surgery at the College.

An Order in Council entitled the Dangerous Drugs Act (Application) Order, 1947, came into force on Jan. 1. Its effect is to bring under the control of the Dangerous Drugs Acts and Regulations the following drugs and preparations, which have not hitherto been so controlled: Amidone, its salts, and any preparation, admixture, extract, or other substance containing any proportion of amidone: and methyldihydromorphinone (commonly known as metopon), its salts, and any preparation, admixture, extract, or other substance containing any proportion of methyldihydromorphinone. It is therefore now unlawful for any person who is not authorized either under the Dangerous Drugs Regulations, 1937, or by licence, to manufacture, supply, procure, or possess any of these drugs: Persons who enjoy a general authorization under those Regulations—for example, doctors and retail chemists—must comply with the Regulations regarding the issue of prescriptions and the keeping of registers in respect of these drugs. Any persons or firms (other than those authorized under the Regulations) concerned in the manufacture, sale, or distribution of any of these drugs and preparations should make application to the Under-Secretary of State, Drugs Branch, Home Office, St. Stephen's House, Victoria Embankment, London, S.W.1, for consideration to be given to the grant of licences to permit them to continue their activities.

Medical News

Rowley Bristow Orthopaedic Hospital

The Church of England Children's Society (formerly the Committee of the Waifs and Strays) has decided to rename the St. Nicholas' and St. Martin's Orthopaedic Hospital (Pyrford, Surrey), which the Society founded, "The Rowley Bristow Orthopaedic Hospital" as an appreciation of his long and brilliant services to the institution.

Oliver Memorial Fund

The committee of the Oliver Memorial Fund offers an award to the value of £50 to a British subject whose original work is considered to have made the most notable contribution to the subject of blood transfusion during the past five years. The committee welcomes applications, as well as communications drawing their attention to suitable candidates. Correspondence, accompanied by a brief résumé of such work, should be sent to Mr. F. W. Mills, National Provincial Bank, Ltd., Holborn Circus Branch, London, E.C.1, on or before Feb. 29, 1948.

Gift for Research

Lord Nuffield has given £50,000 to Lincoln College, Oxford, to found three research fellowships to be known as the Nuffield (Penicillin) Research Fellowships. The gift commemorates the discovery of penicillin's therapeutic properties in the Sir William Dunn School of Pathology, of which Sir Howard Florey, who is a Fellow of Lincoln College, is the head.

Surrey Benevolent Medical Society

The Surrey Benevolent Medical Society, which was founded in 1812, has in its gift four perpetual scholarships to Epsom College, as well as several other scholarships for boys or girls at any school approved by the society. It also gives pensions to deserving relatives of deceased members. For many years the late Dr. S. Morton Mackenzie was the honorary treasurer, and in memory of him and of his untiring energy in so successfully managing the financial affairs of the society it was unanimously agreed at the last annual meeting to name one of the scholarships after him. This scholarship will henceforth be called "The Mackenzie Scholarship." Membership of the society is open to medical men in private practice in the county of Surrey. Particulars can be obtained from the honorary secretary, Dr. L. J. Barford, Heather Lodge, Redhill, Surrey.

Joint Tuberculosis Council

At the last meeting of the Joint Tuberculosis Council a new committee was set up to consider and report on the problem of tuberculous patients whose duties bring them into close touch with children. The convener of the committee is Dr. Wilfrid Sheldon. The Council discussed the recent cuts in priority milk for tuberculous persons, and the Secretary was asked to inform the Ministries of Health and Food that the cuts were regarded with grave misgivings. In the Council's opinion the amounts of food available for tuberculous persons at home and in sanatoria are at dangerously low levels. Another matter considered was the eligibility of tuberculous persons for supplementary financial assistance under the National Assistance Bill. The Council endorsed the opinion of the Tuberculosis Group of the Society of Medical Officers of Health that eligibility for such aid should be based strictly on need and not necessarily on the fact that employment had been given up

Court of Common Council of the Corporation of London

Major-General R. J. Blackham, C.B., C.M.G., C.I.E., D.S.O., M.D., has been re-elected a member of the Court of Common Council of the Corporation of London for the twenty-third year in succession. For many years General Blackham was the only medical member on the Court, but he was joined in 1941 by Dr. Arthur Westerman, the medical officer of The Charterhouse, who has also been re-elected.

Parkinson's Disease

The Ministry of Health issued the following statement on Dec. 30: "Some weeks ago a report appeared in certain of the lay newspapers concerning a German doctor who was alleged to have discovered a new and effective treatment for Parkinson's disease. As a result of this report a number of inquiries have been made of Government departments regarding the possibility of having the practitioner in question brought to this country to undertake the treatment of selected cases. The matter has been followed up through official channels and it is regretfully announced that the claims made in favour of this particular treatment are without foundation."

University of Athens

The title and status of Emeritus Professor of Medicine in the University of Athens has been conferred on Dr. A. P. Cawadias, O.B.E., F.R.C.P., by Royal Hellenic decree.

Honoured by Chinese Government

The Chinese Government has bestowed the Order of the Brilliant Star upon W. Perceval Yetts, C.B.E., D.Lit., M.R.C.S., L.R.C.P., Professor Emeritus of Chinese Art and Archaeology in the University of London.

Export Licensing Control

Under a new order made by the Board of Trade preparations of penicillin have been released from export licensing control. Items that have been added to the export licensing list and for which licences are therefore necessary include: gonadotrophic hormones, testosterone, oestrogens, and bile salts.

Tuberculosis Allowances Scheme

The Minister of Health has authorized an increase in the winter's fuel allowance, under the Tuberculosis Allowances Scheme referred to in paragraph 42 of Memorandum 266/T, from 3s. 6d. to 4s. 6d. a week. This allowance is available from Jan. 4 to May 1.

Health Centres Proposals

The Minister of Health had previously asked local authorities to submit proposals about health centres by Dec. 31. He now cancels this date and will shortly be sending local authorities another circular on health centres.

Wills

Dr. John Crosthwaite Bridge, formerly H.M. Senior Medical Inspector of Factories, left £2,832. Dr. Wilfrid Fawssett, of Worthing, left £6,789, and Dr. Cyril Claude Lavington, of Stoke Bishop, Bristol, left £27,948.

COMING EVENTS

Conference on Mental Health

The National Association for Mental Health (39, Queen Anne Street, London, W.1) has arranged a conference on mental health to be held at Seymour Hall, Seymour Place, London, W., on Thursday and Friday, Jan. 15 and 16, at 10.30 a.m. each day. The subjects for discussion are "Re-adaptation to Life and Work of Persons who have suffered from Nervous or Mental Disorder" (speakers, Drs. G. R. Hargreaves and Donald Stewart); "Methods of Handling Difficult Children in Primary and Post-primary Schools, and Selection and Training of Staffs for Boarding Homes for Difficult Children" (speakers, E. M. Bartlett, Ph.D., and Miss Clare Britton); "Responsibilities of Local Authorities in Relation to Mental Health and the N.H.S. Act, 1946" (speakers, Drs. K. Soddy and Doris M. Odlum); and "Education for Mental Health as a National and International Responsibility" (speakers, Brigadier A. Torrie, M.B., Ch.B., and Dr. J. R. Rees). Particulars of conference fees may be obtained from the conference secretary of the association at the address above.

Course on Medical Treatment

The University of Leeds Postgraduate Committee has arranged a clinical week-end course devoted to the subject of medical treatment, and open to general practitioners and others interested, to be held at the General Infirmary at Leeds on Feb. 21 and 22. The fee for the course is £1 1s. Further information and application forms may be obtained from the Senior Administrative Officer, School of Medicine, Leeds, 2.

Edinburgh Refresher Course

A fortnight's refresher course at Edinburgh University begins on Monday, May 3, at 9 a.m. It is intended primarily for demobilized medical officers (Class II) and for insurance practitioners. Fee for graduates not claiming expenses from Government sources, 10 gns.

International Leprosy Congress

The International Leprosy Congress will be held in Cuba from April 3–11, 1948. The last congress was held in Cairo in 1938, and the next should have been held in Paris five years later; the war, of course, prevented this. Dr. H. W. Wade, the president of the International Leprosy Association, and for many years in charge of the Culion Leper Settlement in the Philippines, with 6,500 patients under his care, arrived recently in this country to consult with Dr. Ernest Muir and Dr. Gordon Ryrie, of the British Empire Leprosy Relief Association, about the arrangements for next year's congress.

Postgraduate Course in Uruguay

A postgraduate course in tuberculosis will be held on March 1–13, 1948, at the Instituto de Tisiologia, Montevideo, Uruguay.

Summer School in Health Education

The Central Council for Health Education will hold a residential summer school in health education at "High Leigh," Hoddesdon, Herts, from Aug. 11 to 25, under the direction of Dr. Robert Sutherland. The object of the school is to present the general principles and practice of health education to a wide variety of students, including educational and medical administrators, doctors, and nurses. Lectures are planned to cover the basic knowledge needed by health educators and will include lectures in physiology (by Prof. Samson Wright), psychology (by Prof. James Drever), the biology of infection (by Dr. Robert Cruickshank), and social factors affecting health (by Prof. J. M. Mackintosh). There will be opportunity for attendance at exhibitions of health education material and for nature study expeditions, sports, and ballroom and folk dancing. The inclusive cost of the course per person will be £16 16s. Applications should be sent in before March 31. Those wishing for further details should write to the Medical Adviser and Secretary, Central Council for Health Education, Tavistock House, Tavistock Square, London, W.C.1.

Mental Deficiency

The 72nd Annual Meeting of the American Association of Mental Deficiency and the First International Congress on Mental Deficiency will be held at the Copley Plaza Hotel, Boston, U.S.A., the former on May 18–22, the latter on May 17–22, 1948.

SOCIETIES AND LECTURES

Monday

MEDICAL SOCIETY OF LONDON, 11, Chandos Street, Cavendish Square, W.—Jan. 12, 8 p.m. *"More Worthies in Medley's Picture of the Founders of the Medical Society of London."* Presidential Address by Mr. W. E. Tanner.

Tuesday

ROYAL COLLEGE OF PHYSICIANS OF LONDON, Pall Mall East, S.W.—Jan. 13, 5 p.m. *"Pneumoconiosis of Coal Miners."* Goulstonian Lecture by Dr. C. M. Fletcher.

CHELSEA CLINICAL SOCIETY.—At South Kensington Hotel, 47, Queens Gate Terrace, London, S.W., Jan. 13, 7 p.m. for 7.30 p.m. *"Industrial Medicine."* Discussion to be opened by Dr. N. Langdon Lloyd.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—Jan. 13, 5 p.m. *"Cutaneous Syphilis."* Dr. A. C. Roxburgh.

Wednesday

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—Jan. 14, 5 p.m. *"X-ray Technique."* Dr. C. W. McKenny.

INSTITUTE OF SOCIAL PSYCHIATRY.—At Seymour Hall, Seymour Place, London, W., Jan. 14, 2 p.m. *Therapeutic Social Clubs.* Conference and discussion.

Thursday

ROYAL COLLEGE OF PHYSICIANS OF LONDON, Pall Mall East, S.W.—Jan. 15, 5 p.m. *"Pneumoconiosis of Coal Miners."* Goulstonian Lecture by Dr. C. M. Fletcher.

EDINBURGH CLINICAL CLUB.—At B.M.A. Scottish House, 7, Drumsheugh Gardens, Edinburgh, Jan. 15, 8 p.m. *"Endocrines in Gynaecology."* Dr. E. C. Fahmy.

BRITISH INSTITUTE OF RADIOLOGY, 32 Welbeck Street, London, W.—Jan. 15, 8 p.m. *"The Role of Radiology in the Teaching of Anatomy."* Prof. A. B. Appleton and Dr. J. W. McLaren.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN, 17, Bloomsbury Square, London, W.C.—Jan. 15, 7.30 p.m. *"The Place of Pharmaceutical Research in Medicine."* A. G. Fishburn, Ph.C., F.R.I.C., D.P.A

ROYAL SOCIETY OF TROPICAL MEDICINE AND HYGIENE.—At 26, Portland Place, London, W., Jan. 15, 7.30 p.m. *"Symposium on Leprosy."* Opening paper to be read by Dr. E. Muir and followed by Lieutenant-Colonel E. W. O'G. Kirwan, I.M.S.(ret), and Dr. A. R. D. Adams.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, S.W.—Jan. 15, 4.30 p.m. *Psychiatric lecture-demonstration.* Dr. D. Curran.

Friday

FACULTY OF RADIOLOGISTS.—At Royal College of Surgeons, Lincoln's Inn Fields, London, W.C., Jan. 16, 2.30 p.m., Diagnosis Section Meeting. *"Some Surgical Findings in Intrathoracic Disease."* Paper by Dr. J. V. Sparks. Followed by discussion.

LONDON CHEST HOSPITAL, Victoria Park, E.—Jan. 16, 5 p.m. *"Surgery of the Oesophagus."* Mr. D. S. M. Barlow.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—Jan. 16, 8 p.m. *"Aetiology and Treatment of Asthma."* Dissertation by Mr. D. M. McNab.

Saturday

LONDON ASSOCIATION OF THE MEDICAL WOMEN'S FEDERATION.—At Queen Elizabeth Hospital for Children, Hackney Road, London, E., Jan. 17, 3 p.m. Clinical meeting.

APPOINTMENTS

Group Captain J. Hutchieson, M.B., B.Ch., D.P.H., has been seconded from the Air Ministry to the Ministry of Civil Aviation as Chief Medical Officer. He will review the Ministry of Civil Aviation's medical requirements and submit proposals.

After qualifying at Queen's University, Belfast, Group Captain Hutchieson joined the R.A.F. in 1936 and has been a senior medical officer on the staff of the Director General Medical Services, Air Ministry, since 1938.

Dr. E. C. Allibone has been appointed Honorary Physician to the Children's Department of the General Infirmary at Leeds from Jan. 1.

Christian William Fraser MacKay, M.B., Ch.B., has been appointed a member of the Executive Council of the Gambia.

The Minister of Health has appointed Miss Elizabeth Cockayne, S.R.N., S.C.M., to be Chief Nursing Officer Designate. Miss Cockayne is matron at the Royal Free Hospital, London.

MILLER, A. A., M.D., D.P.H., D.T.M., Director, Department of Pathology, Preston and County of Lancaster Royal Infirmary.

WARN, J. F., M.D., D.P.H., Medical Officer of Health and School Medical Officer, City of Oxford.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Baldwin.—On Dec. 25, 1947, at Bromhead Nursing Home, Lincoln, to Mabel, wife of Dr. R. B. T. Baldwin, a daughter—Janeis Rae.

Edwards.—On Dec. 3, 1947, to Ivan (*née* Carson), wife of Dr. M. D. Edwards, "St. Margaret," Crawfordsburn, Co., Down, a son—Robert Carson.

Hamilton.—On Dec. 26, 1947, at Lynfield Nursing Home, Altrincham, to Geraldine (*née* Gould), wife of Dr R. S. B. Hamilton, a son.

Harders.—On Dec. 15, 1947, at 12, The Drive, Bounds Green Road, N., to Catharine, wife of Dr. Jacob Harders, a daughter—Carolyn Ann.

Ross.—On Dec. 18, 1947, to Betty, wife of Dr. Kenneth M. Ross of Southsea, a son.

Sutton.—On Dec. 28, 1947, at Sidcup, Kent, to Catherine (*née* Howard), wife of Dr. P. H. Sutton, a son.

Templeman.—On Dec. 25, 1947, at Buckingham Nursing Home, Leeds, to Anne (*née* Thompson), wife of Dr G. H. Templeman, M.B.E., 5, Wynford Grove, Leeds, a daughter.

MARRIAGE

Grace—Cope.—On Jan. 3, 1948, at the King's Chapel of the Savoy, Michael Anthony Grace to Philippa Agnes Lois Cope, only daughter of Mr. V Zachary Cope and the late Mrs Cope.

DEATHS

Alexander.—On Jan. 4, 1948, William Alexander, M.B., Ch.B., Priestfield, Keighley Road, Colne, Lancs.

Chisholm.—On Dec. 20, 1947, Donald Chisholm, M.B., Ch.B., aged 46.

Courtauld.—On Dec. 26, 1947, at Perces, Greenstead Green, Essex, Elizabeth Courtauld, M.D.

Cowie.—On Jan. 5, 1948, at Blackbrook House, Bicklay, Kent, William Cowie, M.B., C.M., aged 76.

Davar.—On Sept. 25, 1947, Framji Edalji Davar, L.M.S., aged 87.

Day.—On Dec. 31, 1947, Frank Herbert Day, M.B., Ch.B., "Inchbrook," Kenilworth.

Fellows.—On Jan. 3, 1948, at The Old Rectory, Church Stretton, Frederick MacFarlane Fellows, F.R.C.S.Ed.

Ferguson.—On Jan. 4, 1948, at 162, Eccles Old Road, Salford, 6, Egerton Allen Ferguson, M.C.P.S.

Fitzgerald.—At Cork, Professor Denis Patrick Fitzgerald, M.D., aged 76.

Greeves.—On Dec. 31, 1947, at The Bosk, Broadstone Dorset, Thomas Neville Greeves, M.R.C.S., L.R.C.P., aged 84.

Hedley.—On Jan. 3, 1948, Edward Williams Hedley, M.B.E., M.D., The Cottage, Thursley, Godalming, aged 74.

Jones.—At The Hollies, Merthyr, William Watkin Jones, M.D., J.P., aged 82.

Latham.—On Dec. 28, 1947, at 52, Penn Road, London, N., Harold William Latham, M.R.C.S., L.R.C.P.

Lefevre.—On Dec. 21, 1947, at Studley House, Longton, Stoke-on-Trent, George Louis Lefevre, M.B., C.M., beloved husband of Elizabeth H. Lefevre.

Leishman.—On Jan 3, 1948, at Bearehill, Brechin, Angus, Thomas Arthur Leishman, M.D., J.P., aged 87.

McLinden.—On Jan. 3, 1948, at Marscroft, Ripponden Road, Oldham, William Riddock McLinden, M.B., Ch.B., aged 53.

Nathan.—On Dec. 30, 1947, at 122, Sussex Way, London, N., Albert Nathan, M.R.C.S., L.R.C.P., aged 46.

Parsons.—On Dec. 18, 1947, at Fairfield, 2, Rockleaze, Bristol, Henry Frank Parsons, M.R.C.S., L.R.C.P.

Robb.—On Jan 2, 1948, at 1, Windsor Terrace, Dundee, John James Robb, M.C., F.R.C.S.Ed.

Rutherford.—On Dec. 31, 1947, at 27, Browning Road, Worthing, George James Rutherford, M.R.C.S., L.R.C.P., aged 78.

Sankey.—Suddenly, Joseph Nicholas Sankey, F.R.C.S., aged 47.

Scaife.—On Dec. 30, 1947, at Bickington, Cecil Scaife, M.D., Lieutenant-Colonel, R.A.M.C., retired.

Siegham.—On Dec. 22, 1947, at Basle, Switzerland, Frederick Siegham, M.D., aged 56.

Strange.—On Dec. 29, 1947, at 2, Belsize Avenue, London, N.W., Robert Gordon Strange, M.B., M.S., aged 75.

White.—On Jan. 2, 1948, at Hospital of St. John and St. Elizabeth, London, N.W., Frank Harris White, M.R.C.S., L.R.C.P., aged 75.

Whiteside.—On Dec. 31, 1947, at Grove House, Hadlow, Kent, John Hewetson Whiteside, M.B., C.M., aged 84.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Prevention of Ophthalmia Neonatorum

Q.—*What is the best routine to adopt in order to prevent ophthalmia neonatorum?*

A.—The fundamental fact in the prophylaxis of ophthalmia neonatorum is that a healthy mother cannot infect her baby, while an affected mother exposes the baby to that danger. The prophylaxis of ophthalmia neonatorum therefore centres, in the first place, on the mother rather than on the baby. In days gone by gonorrhoea was regarded as almost exclusively the cause of ophthalmia neonatorum. Present-day statistics show that gonococcal ophthalmia neonatorum accounts for not more than about 20 to 25% of the cases—compared with staphylococcal ophthalmia neonatorum and the form of the affection due to a virus which account for about 35 and 30%, respectively. The prophylaxis of ophthalmia neonatorum is therefore a matter of eliminating maternal infection and not merely maternal gonorrhoea. The best routine measure to be adopted involves intensive antenatal care, and the elimination of leucorrhoea in the expectant mother. For the baby Credé's method is a useful but not a totally adequate measure. The older statistics summarized in Sydney Stephenson's *Ophthalmia Neonatorum*, 1907, are conclusive evidence that the introduction of the Credé procedure greatly reduced the incidence of this disease. But it is also clear that it was no foolproof measure entirely eliminating the affection. Sorsby has shown (*Ophthalmia Neonatorum*, 1945, Hamish Hamilton) that in spite of the rigorous use of the procedure some 0.1% of all babies develop gonococcal ophthalmia neonatorum.

The traditional Credé procedure consists of two distinct parts. Swabbing of the eyelids as soon as the head is born and before the eyes are opened, and rigid avoidance of contaminating the face or eyes with the bath water in which the baby has been washed, are measures that may be regarded as asepsis. The instillation of silver nitrate or other agents is an attempt at antisepsis. There is some evidence that the omission of the antiseptic component tends to raise the incidence of ophthalmia neonatorum. The evidence is, however, not conclusive, and it would appear that other agents than silver nitrate are at least as efficacious. In the series reported by Sorsby the incidence of ophthalmia neonatorum when argyrol or protargol was used was lower than that in births where silver nitrate was the agent. Whether the difference is statistically significant it is impossible to decide, as so many other factors have to be taken into account. On the other hand, there was a rather higher incidence when mercury perchloride and acriflavine in castor oil were used. It would appear that there is no conclusive evidence that the antiseptic component has any definite value, and it is still less certain whether any particular antiseptic is better than another. The recent suggestion that sodium sulphacetamide might replace the traditional antiseptics is ill founded. In the first place, there is no conclusive evidence that the sulphonamides locally are of value. Secondly, the momentary action obtained by the instillation of one or two drops that are rapidly washed out from the eye can hardly be expected to achieve much; sulphonamides locally certainly do not sterilize an infected conjunctival sac as a pre-operative measure. Penicillin, though of undoubted value locally, is again unlikely to achieve disinfection of an infected conjunctival sac by momentary contact.

In view of these observations it would appear that the asepsis component rather than antisepsis is the essential aspect of the Credé procedure. Reliance must therefore be placed on swabbing the lids as soon as the head is born and before the eyes are open, and avoidance of any possible sepsis being carried to the face or eyes. It is safe to assume that the conjunctival sac of the newborn baby is sterile so long as the lids are closed, and that the baby will not contract ophthalmia neonatorum if the conjunctival sac is protected from septic material on the face, in the bath water, and on the linen.

Treatment of Ascariasis

Q.—*How would you treat ascaris infestation in children?*

A.—Probably the most satisfactory method of treating ascaris infestation in children at the present time is with hexylresorcinol crystals. The dose recommended is 0.1 g. for each year up to the age of 10. A saline purge is required the night before treatment, which should be given on an empty stomach, and a further purge two hours after treatment. No food should be taken for five hours. The treatment can be repeated in five days. If the drug is given in capsules, these should not be chewed, as they are liable to cause erosion of the buccal mucous membrane. Apart from this the treatment is non-toxic, though the drug occasionally acts as a gastro-intestinal irritant.

Alternatives to Cod-liver Oil

Q.—*In the case of a child who tolerates calciferol but will not take cod-liver oil how can vitamin A be supplemented other than by carotene tablets, which are expensive? What is the vitamin-A content of freshly extracted raw carrot juice?*

A.—Alternatives to cod-liver oil are: (*a*) Vitaminized oil, *B.P.C.*, containing 1,000 units of vitamin A and 100 units of vitamin D per gramme. Dose: 3 to 6 ml., or approximately 1 to 2 small teaspoonfuls, daily. (*b*) Emulsion of vitaminized oil, *B.P.C.*, containing 50% of prescription *a*. Dose is twice that of *a*. (*c*) Extract of malt with vitaminized oil, *B.P.* Contains 15% of prescription *a* by volume. Dose: 20 to 40 ml., or approximately 5 teaspoonfuls to 5 dessertspoonfuls, daily. (*d*) Ministry of Food cod-liver-oil compound with added vitamin D, which contains 1,000 units of vitamin A and 200 units of vitamin D per gramme. Dose: 1/2 teaspoonful up to 6 months; over 6 months, 1 teaspoonful. (*e*) Concentrated solutions of vitamins A and D, *B.P.* Dose: 2 minims (0.12 ml.) daily.

These quantities will provide the optimum daily requirements of vitamins A and D. If proprietary preparations are used, care should be taken that a dose is given providing approximately 3,000 to 6,000 units of vitamin A and 600 units of vitamin D daily. The vitamin-A content of carrot juice is approximately 540 units per ounce (28.4 ml.)

Transplantation of Ureters

Q.—*What treatment should be advised for complete epispadias in a boy where the symphysis pubis is normal and there is no sphincteric control of the bladder? At what age would it be advisable to consider transplantation of the ureters? Can anything be done to keep these patients dry (portable urinals have proved unsatisfactory), and are there any special schools where they could be educated?*

A.—The majority of surgeons would advocate transplantation of the ureters for such a case. The usual age for operation is about 3 or 4 years. The earlier the age the greater are the technical difficulties, owing to the smallness of the structures involved. Even at the age of 4 years difficulties are encountered, and it would be preferable that the operation should be done by a surgeon with experience of abdominal work in children. There seems to be no satisfactory method of keeping these patients dry, and no special schools where they can be educated.

Treatment of Parkinsonism

Q.—(*a*) *Have there been any further new developments in the treatment of Parkinson's disease?* (*b*) *What is the new treatment of Parkinsonism recently reported by Sigwald, Bovet, and Dumont?*

A.—(*a*) Belladonna, hyoscine, hyoscyamine, atropine, etc., remain the most useful palliative measures in the treatment of Parkinson's disease.

(*b*) In the *Revue Neurologique* (1946, **78**, 581) these authors state that they have had good results in the treatment of Parkinsonism with 2987 R.P., which is the chlorhydrate of diethylaminoethyl-N-thiodiphenylamine. So far as the writer knows this is the first published report on the clinical action of this drug, which is not yet available in this country.

Enlarged Labia Minora

Q.—*It is often said that large labia minora in women are caused by masturbation. Is there any adequate support for this statement?*

A.—Repeated manipulation or stretching of the labia minora can result in their permanent enlargement. It is customary among the women of some primitive tribes to produce gross hypertrophy of the nymphae by such means. Masturbation, therefore, and indeed any source of chronic irritation, can in theory result in hypertrophied labia, but it is probable that the importance of such causes is frequently exaggerated. It is impossible to prove, if only because a patient's denial of masturbation is not usually to be accepted, but it would appear that the condition is most often a developmental anomaly. This view is supported by the following observations: (*a*) the hypertrophy not infrequently affects one side only; (*b*) it is found in women in whom there is no other reason to suspect masturbation; (*c*) it is often not seen in cases where masturbation is admitted. It should be added that when hypertrophied labia and masturbation are associated it may be difficult to say which is the cause and which the effect.

Absent Palatal and Corneal Reflexes

Q.—*What is the significance of absence of palatal and corneal reflexes—together or separately? I have seen these signs in hospital in cases of hysteria, and also in apparently normal patients.*

A.—Both the palatal and the corneal reflexes may be unobtainable—either separately or together—in cases of hysteria. No serious significance is necessarily to be attached to a failure to elicit these reflexes. Nevertheless a unilateral absence of the corneal response may be an important sign, indicating some interference with the trigeminal nerve or the fillet. Loss of the palatal reflex on one side or both may, of course, be an indication of loss of function of the 9th or 10th cranial nerve.

Piercing the Ears

Q.—*May I have particulars of the technique of piercing the ears?*

A.—Under local analgesia the lobe is transfixed with a wide-bore hypodermic needle. Through this hole a gold ring (hinged and with a sharp point) is introduced. In three months the wound will be epithelized. (The rings can be obtained from a good firm of instrument-makers.) See also an earlier reply (1944, **2**, 615 and 806).

Testosterone Propionate

Q.—(*a*) *Is there an oral preparation of testosterone propionate?* (*b*) *Is local application of an ointment containing testosterone propionate to undeveloped genitalia in an adult female likely to promote normal development, and is such a preparation available?*

A.—(*a*) Testosterone does not act by mouth, but methyl testosterone does. It is available in 5-mg. tablets, and from three to six may be given daily. (*b*) The answer is in the negative. It would also be in the negative if the question involved testosterone given by injection. There is available a preparation of testosterone in the form of an ointment, but it is not satisfactory for most purposes.

Fitness for Work in Compressed Air

Q.—*What outstanding factors would determine a man's unfitness to work in a compressed-air atmosphere?*

A.—The hazards of work in compressed air vary primarily with the pressure, but the general view is that the following conditions would prejudice a candidate for such employment: age exceeding 40 (for first employment) or below 20; obesity; disease of the heart, lungs, or kidneys; otitis; rhinitis or sinusitis; the common cold; alcoholism. Apart from care in the selection of men for work in compressed air, re-examination at frequent intervals is advisable.

NOTES AND COMMENTS

Expression of Placenta.—Dr. W. KEVERALL MCINTYRE (Launceston, Tasmania) writes: May I be allowed to comment on the answers given in your "Any Questions?" column (Aug. 2, 1947, p. 195, and Oct. 25, 1947, p. 679) on the removal of placenta by injection of the umbilical vein and on expression of placenta? The replies stated that injecting the cord is a "time-consuming" method and is applicable only when the condition is not complicated by haemorrhage and that "this appears to be effective in only a few cases."

For many years I have given 0.5 ml. of "pituitrin" intramuscularly as the head is being delivered, and I consider this useful; but the more recent practice of intravenous injection of ergometrine seems to give better results. Even so, I still find the cord injection has a very definite use in third-stage difficulties.

During the last eight years I have proved many times that in a large percentage of cases of retained placenta, particularly those due to uterine inertia, a *rapid* injection of *hot* saline into the umbilical vein not only controls haemorrhage but also stimulates its spontaneous expulsion unless complicated by hour-glass or other contraction ring. If the injection is begun 12 in. (30 cm.) from the vulva, the temperature falls about 10° F. (5.5° C.) in the placental tissues, so that I usually have the saline at about 125° F. (51.7° C.), increasing or decreasing this according to the length of the cord. It is not a "time-consuming" method if the simple apparatus is ready, autoclaved for immediate use. As advocated by Currie, a "sterilendum" enema syringe is much more efficient and expeditious than a "large-sized syringe."

In any properly equipped maternity hospital a two-pint (1.14-litre) jug of hot saline can be prepared in two or three minutes, and the large-bore nozzle or needle of the syringe can be inserted into the vein and the solution injected rapidly—actually it takes me less than two minutes to inject two pints if that amount is required. Frequently uterine response to the hot uterine douche and to the rapid increase in the bulk of the placenta is sufficient to control haemorrhage and expel the placenta before the injection of the two pints has been completed. It is of particular value in cases of atonic uterus in which there is a tendency to steady haemorrhage (even though the amount of blood lost may not be immediately alarming) and the placenta cannot be expressed because of the inertia. If the retention is due to a contraction ring or to a partial (or complete) placenta accreta, one does not expect the injection to expel the placenta, but it will, as I and other of my colleagues have demonstrated over and over again, control the haemorrhage and allow its natural removal later when the ring relaxes. If this has to be done manually, the firm engorged placenta is much more easily handled and removed.

I would suggest that your correspondent, if he sees this rather belated comment, should read the articles[1-4] for details of this simple technique.

In my private practice I have carried out this procedure for various reasons 182 times in my last 3,000 deliveries. I frequently inject the cord if there has been intrauterine interference in the second stage (manual rotation, high forceps, etc.) or third-stage inertia following prolonged labour, or in certain cases who have had post-partum haemorrhage or manual removals in previous deliveries. Of these 182 cord injections, 154 were successful (81%)—in 50 the placenta was spontaneously expelled during the injection, and in 104 immediately or a few minutes afterwards—28 cases were classed as failures, though in many of these the haemorrhage was controlled and the placenta expressed later. Ten (0.33%) had to be completed by manual removal—two of these had a partial placenta accreta and four had definite contraction rings confining part or all of the placenta. In 1,350 previous cases I had done 18 manual removals (1.3%).

If the value of the technique is understood—and correctly practised—and the simple apparatus is always ready for immediate use, it is not as "time-consuming" as changing gloves and other precautions which should be taken before a manual removal is carried out. It is a safe and easily performed hot intrauterine douche, which reduces the amount of blood loss, lessens the chance of infection, and stimulates uterine contractions, so that the placenta is frequently spontaneously expelled. If not, it can usually be expressed soon afterwards.

REFERENCES

1 Currie, D., *British Medical Journal*, 1937, 2, 57.
2 McIntyre, W. K., *Med. J. Austral.*, 1939, 2, 62.
3 ——, Ibid., 1942, 2, 517.
4 ——, Ibid., 1944, 2, 113.

Ringworm of Scalp.—Dr. R. T. BRAIN (London, W.) writes: While agreeing with the letter of Dr. I. M. Scott (Dec. 27, 1947, p. 1066) I have little doubt that others, like myself, have given much thought to the therapy of tinea capitis. Many new fungicides have been produced, and some were credited with more effective fungicidal action than the older remedies in general use. However, as Dr. Scott pointed out, the effectiveness of the fungicide is of less importance than the penetrability of the substance into the hair shaft and down to the bottom of the infected follicle. It seemed probable that some of the new wetting and emulsifying agents might overcome this difficulty, and the problem has been studied since June, 1946, in the laboratory of St. John's Hospital for Diseases of the Skin. Dr. Kenneth Crow began experimental therapy based upon the above-mentioned factors in June, 1946, and this work has been continued by Dr. H. Haber and by Mr. Hadgraft, chief pharmacist of the Royal Free Hospital: but one has delayed publishing results lest it should be thought that the older techniques involving epilation by *x* rays or thorium X were already obsolete.

Several fungicides were tried, but the most favourable series of reactions occurred with the use of a preparation of phenyl mercuric nitrate. In this series 22 cases have been treated—8 due to *M. audouini*, 9 due to *M. felineum*, 4 in which the fungus was not cultured, and one endothrix case. Out of the 22 cases 17 (77%) were cured, the average treatment period being two months, and the criteria of cure a period of repeated observation over two to three months.

A new series of cases has now been started using salicylanilide, and so far the results are encouraging. The penetrating base consists of a mixture of carbo-wax with Crill No. 6 containing phenyl mercuric nitrate. It should be pointed out that much work on similar lines has been done in America, particularly in New York, by McKee, Hermann, and Karp and other co-workers. Details of the researches at St. John's Hospital will be published shortly, but it was thought desirable to make this comment and the cautious observation that it is hoped that from this and similar researches it may be possible eventually, but not yet, to avoid the troublesome techniques of preliminary epilation in the treatment of ringworm of the scalp.

Thoraco-Lumbar Splanchnicectomy.—Mr. FRANCIS E. STOCK (Liverpool) writes: You have condensed my short note on a "New Incision for Splanchnicectomy" read before the Liverpool Medical Institution into three lines (Dec. 27, 1947, p. 1052). The result is somewhat misleading, and lest I should be accused of plagiarism I hasten to correct a false impression. The incision described is not new but is an extension of Fey's thoraco-abdominal incision for the approach to the upper pole of the kidney. As far as I am aware however, the use of this incision has never been advocated for thoraco-lumbar splanchnicectomy, all the standard incisions for this operation being placed more posteriorly.

Windows in Plasters.—Dr. DAVID A. HERD (Leeds) writes: The following is a simple method which I have used for several months and one which may be of interest to your readers. All that is required is an ointment box large enough to completely encircle the ulcerated area. Remove the lid and base and reduce the side depth to about 1/2 in. (1.25 cm.), at the same time shaping one of the edges to the skin part. Place the collar round the ulcer and apply the plaster-of-Paris bandage. Before the last one is applied I cut down and remove the collar, using the last bandage to smooth off the ragged edges. In this way you are left with a clean, correctly placed window whose edges are slightly elevated from the surrounding skin.

William Russ Pugh: a Pioneer Anaesthetist.—Dr. GEOFFREY KAYE (Melbourne) writes: The first administration of an anaesthetic in the Australian colonies was performed by William Russ Pugh, of Launceston, in June, 1847. The ultimate history of this pioneer worker is unknown and the Australian medical historians are anxious to elucidate it. The following biographical facts are recorded: William Russ Pugh graduated L.F.P.S. (Glasgow), 1835; M.D. and Ch.D. (Giessen), 1844; F.R.C.S. (Edin.), 1860. He migrated to Van Dieman's Land about 1838. In about 1854 he moved to Melbourne and his name appears on the *Medical Register* of Victoria for the years 1862–73. It is absent in the year 1874, the presumption being one of death or retirement. The Register of Deaths for the years 1872–7, inclusive, does not contain the name of Dr. Pugh: it is therefore possible that he returned to spend his last years in Britain. Should any reader have information as to the fate of Dr. Pugh or of his family, he is invited to communicate with the Curator of the Museum, Australian Society of Anaesthetists, Physiology School, The University, Melbourne, Australia.

Correction.—*Radiology for Medical Students*, by F. J. Hodges, I. Lampe, and J. F. Holt, was named incorrectly in our review columns on Jan. 3 (p. 15).

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone.
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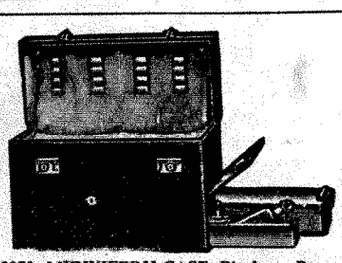

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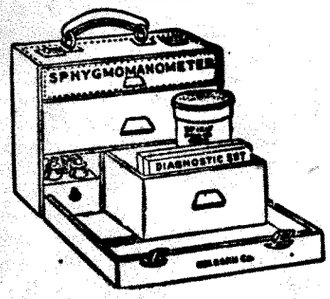

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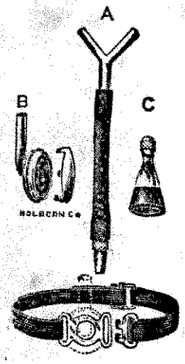

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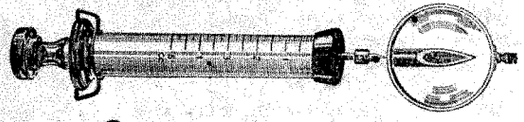

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SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY JANUARY 10 1948

LONDON COUNTY HEALTH SERVICES UNDER THE ACT

All the personal health functions hitherto performed by the 28 metropolitan boroughs and the City of London will, on the "appointed day," be transferred to the London County Council. The county for this purpose will consist of nine divisions, identical with the educational divisions, each comprising from two to five boroughs. In each division there will be a health committee, with L.C.C. and borough representatives and with six co-opted members out of a total membership varying from 18 to 29. Mr. R. A. Stamp, chairman of the Hospital and Medical Services Committee of the L.C.C., told a Press conference that effective links would be established between these health committees and the hospitals and also the executive council for London so far as general-practitioner services are concerned ("assuming," Mr. Stamp added, "that Mr. Bevan brings off a deal with the B.M.A."). There will also be a link with the health authorities in adjoining county areas.

A Measure of Rationalization

This new arrangement is expected to make possible a good deal of rationalization. At present, for example, the ante- and post-natal clinics and child-welfare centres are unevenly distributed over the county, both geographically and from the point of view of population density, and it will be possible to make good the deficiencies and to have more uniform provision. Hitherto there have been no arrangements between borough councils and general practitioners for the care of expectant and nursing mothers.

A medical officer of high standing will be put in charge of each of the divisions. He will be responsible under the county medical officer for co-ordinating all the personal health services, including the school service. To each division will be allocated from the medical staff eligible for transfer from the borough councils such staff as are necessary to ensure a high standard of service, and new staff will be recruited. A greater degree of specialization will be encouraged, so that medical officers will be given the work for which they are most suited, whether in the maternity clinics or the child-welfare centres or the school service. Reciprocal arrangements will be sought under which medical staff employed by the Council may obtain experience in maternity or obstetrical departments of teaching hospitals. Whole-time or part-time obstetric or paediatric consultants will be appointed.

Health Centres

Ultimately the point of contact between those engaged in the services for the care of mothers and children, and indeed in all the personal health services, will be the health centre, but in view of conditions in war-damaged London and the scarcity of building materials and labour it is recognized that some time must elapse before permanent health centres can be available. The idea is to form sub-areas of about 20,000 population, conveniently demarcated by main roads, railways, or open spaces, and to provide for each such area a comprehensive health centre or group of centres so situated that no one would have to travel more than a mile to get treatment or advice, and at which facilities would be available for all these services and also for general practitioners. The short-term programme (three years) includes the putting up of temporary structures. A list of 15 maternity and child welfare centres having first priority and of 14 having second priority is given.

One proposal which is being explored is to have joint appointments of medical specialists, employed both by the hospital and by the local health authority, in connexion with the care and after-care of persons suffering from tuberculosis. A scheme is being worked out for an improved voluntary care organization, with the provision of workshops and settlements for patients, and possibly night sanatoria.

Midwifery Service

The number of domiciliary confinements in London in 1946 attended by midwives was 22,145, about one-third of the total births, and of these rather more than half were undertaken by L.C.C. midwives. Council midwives are at present attending an average of 88 confinements a year, and a similar pressure is being experienced by the midwives employed by district nursing associations and hospitals. The shortage of midwives is likely to persist, and some time must elapse before the number of domiciliary confinements undertaken by each midwife can be reduced to the 66 recommended by the Rushcliffe Committee. An intensive recruiting campaign is to be instituted with a view to increasing the existing staff of midwives, whole or part-time, and of district nurses and health visitors.

For the care of premature infants complete sets of equipment, in accordance with a standard list to be devised, will be lent to mothers free of charge for use at home. The establishment of breast-milk banks at convenient points in the county is proposed.

All the existing health-visiting services will be continued by the Council, subject to such rationalization as may be practicable, and expanded and developed as circumstances permit. About 300 health visitors are at present employed directly by borough councils. It is proposed to consult the metropolitan regional hospital boards and the executive council on the co-ordination of arrangements for health visiting with the hospital and specialist services and the general medical services respectively. Preliminary consultations have taken place with the University of London for the establishment of a school for health visitors. Home nursing is provided at present by voluntary organizations, and the Council intends from the "appointed day" to carry out its duties in this respect through the agency of the 32 voluntary district nursing associations working under the Central Council for District Nursing.

All these services—the L.C.C. hospitals, of course, are left out of acccount, since they will be handed over to the regional boards—are expected in the first year, after allowing for the Government grant, to entail an additional rate of fourpence in the £. From this, however, must be deducted the present cost, whatever it may be, of the borough and other services taken over.

TUBERCULOSIS ALLOWANCES AND THE NATIONAL ASSISTANCE BILL

MEMORANDUM FROM THE JOINT TUBERCULOSIS COUNCIL

Section 5 (3) of the National Assistance Bill provides that "Regulations under this section . . . shall make special provision for blind persons and persons who have *suffered a loss of income* in order to undergo treatment for pulmonary tuberculosis." Under Memorandum 266/T allowances are payable to certain categories of patients suffering from pulmonary tuberculosis who give up work to undergo treatment. Many other categories of tuberculous patients, not covered by the provisions of Memorandum 266/T, are receiving public assistance under the existing Poor Law. This assistance is given on a basis

of need without reference to the question whether they have "suffered a loss of income to undergo treatment."

In November, 1946, a deputation from the Joint Tuberculosis Council and other organizations concerned with tuberculosis was assured, according to a report of the discussions approved by the Ministry, that the Ministry "fully accepts the view that tuberculosis calls for special provision in the interests both of the patient and of public health"; and also that "the Assistance Board would, it was hoped, be empowered in the new Bill to make payments to *needful* persons under treatment for pulmonary tuberculosis on a scale higher than the normal scale of assistance applicable to the community as a whole."

The wording of Section 5 (3) of the Bill, while differing slightly from that of Memo 266/T, appears to carry over to the new scheme one of its restrictions, and apparently excludes those at present in receipt of public assistance who have *not* "suffered a loss of income" from undergoing treatment. Yet the need of the patient and his family for adequate care and maintenance on a higher level because of the disease is just the same; and a Bill which seeks to abolish the Poor Law should presumably make provision for the tuberculous on a basis of *need*. It may be argued that these cases could be covered by Section 5 (1), which gives power to the Assistance Board to determine the nature and extent of any assistance to a person in need; but, as tuberculous persons are specifically mentioned in Section 5 (3) and conditions there laid down, it would probably be held in a court that the Board was precluded from using subsection (1) to cover cases not eligible under subsection (3).

It is the intention of the Ministry that the higher rate of assistance should be conditional upon the patient's undergoing treatment. This intention is welcomed by most tuberculosis administrators and there is much to be said for it. It should not be agreed to, however, without full consideration of the fact that it subjects the recipient to what might be quite arbitrary decisions as to treatment ordered by one medical officer, and it might be wise to include some right of appeal.

The Ministry is also anxious to restrict the special scale of allowances to cases of *pulmonary* tuberculosis. Tuberculosis medical officers are almost unanimous in condemning this restriction and consider that the need of the tuberculous patient and his family for a relatively good standard of living is as great whether the condition is pulmonary or non-pulmonary. When Memo 266/T was introduced there was a nation-wide outcry against the exclusion from benefit of the so-called "chronics" and of the non-pulmonary cases. The restriction on "chronics" has been removed: it is to be hoped that the restriction on the non-pulmonaries may also be removed. The number of adult non-pulmonary cases is relatively small; the cost of their inclusion would not be a heavy extra burden and would be outweighed by the benefit of the extra safeguard to the health of the susceptible family.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

County Borough Council.—Gateshead.

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Leyton, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

MEDICAL ASSOCIATION OF EIRE

Dr. James Francis Fitzgerald, owing to advancing years, has found it necessary to resign as from Jan. 1 his position as Medical Secretary to the Medical Association of Eire. His successor has not yet been appointed.

HEARD AT HEADQUARTERS

Staggered Remuneration

The experience of a doctor in Germany as recounted to a colleague in America and published in a journal on the other side makes interesting reading for those who are concerned about developments in State medicine. Recently in Germany there has been introduced into panel practice a system of "staggered" remuneration in favour of doctors with smaller practices, so that for the first 500 on their list they receive for each person 4 marks a quarter. (According to the rate of exchange in Germany a mark is now worth sixpence.) For the sixth, seventh, eighth, and ninth hundreds they receive a progressively decreasing amount, ranging from 3.60 to 0.90 marks, and for anything over 1,000 they receive 0.60 marks. This doctor, who has over 1,900 panel patients on his list, has been receiving about 8,000 marks a quarter, but the effect of staggering is to reduce the amount to 3,000. Expenses of practice do not diminish in the same drastic ratio, but it would be to this doctor's interest to reduce his panel practice from 1,900 to 500, in which case he would earn the full 2,000 marks and be able to dispense with a secretary, and his net income would be relatively higher than if he was responsible for three or four times that number of patients. He is not allowed, however, to curtail his panel practice. In this doctor's case his panel remuneration meets his practice expenses and a little over, and he subsists on private practice.

Air Ambulance

Among the usual batch of miscellaneous queries which reached Headquarters the other morning was one from a firm of aircraft constructors who are proposing to fit a De Havilland Rapide as an air ambulance, and inquired what likelihood there is of air-ambulance traffic. In wartime, of course, the air ambulance plays a great role; in peacetime such a service is useful in countries with vast spaces such as Australia, but in a small island like ours its use is more limited. Local authorities at the moment are concerning themselves with normal ambulance services in association with the hospitals under the Regional Boards, but except possibly in such areas as the Highlands and Islands and perhaps the Yorkshire moors the need for air ambulances does not seem very urgent.

A Resolute Council

An observer at the "crisis" meeting of the Association's Council commented on the rapid changes in its personnel which a few years can make. Out of its sixty or more members only eight were members ten years ago, the eight including the present Chairman, the Chairman of the Representative Body, the Treasurer, the chairmen of three Standing Committees, and two other members. It is natural at such a time to think of some of the doughty figures of the past, and of the words they would have uttered and the action they would have taken in the present situation—of J. A. Macdonald and Jenner Verrall, who had to face another Welshman, and of Henry Brackenbury and Kaye Le Fleming at a later time.

Postman's Knock

One would not have been surprised if the staff of the Association had made wry faces when some members of the Council urged that, in addition to publication in the *Journal* of articles analysing the Minister's document, the articles should be sent by post individually to every member of the profession in the kingdom. In an all-in fight, of course, an expenditure of £200 every time on postage alone, assuming that it is only penny postage, does not count, but a more practical difficulty is the obtaining of paper for this vast circularization. A visit to the Great Hall of B.M.A. House, transformed into something like the dispatching department of a large factory, suggested what it means to dispatch even one set of documents to every practitioner. It means addressing one person in every thousand of the population—not a task to be undertaken lightheartedly.

The Home Office announces that Dr. Brian Arthur McCubbin is no longer authorized under the Dangerous Drugs Acts to be in possession of or to supply dangerous drugs.

Correspondence

National Health Service

SIR,—From the word "go" there will be an avalanche of work which will throw a tremendous strain on the profession and is likely to lead to a breakdown unless there is a corresponding increase of man-power (especially in the under-doctored areas) and expansion in every branch of the profession and ancillary services. The Health Service will require a complete administrative machine analogous to that of the fighting Services and with a large number of doctors doing work which is exclusively administrative. The good will of the profession is assured, but if there is a medical breakdown owing to the Service being forced on us before we are ready, then it must be made quite clear that the Government must accept full responsibility.—I am, etc.,

St. Mary Bourne, Andover, Hants. W. D. KEYWORTH.

Working Hours in the N.H.S.

SIR,—From perusal of recent correspondence in the *B.M.J.* it appears obvious that very many G.P.s are under no illusions about working hours under the N.H.S. It is indeed patent that our work must be materially increased—the mere extension of free (so-called) doctoring to all women and children, apart from any other class of patient, will ensure this. Not only will our clinical work, our visits, and our surgeries be increased but also, no doubt, will the additional paper work which must inevitably descend upon us. To cope with this increased work we will have at the outset less G.P.s than are in practice to-day. For it is an unfortunate fault of any bureaucratic service (such as the N.H.S.) that it must essentially remove many "producers"—i.e., G.P.s—from their active clinical work into non-productive office jobs. To this depletion in our numbers may be added all those elderly G.P.s who are plodding along keeping their practices alive until the "appointed day."

Thus with reduced numbers we shall be left to face a marked increase of work. Now how long will it take to produce sufficient G.P.s to give the required full service?—ten, fifteen, twenty years? At the best we can settle ourselves down to ten or fifteen years of much harder work until such time as some wonderful State-operated doctor-producing sausage-machine has churned out sufficient medical types to fill the gaps. And, to us G.P.s in practice to-day who will have to bear the brunt and hold the fort until this Utopian state is achieved, what is offered?—(*a*) A remuneration as yet undefined; (*b*) a pension on which the large majority of G.P.s who are in practice to-day, being between the ages of 35 and 55, will find it impossible to live, as they will have been unable, through no fault of their own, to put in enough years of service; (*c*) compensation to our widows for the loss of our practices. I say "widows" expressly, for, under pressure of the increased work which one can visualize, few of us will live long enough to see the Minister's cheque. (We might also suggest to the Minister that he should arrange to employ collectors on our behalf who will continue to go and collect the great mass of book debts which will be owing to us on the "day.")

There is little doubt that we who are in general practice to-day are in for a pretty tough time if the N.H.S. is allowed to come along unchallenged. And, alas, apart from "belly-aching" like this in letters to the *B.M.J.* there appears to be little that we as individuals can do about it. But we can at least attempt to impress upon the B.M.A. that we have a very definite axe to grind and that that axe should be well and truly ground through the medium of the Negotiating Committee.

It is easy to criticize light-heartedly; it is foolish to criticize destructively. May I, therefore, make one respectful suggestion about working conditions which I believe to be constructive and important to the future well-being of G.P.s under any form of service? The evening surgery is to my mind a most evil institution which has become, for some odd reason, accepted as a necessity in the average practice. It has made the G.P. a man apart from his fellows; it removes him from social functions; debars him from active participation in local affairs whether it be amateur theatricals, chess club, or even attendance in the local council chamber; most foul of all, it cuts deeply into his domestic life. In these days of earlier entertainments how many G.P.s can ever accompany their wives or families to the theatre or cinema in the evening? In short, this stupid evening ritual precludes the G.P. from all the normal relaxations to which a man may reasonably look forward at the end of a day's work. Here then is my suggestion in improving the G.P.'s lot: let us, whether under N.H.S. or any other service, have an end of evening surgeries; this demand I would like to see incorporated in the B.M.A.'s suggested terms of service in the N.H.S.—I am, etc.,

Glossop, Derbyshire. H. M. R. WADDELL.

*** The remuneration has since been defined and was published in the *Supplement* of Dec. 20 (p. 158).—ED., *B.M.J.*

Dispensing in N.H.S.

SIR,—A point about a future national health service which appears to have escaped notice, especially with regard to children: at present we all carry stocks of drugs and dispense at any hour. In the N.H.S. we shall presumably not need these, as a prescription will be issued. It is hoped that adequate pharmaceutical arrangements will be made for late calls: at present chemists in this area close at 6.30 p.m. With all our child patients "on the panel" many late bottles of medicine will be required.—I am, etc.,

Cardiff. DAVID SAUNDERS.

Married Doctors in the Services

SIR,—Your answer to my letter on married doctors in the Services (Dec. 6, 1947, p. 133) provokes me to further utterance. The answer of the Service Departments to the B.M.A. Armed Forces Committee is a red herring in the best complacent tradition. I contend that to all intents and purposes "the comparable officer holding a permanent commission" does not exist. To be "comparable" he must be a doctor, married, have one child (or more), and be less than 25 years of age. What man in these circumstances would take a permanent commission knowing that he must keep his family so frugally on half allowances? Thus, the feelings of such an abstract officer are likewise abstract, and this herring is particularly odorous.

To add insult, the Service Departments recognize that financial difficulties may ensue as a result of this unfair pay system and loftily suggest charity in the form of a war-service grant—the Services means test. And then Mr. Alexander's reply to Sir Ernest Graham-Little is on a different theme—not a comparison with the remuneration of the regular officer but with that of "civilians of similar age and qualifications." I would merely say, "O to be one of them again!". But—an afterthought—Mr. Alexander was no doubt referring to the remuneration of the civilian State-doctor, or should I say the State-civilian doctor. Heaven forbid!—I am, etc.,

CONSCRIPTED, R.A.F.V.R.

Petrol Restrictions

SIR,—So, cap in hand, we go to the Minister of Fuel and meekly ask to be allowed to take our cars to the cinema with us so that we may have the privilege of being called out in the middle of the performance. The Minister (thinking, no doubt, "what a lot of fools") has given us what we asked for, and we have written (Dec. 6, 1947, p. 916) a humble address thanking him for his magnanimity. I submit, Sir, that this is not enough. Your correspondents have asked for recreation, and have simply been given the opportunity to do more work. The doctor's leisure is limited to an extent far greater than other workers', and it is essential if he is to be able to make any use of it that he should have a reasonably convenient method of travel at his disposal. The town practitioner may want to go into the country, miles from the nearest telephone; the country practitioner probably wants to go to a town, but he does not necessarily want to spend his time while there eagerly awaiting the bell that will recall him to work. Other workers can do these things: either they make use of their ample week-ends (often starting at 4.30 p.m. on Friday) or they take a day or two off during the week, a procedure probably only too well known to the Minister of Fuel and Power under the name "voluntary absenteeism."

You state that "medical men naturally expect to share with the rest of the community the various hardships to which we are these days all exposed." Why, may I ask? The rest of the community does not share with us the hardship of being on call at any time of any day or night, nor does it share our relatively enormous occupational morbidity and mortality from coronary thrombosis. In fact, by its 40-hour week and its repeated strikes it must be regarded as very largely responsible for its own hardships.

It has been suggested that we should not ask for privileges denied to others. But our special position is already recognized by the law for some purposes—e.g., exemption from jury service (although one day our self-effacing representatives will probably ask for this exemption to be cancelled). I must ask the B.M.A. to abandon its usual pusillanimous methods and to give an ultimatum to the Government that unless more consideration is given to the medical profession in this matter doctors will cease to be available 24 hours a day.—I am, etc.,

Silver End, Essex. J. W. NICHOLAS.

COMPULSORY RECRUITMENT TO H.M. FORCES OF MEDICAL PRACTITIONERS

The Central Medical War Committee has been notified by the Ministry of Health of the following changes in the arrangements for calling up medical practitioners with effect from Jan. 1.

The compulsory recruitment of medical practitioners for service with H.M. Forces as general duty medical officers shall be confined to those who have not reached the age of 26 years, unless the Central Medical War Committee agrees (or has already agreed) to postpone a practitioner's call-up beyond his 26th birthday on the ground that he is undergoing or about to undergo training for the purpose of acquiring further qualifications or special experience. In such cases the practitioner shall be liable for compulsory recruitment as a general duty officer until he has reached the age of 30 years.

The compulsory recruitment of practitioners for service with H.M. Forces as specialists or graded specialists shall be confined to those who have not reached the age of 35 years.

B.M.A. LIBRARY

The following books have been added to the Library:

Bancroft, T. W., and Humphreys, G. H. (Editors): Surgical Treatment of Soft Tissues. 1946.
Barclay, J.: Why No Nurses. 1946.
Buxton, P. A.: The Louse. Second edition. 1947.
Caporale, L.: L'Urologia nella Donna. Second edition. 1946.
Chesser, E.: Unwanted Child. 1947.
Clark-Kennedy, A. E.: Medicine. Vol. 1. 1947.
Cochrane, R. G.: A Practical Textbook of Leprosy. 1947.
Collis, E.: A Way of Life for the Handicapped Child. 1947.
Corwin, E. H. L.: The American Hospital. 1946.
De Lacerda, H.: A Tiróide. 1946.
Eysenck, H. J.: Dimensions of Personality. 1947.
Feer, E.: Diagnostik der Kinderkrankheiten. Fünfte Aufl. 1947.
Harvey, W. C., and Hill, H.: Insect Pests. Second edition. 1947.
Holmes, G. W., and Robbins, L. L.: Roentgen Interpretation. Seventh edition. 1947.
Howell, E.: Escape to Live. 1947.
Jameson and Parkinson's Synopsis of Hygiene. Ninth edition by G. S. Parkinson. 1947.
Loeper, M.: Hépatites Rares. 1946.
Millin, T.: Retropubic Urinary Surgery. 1947.
Monrad-Krohn, G. H.: Clinical Examination of the Nervous System. Eighth edition. 1947.
Nicole, J. E.: Psychopathology. Fourth edition. 1946.
Rees, J. R. (Editor): The Case of Rudolf Hess. 1947.
Refsum, S.: Heredopathia Atactica Polyneuritiformis. 1946.
Rhodes, H. T. F.: Forensic Chemistry. Second edition. 1946.
Saint, C. F. M.: Surgical Note-taking. Fourth edition. 1947.
Schäfer, I.: A Kábitoszerek és a nemzetközi büntetőjog feladatai. 1946.
Schauffler, G. C.: Pediatric Gynecology. Second edition 1947.
Sjövall, E.: Rättsmedicin. 1946.
Slaughter, F. G.: A Touch of Glory. 1947.
Steinmann, B.: Das Herz beim Scharlach. 1945.
Strode, W. C.: The Gleam. 1947.
Treiger, I. J.: Atlas of Cardiovascular Diseases. 1947.
Veintemillas, F.: Tratado sobre las Rickettsias y las Fiebres Exantematicas. 1944.
Walker and Percival's Introduction to Dermatology. Eleventh edition by G. H. Percival. 1947.
Zoethout, W. D., and Tuttle, W. W.: Textbook of Physiology. Ninth edition. 1946.

Association Notices

PHYSICAL MEDICINE GROUP

Dr. F. S. Cooksey (London) and Dr. D. Wilson (Bath) have been elected members of the Physical Medicine Group Committee as a result of a postal ballot held to fill two casual vacancies on the Committee.

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As a result of a ballot held to fill casual vacancies, the following have been elected members of the Group Committee:

Dr. J. A. Aitken (London)	London Region
Dr. J. A. Fraser Roberts (London)	London Region
Dr. J. C. Brundret (Liverpool)	Manchester and Liverpool Region
Dr. G. W. Harris (Cambridge)	Oxford and Cambridge Region
Dr. W. R. M. Morton (Belfast)	Scotland and N. Ireland Region

AREAS OF BELFAST AND NORTH-EAST ULSTER DIVISIONS

Notice is hereby given by the Council to all concerned:

(1) That the area of the Belfast Division be redefined as follows: The City of Belfast; that part of County Antrim south of, but excluding, Toomebridge, Ballymena, Carnlough; eastern part of County Down.

(2) That the area of the North-east Ulster Division be redefined as follows: That part of County Antrim north of, but including, Toomebridge, Ballymena, Carnlough; the eastern part of County Londonderry.

The above alterations to take effect as from the date of this notice.

CHARLES HILL,
Secretary.

Branch and Division Meetings to be Held

DERBY DIVISION.—At Derbyshire Royal Infirmary, Tuesday, Jan. 13, 8.15 p.m. Mr. W. G. Rose: Breast Cancer; Mr. N. L. Edwards: Uterine Cancer.

KINGSTON DIVISION.—At Atkinson-Morley Emergency Hospital, Copse Hill, London, S.W., Tuesday, Jan. 13, 8 p.m. Clinical evening. Mr. Wylie McKissock, M.S., F.R.C.S., and the staff of the Hospital have arranged to present a series of cases to demonstrate the modern methods of investigation and treatment in neurological surgery.

SOUTH BEDFORDSHIRE DIVISION.—At Luton and Dunstable Hospital, Friday, Jan. 16, 9 p.m. Speaker: Dr. Charles Hill. All medical practitioners in the area are invited to attend.

SUNDERLAND DIVISION.—At Sunderland and Durham County Eye Infirmary, Friday, Jan. 16, 7.45 p.m. Clinical demonstration by members of the staff of the Eye Infirmary. Address by Mr. B. W. Rycroft: Modern Trends in Ophthalmic Surgery.

Meetings of Branches and Divisions

EAST YORKSHIRE BRANCH

The annual dinner was held on Dec. 11, and was attended by some 60 members and guests. Prof. 'Espinasse, Dean of the Faculty of Science and Deputy Principal of the University College, Hull, proposing the toast of the Association, commented upon the inability of existing medical schools to provide the number of doctors required by a full health service. In disagreement with the Goodenough Report, and feeling that additional medical schools would be required, he hoped that such a school might be developed in association with the institution he represented.

The President of the Branch, Dr. Stenhouse Stewart, in his reply thanked Prof. 'Espinasse for the continued favour of the College, which from its inauguration had the support of the Branch, and announced that the B.M.A. Prize for 1946–7 had been awarded to Mr. Jack Cherry, now pursuing his further studies at the London Hospital.

The Home Office announces that the Authorities granted by the Regulations made under the Dangerous Drugs Act, 1920, have been restored to Dr. Henry Joseph Constantine Churchill.

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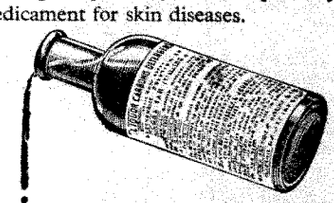

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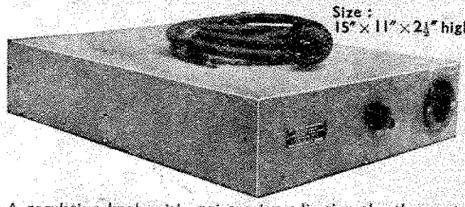

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Victoria, British Columbia, Canada
HOUSE PHYSICIAN AND SURGEON

Applications are invited from duly qualified medical practitioners for the above post at a salary of $1,800 per year (approximately £450). The appointment is for six months in the first instance and is renewable up to two years. Duties will include work in the medical, surgical and gynaecological wards, and assisting surgeons at operations. The hospital consists of 325 beds. Travelling expenses will be repaid up to $100. Applicant should state age, married or single, qualifications, previous experience if any, and enclose not more than three copies of recent testimonials; also, approximate date when duties could be commenced. This appointment is open to applicants registered with the General Medical Council of the United Kingdom, but before being allowed to enter private practice on completion of the appointment it will be necessary for them to register with the College of Physicians and Surgeons of British Columbia. Further details can be obtained from Mr. H. F. E. Smith, Industrial and Trade Representative, British Columbia House, 1 and 3, Regent Street, London, W.1; or direct from Sister Superior, St. Joseph's Hospital, Victoria, British Columbia, Canada.

SOUTHERN RHODESIA GOVERNMENT
VACANCY FOR SCHOOLS MEDICAL OFFICER

A lady whole-time Medical Officer is required for appointment in the Southern Rhodesia Government Medical Service. Her duties will be primarily in connexion with Medical Inspection of Schools throughout the Colony under the Senior Schools Medical Officer but she may be called upon to undertake any other duties in the Public Health Department which may be assigned to her by the Medical Director. Private practice will not be permitted. Applicants should not be over 35 years of age, should hold a registrable Diploma in Public Health and have experience in Intelligence Testing. Preference will also be given to candidates with experience in Refraction work. Salary scale will be £935 by £33 to £1,100 per annum and a cost-of-living allowance in terms of the regulations will also be paid. Travelling and subsistence allowances are payable and arrangements for motor transport will be made. A contributory pension scheme is available. In terms of existing regulations 45 days vacation leave per annum (cumulative) may be granted, but vacation leave may not be taken during the first year of service and not more than six months may be taken at any one time or within a period of eighteen months. The successful applicant will be provided with travelling fare from place of appointment to Southern Rhodesia and appointment will be subject to ability to pass a medical examination by a Government or other duly appointed medical officer. Application forms may be obtained from the Secretary, Office of the High Commissioner for Southern Rhodesia, Rhodesia House, 429, Strand, London, W.C.2, and completed forms should be returned to his office not later than March 15, 1948.

AUCKLAND HOSPITAL BOARD, New Zealand
DIRECTOR OF RADIOLOGY

Applications are invited from qualified medical practitioners of the British Empire of at least seven years' standing for the position of Director of Radiology, Auckland Hospital Board's Institutions. Applicants must possess D.M.R.E. or equivalent degree and the appointee shall be registered in New Zealand before taking up duty. The salary, living out, shall be at the commencing rate of £N.Z.1,400 per annum, rising by one annual increment of £N.Z.100 to £N.Z.1,500 per annum. Any further increments will necessarily be in accordance with the salary scale to be approved by the Director of Stabilization on the advice of the Advisory Committee to the Hon. the Minister of Health. Conditions of appointment and form of application may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London. Applications, addressed to the undersigned, will close at the Office of the Board, Kitchener Street, Auckland, New Zealand, at noon on Monday, February 23, 1948.—R. F. Galbraith, Secretary.

QUEEN VICTORIA MEMORIAL HOSPITAL
172, Lonsdale Street, Melbourne, Australia
MEDICAL SUPERINTENDENT

Applications are invited from fully qualified medical women for the position of Medical Superintendent (210 bed hospital for women and children—obstetric, surgical and medical beds). Salary at the rate of £500 per annum, plus board and residence. Applications, stating age and experience, and enclosing copies of testimonials, should reach the Manager not later than February 15, 1948.—Marion Mossman, Manager and Secretary.

ST. LAURENCE'S HOSPITAL
(Richmond, Whitworth and Hardwicke Hospitals)
North Brunswick Street, Dublin
RESIDENT ASSISTANT in Neurosurgical Dept.

The Board of Governors invite applications from registered medical practitioners for the above appointment. Candidates should preferably have some experience of, or desire to gain experience in, neurosurgery and be prepared to serve for two years. Salary £180 per annum with full residential emoluments. Applications to the undersigned.—A. W. MacDermott, Secretary and Superintendent.

UNIVERSITY OF ST. ANDREWS
TWO MEDICAL OFFICERS

The University Court of the University of St. Andrews invites applications for appointment of two Medical Officers in connection with the Student Health Scheme to be operated by the University. One of these officers will be located in St. Andrews and the other in Dundee. The salary attached to each appointment is £1,200 per annum together with F.S.S.U. benefits. The University operates a scheme of family allowances and a grant towards expenses of removal may be made. Further particulars of the appointment may be obtained from the undersigned with whom one copy of the application, together with the names of three referees, should be submitted not later than February 28, 1948.—David J. B. Ritchie, Secretary, The University, St. Andrews.

UNIVERSITY OF LONDON
POSTGRADUATE MEDICAL SCHOOL OF LONDON
2 HOUSE SURGEONS IN RADIOTHERAPY (A)

Applications are invited from registered medical practitioners, male and female, including practitioners liable to service under the National Service Acts who have not yet completed three months since the date of qualification, for the appointment of two House Surgeons in Radiotherapy (A), at a salary at the rate of £135 per annum, plus full residential emoluments. The appointments will date from March 1, 1948. These posts are suitable for prospective candidates for the Diploma in Medical Radiology, Radiotherapists, or surgeons interested in Radiotherapy. Apply, the Dean, Postgraduate Medical School of London, Ducane Road, W.12, before January 17, 1948.

UNIVERSITY OF BRISTOL
ANAESTHETIC REGISTRAR (B1)

The University of Bristol in conjunction with the Bristol Royal Hospital invites applications for the non-resident post of Anaesthetic Registrar (B1). The appointment is for one year and renewable. The salary will be on a scale from £500 to £750 per annum, according to qualifications and experience. There is a University Scheme for Children's Allowances. Applications, giving full names, age, qualifications, details of education and experience, together with the names of not more than three referees and copies of not more than three recent testimonials, should reach the undersigned, from whom further particulars may be obtained, on or before January 31, 1948.—Winifred Shapland, Secretary and Registrar, University of Bristol, Bristol, 8.

KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION
NORTH WALES SANATORIUM, near Denbigh
(400 beds, pulmonary and non-pulmonary tuberculosis; X-ray department; major operative thoracic unit, etc.)
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of Junior Resident Medical Officer (B2), including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of one year. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—Norman Tattersall, Principal Medical Officer, Memorial Offices, Cathays Park, Cardiff.

GLASGOW ROYAL INFIRMARY
REGISTRAR (B1)
for Radiotherapy Department

Applications are invited from registered medical practitioners for the post of Registrar in the Radiotherapy Department (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £450 per annum, rising to £500 per annum. The post is tenable for two years. Particulars as to duties, etc., may be obtained from the Superintendent, Royal Infirmary, 84, Castle Street, Glasgow, C.4. Applications, supported by three names for reference, should be submitted to the undernoted not later than January 31, 1948.—A. A. MacIver, Secretary, Glasgow Royal Infirmary, Office: 135, Buchanan Street, Glasgow, C.1.

GOVERNMENT TRAINING CENTRE
Radnor Road, Bristol
CENTRE MEDICAL OFFICER

Applications are invited from registered medical practitioners (preferably with industrial experience) for a part-time appointment as Centre Medical Officer at the Government Training Centre at Radnor Road, Bristol. Duties include general medical supervision, including supervision of first-aid arrangements, etc., and (where required) examinations of trainees. Attendance will be required for about two hours a week in one or two sessions. Fees are by scale, depending on length of session, at present at rate of £1 1s. for a session not exceeding one hour and £1 11s. 6d. for a session not exceeding two hours, but without prejudice to negotiations now proceeding with the British Medical Association on this question. Applications, stating age and experience, qualifications, with dates and period of service (if any) with Forces, should be sent to the Secretary, (P.R. Dept.), Room 013, St. James's Square, S.W.1, by January 20, 1948.

BOROUGH OF BARKING
BARKING AND UPNEY (MATERNITY) HOSPITAL
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from qualified medical practitioners for the above-mentioned appointment. Previous medical appointments of this nature are desirable. Salary scale £455 per annum, rising by annual increments of £25 per annum to a maximum of £555 per annum, plus cost of living bonus and emoluments valued at £150 per annum. The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act, 1937, and to satisfactory medical examination. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Application forms and conditions of service may be obtained from the Medical Officer of Health, Town Hall, Barking, Essex, and should be returned to the undersigned not later than Saturday, January 31, 1948.—E. R. Farr, Town Clerk, Town Hall, Barking, Essex.

RAMPTON STATE MENTAL INSTITUTION
Near Retford, Notts.
MEDICAL OFFICER

Applications are invited from suitably qualified R practitioners holding B2 appointments for the post of Temporary Medical Officer. The successful applicant would be considered for the permanent appointment at a later date. R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The Institution, which is a modern one, provides for some 1,200 patients, male and female, suffering from conduct disorders associated with mental deficiency. There is every opportunity for general clinical experience and the study and treatment of psychopathic disorders and other mental conditions. Salary £950, rising to £1,300 by increments of £30, with a deduction of £30 for each year below the age of 35 and a corresponding increment for each year over 35 up to the age of 40. A deduction of 27s. 6d. per week is made for board, laundry, etc., and a charge of £70 per annum is made for accommodation. When the appointment is filled on a permanent basis a house will be available. Applications, with a copy of recent testimonials and references, to the Medical Superintendent, from whom further particulars may be obtained if required.

NORTHERN REGIONAL HOSPITAL BOARD (SCOTLAND)
ADMINISTRATIVE MEDICAL OFFICER AND SECRETARY

Applications are invited from registered medical practitioners for the appointment of Administrative Medical Officer and Secretary at an annual salary of £1,750. The medical officer appointed will be expected to devote his whole time to the duties of his office and will act as the medical officer of the Board on the planning, organization and staffing of the hospital and specialist services of the Region, and will also carry out such other secretarial, administrative and executive functions as the Board may assign to him from time to time. The appointment is terminable by three months' notice on either side. A Treasurer will be appointed who will also act as an Assistant non-Medical Secretary. Subject to approval of regulations now before Parliament, the post will be superannuable and the contribution payable by the officer will be six per cent of salary. The area comprises the Counties of Inverness (including Skye and the Outer Islands), Nairn, Ross and Cromarty, Sutherland and Caithness. Applications, stating particulars of the candidate's qualifications and experience, together with the names of three referees, should be addressed to the Chairman of the Northern Regional Hospital Board, 46, High Street, Inverness, and should reach him immediately.

LEEDS REGIONAL HOSPITAL BOARD (REGION 2)
REGIONAL PSYCHIATRIST

Applications are invited for the whole-time appointment of Regional Psychiatrist to the Leeds Regional Hospital Board at an inclusive salary of £1,900 per annum, subject to deduction of six per cent for superannuation purposes. Applicants should have wide experience in general psychiatry, including administrative experience of both in-patient and out-patient work. The officer appointed will, subject to the general direction of the Senior Administrative Medical Officer, be responsible for the surveying of, and for making recommendations regarding, the Mental Health Services in the Region, in conjunction with the Mental Health Committee and the Regional Technical Advisory Sub-Committee. He will be given opportunities for clinical work and for research. Applications, giving particulars of qualifications and experience, together with the names of three referees, should be addressed to the Chairman, Leeds Regional Hospital Board, Bradford Royal Infirmary, Bradford, to reach him not later than January 31, 1948. Canvassing in any form will disqualify. Further particulars will be supplied on application.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT HOUSE SURGEON (A or B2)
for Fracture and Casualty Departments

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident House Surgeon (A or B2), now vacant, for work in the Fracture and Casualty Departments of the above hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be for a period of one year. The salary payable will be, in the case of an A appointment, £120 per annum, and for a B2 appointment at £200 per annum, together with full residential emoluments. The hospital, in addition to the Fracture and Casualty Departments, accommodates acute medical and surgical Service and civilian patients and has a Thoracic Surgery Centre (112 beds). Total beds 1,000. Applications should be forwarded to the Medical Superintendent, Pinderfields Emergency Hospital, Wakefield.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

WEST RIDING OF YORKSHIRE MENTAL HOSPITALS BOARD
MENSTON MENTAL HOSPITAL
HOUSE PHYSICIAN (B1)

Applications are invited from recently qualified doctors, who are interested in Psychiatry, for the position of House Physician (B1) at the above hospital. The post offers facilities for experience in modern methods of treatment and ample opportunities will be provided for postgraduate study. Salary will be at the rate of £455 per annum, rising by annual increments of £25 to £555 per annum, together with full residential emoluments valued at £200 per annum and war bonus will be payable at the rate of £30 per annum. In the case of non-resident officers, an allowance of £200 per annum is made in lieu of emoluments and war bonus is at the rate of £60 per annum. An additional £50 per annum is payable to holders of the D.P.M. or M.D. in Psychological Medicine (London). Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment will be subject to the provisions of the Asylums Officers' Superannuation Act, 1909, Class I, and deductions from total salary, emoluments, etc., will be made at the rate of three per cent in respect of contributions. Applications should be addressed as soon as possible to the Medical Superintendent, Menston Mental Hospital, Leeds, together with the names and addresses of two persons to whom reference may be made.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

ABERDEEN ROYAL INFIRMARY
CO-ORDINATING OFFICER

The Board of Directors invites applications for the full-time post of Co-ordinating Officer for the arrangements for the diagnosis and treatment of malignant diseases meantime in process of expansion to cover the North-East and Northern Areas of Scotland. Candidates should have considerable experience in surgery and in the diagnosis of malignant disease and the assessment of the possibilities of treatment both by surgery and radiotherapy. They should also have experience in the maintenance of standardized records and in the organization of "follow-up" clinics. Salary will be within the range of £1,750 to £2,000 per annum, according to qualifications and experience. There is no provision for superannuation at present, but this is subject to review with the inception of the National Health Service. A copy of the conditions of appointment may be had on application to the undersigned with whom applications and testimonials and the names of two persons for reference, should be lodged on or before January 24, 1948.—John A. McConnchie, Clerk and Treasurer, 1, Albyn Place, Aberdeen.

ADMINISTRATIVE COUNTY OF NORFOLK
Combined appointment of
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH
for the
ERPINGHAM RURAL DISTRICT
CROMER URBAN DISTRICT
NORTH WALSHAM URBAN DISTRICT
SHERINGHAM URBAN DISTRICT and
MEDICAL OFFICER
to the EAST NORFOLK JOINT ISOLATION HOSPITAL AT ROUGHTON

The Norfolk County Council and the District Councils concerned invite applications from medical practitioners (including those at present serving in H.M. Forces) qualified to hold such an office by reason of the terms of the Sanitary Officers (outside London) Regulations, 1935, for the combined whole-time appointment of Assistant County Medical Officer and Medical Officer of Health for the above-mentioned Districts. Population of the combined area is now about 29,615. The salary for the combined appointment will be £960 per annum, plus bonus (at present £59 16s. per annum) with travelling expenses in accordance with the County Council's scale The post will be designated under the Local Government Superannuation Act, 1937, and the salary will be subject to the statutory deductions for this purpose. The successful applicant will be required to pass a medical examination.

The officer will act under the direction of the County Medical Officer as Assistant School Medical Officer and Medical Officer to Infant Welfare Centres, and will also be required to perform such others duties as may be assigned to him by the County Council. As regards his duties as Medical Officer of Health, he will be subject to the control of the District Councils concerned, and will be required to live at an approved centre within the area. Resignation of the appointment will be subject to three months' notice to be received by the Clerk of the County Council. Applications must be made on the prescribed form, which can be obtained from the County Medical Officer, Public Health Department, 29, Thorpe Road, Norwich, to whom they should be returned, accompanied by copies of not more than three recent testimonials, not later than January 22, 1948. Canvassing in any form will be a disqualification.—H. Oswald Brown, Clerk of the County Council.

ADMINISTRATIVE COUNTY OF LONDON
School Health Service
PSYCHIATRIST

Applications are invited from registered medical practitioners of appropriate professional standing and qualifications for the appointment of Psychiatrist (whole-time) on the central medical staff. Salary £1,160 by £50 to £1,360. Duties are concerned with the scheme for child psychiatry in the School Health Service. Forms of application, containing details of duties, etc., from the Clerk of the Council, the County Hall, Westminster Bridge, S.E.1 (stamped addressed foolscap envelope necessary), and should be returned not later than January 24. Canvassing disqualifies. (3909)

BOROUGH OF BEXHILL
MEDICAL OFFICER OF HEALTH AND ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from registered medical practitioners for the above appointment. By arrangement with the East Sussex County Council the duties will include work in the School Health Services. Candidates must have had experience in Public Health work and hold the Diploma in Public Health or similar qualifications. The salary attached to the post is £960 per annum, rising by annual increments of £100 to £1,160 per annum, plus cost-of-living bonus, together with a car allowance in accordance with the Council's scale. The actual position on the scale will depend upon experience and length of service of the selected candidate. The appointment will be subject to the Local Government Superannuation Act, 1937, and the successful candidate passing a medical examination as to his physical fitness. The person appointed will not be permitted to engage in private practice. Applications, together with the names of three persons to whom reference may be made, should be sent to the undersigned not later than January 21, 1948, endorsed "Medical Officer of Health." Canvassing, directly or indirectly, will disqualify.—Edward Smith, Town Clerk, Town Hall, Bexhill, Sussex.

BOROUGH OF WESTON-SUPER-MARE
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited from suitably qualified practitioners for appointment as Deputy Medical Officer of Health at a salary of £650 per annum, rising by annual increments of £50 per annum to a maximum of £850 per annum. A bonus is payable in addition and, at the present time, this amounts to £59 16s. per annum. Applicants must possess the Diploma in Public Health or a degree in Sanitary Science and will be required to pass a medical examination and contribute to the Council's Superannuation Scheme. Full particulars and form of application may be obtained from the undersigned, to whom applications should be returned, accompanied by copies of not more than three testimonials, by January 17, 1948. Canvassing, either directly or indirectly, will disqualify.—Cyril G. Eastwood, Medical Officer of Health, Town Hall, Weston-super-Mare.

BOROUGH OF EALING
MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners who are also holders of a degree or Diploma in Sanitary Science, Public Health or State Medicine. The appointment is subject to approval by the Ministry of Health and the provisions of Section 110 of the Local Government Act, 1933, and the Sanitary Officers' (Outside London) Regulations, 1935. The person appointed will be required to devote his whole time to the duties of the office, not to accept any other office without the previous consent of the Council or take any private practice, but to be in the exclusive employment of the Council. He will be required to act as Medical Superintendent at the Clayponds Isolation Hospital and the Perivale Maternity Hospital as and when directed to do so by the Council. The salary will be at the rate of £1,320, rising to £1,600 by yearly increments of £50, plus National Whitley Council cost-of-living bonus. (This salary will be reconsidered if an amendment of the Asquith Memorandum is received. The population of Ealing is 185,000.) A car allowance at the rate of £125 per annum is payable to the Medical Officer of Health to cover all expenses in maintaining a car for the purpose of his duties. Canvassing, either directly or indirectly is strictly prohibited and will be deemed to be a disqualification. Copies of the application form and terms of appointment can be obtained from the undersigned, to whom applications, accompanied by copies of testimonials, must be delivered not later than January 28, 1948.—E. J. Cope-Brown, Town Clerk, Town Hall, Ealing, W.5.

BOROUGH OF FINCHLEY
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners (men and women) for a whole-time appointment of Assistant Medical Officer of Health. The salary will be within the scale £650 × £25—£850, plus cost of living bonus. The commencing salary will be fixed having regard to previous service in a similar post. A car allowance according to the Council's scale will also be payable. The duties will consist mainly of Maternity and Child Welfare and School Health Service Work, but may include such other duties as the Council determine. The appointment so far as concerns School Health work will be part-time to the service of the Middlesex County Council. Possession of the D.P.H. or D.C.H. will be an advantage. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to a satisfactory medical examination. Applications must reach the Medical Officer of Health, 308, Regents Park Road, N.3, by not later than January 24, 1948. Canvassing, directly or indirectly, will disqualify.—R. M. Franklin, Town Clerk, Municipal Offices, Finchley, N.3.

BEDFORDSHIRE COUNTY COUNCIL
ST. PETER'S HOSPITAL, Bedford
Assistant RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, including R practitioners who now hold A posts, for the appointment of Assistant Resident Medical Officer (B2). Salary will be at the rate of £250 per annum, together with cost-of-living bonus (at present £59 16s.). If non-resident, an allowance of £100 per annum will be made in lieu of board and lodging. If held by an R practitioner, the appointment will be limited to six months. In the event of a demobilized medical officer being appointed, application will be made for upgrading under the scheme. Applications should be addressed to the County Medical Officer, Shire Hall, Bedford, from whom further particulars may be obtained.—J. B. Graham, Clerk of the County Council, Shire Hall, Bedford.

CORPORATION OF DUNDEE
DUNDEE MENTAL HOSPITAL
Public Health Department
SENIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Assistant Medical Officer (B1). Salary is at the rate of £500 per annum with war bonus of £75, and full residential emoluments. Suitably qualified R practitioners holding B2 appointments and those holding B1 appointments (if ineligible for H.M. Forces) are invited to apply. Applications should be sent to the Medical Superintendent, Mental Hospital, Westgreen, Dundee. No married quarters are available.

CHESHIRE COUNTY COUNCIL
CLATTERBRIDGE (COUNTY) GENERAL HOSPITAL, Bebington, Wirral
Assistant RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the post of Assistant Resident Medical Officer (B2). The duties will be mainly surgical. Salary £200 per annum, plus bonus and residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications (no special form) to be sent as soon as possible to the undersigned.—Arnold Brown, County Medical Officer, 24, Nicholas Street, Chester.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

BUCKS COUNTY COUNCIL
TINDAL GENERAL HOSPITAL, Aylesbury
(125 beds. Resident Medical Staff, 4)
HOUSE SURGEON (B2) (Male)

Applications are invited from duly registered medical practitioners (male), including R practitioners holding A posts, for the post of House Surgeon (B2). The appointment is for a period of six months at a salary of £250 per annum, with full residential emoluments. The post is vacant on January 21, 1948. Good experience of general surgical work is obtainable : post-graduate teaching for Fellowship examinations is available. Applications, stating date free to commence duty, together with copies of two recent testimonials, should be submitted to the Medical Superintendent by January 15, 1948.

CITY OF SALFORD
Health Department
ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications for this post are invited from qualified medical practitioners (male or female) preferably in possession of the Diploma in Public Health and with experience of Maternity and Child Welfare and School Health work. The appointment will be permanent and whole-time, and the salary will be £650, rising by annual increments of £25 to £850 per annum, plus cost-of-living bonus. The commencing salary will be fixed within this scale according to qualifications and experience. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. Form of application and other particulars relating to the appointment may be obtained from the Medical Officer of Health, 143, Regent Road, Salford, 5, by whom applications (including the names of two referees) must be received not later than January 17, 1948.—H. H. Tomson, Town Clerk.

CITY OF BIRMINGHAM MENTAL HOSPITALS
RUBERY HILL DIVISION
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from unmarried, male or female, medical practitioners for the whole-time appointment of Assistant Medical Officer (B1) at the above hospital. Salary £455 per annum, rising by £25 to £555, plus full residential emoluments valued at £150 per annum, plus cost-of-living bonus. An additional £50 will be paid to holders of the D.P.M. The appointment will be subject to the Asylums Officers' Superannuation Act, 1909. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications to be sent in writing to the Medical Superintendent, Rubery Hill Mental Hospital, Birmingham, by Saturday, January 17, 1948. Previous experience of mental hospital work not essential.

CITY OF LIVERPOOL
CLINICAL TUBERCULOSIS OFFICER

Applications are invited from registered medical practitioners for the appointment of whole-time Clinical Tuberculosis Officer in the Liverpool Public Health Department, under the administrative control of the Medical Officer of Health and the Chief Clinical Tuberculosis Officer. Candidates must possess special knowledge and experience of modern methods of diagnosis and treatment of tuberculosis, including interpretation of chest radiographs. Salary £800 per annum, rising by annual increments of £50 to a maximum of £1,000 per annum, plus bonus, as approved by the City Council. The appointment, terminable by three months' notice on either side, will be subject to the standing orders of the City Council, and to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will have to pass a medical examination. Forms of application may be obtained from the Medical Officer of Health, Gordon House, Belmont Grove, Liverpool, 6, and should be returned to the undersigned, accompanied by copies of not more than three recent testimonials, in envelopes endorsed "Clinical Tuberculosis Officer," so as to be received not later than Friday, January 23, 1948. Canvassing of members of the City Council, either directly or indirectly, will be a disqualification.—Thomas Alker, Town Clerk, Municipal Offices, Dale Street, Liverpool.

CITY OF BRADFORD
MUNICIPAL GENERAL HOSPITAL—ST. LUKE'S

Applications are invited from registered medical practitioners for the following appointments :—

HOUSE SURGEONS (A and B2) (General Surgery)

Salary for A appointment £120 per annum, and for B2 appointment, £200 per annum, plus full residential emoluments in each case. Practitioners within three months of qualification may apply for A post, when the appointment will be for a period of six months. Practitioners who now hold A posts may apply for the B2 post, when the appointment will be limited to six months.

RESIDENT ANAESTHETIST (B1)

Salary £350 per annum, plus full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also holding B1 and ineligible for H.M. Forces, may apply. This appointment is limited to one year.—W. H. Leathem, Town Clerk, Town Hall, Bradford

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners, holding a Diploma in Public Health, for the appointment of Deputy Medical Officer of Health to the City and County Borough. Salary £1,200 per annum, plus cost-of-living bonus, £59 16s. per annum. The post is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The duties will be concerned mainly with administration and candidates should have had good experience of public health work and preventive medicine. Applications, endorsed "Deputy Medical Officer of Health," stating age, qualifications, together with full details of the officer's training and experience and particulars of present and past appointments, should be accompanied by two recent testimonials and the names of three persons to whom reference can be made as to character and ability, and addressed to the Medical Officer of Health, Health Department, Town Hall, Newcastle-upon-Tyne, 1, to reach him not later than January 24, 1948. Canvassing, either directly or indirectly, will be considered a disqualification.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

CITY OF CARLISLE
FUSEHILL EMERGENCY HOSPITAL
RESIDENT MEDICAL OFFICER (B2) or (A)

Applications are invited from duly qualified medical practitioners for the above post at a salary of £200 per annum, plus residential emoluments. Practitioners within three months of qualification who are liable under the National Service Acts may apply for an A post, and R practitioners holding A posts may apply for a B2 post. The appointment is for six months in the first instance and (except in the case of R practitioners) may be renewed. The duties will include work in Medical, Surgical, Gynaecological, E.N.T. Wards and in a Tuberculosis Pavilion. Applications, stating age, nationality, medical school, date of qualification and experience together with copies of testimonials, should be submitted to the Medical Officer of Health, 22, Fisher Street, Carlisle, as soon as possible.—H. D. A. Robertson, Town Clerk.

CITY AND COUNTY OF NEWCASTLE-UPON TYNE
NEWCASTLE GENERAL HOSPITAL
HOUSE SURGEON (A)
Accident and Admissions Department

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A) to the Accident and Admissions Department, vacant on March 1, 1948. The appointment will be for a period of six months. Salary at the rate of £150 per annum, with residential emoluments and cost-of-living bonus. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.—J. Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
SHOTLEY BRIDGE HOSPITAL
TWO HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners, male and female, for two House Surgeons (A) posts, which will become vacant in February, 1948. The appointments will be for a period of six months. Salary is at the rate of £200 per annum, with residential emoluments and cost-of-living bonus. Practitioners within three months of qualification and liable under the National Service Acts, may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.—J. Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

CITY OF BIRMINGHAM
SELLY OAK HOSPITAL
HOUSE PHYSICIANS (A). Two vacancies
HOUSE SURGEONS (A). Three vacancies
GYNAECOLOGICAL AND OBSTETRICAL HOUSE SURGEON (A). One vacancy

Applications are invited from registered medical practitioners, male or female, for the above appointments. The salary is at the rate of £250 per annum, plus residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointments will be for six months, otherwise for one year. Applications should be sent to the Medical Superintendent, Selly Oak Hospital, Birmingham, 29.

COUNTY BOROUGH OF WEST HAM
DAGENHAM SANATORIUM, Dagenham, Essex
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for an Assistant Medical Officer (B1) from registered medical practitioners (male or female). Suitably qualified R practitioners holding B2 appointments may apply. R practitioners holding B1 appointments cannot apply unless they have been rejected by R.A.M.C. Salary £455 per annum, by annual increments of £25 to £555 per annum, plus temporary cost-of-living bonus, with full emoluments. Further particulars and application forms from Medical Officer of Health, 225, Romford Road, West Ham, E.7, to be returned to him by January 15, 1948.—E. E. King, Town Clerk, West Ham Town Hall, Stratford, London, E.15.

CITY OF PLYMOUTH
CITY GENERAL HOSPITAL (450 beds)
JUNIOR ASSISTANT MEDICAL OFFICER (A)

Applications are invited from duly qualified and registered medical practitioners, male and female, including practitioners within three months of qualification, who are liable under the National Service Acts, for the appointment of Junior Assistant Medical Officer (A) at the City General Hospital, Plymouth. The appointment will be for a period of six months and terminable by one month's notice on either side at any time. Salary will be at the rate of £250 per annum, plus full residential emoluments and war bonus. All fees other than this received by the officer must be refunded to the Council. The duties of the post will be chiefly on the surgical side of the hospital. Further information may be obtained from the Medical Superintendent. Applications should be sent to the undersigned as soon as possible.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CUMBERLAND COUNTY COUNCIL
PSYCHIATRIST

The Cumberland County Council invite applications for the appointment of a whole-time Psychiatrist. Applicants must be registered medical practitioners holding a Diploma in Psychological Medicine, and a certificate of recognized training in Child Psychiatry. The salary will be within the range £1,000 to £1,250 per annum, according to qualifications and experience, and if commencing below £1,250 will rise to that maximum by annual increments of £50 ; plus cost-of-living bonus. The person appointed will be required to contribute to the appropriate superannuation scheme, and to pass a medical examination. Travelling and subsistence allowances will be provided on the County scale for the time being in force, the person appointed providing his own motor car. Forms of application, with terms of the appointment, may be obtained from the County Medical Officer, County Health Department, 11, Portland Square, Carlisle, and completed applications must be received by him not later than February 29, 1948. Canvassing, directly or indirectly, will disqualify.—G. N. C. Swift, Clerk of the County Council.

CUMBERLAND COUNTY COUNCIL
DEPUTY COUNTY MEDICAL OFFICER AND DIVISIONAL MEDICAL OFFICER
East Cumberland

The Cumberland County Council invite applications for the above appointment. Applicants must be registered medical practitioners holding a Diploma in Public Health or corresponding qualification. The salary will be at the rate of £1,150 per annum, plus cost-of-living bonus.—The person appointed will be required to contribute to the appropriate superannuation scheme, and to pass a medical examination. Travelling and subsistence allowances will be provided on the County scale for the time being in force, the person appointed providing his own car. Experience in Public Health administration, the School Health Service and Tuberculosis will be a recommendation. Forms of application, with terms of the appointment, may be obtained from the County Medical Officer, County Health Department, 11, Portland Square, Carlisle, and completed applications must be received by him not later than February 12, 1948. Canvassing, directly or indirectly, will disqualify.—G. N. C. Swift, Clerk of the County Council

CUMBERLAND COUNTY COUNCIL
DIVISIONAL MEDICAL OFFICER
West Cumberland

The Cumberland County Council invite applications for the above appointment. Applicants must be registered medical practitioners, holding a Diploma in Public Health, or corresponding qualification. The salary will be within the range £950 to £1,050 per annum, according to qualifications and experience, plus cost-of-living bonus. The person appointed will be required to contribute to the appropriate superannuation scheme, and to pass a medical examination. Travelling and subsistence allowances will be provided on the County scale for the time being in force, the person appointed providing his own motor car. Forms of application, with terms of the appointment, may be obtained from the County Medical Officer, County Health Department, 11, Portland Square, Carlisle, and completed applications must be received by him not later than February 12, 1948. Canvassing, directly or indirectly, will disqualify.—G. N. C Swift, Clerk of the County Council.

COUNTY BOROUGH OF DERBY
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners possessing the D.P.H. for the above permanent whole-time appointment. The salary will be in accordance with the Askwith Memorandum, i.e., £650 by £25 per annum to £850, plus cost-of-living bonus, at present £59 16s. per annum. The duties include work in connexion with Public Health, Infectious Disease, Maternity and Child Welfare, and School Medical work. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment will be determinable by one month's notice on either side. Applications should be sent to the Acting Medical Officer of Health, The Council House, Corporation Street, Derby, to arrive not later than Saturday, January 24, 1948.—C. Ashton, Town Clerk.

COUNTY COUNCIL OF CLACKMANNAN
Public Health Department
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of Assistant Medical Officer of Health for the County of Clackmannan. Applicants must be duly qualified medical practitioners and must possess the Diploma in Public Health or equivalent qualification. Duties will be of a general nature and will embrace the Infectious Diseases Hospital, but will be mainly in connexion with medical inspection and treatment of school children. The salary will be at the rate of £500, rising by £25 annually to a maximum of £700, with placing according to qualifications and experience, together with appropriate J.I.C. war bonus and car allowance. The post is a superannuated one and the successful applicant, as a condition of appointment, will be required to pass a medical examination. Further information as to duties and conditions of service may be had from the County Medical Officer, Public Health Department, Bedford Place, Alloa. Applications should be lodged with the County Clerk, County Buildings, Alloa, not later than February 16, 1948.

COUNTY BOROUGH OF WARRINGTON
Health Department
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners for the appointment of Assistant Medical Officer of Health. The duties of the appointment will offer experience in all branches of Public Health work, including Maternity and Child Welfare, Venereal Diseases, Nurseries, and the School Health Service. Preference will be given to candidates possessing the D.P.H. or D.C.H. Salary £650 per annum, rising by annual increments of £25 to a maximum of £850, plus appropriate cost-of-living bonus, and car allowance of £50 per annum. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the passing of a medical examination. The appointment is a whole-time one, terminable by three months' notice on either side, and the successful candidate will not be permitted to engage in private practice. Applications should be sent to the undersigned by January 24, 1948.—Stuart F. Allison, Medical Officer of Health, Health Department, Sankey Street, Warrington.

COUNTY COUNCIL OF THE COUNTY OF STIRLING
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of an Assistant Medical Officer of Health. Applicants must be registered medical practitioners and also hold a Diploma in Public Health. Salary £650, rising by annual increments of £25 to £900 per annum, with placing on the scale according to experience, with in addition a temporary cost-of-living bonus which is at present £59 16s. per annum. The successful applicant will require to undertake child welfare work, school medical service and such other duties as may be directed from time to time by the County Medical Officer. The applicant will also be required to pass a medical examination and the salary will be subject to deduction of superannuation contributions. A form of application may be obtained from the undernoted, with whom applications and copies of three recent testimonials should be lodged on or before January 31, 1948.—George J. Sherriff, County Clerk, County Offices, Viewforth, Stirling.

COUNTY OF BUCKS
RURAL AND URBAN DISTRICTS OF ETON
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners holding the qualifications prescribed by the Sanitary Officers (Outside London) Regulations, 1935, for the whole-time joint appointment of Assistant County Medical Officer and Medical Officer of Health for the Eton Rural and Urban Districts. Salary at the rate of £1,000 per annum rising by annual increments of £25 per annum to a maximum of £1,100, plus cost-of-living bonus. Travelling and subsistence allowances will be paid on the appropriate Council's scale. The appointment is superannuable and subject to medical examination. Further particulars and forms of application may be obtained from the undersigned to whom applications must be delivered by January 24, 1948. Canvassing will be a disqualification.—Guy R. Crouch, Clerk of the Bucks County Council, County Hall, Aylesbury.

COUNTY BOROUGH OF BURY
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of Assistant Medical Officer of Health at a salary of £650 per annum, rising by annual increments of £25 to £850 per annum, plus cost-of-living bonus at present £59 16s. per annum. Applicants must be qualified male medical practitioners and preference will be given to candidates possessing the Diploma of Public Health. The duties will include work in connexion with the Public Health and School Health services. The appointment, which will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing satisfactorily a medical examination, will be terminable by two months' notice on either side at any time. Applications must be forwarded to me in an envelope endorsed "Assistant Medical Officer of Health" not later than January 19, 1948.—Edward S. Smith, Town Clerk, Municipal Offices, Bank Street, Bury.

COUNTY COUNCIL OF CUMBERLAND
RURAL DISTRICT COUNCIL OF MILLOM
DISTRICT MEDICAL OFFICER OF HEALTH AND ASSISTANT COUNTY MEDICAL OFFICER

The County Council of Cumberland and the Rural District Council of Millom invite applications for the above combined appointment. Salary £960 per annum by £50 to a maximum of £1,110, plus cost-of-living bonus. Travelling and subsistence allowance on the County Scale for the time being in force. Applicants must be registered medical practitioners holding the Diploma in Public Health or corresponding qualification. Further particulars and forms of application may be obtained from the County Medical Officer, 11, Portland Square, Carlisle, to whom applications should be submitted before January 24, 1948.—G. N. C. Swift, Clerk to the County Council, W. N. Kitchin, Clerk to the Millom Rural District.

COUNTY BOROUGH OF MIDDLESBROUGH
MIDDLESBROUGH GENERAL HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Physician (A). The salary is at the rate of £200 per annum, together with full residential emoluments. The General Hospital contains 355 beds and is an Acute General Hospital. The successful candidate will be required to pass a medical examination. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be limited to a period of six months, otherwise the appointment will be for twelve months. Applications should be sent not later than Wednesday, January 21, 1948, to the Medical Superintendent, Mr. E. W. Grahame, M.D., Ch.M., F.R.C.S.(E.), F.R.C.S. (Eng.), General Hospital, Ayresome Green Lane, Middlesbrough, from whom further information may be obtained.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough.

FALKIRK AND DISTRICT ROYAL INFIRMARY
MEDICAL SUPERINTENDENT

The Managers invite applications for the post of Medical Superintendent at the above infirmary. This appointment may be held up to the age of 65 (with a possible extension of twelve months longer in special circumstances). Salary to be not less than £1,000 per annum, with residential emoluments not exceeding £250 in lieu of free house, coal and light, until a house becomes available. Particulars relating to the duties may be obtained from the Hon. Secretary, with whom six copies of letter of application, stating age and previous experience, together with recent testimonials (not exceeding six in number), must be lodged not later than Friday, January 30, 1948. Canvassing in any form by applicants will disqualify them.—M. D. Kennedy, Solicitor, Hon Secretary, 14, Princes Street, Falkirk.

GLAMORGAN COUNTY COUNCIL
EAST GLAMORGAN COUNTY HOSPITAL
Church Village
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B1) at the above-named hospital. Preference will be given to applicants with a Diploma in Anaesthetics which is, however, not an essential qualification for this post. Experience in all modern methods of anaesthesia is essential. Applicants must be under 45 years of age unless already employed by a Local Authority and are considered to be specially suitable for appointment. In the case of ex-Servicemen, this age limit will be raised by the number of years served in H.M. Forces during the late war. Applications from R. practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary at the rate of £455, rising by annual increments of £25 to £555 per annum, plus prevailing cost-of-living bonus and full residential emoluments. All fees whatsoever received by the successful candidate whilst holding this appointment must be handed over to the County Council. The appointment is subject to the regulations of the County Council and terminable by one month's notice on either side. Applications should be received by the County Medical Officer, Glamorgan County Hall, Cardiff, within ten days of the publication of this advertisement.—D. J. Parry, Clerk of the County Council, Glamorgan County Hall, Cardiff.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE SURGEON (B2) (General Surgery)

Applications are invited for the above appointment from registered medical practitioners, male and female, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to a period of six months, otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary £250 per annum, plus a cost-of-living bonus, and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, January 19, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

ESSEX COUNTY COUNCIL
OPHTHALMIC SPECIALISTS

Applications are invited from registered medical practitioners for the following appointments. Applicants should have special experience in all branches of Ophthalmology and should be in possession of the Diploma in Ophthalmic Medicine and Surgery.

SENIOR ASSISTANT COUNTY MEDICAL OFFICER for Ophthalmic work. Salary £900 a year rising by annual increments of £50 to £1,200 a year.

ASSISTANT COUNTY MEDICAL OFFICER for Ophthalmic work. Salary £750 a year, rising by annual increments of £25 to £950 a year.

Bonus is now paid in addition. Applications (on the prescribed form obtainable from the County Medical Officer of Health at the undermentioned address), accompanied by non-returnable copies of three recent testimonials, should be received by me at County Hall, Chelmsford, not later than January 19, 1948. Canvassing, whether directly or indirectly, will disqualify a candidate.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

KINGSTON-UPON-HULL CORPORATION
HEALTH DEPARTMENT
BEVERLEY ROAD HOSPITAL (432 beds)

Applications are invited for the undermentioned appointments from registered medical practitioners of either sex, including those now serving in H.M Forces :—

SENIOR HOUSE POST (SURGICAL) (B1), tenable for three years. Salary £455 per annum, plus cost-of-living bonus, rising to £555 per annum by annual increments of £25, plus full residential emoluments. Applications from R practitioners holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C.

JUNIOR HOUSE POST (SURGICAL) (A), tenable for one year. Salary £250 per annum, plus cost-of-living bonus and plus full residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months.

Forms of application, conditions of appointment etc., may be obtained from, and the form should be returned duly completed to, the Medical Officer of Health, Guildhall, Kingston-upon-Hull, not later than 10 a.m. on Monday, February 9, 1948.

KINGSTON-UPON-HULL CORPORATION
HEALTH DEPARTMENT
ASSISTANT MEDICAL OFFICER OF HEALTH with duties mainly in the Port Health Service

Applications are invited from duly qualified medical officers for the above appointment. Practitioners serving in H.M. Forces are invited to apply. Candidates must hold a registered degree or diploma in State Medicine or Public Health. Experience in Port Health work and Infectious Diseases will be considered additional qualifications. The salary scale is £750 per annum, rising by annual increments of £25 to £850 per annum, plus cost-of-living bonus. The commencing salary may be fixed at a rate higher than £750, plus bonus, in the case of candidates who have had previous experience in Port Health work. Application forms, conditions of appointment, etc., may be obtained from the Medical Officer of Health, Guildhall, Kingston-upon-Hull, to whom the completed form should be returned not later than 10 a.m. on Monday, February 9, 1948.

KENT COUNTY COUNCIL
COUNTY HOSPITAL, Lenham
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the appointment of Resident Medical Officer at the above hospital. Salary within the scale £455, rising by annual increments of £25 to £555 a year, according to experience, plus a temporary cost-of-living allowance and full residential emoluments. Applicants should have had previous experience in the treatment of pulmonary tuberculosis. Suitably qualified R practitioners holding B2 appointments and those who have returned from the Forces are invited to apply. R practitioners now holding B1 appointments and ineligible for H.M. Forces may also apply. The appointment is subject to the Local Government Superannuation Act, 1937. Applications, stating age, qualifications, experience, together with the names and addresses of two responsible persons to whom reference may be made as to professional ability and character, should be addressed to the County Medical Officer, County Hall, Maidstone, not later than January 20, 1948.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

ALTRINCHAM GENERAL HOSPITAL
near Manchester (100 beds, 3 Residents)
HOUSE SURGEON (A)

House Surgeon (A), male or female, including practitioners within three months of qualification who are liable under the National Service Acts. Salary £150 per annum, usual emoluments. To commence February 1, 1948. If held by an R practitioner appointment will be limited to six months, otherwise renewable for a further period. Applications to General Superintendent as soon as possible.

Have you read the notice at top of page 12 ?

Have you read the notice at top of page 12 ?

MANCHESTER CORPORATION
CRUMPSALL HOSPITAL (1,400 beds)
PHYSICIAN (PART-TIME)
in charge of the Physiotherapy Department

The Health Committee invite applications for the post of Physician in charge of the Physiotherapy Department at Crumpsall Hospital, Crumpsall, Manchester, 8. The appointment is part-time and does not carry with it the right of entry into the Corporation Superannuation Fund. Candidates should have had previous experience in physical medicine and, preferably, should hold a higher diploma in that subject. Remuneration will be on a sessional fee basis at the rate of £4 4s. per session of normally 1½ to 2½ hours' duration, plus mileage allowance as necessary, in accordance with the Manchester Corporation conditions of service. Two sessions weekly will be required. Forms of application and copies of a memorandum on the terms and conditions of the appointment may be obtained from the Medical Officer of Health, Health Department, Hospitals Administration Section, P.O. Box 399, Town Hall, Manchester, 2. Applications are to be addressed to the Town Clerk, Town Hall, Manchester, 2, and not to any member of the Council, and must be received not later than January 28, 1948. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL
Edgware, Middlesex

(1) **CASUALTY OFFICER (B1) (Resident).** Considerable all round experience. R practitioners holding B2 posts eligible, those holding B1 posts ineligible unless rejected by H.M. Forces. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash). Post vacant immediately.

(2) **JUNIOR ASSISTANT MEDICAL OFFICER (B2) (Resident)** for Anaesthetic duties. R practitioners holding A posts eligible. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry.

(3) **SENIOR HOUSE SURGEON (B2) (Resident, Male).**

(4) **TWO SENIOR HOUSE PHYSICIANS (B2) (Resident, Men).**

(3) and (4) Registered medical practitioners who now hold A posts, including R practitioners. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry. (2) (3) and (4) Whole-time duties such as Council may require under supervision of Medical Director. Posts vacant March 1, 1948.

All six months' appointments, subject to medical examination. Applications to Medical Director of Hospital by January 24, 1948. No forms (quoting D.336, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
HILLINGDON COUNTY HOSPITAL
Uxbridge, Middlesex
CHIEF ASSISTANT to Thoracic Surgeon

Higher surgery qualification essential with experience in thoracic surgery and ability to undertake general emergency surgery. The post provides good experience in thoracic surgery. General scope of duties arranged by Medical Director may include teaching. Appointment, subject to medical examination, one to three years, exceptional circumstances five years. Inclusive salary (non-resident) £750 by £50 to £950 per annum, plus any temporary bonus (now £60 per annum). Non-resident post (except when on duty), but required to live near hospital. Applications to undersigned by January 24, 1948 (quoting D.334, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
SPRINGFIELD MENTAL HOSPITAL
Wandsworth, S.W.17
(Large hospital with every modern method of treatment)
SENIOR PHYSICIAN (B1)

Required with D.P.M., and preferably mental hospital experience. Salary £600 by £25 to £700 per annum, plus £50 per annum, for D.P.M., plus any temporary bonus (now £60 per annum). Unfurnished flat in hospital grounds available for married man at appropriate rental. No emoluments. R practitioners holding B1 appointments and ineligible for H.M. Forces may apply. Established and pensionable, subject to medical examination. Applications, with copies of two testimonials, to Medical Superintendent of Hospital (quoting D.337, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL, Enfield, Middlesex
SENIOR Resident HOUSE PHYSICIAN (B2)

Registered medical practitioners, including R practitioners now holding A posts. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging and laundry. Six months' appointment. Whole time general medical duties, under supervision of Medical Director. Post vacant January 24, 1948. Application to Medical Director of Hospital immediately (quoting D.331, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CENTRAL MIDDLESEX COUNTY HOSPITAL
Park Royal, N.W.10
SURGICAL OFFICER (B1) (Resident)

Surgical Officer (B1) (Resident) required at Central Middlesex County Hospital, Park Royal, N.W.10, for Aural Department, to act as first assistant. Registered medical practitioners who have held posts as House Surgeons with experience in E.N.T. work. Post approved for D.L.O. examination. Salary £400 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry. Appointment, one year, subject to medical examination. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Whole-time duties such as Council may require under supervision of Medical Director and Visiting E.N.T. Consultant. Application to Medical Director of Hospital by January 24, 1948 (quoting D.335, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

NORTHUMBERLAND COUNTY COUNCIL
Health Department
ASSISTANT TUBERCULOSIS OFFICER
(whole-time)

Applications are invited from registered medical practitioners for the appointment of Assistant Tuberculosis Officer. Candidates should possess special knowledge and have experience of the modern methods of diagnosis and treatment of tuberculosis, including the ability to interpret chest x-ray films and also be able to undertake A.P. refills. The successful candidate will work under the general administrative control of the County Medical Officer and the clinical control of the Senior Tuberculosis Officer. The salary will be in accordance with the recommendations of interim revision of the Askwith memorandum for Medical Officers employed in departments, namely £650 per annum, rising by annual increments of £25 to a maximum of £850 per annum, plus cost-of-living bonus. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment is terminable by three months' notice on either side. Applications, giving full details of age, qualifications, experience and liability for military service, together with copies of three recent testimonials, should reach the County Medical Officer, County Hall, Newcastle-upon-Tyne, 1, not later than Saturday, January 24, 1948.—J. B. Tilley, County Medical Officer.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM EMERGENCY HOSPITAL
(Regional Orthopaedic Centre—440 beds)
HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeons (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months, otherwise it will be for a period of twelve months. Salary is at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the undersigned by January 24, 1948.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM EMERGENCY HOSPITAL
(Regional Orthopaedic Centre—440 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Anaesthetist (B2) which becomes vacant on February 1, 1948. R practitioners who now hold A posts may apply, when appointment will be limited to six months, otherwise it will be for a period of one year. The salary is at the rate of £200 per annum, with full residential emoluments. In addition to the orthopaedic work, a large amount of general surgery is carried out. Applications should be sent to the undersigned by January 24.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN
SPECIALIST ANAESTHETIST

Applications are invited from ex-Service medical practitioners for the above-mentioned appointment made in accordance with the Department of Health for Scotland letter of November 9, 1946. Salary up to the rate of £1,000 per annum (non-resident). The appointment is a full-time one and the holder will not be allowed to engage in private practice. Applications, including the names of three referees, and stating whether a Class III appointment has been held, should reach the Secretary, 9, Sciennes Road, Edinburgh, 9, not later than March 15, 1948.

ADDENBROOKE'S HOSPITAL, Cambridge
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of Resident Anaesthetist (B2), vacant on February 18, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, which is the normal period of appointment. The salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned not later than Wednesday, January 21, 1948.—J. A. Beardsall, Secretary-Superintendent.

STAFFORDSHIRE COUNTY COUNCIL
TAMWORTH BOROUGH COUNCIL
LICHFIELD CITY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited for the combined whole-time appointment of an Assistant County Medical Officer for the Administrative County of Stafford and Medical Officer of Health of the Tamworth Borough and Lichfield City (estimated populations, 12,300 and 10,500 respectively) at a salary at the rate of £960 per annum, plus cost-of-living bonus. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to provide a motor car, the allowances for which will be in accordance with the County Council scale. Applicants must be fully qualified medical men with experience in public health duties, and must hold the Diploma of Public Health. The candidate appointed will, as regards his duties as Assistant County Medical Officer, act under the direction of the County Medical Officer of Health and will be required to perform such duties as may from time to time be prescribed. As regards his duties as District Medical Officer of Health, he will be subject to the sole control and direction of the local Sanitary Authorities. The appointment is subject to the approval of the Ministers of Health and Education, and also, as far as the offices of District Medical Officer are concerned, to the provisions of the Sanitary Officers' (Outside London) Regulations, 1935. The combined appointment will be subject to three calendar months' notice in writing on either side, which, as far as the offices of District Medical Officer of Health are concerned, will also be subject to the consent of the Minister of Health. The successful candidate will be required to pass a medical examination and produce his birth certificate. Forms of application may be obtained from the Clerk of the County Council, County Buildings, Stafford, and should be returned to him by first post on January 19, 1948, together with copies of not more than three recent testimonials.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford. H Wood, Town Clerk, Tamworth. A. N. Ballard, Town Clerk, Lichfield.

STAFFORDSHIRE COUNTY COUNCIL
WORDSLEY EMERGENCY HOSPITAL,
near Stourbridge (450 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from suitably qualified registered medical practitioners for the above-mentioned post which is now vacant. Acute medical cases are received at the hospital and the other departments include a Fracture A Department, Thoracic Surgery and Maternity Units. The appointment, which will be subject to one calendar month's notice in writing on either side, will be for a period of one year, with salary at the rate of £455 per annum, plus full residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless the candidates are ineligible for H.M. Forces. Applications must reach the undersigned by January 19, 1948.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford.

SURREY COUNTY COUNCIL
EPSOM COUNTY HOSPITAL
Dorking Road, Epsom (450 beds)
Resident ASSISTANT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those serving in H.M. Forces, for the above appointment. The duties will be mainly in the Surgical Unit but will also include relief anaesthetic and general duties as required by the Medical Superintendent. Candidates must have had previous experience in a house appointment. Salary £250, £350, £400 or £450 per annum, according to qualifications and experience. The appointment is for six months, renewable for a further six months. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have already completed a period of service with H.M. Forces, or have been rejected for such service. Enquiries relating to the appointment should be made to the Medical Superintendent of the Hospital, to whom applications by letter, stating present appointment, should be sent by January 21, 1948.

SOMERSET COUNTY COUNCIL
MUSGROVE PARK HOSPITAL,
Taunton, Somerset (Over 300 beds)
RESIDENT HOUSE SURGEON (B2)
(male or female)

Salary is at the rate of £350 per annum, with full residential emoluments. R practitioners holding A posts may apply. The appointment will be for a period of six months and will be limited to six months if an R practitioner is appointed. The work will consist primarily of the care of a Children's Unit under the direction of a consultant paediatrician and a Maternity Unit under a consultant obstetric surgeon, but there are opportunities for some general orthopaedic surgical and rehabilitation work. The hospital is under the joint control of the Somerset County Council and the Ministry of Pensions. Forms of application are available on request and should be forwarded to the County Medical Officer of Health, County Hall, Taunton, not later than Saturday, January 31, 1948.

WORCESTERSHIRE COUNTY COUNCIL
MALVERN URBAN DISTRICT COUNCIL
UPTON-ON-SEVERN RURAL DISTRICT COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH AND MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners (with the D.P.H.) for the combined appointment of Assistant County Medical Officer of Health and Medical Officer of Health for the above mentioned districts. The appointment will be terminable on three months' notice. The person appointed will be required to reside in a suitable centre within the districts and to devote full time to the duties of the combined appointments and will be restricted from engaging in private practice. It will be a condition that the officer on vacating one appointment shall relinquish all of them. The appointment will be superannuable and the officer will have to undergo a medical examination. The combined salary will be £1,040 per annum, rising to £1,140 (with cost-of-living bonus, at present £59 16s. per annum), and £140 per annum for travelling expenses. Unfurnished house available at Upton-on-Severn for successful candidate. Applications, on forms to be obtained from the County Medical Officer, County Buildings, Worcester, to be addressed to the Clerk of the County Council, Shirehall, Worcester, not later than January 31, 1948.—W. R. Scurfield, Clerk to the County Council. J. Bulman, Clerk to the Malvern Urban District Council. H. H. Foster, Clerk to the Upton-on-Severn Rural District Council. (P120).

BURY INFIRMARY, Lancashire (161 beds)
(With post-operative unit to be opened during the next few months—190 approx.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from suitably qualified male practitioners for the above post which becomes vacant at the end of February. Possession of the Fellowship of one of the Royal Colleges will be an advantage, but applications from others (including those studying for this qualification) will be considered. The post is particularly suitable for those who are intending to take the F.R.C.S. examinations in due course, and its tenure is for one year in the beginning with the possibility of an extension for a further year. Applicants should have held a house appointment and R practitioners holding B2 posts are invited to apply. Applications from practitioners holding B1 posts can only be considered where the applicant is ineligible for H.M. Forces. Salary will not be less than £400 per annum to commence, and with full residential emoluments. Applications, stating whether married or single, to the undersigned not later than February 7.—H. Wilkinson, Superintendent.

BEARSTED MEMORIAL HOSPITAL
London, N.16
PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
WHOLE-TIME REGISTRAR (B1)
Gynaecological and Obstetric Departments

Applications are invited for the appointment of Whole-time Registrar (B1) to the Gynaecological and Obstetric Departments. Applicants must be Fellows of one of the Royal Colleges, preferably Royal College of Surgeons of England, and must be M.R.C.O.G. The appointment is for a period of six months. Applications from R practitioners who hold B1 appointments cannot be considered unless they have been rejected for H.M. Forces. Salary £750 per annum. Applications, with recent testimonials, by January 24, 1948, to J. C. Burdett, Director and House Governor, The Prince of Wales's General Hospital.

BOOTLE GENERAL HOSPITAL, Liverpool, 20
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Salary £350 per annum, with full residential emoluments. There are three other resident officers. Preference will be given to actual or intending Fellows of the Royal College of Surgeons. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and ineligible for H.M. Forces, may apply. Applications should be sent to the Superintendent at the above address as soon as possible after the appearance of this advertisement.

BOOTLE GENERAL HOSPITAL, Liverpool, 20
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, men and women, for the above appointment, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment is for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent as soon as possible to the Superintendent.

BATTERSEA GENERAL HOSPITAL
Battersea Park, S.W.11
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable for service under the National Service Acts for the above appointment. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications, accompanied by two recent testimonials, should be sent to the Secretary of the Hospital.

BIRMINGHAM MATERNITY HOSPITAL
(Associated Teaching Hospital of the University of Birmingham)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant March 1, 1948. The appointment is for twelve months and the holder will be eligible for reappointment. The post is recognized for the examinations of the Royal College of Obstetricians and Gynaecologists. Applicants should have held house appointments and at least one previous obstetrical post. Preference will be given to candidates holding the M.R.C.O.G., or reading for this examination. Salary at the rate of £200 per annum, with full residential emoluments. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces may apply. Applications should be sent as soon as possible to Bernard Sylvester, House Governor, Loveday Street, Birmingham, 4.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
Teaching Hospital of 1,000 beds
(In association with the Birmingham University)

Applications are invited for the following posts:

TWO RESIDENT ANAESTHETIC REGISTRARS (B1). Salary £350 per annum, with full residential emoluments.

ONE NON-RESIDENT ANAESTHETIC REGISTRAR (B1). Salary £450 per annum.

Candidates must be registered medical practitioners, and have had experience in the Anaesthetic Department of a general hospital. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications should be sent to the undersigned, from whom all further information may be obtained, at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital, 1840-1941)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following A posts for six months from February 1:—

ONE HOUSE SURGEON to the Professorial Unit.
ONE HOUSE SURGEON to the Neuro-Surgical Department.
THREE HOUSE SURGEONS to the Ear, Nose, and Throat Department.
FOUR GENERAL HOUSE SURGEONS.
ONE HOUSE PHYSICIAN for duty at the Midland Nerve Hospital.

Salary in each case at the rate of £70 per annum, with full residential emoluments.

Applications should be sent to the undersigned at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital, 1840-1941)
RESIDENT ANAESTHETISTS (B2)

Applications are invited from registered medical practitioners, male and female, for the appointments of Resident Anaesthetist (B2), including R practitioners who now hold A posts. The appointments are for six months and are recognized Resident Anaesthetist posts for the purpose of taking the Diploma in Anaesthetics. Salary £100 to £120 per annum, according to experience, with full residential emoluments. Applications should be sent to the undersigned at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BRISTOL MATERNITY HOSPITAL
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A) to the Bristol Maternity Hospital, for a period of six months commencing on March 1, 1948, at a salary of £150 per annum. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. The appointment is recognized by the R.C.O.G. Applications on forms to be obtained from the undersigned should be returned not later than January 21, 1948.—A. B. Scott, Royal Infirmary Branch, Bristol Royal Hospital, Bristol, 2.

BEXHILL HOSPITAL, Bexhill-on-Sea (62 beds)
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of a Resident Medical Officer (A), vacant February 1, 1948, including practitioners within three months of qualification and liable under the National Service Acts, 1939-41, when appointment will be for a period of six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications to be addressed to the Secretary.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Resident Surgical Officer (B1), vacant on February 1, 1948 (including R practitioners who now hold B2 posts). Applications from R practitioners who hold B1 posts cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BEDFORD COUNTY HOSPITAL, Bedford
FOURTH HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the post of Fourth House Surgeon (A) now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BRITISH LEGION VILLAGE
Preston Hall, Maidstone, Kent
RESIDENT ASSISTANT MEDICAL OFFICER

Candidates must have some experience in treatment of pulmonary tuberculosis. Preference given to those who have served in H.M. Forces. Post in E.M.S. under Ministry of Health. Salary £550 per annum, plus consolidation addition and allowance £100 per annum if board and lodging not supplied. Salary, addition, and allowance paid by Ministry of Health. Appointment terminable by a month's notice on either side. Applications to Secretary by January 31, 1948.

BUCHANAN HOSPITAL
St. Leonards-on-Sea (104 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for six months. Salary £250 per annum, with board residence and laundry. Applications to be sent to the undersigned.—H. A. Froggatt, House Governor and Secretary.

COUNTY MENTAL HOSPITAL
Lancaster (3,000 beds)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Medical Officer (B1). R practitioners holding B2 appointments and those holding B1 posts and ineligible for H.M. Forces may apply. Preference given to candidates with previous psychiatric experience who have held a house appointment. Salary £465 per annum, rising by annual increments of £30 to £555 per annum, and if unmarried with residential emoluments valued at £200 per annum. Variable cost-of-living bonus is payable in addition which at present is £59 16s. per annum, half of which is paid in cash, the other half added to the value of the emoluments. A further £50 per annum is payable to holders of the D.P.M. An unfurnished flat is available for a married man in which case the gross salary would be paid in cash less £60 per annum (emolument for flat). The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909, and conditional on the candidate passing a medical examination. Applications, together, with the names of two referees, to be sent immediately to the Medical Superintendent.

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant now. Salary at the rate of £100 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent to the undersigned immediately. The successful applicant must be a member of a Medical Defence Society.—T. H. G. Gartland, Superintendent and Secretary.

CHILDREN'S HOSPITAL
King Edward VII Memorial, Birmingham, 16
CLINICAL PATHOLOGIST

Applications are invited for the post of Clinical Pathologist. Applicants, who will be responsible for the hospital's clinical pathology service, must be registered medical practitioners with hospital experience, and preferably holding one of the higher qualifications. The commencing salary will be determined by the experience and qualifications of applicants, within a range of £800 per annum to £1,800 per annum. Further details of this appointment can be obtained from the undersigned, to whom applications should be submitted not later than January 19, 1948.—N. R. Winwood, House Governor.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
PAEDIATRIC SURGEON

Applications are invited for the post of Paediatric Surgeon. Applicants will be required to devote their entire time to paediatric surgery and associated teaching and research. The remuneration for a full-time appointment would be £2,000 per annum, but consideration might be given to a part-time appointment at £1,500 per annum, allowing of private practice in paediatric surgery. Applicants must be Fellows of the Royal College of Surgeons and have had experience in the surgery of childhood. Applications with the names of three referees should be submitted to the Superintendent and Secretary, The Children's Hospital, Western Bank, Sheffield, 10, not later than January 19, 1948.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth, Cornwall
HOUSE SURGEON (A)
Obstetric and Gynaecological Department

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) to the Obstetric and Gynaecological Departments, vacant February 1, 1948, tenable for six months. Salary at the rate of £200 per annum, with the usual residential emoluments. This appointment is recognized by the Royal College of Obstetricians and Gynaecologists for the Diploma in Obstetrics. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be addressed to J. C. Field, Secretary-Superintendent.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL (220 beds)
HONORARY PSYCHIATRIST

A vacancy occurs on the staff of the above hospital for an Honorary Psychiatrist. Applicants must have a good knowledge and wide experience of Psychiatry. The person appointed will be required to carry out the organization and administration of the newly created department and will be expected to co-operate with clinics held at the Gloucestershire Royal Infirmary, and the general arrangements for Mental Services in the County of Gloucestershire. Applications should reach the undersigned not later than fourteen days following the insertion of this advertisement.—Stanley T. Davis, Secretary-Superintendent.

CARDIFF CITY MENTAL HOSPITAL
Whitchurch, Cardiff
HOUSE PHYSICIAN (A)

Applications, including applications from practitioners within three months of qualification who are liable under the National Service Acts, are invited for the post of House Physician (A). Salary £300 per annum with full residential emoluments. R practitioner appointment limited to six months, otherwise, in certain circumstances, may be renewable for a further six months. The successful applicant will have an opportunity of acquiring knowledge in every branch of psychiatry including psychosis, neuroses (in-patient and out-patient), child psychiatry and neuro-psychiatric research. Forms of application from the Physician Superintendent.

COVENTRY AND WARWICKSHIRE HOSPITAL
Coventry
HOUSE SURGEON (A)
to the General Surgical Department combining E.N.T. Duties

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) to the General Surgical Department, combining Ear, Nose and Throat duties, including R practitioners within three months of qualification. The appointment, which is for six months, is vacant February 6, 1948. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL, Coventry
ASSISTANT CLINICAL PATHOLOGIST

Applications are invited for the post of Assistant Clinical Pathologist at Coventry Joint Laboratory. The Laboratory, situated at the Coventry and Warwickshire Hospital, is administered by a Committee representing the Hospital and the City Council of Coventry and undertakes the whole of the pathological and bacteriological work for the Health Committee and for the Hospitals (voluntary and municipal). The appointment is full-time and non-resident. Salary at the rate of £1,000 per annum. Applications should be addressed to the Secretary, Coventry Joint Laboratory Committee, Coventry and Warwickshire Hospital, Coventry.

COVENTRY AND WARWICKSHIRE HOSPITAL
HOUSE SURGEON (A)

House Surgeon (A) for Fracture and Accident Wards now about to be re-opened. Salary at the rate of £200 per annum with full residential emoluments. Appointment is for six months in the first instance. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications with full details to the House Governor, Coventry and Warwickshire Hospital, Coventry.

CUMBERLAND INFIRMARY, Carlisle (289 beds)
ASSISTANT PHYSICIAN

Applications are invited for the appointment of an Honorary or Visiting Assistant Physician. In the case of ex-Service applicants, the appointment may be made under the Government Scheme, detailed in Ministry of Health Circular No. 202/46, in which case the post would be full-time with a salary of £1,000 per annum, and private practice would not be permitted. A higher qualification is essential. Further particulars may be obtained from the undersigned, to whom applications, together with copies of not more than four testimonials, should be sent by January 30, 1948.—K. C. Booker, Secretary-Superintendent.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL (215 beds)

Applications are invited from registered medical practitioners (male) for the following appointments:
HOUSE PHYSICIAN (A)
HOUSE SURGEON (A)

Practitioners within three months of qualification and liable for service under the National Service Acts may apply, when the appointment will be for six months, otherwise renewable. Salary £175 per annum, with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(Beds, Hospital 287, Annexe 33)
SECOND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Second Casualty Officer (A). Salary £225 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications to be sent as soon as possible to M. H. Boone, House Governor and Secretary.

CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE, Manchester, 20
Assistant RESIDENT SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B2), duties to commence February 1, 1948. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £200 per annum. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications, accompanied by the names of two referees, should be sent at once to the Superintendent.

CHARING CROSS HOSPITAL
CLINICAL ASSISTANT (Male)
to the Obstetric Department

The Council invite applications for the post of Clinical Assistant (male) to the Obstetric Department. Honorarium £50 per annum. Applications should be sent to the undersigned not later than first post January 26, 1948.—George J. Jones, House Governor, Charing Cross Hospital, W.C.2.

DURHAM COUNTY MENTAL HOSPITAL
ASSISTANT MEDICAL OFFICER (B1)

The Visiting Committee invite applications from duly registered medical practitioners, qualified to apply, for the appointment of Assistant Medical Officer at the Mental Hospital. Salary £455 per annum, rising by annual increments of £25 to £555 per annum, plus cost-of-living bonus at present £30 1s. 3d. per annum, together with board, lodging, laundry and attendance, valued at £108 1s. 4d. per annum for superannuation purposes, plus £50 per annum for the Diploma in Psychological Medicine. The appointment will be subject to the conditions of the Asylums Officers' Superannuation Act, 1909, and the successful candidate will be required to pass a medical examination. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications to be forwarded to the Medical Superintendent, Winterton, Sedgefield, Stockton-on-Tees, by January 31, 1948.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the above appointment from medical practitioners, including R practitioners, who hold B2 appointments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The post, vacant January 26, is for six months (with the option of a further six months), and will carry a salary of £300 per annum, rising to £350 after six months, with full residential emoluments. Applications should be sent at once to the undersigned.—G. W. Beckwith, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, for the above appointment, vacant January 21, 1948. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DERBYSHIRE ROYAL INFIRMARY, Derby
SURGICAL REGISTRAR (B1)
E.N.T. and NEURO-SURGICAL HOUSE SURGEON (A)

Surgical Registrar (B1), vacant January 20, 1948, six months' appointment. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £350 per annum, with full residential emoluments.

E.N.T. and Neuro-Surgical House Surgeon (A), vacant February 1, 1948, six months' appointment. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. Salary £200 per annum, with full residential emoluments.

Applications to be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DREADNOUGHT SEAMEN'S HOSPITAL
Greenwich, S.E.10
HOUSE SURGEON (B2)

As from February 1, 1948, there will be a vacancy for House Surgeon (B2). Applications are invited from registered British medical practitioners, male, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications to be sent to the undersigned on or before January 21, 1948.—F. A. Lyon, Administrator and Secretary.

DREADNOUGHT SEAMEN'S HOSPITAL
Greenwich, S.E.10
CASUALTY OFFICER (B2)

As from February 1, 1948, there will be a vacancy for Casualty Officer (B2). Applications are invited from registered British medical practitioners, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £200 (if resident) or £300 (if non-resident). Applications to be sent to the undersigned on or before January 21, 1948.—F. A. Lyon, Administrator and Secretary

DONCASTER ROYAL INFIRMARY (330 beds)
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners (male) for the appointment of Casualty Officer (B2). Salary £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. This large industrial area offers excellent opportunities for gaining experience. Applications should be sent immediately to A. Jones, Secretary-Superintendent.

EAST SUFFOLK AND IPSWICH HOSPITAL
Ipswich

Applications are invited from registered medical practitioners for the following posts which are now vacant:—

1. **RESIDENT MEDICAL OFFICER (B1).** Salary £650, with house, fuel and lighting.
2. **RESIDENT SURGICAL OFFICER (B1)** who is also Deputy R.M.O. Salary £500, with full residential emoluments.

Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Preference given to M.D. or M.R.C.P. for the R.M.O. and M.S. or Fellowship for the R.S.O. Applications to be sent to Arthur Griffiths, Secretary, The Hospital, Ipswich.

EAST SUFFOLK AND IPSWICH HOSPITAL
(389 beds)
HOUSE SURGEON (A)
to the Gynaecological and Obstetrical Department

Applications are invited from registered medical practitioners liable to service under the National Service Acts and within three months of qualification for the post of House Surgeon (A) to the Gynaecological and Obstetrical Department, vacant January 25, 1948. Appointment is for six months. Salary at the rate of £250 per annum, with the usual residential emoluments.—Arthur Griffiths, Secretary, The Hospital, Ipswich.

EAST SUFFOLK AND IPSWICH HOSPITAL
Ipswich (389 beds)
HOUSE SURGEON (B2)
to the Orthopaedic and Fracture Department

Applications are invited from registered medical practitioners, including R practitioners now holding A posts, for the appointment of House Surgeon (B2) to the Orthopaedic and Fracture Department, vacant January 14. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments.—Arthur Griffiths, Secretary, The Hospital, Ipswich.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, London, E.7
CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer and Orthopaedic House Surgeon (A) for the six months commencing February 11, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. Salary at the rate of £150 per annum with board, residence, and laundry. Applications should be sent to the undersigned by January 16, 1948.—Reginald Perry, Secretary-Superintendent.

FINCHLEY MEMORIAL HOSPITAL
Granville Road, London, N.12 (84 beds)
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of Resident Medical Officer (A), vacant March 1, 1948. If held by an R practitioner the appointment will be limited to six months. Salary £200 per annum, with full residential emoluments. Applications should reach the undersigned not later than January 24, 1948.—T. E. Jarvis, House Governor and Secretary.

GUEST HOSPITAL, Dudley (153 beds)

Applications are invited from registered medical practitioners for the following resident appointments. Full residential emoluments apply to all posts which are tenable for six months:—

RESIDENT SURGICAL OFFICER (B1) Salary £350 per annum, vacant February 13, 1948.

Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Fellowship of one of the Royal Colleges. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

TWO HOUSE SURGEONS (B2). Salary £200 per annum, vacant January 31, 1948, and February 7, 1948. Practitioners holding A posts are invited to apply.

RESIDENT ANAESTHETIST (B2). Salary £200 per annum, vacant now. Successful candidate may be called upon to undertake other medical duties. Practitioners holding A posts are invited to apply.

CASUALTY HOUSE SURGEON (A). Salary £200 per annum, now vacant. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply.—H. Raymond Hurst, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham
(589 beds, including "The Cedars" Branch Hospital)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners, male and female, for the appointment of a Resident Anaesthetist (B1). Applications from male R practitioners who hold B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. If held by a practitioner who is liable under the National Service Acts, the appointment will be for a period of twelve months. The salary is at the rate of £400 per annum, with full residential emoluments, and duties will commence on or about January 15, 1948. Applications should be sent to Henry M. Stanley, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham (589 beds)
TWO CASUALTY OFFICERS (A)

Applications are invited from registered medical practitioners (male), including practitioners within three months of qualification who are liable to service under the National Service Acts for the appointment of two Casualty Officers (A) for the above hospital. Duties to commence about February 24, 1948. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £300 per annum, with full residential emoluments. Applications to be sent to the undersigned.—Henry M. Stanley, House Governor and Secretary.

GUY'S HOSPITAL, S.E.1
ASSISTANT PHYSICIAN

Applications are invited from Service candidates and others for the appointment of Assistant Physician to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent, to whom letters of application (20 copies), together with names of three referees, should be submitted not later than January 31, 1948, and from whom any further information desired can be obtained.

GUY'S HOSPITAL, S.E.1
ASSISTANT OBSTETRIC SURGEON

Applications are invited from Service candidates and others for the appointment of Assistant Obstetric Surgeon to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent, to whom letters of application (20 copies), together with the names of three referees, should be submitted not later than January 31, 1948, and from whom any further information desired can be obtained.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts:—

RESIDENT SURGICAL OFFICER (B1). Previous surgical experience essential. R practitioners holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary £250 per annum.

RESIDENT JUNIOR HOUSE SURGEON (A). In charge of Casualty, Ear, Nose, and Throat, and Fracture Departments. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. Salary £200 per annum.

The appointments are for twelve and six months respectively. Applications should be sent to T. W. Upton, Secretary.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
ANAESTHETIST

There is a vacancy on the visiting medical staff for an Anaesthetist. Applicants must be registered medical practitioners, practising solely as Anaesthetists, and must hold the Diploma in Anaesthetics; those holding appointments as First Assistant Anaesthetists at this hospital will be permitted to apply. Applicants will be required to call upon members of the visiting medical staff and to furnish them with copies of their applications, supported by three testimonials given specially for the purpose. Further particulars and form of application, which must be returned not later than February 2, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HARTLEPOOLS HOSPITAL
Hartlepool, Co. Durham
(126 beds, including Maternity Unit)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male or female, for the post of House Physician (A), including practitioners within three months of qualification who are liable under the National Service Acts. The appointment is for a period of six months from January 28, 1948. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent to the Superintendent, Hartlepools Hospital, Hartlepool, Co. Durham.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
HONORARY RADIOLOGIST

The Council of Management invites applications for the office of Honorary Radiologist consequent upon the appointment of Dr. E. Rohan Williams, the present holder of the office, as Director of the Radiological Department, St. Mary's Hospital, W.2. Candidates are required to be medical practitioners engaged solely in consulting practice in this specialty and to possess a higher diploma in medical radiology. It is a condition of the appointment that attendance shall be made on at least five full half days weekly. Private practice in the department which is substantial is permitted, in accordance with regulations laid down by the Council. Applications, giving full details, with the names of three referees, must reach the undersigned not later than February 2, 1948, from whom full particulars should be obtained in the first instance.—By order of the Council of Management, Kenneth A. F. Miles, House Governor.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
CASUALTY SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who hold A posts, for the resident post of Casualty Surgical Officer (B2) at the Out-patient Department, Bayham Street, N.W.1, vacant February 1, 1948, tenable for six months. Salary £200 per annum, with board, lodging and laundry. Applications on the prescribed form, with copies of three recent testimonials, to be returned to the undersigned forthwith.—Kenneth A. F. Miles, House Governor.

HOLLOWAY SANATORIUM
Virginia Water, Surrey
Private Registered Mental Hospital
RESIDENT HOUSE PHYSICIAN (A)

Required, six months' appointment. Practitioners within three months of qualification and liable to service under the National Service Acts may apply. Salary £350 per annum, plus full residential emoluments. All modern methods of treatment are carried out at the hospital. Applications, with names of two referees, to be sent to the Medical Superintendent not later than first post Saturday, January 24, 1948.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required to commence immediately. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £200, with full residential emoluments. Applications to be sent to the undersigned.—H. J. Johnson, General Superintendent and Secretary.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HULL ROYAL INFIRMARY
FIRST AND SECOND HOUSE SURGEONS (B2)

Applications are invited for the posts of First and Second House Surgeons (B2) (2 posts) vacant January. Suitably qualified R practitioners who now hold A posts may apply. Salary £200 per annum with full residential emoluments. The appointments will be for six months in the first instance, but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

INGHAM INFIRMARY, South Shields
HOUSE SURGEON (A)
CASUALTY OFFICER AND "SPECIALS" HOUSE SURGEON (A)

Applications are invited from medical practitioners for the posts of House Surgeon (A) (vacant mid-January) and Casualty Officer and "Specials" House Surgeon (A) (vacant February 1, 1948). Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. The appointment is for a period of six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned.—R. Hood Coulthard, Jr., House Governor and Secretary.

KING EDWARD MEMORIAL HOSPITAL
Ealing
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A) to the second Surgeon and the Ear Nose and Throat Surgeons, to become vacant on February 1, 1948. Six months' appointment. Salary at the rate of £175 per annum, with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned by January 16, 1948.—R. A. Mickelwright, House Governor.

KING EDWARD MEMORIAL HOSPITAL, Ealing
CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer and Orthopaedic House Surgeon (B2) vacant now, including R practitioners who now hold A posts. Salary at the rate of £250 per annum, with full residential emoluments. Applications, accompanied by copies of two recent testimonials, should be sent to the undersigned immediately.—R. A. Mickelwright, House Governor.

KING GEORGE HOSPITAL, Ilford
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of a House Surgeon (A), to become vacant on February 1, 1948, including R practitioners within three months of qualification. Appointment will be for a period of six months. Salary is at the rate of £180 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—T. J. Rose, Deputy Secretary.

KING GEORGE HOSPITAL, Ilford
CASUALTY REGISTRAR (B1)

Applications are invited from registered medical practitioners for the above appointment. Previous resident hospital experience essential and primary Fellowship desirable. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for six months (renewable). Salary £350 per annum resident, or £550 non-resident. Applications should be sent to the undersigned as soon as possible.—T. J. Rose, Deputy Secretary.

KENT AND CANTERBURY HOSPITAL
Canterbury (216 beds)
HOUSE SURGEON (B2)

Applications are invited from male registered medical practitioners for the appointment of a House Surgeon (B2), including R practitioners who now hold A posts. Commencing February 1, 1948. If held by an R practitioner the appointment will be limited to six months. The salary is £200 per annum, with full residential emoluments. The duties include care of maternity patients and casualty service. Applications should be sent to the Superintendent and Secretary.

LIVERPOOL MATERNITY HOSPITAL
RESIDENT OBSTETRIC ASSISTANT (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Obstetric Assistant (B1), to become vacant on April 1, 1948. Applicants should have held house appointments and had experience in obstetrics. Preference will be given to holders of M.R.C.O.G. or D.Obst.R.C.O.G. Applications are invited from practitioners serving with the Forces provided they will be free to take up the appointment on April 1, 1948, and applications will also be considered from R practitioners holding B2 appointments. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected for service with the Armed Forces. The appointment is for one year, but may be renewed for a further twelve months' period, and is subject to three months' notice on either side within the inclusive term of appointment. Salary is at the rate of £500 per annum, with full board, residence and laundry. Applications (which should include the names of two referees) should be forwarded on or before January 23 next, addressed to the Honorary Secretary, Medical Board, Liverpool Maternity Hospital, Oxford Street, Liverpool, 7, and covering envelope marked "O.A." in top left-hand corner.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

LIVERPOOL AND DISTRICT HOSPITAL FOR DISEASES OF THE HEART
34, Oxford Street, Liverpool, 7
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Physician (A) to commence February 1. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Appointment will be for a period of six months. Salary at the rate of £100 per annum, with full residential emoluments. Facilities for M.D. thesis. Applications to the Secretary.

LINCOLN COUNTY HOSPITAL
(Voluntary Hospital, 200 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (A), now vacant. Salary is at the rate of £225 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be sent to Ronald W. Howick, Secretary-Superintendent.

LONGTON HOSPITAL, Stoke-on-Trent, Staffs
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications to B. Pitt, Secretary.

LONDON CHEST HOSPITAL, E.2
HONORARY PHYSICIAN

The Board of Management invite applications for the post of Honorary Physician. Candidates must be Members of the Royal College of Physicians of England. Applications should be sent to the undersigned (from whom further particulars may be obtained) to arrive not later than January 31, 1948.—Thomas Brown, Secretary.

MEMORIAL HOSPITAL
Shooters' Hill, London, S.E.18
(General Hospital, 130 beds)

Applications are invited for the following appointments :—

(a) **RESIDENT SURGICAL OFFICER (B1)** for a period of twelve months. Salary £350 per annum. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

(b) **HOUSE SURGEON (B2)** for six months. Salary £250 per annum. Practitioners who hold A posts are invited to apply.

Both appointments will take effect from February 1, 1948. Full residential emoluments included in each case. Closing date for the receipt of applications, January 21. Short-listed candidates will be invited to attend for interview on Monday, January 26. Applications should be sent to the House Governor.

MEMORIAL HOSPITAL
Shooters Hill, London, S.E.18
(General Hospital, 130 beds)
CASUALTY OFFICER (A)

Applications are invited for the post of Casualty Officer (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Salary £175 per annum, with full residential emoluments. Applications should be addressed to the House Governor as soon as possible.

MANCHESTER ROYAL INFIRMARY
(Barnes Hospital)
Resident SURGICAL OFFICER (B1) Orthopaedic

The Board of Management invite applications from registered medical practitioners, male and female, for the above appointment, now vacant. Applicants should have held house appointments and have had orthopaedic experience. Suitably qualified R practitioners holding B2 posts are eligible to apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. The appointment is for twelve months at a salary of £200 per annum with residence. Applications should be sent to the Chairman of the Medical Board not later than January 14, 1948.—F. J. Cable, General Superintendent and Secretary.

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL (Non-Sectarian—102 beds)
Cheetham, Manchester, 8
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners for the appointment of House Physician (B2), including R practitioners who hold A posts. Salary at the rate of £200 per annum, with full residential emoluments. Appointment will be for a period of six months. Applications to be submitted forthwith to the undersigned. Duties to commence February 1, 1948.—C. D. Drake, General Superintendent.

MANCHESTER ROYAL INFIRMARY

The Board of Management invite applications from registered medical practitioners, male and female, including R practitioners within three months of qualification, for the following A appointments :—

1 **HOUSE SURGEON for the Aural, Gynaecological and Dermatological Departments** for January 28, 1948.

1 **HOUSE SURGEON for the Orthopaedic Department** for January 28, 1948.

Appointments are for six months, subject to the provision of the Bye-laws as to notice, etc., and the salary in each case is at the rate of £75 per annum, with residence. Applications to be sent to the Chairman of the Medical Board not later than January 14, 1948.—F. J. Cable, General Superintendent and Secretary.

MANCHESTER ROYAL INFIRMARY

The Board of Management invite applications from registered medical practitioners, male and female, including R practitioners within three months of qualification, for the following A appointment :—

HOUSE SURGEON to the Neurosurgical Department, vacant January 28, 1948.

The appointment is for six months, subject to the provisions of the bye-laws as to notice, etc., and the salary is at the rate of £75 per annum, with residence. Applications to be sent to the Chairman of the Medical Board not later than January 14, 1948.—By order, F. J. Cable, General Superintendent and Secretary.

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL, Cheetham, Manchester, 8
(Non-Sectarian, 102 beds)
CASUALTY OFFICER & HOUSE SURGEON (A)

Applications are invited for the post of Casualty Officer and House Surgeon (A). Salary at the rate of £175 per annum, with full residential emoluments. The appointment will be for a period of six months. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be addressed to the undersigned at the Hospital.—C. D. Drake, General Superintendent.

METROPOLITAN HOSPITAL
Kingsland Road, London, E.8
PART-TIME ASSISTANT RADIOLOGIST

Applications are invited for the post of Part-time Assistant Radiologist. The appointment is a temporary one, and will be for the period that the present holder is serving with the Armed Forces. The candidate appointed will be expected to do two sessions weekly. Payment will be at the rate of £4 4s. a session. One copy of application, enclosing the fullest particulars of experience, together with copy testimonials should be sent forthwith to the House Governor.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
RESIDENT ASSISTANT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners, male or female, for the post of Resident Assistant Anaesthetist (B1). Candidates must have had special experience in anaesthesia and if not in possession of a Diploma in Anaesthetics, should be studying for such a diploma. Appointment will be for one year. Salary £375 per annum, plus residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should be sent to the House Governor and Secretary to reach him as soon as possible.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) (male), vacant February 2, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £220 per annum, with full residential emoluments. Applications should be sent as soon as possible to A. Ashworth, House Governor and Secretary.

MANFIELD ORTHOPAEDIC HOSPITAL
Northampton
Assistant RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male and female, for the appointment of Assistant Resident Surgical Officer (B1) now vacant, including R practitioners who now hold B2 posts. Applications from R practitioners who now hold B1 posts cannot be entertained unless they have been rejected by the R.A.M.C. Salary is at the rate of £300 per annum, with full residential emoluments.—H. G. Lewis, Secretary-Superintendent.

MONTAGU HOSPITAL, Mexborough, Yorks
(122 beds) Voluntary, with Visiting Consultant Staff
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male, for the appointment of House Surgeon (B2). Commencing salary £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications to A. R. C. Renner, Secretary-Superintendent.

NORTHAMPTON COUNTY MENTAL HOSPITAL, Berrywood, Northampton
ASSISTANT MEDICAL OFFICER (B1)

Assistant Medical Officer (B1) required. Commencing salary £455, rising by annual increments of £25 to £555 per annum, plus cost-of-living bonus (at present £30 per annum), and board, lodging, and laundry valued for superannuation purposes at £180 per annum. An additional £50 per annum will be given if the officer holds or obtains the Diploma in Psychological Medicine. The post is a whole-time appointment and is subject to the provisions of the Asylums Officers Superannuation Act, 1909. Married quarters available. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply. Applications, accompanied by two testimonials, to be addressed to the Medical Superintendent.

NEWBURY DISTRICT HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the appointment of Resident Surgical Officer (B1) at the above hospital. Applicants should have had surgical experience and preference will be given to applicants holding a higher surgical qualification. Salary will be in accordance with qualifications and experience, but not less than £450 per annum. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications to the undersigned within seven days of the date of this advertisement.—John S. Holdstock, Secretary, Newbury District Hospital, Berks.

NEWBURY DISTRICT HOSPITAL
RESIDENT HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, for the appointment of Resident House Surgeon (A). Salary is at the rate of £150 per annum, with full residential emoluments. The appointment is vacant, and will be for a period of six months. Applications should be forwarded immediately to the Secretary, Newbury District Hospital, Newbury, Berkshire.

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke-on-Trent
ASSISTANT RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Resident Surgical Officer (B1), with which is combined the duties of Casualty Officer. Applicants should have had surgical experience. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Demobilized medical officers are invited to apply. Salary at the rate of £350 per annum, with full residential emoluments. Applications to the House Governor.

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke-on-Trent
ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of Orthopaedic House Surgeon (A), including practitioners within three months of qualification. If held by an R practitioner the appointment will be limited to six months. Salary will be at the rate of £185 per annum, with full residential emoluments. Applications to be forwarded as soon as possible to the House Governor.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of full-time Pathologist at the above hospital. Applicants should be exclusively engaged in the practice of Pathology, with wide training in Clinical Pathology and Morbid Anatomy. The post will be non-resident, with a commencing salary of £1,100, the successful candidate being permitted to engage in private practice, restricted to the private wing of the hospital, at present 23 beds. Applications should reach the Secretary not later than February 28, 1948.

NEW SUSSEX HOSPITAL FOR WOMEN AND CHILDREN, Brighton (Incorporated)
(Officered by Women Doctors)
Windlesham Road, Brighton, 1
HOUSE SURGEON (B2)
General Surgery and Gynaecology

Applications are invited from medical women practitioners for the post of House Surgeon (B2) (General Surgery and Gynaecology). Salary £150 per annum, resident. The appointment is for six months. Applications must be submitted to the undersigned immediately.—Percy F. Spooner, Secretary.

NORFOLK AND NORWICH HOSPITAL
Norwich
RESIDENT ANAESTHETIST (B2)

Applications are invited for the post of Resident Anaesthetist (B2). Salary £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications should be addressed to F. L. Gatfield, House Governor and Secretary.

ORTHOPAEDIC HOSPITAL
Hartshill, Stoke-on-Trent
(78 beds, Fracture B Hospital, E.M.S.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Suitably qualified R practitioners, preferably with orthopaedic experience, holding B2 posts may apply. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £350 per annum, plus residential emoluments. Applications should be sent to the undersigned immediately.—Victor Johnson, Secretary-Superintendent.

OLDHAM ROYAL INFIRMARY (203 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Gynaecologist, the Aural Surgeon, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRINCESS BEATRICE HOSPITAL
Earl's Court, S.W.5
(General Hospital, 92 beds)
OBSTETRIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of an Obstetric House Surgeon (B2), to become vacant on January 31, 1948, including R practitioners who hold A appointments. If held by an R practitioner, appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Obstetric experience essential. Applications should be sent to the House Governor not later than January 17, 1948.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
JUNIOR HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of Junior House Physician and Casualty Officer (A). The appointment will be for a period of six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. C. Burdett, Director and House Governor.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of Casualty Officer (A). The appointment will be for a period of six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. C. Burdett, Director and House Governor

PRINCE OF WALES'S HOSPITAL, Plymouth
SENIOR HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of Senior House Surgeon (B2) for duty at the Devonport Section, vacant February 1, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), vacant February 25, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
SENIOR HOUSE PHYSICIAN (B1)

Applications are invited from suitably qualified medical practitioners for the post of Senior House Physician (B1) with duties in the medical wards and clinics. Vacant early February. R practitioners holding B2 appointments and those holding B1 appointments who are not liable under the National Service Acts may also apply. Salary at the rate of £350 per annum, with the usual residential emoluments. Six months' appointment, which could be continued afterwards as Registrar. Applications should be sent as soon as possible to the Superintendent, Royal Infirmary, Preston.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
GYNAECOLOGICAL HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Gynaecological House Surgeon, with duties under Specialist Surgeons. Vacant early February. R practitioners within three months of qualification and liable under the National Service Acts may also apply. Six months' appointment. Salary at the rate of £175 per annum, with the usual residential allowances. Applications should be sent to the Superintendent, Royal Infirmary, Preston.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
RESIDENT ANAESTHETIST (B2)

Applications are invited from suitably qualified medical practitioners for the appointment of Resident Anaesthetist (B2). Duties under Specialist Anaesthetist. Post recognized for D.A. examination. R practitioners holding A appointments may apply. Six months' appointment but may be renewed by arrangement. Salary at the rate of £300 per annum, plus usual residential emoluments. Applications should be forwarded to the Superintendent, Royal Infirmary, Preston.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
RESIDENT OBSTETRICAL OFFICER (B1)

Applications are invited for the post of Resident Obstetrical Officer (B1) for the Maternity Hospital (45 beds and Ante-Natal Department), vacant end of January. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Preference will be given to candidates with a postgraduate Diploma in Obstetrics. Salary £300, with the usual residential emoluments. Applications should be forwarded to the Superintendent, Royal Infirmary, Preston.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, London, E.2
HOUSE PHYSICIAN (A)
TWO CASUALTY OFFICERS (B2)

Applications are invited from registered medical practitioners, male and female, for the above appointments to become vacant on March 1, 1948, including practitioners within three months of qualification and R practitioners now holding A posts. Appointment will be for six months in each case. Salary at the rate of £150 per annum, with full residential emoluments. Application forms may be obtained from the undersigned and should be returned, with copies of not more than three testimonials, on or before January 27, 1948.—Charles H. Bessell, General Secretary.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, London, E.2
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male and female, for the above appointment, to become vacant March 1, 1948. Candidates must have had experience in the treatment of sick children. The appointment will be for six months in the first instance, and is renewable for subsequent periods not exceeding two years. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £300 per annum, with full residential emoluments. Application forms may be obtained from the undersigned and should be returned, with not more than three testimonials, not later than January 27, 1948.—Charles H. Bessell, General Secretary.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Glamis Road, London, E.1
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male and female, for the above appointment, to become vacant on March 1, 1948, including practitioners within three months of qualification who are liable under the National Service Acts. Appointment will be for six months. Salary at the rate of £160 per annum, with full residential emoluments. Application forms may be obtained from the undersigned and should be returned, with copies of not more than three testimonials, on or before January 27, 1948.—Charles H. Bessell, General Secretary, Hackney Road, E.2.

PUTNEY HOSPITAL
Lower Common, S.W.15 (106 beds)
RESIDENT HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (A), male. Salary £120 per annum, with board residence. Practitioners within three months of qualification and liable under the National Service Acts are invited to apply. The appointment is for six months from February 1, 1948. Applications should reach the undersigned not later than January 21, 1948.—A. J. Ellicott, Secretary.

ROYAL HALIFAX INFIRMARY (283 beds)

ORTHOPAEDIC REGISTRAR (B1), male (non-resident) required. Vacancy early January. Salary according to experience, but not less than £750 per annum commencing. Candidates should be well trained in Orthopaedics, and the possession of higher qualifications will be an advantage. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

FIRST HOUSE SURGEON (B2), male, required. Six months' post. Vacant January 1948. Salary £250 per annum, with full residential emoluments. Practitioners holding A posts are invited to apply.

OPHTHALMIC, E.N.T. HOUSE SURGEON (A or B2), male, required. Six months' post. Vacant now. Salary for A candidate £200 per annum, and for B2 candidate £250 per annum, with full residential emoluments.

Applications, accompanied by copies of three recent testimonials, and the names of three referees to be sent to the Secretary as soon as possible.

ROYAL LIVERPOOL BABIES HOSPITAL
Woolton
RESIDENT MEDICAL OFFICER (A)

Required Resident Medical Officer (A) commencing immediately. Salary at the rate of £200 plus residential emoluments. R practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be limited to six months.—Apply to the Hon. Secretary, 9, Copperas Hill, Liverpool.

Have you read the notice at top of page 12 ?

THE Medical Defence Union

Established 1885

MUSeum 1337

Annual Subscription £1 **MEMBERSHIP EXCEEDS 31,500** *Assets exceed £170,000*

THE UNION protects, supports, and safeguards the character and interests of registered medical and dental practitioners. Members are fully INDEMNIFIED against actions undertaken on their behalf.

IMMUNITY from medico-legal actions, from slander or the receipt of accusatory letters does not exist; The Union proffers financial assistance, legal advice and defensive measures at a minimal annual cost.

THE UNION PROVIDES each Member with ample financial indemnity against legal action, resolute defensive measures, and sympathetic legal advice.

PROTECTION is also provided on special terms to medical and dental practitioners resident and practising overseas.

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Sq., London, W.C.1

Have you read the notice at top of page 12 ?

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL INFIRMARY, Sheffield

Applications are invited from registered medical practitioners, male and female, for the following posts:—

HOUSE SURGEON (A)
to the Ophthalmic Department
HOUSE SURGEON (A)
to the Neurosurgical Department
HOUSE SURGEON (A)
to the Orthopaedic Department

now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner under these Acts, appointment will be for a period of six months. Salary is at the rate of £80 per annum, with full residential emoluments, and a bonus of £20 payable at the expiration of six months' satisfactory service. Applications should be sent forthwith to Joseph Griffith, General Superintendent, The Royal Infirmary, Sheffield, 6.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
THE ROYAL HOSPITAL UNIT
ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of Orthopaedic House Surgeon (A), including practitioners within three months of qualification, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Otherwise it may be extended. Salary is at the rate of £80 per annum, with full residential emoluments. A bonus of £20 will be payable after six months' satisfactory service and a further bonus of £10 after a second six months' satisfactory service. Applications to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, at The Royal Hospital, Sheffield, 1.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL HOSPITAL
ASSISTANT PATHOLOGIST (B1)

Applications are invited from registered medical practitioners for the appointment of Assistant Pathologist (B1), vacant shortly. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £450 per annum, non-resident. Applications to be forwarded immediately to General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL VICTORIA AND WEST HANTS HOSPITAL, Bournemouth (374 beds)
RESIDENTIAL SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Surgical Officer (B1). Commencing salary £300 per annum, with full residential emoluments, appointment to be for a period of one year. Applicants should have held house appointments and had good experience. The holding of a Fellowship of a Royal College of Surgeons an advantage. Suitably qualified R practitioners holding B2 appointments and B1 appointments if ineligible for H.M. Forces may apply. Applications should be sent to the undersigned within two weeks of publication of this advertisement.—Gordon M. Saul, Secretary.

ROYAL INFIRMARY, Sunderland (312 beds)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification, who are liable to serve under the National Service Acts, for the following resident appointments, which are tenable for a period of six months:—

TWO HOUSE SURGEONS (A), vacant on January 19 and February 1, 1948. This hospital is recognized by the Royal College of Surgeons for the Fellowship. Salary £175 per annum, with full residential emoluments.

Applications are also invited from registered medical practitioners, including R practitioners who now hold A posts, for the following resident appointments which are tenable for six months. Salary £250 per annum, with full residential emoluments:—

EAR, NOSE AND THROAT AND CASUALTY SURGEON (B2), vacant February 6, 1948.

ORTHOPAEDIC HOUSE SURGEON (B2), vacant February 7, 1948.

Applications to be forwarded to the House Governor and Secretary as soon as possible.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) now vacant. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months; otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A. Stanley Brunt, General Superintendent and Secretary.

ROYAL HOSPITAL, Richmond, Surrey
HOUSE SURGEON (A) AND HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the appointments of (a) House Surgeon (A) to become vacant on February 7, 1948. Salary £175 per annum, with full residential emoluments; (b) House Physician and Casualty Officer (A) to become vacant on February 3, 1948. Salary £175, with full residential emoluments. If held by practitioners who are liable under the National Service Acts, appointments will be for a period of six months. Applications to be made to the House Governor as soon as possible.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch 310 beds
HOUSE SURGEON (A) AND HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) and a House Physician (A), vacant now, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary is at the rate of £150 per annum, with full residential emoluments.—W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton (500 beds)
PAID SPECIALIST APPOINTMENT
Ministry of Health Circular 202/46
SUPERNUMERARY PATHOLOGIST

Applications are invited from ex-Service Specialists who have held Class III appointment for the post of Supernumerary Pathologist at the Royal Hospital, Wolverhampton. The appointment has been approved by the Ministry of Health under the above Circular, and will be for the interim period before the establishment of the National Health Service. Salary £1,000 per annum. Applications should be sent immediately to W. Cockburn, House Governor.

ROYAL MASONIC HOSPITAL
Ravenscourt Park, London, W.6
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the appointment of Resident Surgical Officer (B1), vacant on February 1, 1948. Applicants should have held house appointments and should have had surgical experience. Preference will be given to candidates holding Diploma F.R.C.S. Salary at the rate of £350 per annum together with full board, lodging and laundry. Suitably qualified R practitioners holding B2 appointments and also holding B1 appointments and ineligible for H.M. Forces are invited to apply. Please apply in writing, sending copies of testimonials immediately and to arrive not later than January 12, 1948, to the Joint Honorary Secretaries at the Hospital.

ROYAL NORTHERN HOSPITAL, Holloway, N.7
CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer and Orthopaedic House Surgeon (B2) to become vacant on February 2, 1948, for a period of six months. R practitioners holding A posts may apply. Salary and emoluments £150 per annum, with board residence and laundry. Applications should be sent to the undersigned not later than January 16, 1948.—Gilbert G. Panter, Secretary.

ROYAL PORTSMOUTH HOSPITAL, Portsmouth (205 beds)
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including those within three months of qualification and liable under the National Service Acts, for the appointment of Casualty Officer (A), vacant immediately. Six months' appointment. Salary £200 per annum, with full residential emoluments. Applications to be sent as soon as possible to G. A. Hughes, Secretary.

ROYAL PORTSMOUTH HOSPITAL, Portsmouth
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male), including R practitioners holding A posts, for appointment as House Surgeon (B2). Salary at rate of £225 per annum, with full residential emoluments. Six months' appointment. Applications to be sent immediately to G. A. Hughes, Secretary.

ROYAL SUSSEX COUNTY HOSPITAL
Brighton, 7
E.N.T. HOUSE SURGEON (A)

Applications are invited for the post of E.N.T. House Surgeon (A), which also includes duties as Deputy Casualty Officer, vacant towards the end of January, 1948. The appointment will be limited to six months to R practitioners. Salary at the rate of £200 per annum, with full residential emoluments. Applications should be forwarded to the Secretary-Superintendent immediately.

ROCHDALE INFIRMARY, Lancashire
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female), for the appointment of Resident Surgical Officer (B1). Salary £350 per annum. Suitably qualified R and W practitioners holding B2 appointments, also R practitioners holding B1 and rejected by the R.A.M.C., may apply. Applications to the Superintendent-Secretary.

ROYAL FREE HOSPITAL
Gray's Inn Road, W.C.1
HONORARY ASSISTANT SURGEON
Ophthalmic Department

Applications are invited for the appointment of Honorary Assistant Surgeon to the Ophthalmic Department. Candidates must possess the qualifications of (Eng.) F.R.C.S. or F.R.C.S. (Oph.). Applications, together with copies of three recent testimonials and a photograph, should be sent to the undersigned not later than January 24, 1948. Applicants are also required to call on each member of the Honorary Medical Staff approximately forty for interview, leaving a copy of application and testimonials.—R. G. Heppell, House Governor.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton
HONORARY ANAESTHETIST

The Board of Management of the hospital will meet on Friday, February 6, 1948, at 3.30 p.m for the purpose of electing an Honorary Anaesthetist. Candidates must be registered under the Medical Acts. All candidates are required to transmit their applications and testimonials, under cover, to the undersigned, not later than January 26, 1948, and must hold themselves in readiness to attend the meeting of the Committee on the day of election. The Committee does not bind itself to appoint any candidate. Every candidate will have an opportunity of appearing before the Committee.—Percy F. Spooner, Secretary-Superintendent.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Brighton (126 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the appointment of House Physician (B2), to commence duties early in February. Salary at the rate of £200 per annum, with full residential emoluments. The hospital is recognized for the D.C.H. Diploma and M.D. Examination, Branch I. Six months' appointment. Applications to be sent to the undersigned.—Percy F. Spooner, Secretary-Superintendent.

ROYAL EAST SUSSEX HOSPITAL, Hastings
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of a House Physician (A), vacant February 23, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to Wilfrid G. Kemsley, Secretary and House Governor.

REDLANDS HOSPITAL FOR WOMEN
Glasgow, W.2
TWO RESIDENTS (A)

Applications are invited from registered medical women (A) for the posts of two Residents for six months to start on February 1, 1948 (three months surgery and gynaecology, three months medicine and midwifery). Salary is at the rate of £125 per annum, with full residential emoluments. Applications to be sent to the Medical Secretary, Redlands Hospital for Women, Glasgow, W.2, not later than January 13, 1948.

ROYAL BERKSHIRE HOSPITAL, Reading

Applications are invited from registered medical practitioners, male, for the following posts:—

TWO CASUALTY OFFICERS (A). Salary is at the rate of £150 per annum, with full residential emoluments. Duties will involve alternating with each other in the Casualty Department, Fracture Clinic and Accident Wards, and assisting in the treatment of all cases of traumatic origin. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners (male) for the following appointment: Casualty Officer (A) to become vacant immediately. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

SALISBURY GENERAL INFIRMARY
ASSISTANT PATHOLOGIST

Candidates should have a thorough and recent experience in general Clinical Pathology; additional specialized experience, either in bacteriology or in morbid anatomy, would be advantageous. The laboratory carries out an area pathological service based upon a central laboratory at Salisbury, and undertakes the work of a number of neighbouring hospitals, some of which have branch laboratories. It is the Wiltshire County Laboratory, and an associated unit of the Public Health Laboratory Service. Salary £1,200 per annum, rising by £50 per annum to £1,700; candidates should be preferably under 35 years of age. Applications, along with recent testimonials, or the names of two referees to whom application can be made, should be sent as soon as possible to the Secretary, Department of Pathology, Salisbury General Infirmary.

RADCLIFFE INFIRMARY, Oxford
HOUSE SURGEON (B2)
to the Accident Department

Applications are invited for the post of House Surgeon (B2) to the Accident Department for six months from February 1, including R practitioners who hold A posts. The post is a resident one and the salary at the rate of £100 per annum. Applications should be received by the undersigned not later than January 20, 1948.—A. G. E. Sanctuary, Administrator.

ROYAL WEST SUSSEX HOSPITAL
Chichester (212 beds, including 50 E.M.S.)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the appointment of Resident Medical Officer (B2) vacant for six months from February 1, 1948. R practitioners holding A posts may apply. Salary £225 per annum, with full residential emoluments. Applications should be sent to the Secretary not later than January 14, 1948.

STOCKPORT INFIRMARY (167 beds)

Applications are invited from registered medical practitioners for the following posts:—
HOUSE SURGEON (A) (Ear, Nose, Throat and Eye) approved under D.L.O. and D.O.M.S. regulations. Post available immediately. Including practitioners within three months of qualification who are liable under the National Service Acts.
CASUALTY OFFICER (B2). Post available immediately. Including R practitioners at present holding A posts.

The appointments will be for a period of six months. Salary for the A post is at the rate of £150 per annum, and for the B2 post at £175 per annum, with full residential emoluments.

Applications, with copies of two testimonials, can be sent to the undersigned forthwith.—H. G. Price, Secretary-Superintendent.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant. Salary is at the rate of £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent immediately to the Secretary, H. F. Donald, The Infirmary, Stamford.

ST. THOMAS'S HOSPITAL, S.E.1

Applications are invited for the following posts:—
PHYSICIAN IN THORACIC MEDICINE
PHYSICIAN TO THE DEPARTMENT OF PSYCHOLOGICAL MEDICINE

It is proposed to make the latter appointment in March or April next so that the successful candidate may take over from the present Physician on his retirement in June.

Applicants must be Fellows or Members of the Royal College of Physicians of London, and should submit twenty copies of their applications, giving details of age, experience, and qualifications with dates, and the names of three referees to whom the Hospital may write. Applications should be sent by January 29, 1948, to the Clerk of the Governors, to whom any enquiries should be addressed.

ST. THOMAS'S HOSPITAL, S.E.1
HONORARY SURGEON

Applications are invited for the post of Honorary Surgeon to the hospital One of the present surgeons to out-patients will be a candidate and, if he is appointed, there will be a vacancy for an Honorary Surgeon to Out-patients. Candidates must be Fellows of the Royal College of Surgeons. Twenty copies of applications, which should include details of age, qualifications and experience, and the names and addresses of three referees to whom the hospital may write, should be sent by January 15, 1948, to the Clerk of the Governors, to whom any inquiries should be addressed.

ST. THOMAS'S HOSPITAL, S.E.1
RESIDENT ASSISTANT PHYSICIAN (B1)

Applications are invited for the post of Resident Assistant Physician (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for a period of one year in the first instance, at a salary at the rate of £650 per annum, with full residential emoluments. Applications, including the names and addresses of three referees, should be sent by January 26, 1948, to Clerk of the Governors.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
January 6, 1948. Secretary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary hospital 200 beds)
ASSISTANT PATHOLOGIST

Applications are invited for this new whole-time appointment from registered medical practitioners with suitable pathological experience. Salary £1,000 per annum, non-resident, and the holder will not be allowed to engage in private practice. Applications to be forwarded to the undersigned, from whom further details may be obtained, not later than January 29, 1948.—T. Rhodes, Superintendent-Secretary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary hospital 200 beds)
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, for post of Casualty Officer (A) vacant February 1, 1948. Salary £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be for six months. Applications to be forwarded to the Superintendent-Secretary as soon as possible.

TIVERTON AND DISTRICT HOSPITAL
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A), vacant mid-February, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be limited to six months. Salary at the rate of £200 per annum, with full residential emoluments. Apply Secretary.

TILBURY HOSPITAL, Essex
GYNAECOLOGICAL HOUSE OFFICER AND CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners, including R practitioners now holding A posts, for the appointment of Gynaecological House Officer and Casualty Officer (B2), now vacant. If held by an R practitioner, the appointment will be limited to six months. Salary £200 per annum with full residential emoluments. Applications to be sent to the Secretary.

SOUTH-EASTERN HOSPITAL FOR CHILDREN
321, Sydenham Road, S.E.26.
RESIDENT MEDICAL OFFICER (B1)

Resident Medical Officer (B1) required end of January. Preference will be given to candidates holding Diploma of Child Health. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Appointment for six months in the first instance, renewable for a further period of six months at the discretion of the Committee of Management. Salary £350 per annum. Applications should be forwarded to the Secretary.

SALISBURY GENERAL INFIRMARY (275 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A). Salary at the rate of £175 per annum, with full residential emoluments. The appointment will be for a period of six months. Applications should be sent to the Superintendent and Secretary by January 30, 1948.

TYNEMOUTH VICTORIA JUBILEE INFIRMARY
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant February 1. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding Diploma of F.R.C.S. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary £500 plus, according to qualifications and experience, with board, accommodation and laundry also provided.—Chas. Rowell, Secretary, Hawkey's Lane, North Shields, Northumberland.

TAUNTON AND SOMERSET HOSPITAL
(150 beds)
TWO HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners for House Surgeons, one to a general surgeon and one obstetrician, and one to a general surgeon and an E.N.T. surgeon. A appointments. One may be B2 if suitable applicant. Salaries, B2, £200 per annum, A, £175 per annum, with full residential emoluments. If held by R practitioners, appointments will be for six months, and are recognized by R.C.S. in connexion with the resident surgical posts required of candidates for the Final Fellowship Examination. Applications to the Secretary.

WEST LONDON HOSPITAL
Hammersmith, W.6 (241 beds)
ASSISTANT RADIOLOGIST (Diagnosis)

There is a vacancy for the post of Assistant Radiologist (Diagnosis). Candidates must be duly qualified medical practitioners and possess a Diploma in Radiology. Duties include teaching in the Medical School. The Assistant Radiologist will be required to attend at least three sessions each week. Payment is on a sessional basis at the rate of £220 per annum for one weekly session. Applications (without testimonials) should be sent to the undersigned before Wednesday, January 14, 1948, giving full particulars of age, qualifications, experience, and the names and addresses of two referees.—C. R. Lockhart, Secretary.

WEST LONDON HOSPITAL
Hammersmith, W.6 (241 beds)
SURGEON to the Throat, Nose and Ear Dept.

Applications are invited for the post of Surgeon to the Throat, Nose and Ear Department. Duties include the charge of beds and out-patients and teaching in the medical school. Candidates must hold one of the higher surgical qualifications. Payment is on a sessional basis at the rate of £220 per annum for one weekly session. Applications (without testimonials) should be sent to the undersigned before Wednesday, January 14, 1948, giving full particulars of age, qualifications, experience, and the names and addresses of three referees.—C. R. Lockhart, Secretary.

(Continued on page 28)

Have you read the notice at top of page 12 ?

THE MEDICAL PROTECTION SOCIETY LIMITED
Founded 1892. Assets exceed £100,000.
Members receive advice and assistance in all matters affecting the practice of their profession and are afforded COMPLETE INDEMNITY against costs and damages in cases undertaken on their behalf.
Subscription £1. No entrance fee to those joining within twelve months of registration. Entrance fee, 10/-.
Full Particulars from the Secretary, VICTORY HOUSE, LEICESTER SQUARE, W.C.2. Gerrard 4553 and 4814.

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To all other advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d.; or 30 words 22s.; and 3s. 6d. for each six words *or less* thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 25s. (minimum); or 24 words, 31s.; or 30 words, 37s.; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To ALL advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.
Telephone: Euston 2111.
Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 12

PERSONAL

DOCTOR CAN TAKE PAG. OR ELDERLY PERSON, country home.—Box 6678. B.M.J.

GLOS.—MATRON HAS VACANCIES in her exclusive Nursing Home, central heating, log fires, gardens, own produce, excellent nursing (S.R.N.) and domestic staff; private bathrooms, lounge, dining room. Fees from 10½ guineas.—Upton Grove, Tetbury.

PUBLIC MEDICAL SERVICE FOR LONDON.—Notice is hereby given that the loans made by founder members of this service in 1926 are now repayable. Applications should be made to the Secretary, Public Medical Service for London, Tavistock House (N.), Tavistock Square, W.C.1.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

WANTED IMMEDIATELY, SCIENTIFIC ASSISTant, lady, to undertake laboratory and literary work in Industrial Medical Research. Graduate in physiology and biochemistry preferred. Age 20 to 25. Starting salary from £300 to £400 according to age, qualifications and experience. Application forms obtainable from Central Staff Department, Imperial Chemical Industries, Ltd., 2, Grosvenor Place, S.W.1.

CITY OF BIRMINGHAM GAS DEPARTMENT.—Applications are invited from registered medical practitioners for the post of **INDUSTRIAL MEDICAL OFFICER** in the City of Birmingham Gas Department. This is a new post and the successful candidate will be responsible for the development and operation of a health service for approximately 4,500 workers. The salary, which will be fixed according to qualifications and experience, will be from £1,000 to £1,500 per annum, (plus bonus) which is at present £59 19s. and will be subject to periodic review. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to passing the Corporation medical examination. Applications, stating age, training, qualifications and experience, together with the names of three persons from whom references can be obtained, should be addressed to the undersigned to arrive not later than January 31, 1948.—Alex W. Lee, General Manager and Secretary, The Council House, Birmingham, 3.

CAMBORNE-REDRUTH MINERS' & GENERAL HOSPITAL, Redruth (60 beds).—Part I Midwifery Training School. **STAFF MIDWIVES** required for additional staff. S.R.N., S.C.M., essential. Rushcliffe Scale, F.S.S.N. or Public Authority Superannuation Scheme in force. Apply with full particulars to Matron.

M.R.C.S., L.R.C.P., WITH EXPERIENCE IN G.P. and house surgeon and casualty appointment, requires **POST IN INDUSTRIAL MEDICINE.**—Box 6651, B.M.J.

ROYAL CANCER HOSPITAL (FREE) (Incorporated under Royal Charter), Fulham Road, London, S.W.3.—Applications are invited for a **RESEARCH FELLOWSHIP** promoted by the Association of British Chemical Manufacturers for the purposes of a field and experimental investigation of papilloma of the bladder in industry. The Fellowship will be full-time and is tenable at the Chester Beatty Research Institute of the Royal Cancer Hospital (Free). Applicants should hold a medical degree, and preference will be given to those with additional scientific qualifications or interests, especially in chemistry or statistics. Salary at the rate of £1,000 per annum, plus travelling and other expenses. The appointment is superannuable under the F.S.S.U., and subject to conditions will be made for a period of five years. Applications should be addressed to reach the Secretary, The Royal Cancer Hospital (Free), Fulham Road, London, S.W.3, by Monday, January 19, 1948.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.—The College invites applications for a **LECTURER IN ANATOMY** (salary £1,000 per annum). One copy of application, and names of three referees must be received by the undersigned, from whom further particulars may be obtained, within seven days of the appearance of this advertisement.—Louis S. Thomas, Registrar, University College, Cathays Park, Cardiff.

UNIVERSITY OF LONDON, KING'S COLLEGE. LABORATORY TECHNICIAN required in the Anatomy Department, especially for histological work. Salary according to experience. Apply as soon as possible to the Secretary, King's College, Strand, W.C.2.

WELSH NATIONAL SCHOOL OF MEDICINE (University of Wales).—Applications are invited for the temporary appointment of **JUNIOR ASSISTANT** (full-time) in the Medical Unit, for a period not exceeding two years, at a salary at the rate of £450 per annum. Further particulars of the appointment may be obtained from the undersigned, by whom applications must be received not later than Saturday, January 24, 1948.—S. C. Edwards, Secretary, 10, The Parade, Cardiff.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

POSTGRADUATE COURSE OF UROLOGICAL INSTRUCTION at St. Peter's and St. Paul's Hospitals, January 13 to April 15, 1948.—The Course will include systematic lectures covering the whole subject of Urology, out-patient sessions, ward visits, operation sessions, and tutorial demonstrations. All postgraduates taking the course are expected to attend lectures, and may attend all the tutorial demonstrations. They will be allotted individually to certain out-patient sessions, ward visits and operation sessions. The fee for the course is fifteen guineas, payable in advance. Applications should be made to The Secretary, St. Peter's Hospital for Stone, Henrietta Street, London, W.C.2. Envelopes should be marked "Postgraduate Course."

COURSE OF INSTRUCTION IN TROPICAL MEDICINE AND HYGIENE.—The next Course will begin on March 1, 1948, and will cover a period of five months. It is primarily designed to prepare students for the examination of the English Conjoint Board for the Diploma in Tropical Medicine and Hygiene, but students not wishing to take the Diploma are accepted for the course which includes theoretical and practical instruction in Protozoology, Helminthology, Bacteriology, Clinical Pathology and Haematology, Tropical Medicine and Surgery, Principles of Nutrition, Medical Entomology, Vital Statistics, Sanitation, and the Principles of Preventive Medicine including the prevention of specific diseases in relation to the tropics. The fee for the course is £40. Cheques should be made payable to the London School of Hygiene and Tropical Medicine. Space permitting, candidates who do not wish to take the whole course may be admitted to certain parts of it separately. The fee for short periods of instruction is £2 2s. per week. Any intending students are advised to apply for registration at once. Further information regarding the course may be obtained from the Registration Office, London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London, W.C.1. Telephone number: Museum 3041.

Balfour Memorial Fund

A small sum is available annually for the payment or partial payment of fees for a student wishing to attend the course but unable to do so for financial reasons. In making allotments from the fund attention will be paid to: (a) proof that the candidate is, or will be, employed in an approved manner in the practice of Tropical Medicine overseas, (b) ability, and (c) financial need. Applications should be forwarded to the Dean.

COACHING FOR M.R.C.P. AND QUALIFYING EXAMINATIONS in Medicine. Individual or in classes by arrangement.—Box 6662, B.M.J.

EXAMINING BOARD IN ENGLAND
by the
ROYAL COLLEGE OF PHYSICIANS OF LONDON
and the
ROYAL COLLEGE OF SURGEONS OF ENGLAND

Notice is hereby given that the following Examination will commence on the date stated below:—

DIPLOMA IN OPHTHALMIC MEDICINE AND SURGERY
Friday, February 6

Candidates who have fulfilled the necessary conditions, and who desire to present themselves for examination, must give notice in writing to the Secretary, Examination Hall, 8-11, Queen Square, London, W.C.1, at least 21 days before the date of the Examination, transmitting at the same time such certificates as may be required by the regulations of the Board, together with the full amount of the fee for the part or parts of the Examination for which they desire to enter. Applications for Part II are due at the same time as those for Part I.—F. M. Stent, Secretary.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

INTERNAL MEDICINE

A course lasting twelve weeks, suitable for graduates wishing a refresher course, or to specialize in medicine, begins on Monday, April 12, 1948. A similar class commences on October 4, 1948. These courses consist of 300 hours instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five-months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for Surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. Twenty hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment. Fifty hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Internal Medicine and Surgery should supply particulars of qualifications and postgraduate experience.

NORTH LONDON POSTGRADUATE MEDICAL INSTITUTE. Bearsted Memorial Hospital, N.16; Chase Farm Hospital, Enfield; North Eastern Hospital, Tottenham, N.15; North Middlesex County Hospital, Edmonton, N.18; The Prince of Wales's General Hospital, Tottenham, N.15.—A **COURSE IN ADVANCED SURGERY** will be held from March 1, 1948, to April 23, 1948, including lectures, clinical demonstrations and tutorials in surgical anatomy. Fee 25 guineas. Kindly send applications and details of qualifications and experience to the Dean, at The Prince of Wales's General Hospital, N.15

UNIVERSITY OF LONDON

BRITISH POSTGRADUATE MEDICAL FEDERATION

REFRESHER COURSES FOR GENERAL PRACTITIONERS JANUARY–JUNE 1948

Date	No. of weeks	Subject	Hospital
Jan. 19–23	1	Medicine	Lewisham L.C.C. Hospital
Jan. 26–30	1	Obstetrics and Gynaecology	Redhill County Hospital, Edgware
Feb. 23–Mar. 5	2	General	Royal Northern Hospital, Holloway Road, N.7
Apr. 1–June 18	Extended 12 afternoons	General	Hampstead General Hospital, Haverstock Hill, N.W.3
Apr. 26–30	1	Medicine	Metropolitan Hospital, Kingsland Road, E.8
May 3–7	1	Obstetrics and Gynaecology	Paddington L.C.C. Hospital
June 7–11	1	Obstetrics and Gynaecology	North Middlesex County Hospital, Silver Street, Edmonton, N.
June 14–18	1	Medicine	West Middlesex County Hospital, Isleworth

Fees: 10 guineas for 2 weeks' course; 5 guineas for 1 week and extended courses. Schemes of financial assistance are available, subject to certain conditions, for (a) demobilized general practitioners, (b) N.H.I. practitioners.

Applications for places, and further particulars, should be made to The Secretary, British Postgraduate Medical Federation, 2 Gordon Square, W.C.1. They should state if the practitioner is applying under (a) or (b) above, or not.

POSTAL COACHING for all Medical Examinations. Examination Successes 1901-46; M.D.Lond., 450; M.B., B.S.Lond., Final, 405; F.R.C.S.Eng., Primary, 357; F.R.C.S.Eng., Final, 282; M.R.C.P. Lond., 386; M.R.C.S., L.R.C.P., Final, 859; D.A. (1936-46). 110. F.R.C.S.Edin., D.Obst.R.C.O.G. M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17 Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

POSTGRADUATE STUDY. Diploma in Anaesthetics; Diploma in Psychological Medicine; Diploma in Ophthalmology; Diploma in Radiology; Diploma in Laryngology; Diploma in Child Health; F.R.C.S.Eng. and all Surgical Examinations; M.R.C.P.Lond. and all Medical Examinations; M.D. Thesis of all Universities; Courses for all Qualifying Examinations. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested. Address: Secretary, Medical Correspondence College, 19, Welbeck St., London, W.1.

LECTURES

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES IN PLASTIC SURGERY, FEBRUARY, 1948

The following Lectures in Plastic Surgery will be delivered at the College in Lincoln's Inn Fields, London, W.C.2, at 5 p.m. on each day:

Thurs.	12	MR. RAINSFORD MOWLEM	Bone, Cartilage and Fascia Transplants
Mon.	16	SIR HAROLD GILLIES	Skin Flaps: Indications and Technique
Wed.	18	MR. A. B. WALLACE	Free Skin Grafting: Methods and Application
Fri.	20	MR. R. P. OSBORNE	Burns and their Early Treatment
Mon.	23	PROF. T. POMFRET KILNER	Cleft Lip and Palate Repair
Tues.	24	MR. P. H. JAYES	Fractures of the Facial Skeleton
Wed.	25	MR. J. N. BARRON	Hand Injuries
Thurs.	26	MR. J. B. CUTHBERT	Hand Deformities: Reparative Surgery
Fri.	27	SIR ARCHIBALD MCINDOE	External Genitalia: Treatment of Congenital Deformities

The fee for the whole course is £4 4s. or 10s. for one lecture.

Fellows and Members of the College and Fellows and Licentiates in Dental Surgery will be admitted to the whole course on payment of a fee of £2 2s., or to one lecture on the payment of 7s. 6d.

Applications, accompanied by a cheque for £4 4s. or £2 2s., should be sent to the Secretary, Postgraduate Education Committee, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES IN ORTHOPAEDICS, JANUARY, 1948

The following Lectures in Orthopaedics will be delivered at the College in Lincoln's Inn Fields, London W.C.2, at 5 p.m. on each day:

Wed.	14	PROF. H. J. SEDDON	Bone Growth
Thurs.	15	MR. V. H. ELLIS	Pyogenic Affections of Hip and Knee Joints
Fri.	16	MR. A. ROCYN JONES	Congenital Dislocation of the Hip
Mon.	19	MR. F. W. HOLDSWORTH	Fractures Involving the Knee Joint
Tues.	20	MR. E. P. BROCKMAN	Congenital Deformities of the Foot
Wed.	21	MR. R. BROOMHEAD	Muscle and Tendon Ruptures
Thurs.	22	MR. PHILIP WILES	Postural Deformities of the Spine
Fri.	23	MR. A. J. WATSON	Ankle Joint Fractures
Mon.	26	MR. H. JACKSON BURROWS	Static Derangements of the Foot
Tues.	27	MR. ROLAND BARNES	Brachial Plexus Injuries
Wed.	28	MR. R. H. YOUNG	Derangements of Lumbar Spine and Pelvic Joints
Thurs.	29	MR. ST. J. D. BUXTON	Fractures and Dislocation of the Shoulder Joint

The fee for the whole course is £5 5s., or 10s. for one lecture.

Fellows and Members, and Fellows and Licentiates in Dental Surgery of the College will be admitted to the whole course on payment of a fee of £3 3s., or to one lecture on the payment of 7s. 6d.

Applications, accompanied by a cheque for £5 5s. or £3 3s., should be sent to the Secretary, Postgraduate Education Committee, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES—FEBRUARY, 1948

The following Lectures will be delivered at the College in Lincoln's Inn Fields, London, W.C.2, at 5 p.m. on each day:

HUNTERIAN LECTURES

Mon.	2	PROF. A. W. BADENOCH	Congenital Obstruction at the Bladder Neck
Tues.	3	PROF. A. DAVIS BEATTIE	The Treatment of Peptic Ulcer by Vagotomy
Wed.	4	PROF. DENIS BROWNE	Hare Lip and Cleft Palate
Fri.	6	PROF. R. GUY PULVERTAFT	Repair of Tendon Injuries in the Hand
Mon.	9	PROF. VICTOR RIDDELL	Carcinoma of the Breast
Tues.	10	PROF. FRANCIS E. STOCK	The Surgical Approach to Hypertension
Wed.	11	PROF. A. HEDLEY VISICK	A Study of the Failures after Gastrectomy
Fri.	13	PROF. STANLEY WAY	The Anatomy of the Lymphatic Drainage of the Vulva and its Influence on the Radical Operation for Carcinoma
Tues.	17	PROF. M. C. WILKINSON	Some Observations on the Pathogenesis and Treatment of Skeletal Tuberculosis

BERNHARD BARON LECTURE

Thur.	19	PROF. JOHN BEATTIE (Bernhard Baron Research Professor)	Hormonal Changes after Injury

The Lectures are open to those attending Courses in the College and also to all other Medical Practitioners, Dentists and advanced students.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

EDUCATIONAL

MOORFIELDS WESTMINSTER AND CENTRAL EYE HOSPITAL.—The CRUISE CLINICAL RESEARCH SCHOLARSHIP, value £100.—Tenable for one year at the Westminster Branch, High Holborn, London, W.C.1. The holder to commence work on April 1, 1948. Closing date for entries: March 1, 1948. Candidates should make early application for further particulars to the Hon. Secretary, Medical Committee, Moorfields Westminster and Central Eye Hospital, High Holborn, London, W.C.1.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. COURT OF EXAMINERS.—Notice is hereby given that the Council on February 12, 1948, will elect one Member of the Court of Examiners. The Examiner retiring in rotation is Mr. Ernest Finch, who is applying for re-election. Fellows of the College desirous of becoming candidates for the office must make application in writing to the Assistant Secretary on or before Monday, February 2, 1948.—Kennedy Cassels, Secretary, Lincoln's Inn Fields, London, W.C.2.

SOCIETY OF APOTHECARIES OF LONDON.—Surgery: February 9, March 8, April 12. Medicine and Pathology: February 16, March 15, April 19. Midwifery: February 17, March 16, April 20. Mastery of Midwifery: May and November. Diploma in Industrial Health: July and December. For regulations apply Registrar, Apothecaries' Hall, Black Friars Lane, London, E.C.4.

SOCIETY OF APOTHECARIES OF LONDON. DIPLOMA IN INDUSTRIAL HEALTH.—The next Examination will begin on Monday, July 5, 1948. The following Examination will be held in December, 1948. For regulations apply Registrar, Apothecaries' Hall, Black Friars Lane, London, E.C.4.

UNIVERSITY OF BRISTOL.—A Course for Part II of the University **DIPLOMA IN PSYCHOLOGICAL MEDICINE (D.P.M.)**, provided sufficient applications are received, will commence on February 2, 1948, and will cover a period of 8 weeks. The fee for the Course will be 21 guineas. Further details can be obtained from and applications should be sent before January 21, 1948, to the Director of Medical Postgraduate Studies, University of Bristol.

LECTURES

D.OBST.R.C.O.G. A COURSE OF LECTURES AND TUTORIALS for the March Examination will commence Monday, January 19, 1948.—Apply Box 6305, B.M.J.

PRIMARY F.R.C.S.—COURSE OF LECTURE-DEMONSTRATIONS in ANATOMY, PHYSIOLOGY and BACTERIOLOGY on Monday and Thursday evenings, 7.30 p.m. to 10.0 p.m. February 9 to January 3, 1948. Lecture room, Royal Cancer Hospital. Apply: Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

ASSISTANTSHIPS

VACANT

Wanted, Male Assistant, Protestant, with or without View, Yorkshire town. House available, rent free. Good salary. Scope.—Box 6321, B.M.J.

Wanted, Experienced Male Assistant, British, North-east England, mixed general practice. Prospects to suitable man. Salary by arrangement. Flat furnished and car available.—Box 6664, B.M.J.

Wanted, Assistant, British, male, for sound mixed practice South Midlands. Unfurnished accommodation over surgery available. Car desirable. Salary £900 per annum. Good prospects.—Box 6663, B.M.J.

Wanted, Male Assistant, young, long term, out-door for mixed general practice Bristol. Must be experienced and well qualified. Commencing March 1, references, usual bond. Car supplied. Salary by arrangement.—Box 6623, B.M.J.

Wanted urgently, Indoor or Outdoor Assistant. Car owner essential. Suit newly qualified.—Box 6624, B.M.J.

Wanted, Assistant, male, preferably single, for pleasant country practice in Welsh border. Dispenser kept, car provided.—Box 6606, B.M.J.

Wanted, Assistant, driver, Monmouthshire. Rooms and attendance provided. Work light. Give full particulars (nationality, etc.).—Box 6652, B.M.J.

Wanted, Lady Assistant for large mixed practice in N.W. England, pleasant neighbourhood. Definite prospect of permanency to suitable person if desired. —Box 6607, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Assistant for a year, with View to Partnership, required by large partnership of doctors in South of England town. Each partner is interested in a special branch of medicine. Large central surgery. Three Dispensers and two Secretaries kept. Unfurnished house available with vacant possession on rental. Applicants must be English or Scottish, possess a University qualification or extra diploma, male, and not over thirty-two years old. —Box 6322, B.M.J.

Advertiser Requires Assistant for three months. South Yorks industrial practice. Car available or allowance. Dispenser employed. No branch surgeries.—Box 6621, B.M.J.

Assistant wanted, male, Midland City. Experience in G.P., and own car essential. Good salary. Outdoor.—Box 6315, B.M.J.

Doctor Required to run medium-sized panel and dispensing practice in East London (R.C. preferred). Must be keen and hard working. May be married or single. Furnished house if married. Salary by arrangement. Excellent opportunity and prospects for right man. Apply stating age, qualifications, experience to Box 6622, B.M.J.

Part-time Assistant wanted for mixed practice in West Middlesex, mornings or evenings, good prospects for keen and reliable applicant. Own car advantage.—Box 6605, B.M.J.

Second Assistant for large easily run panel and private practice. South London. No branch. Send full particulars.—Box 6679, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

WANTED

Wanted Assistantship, with or without View, good class country practice, by M.R.C.S. 1939, aged 33. House appointments in medicine, casualty, surgery, paediatrics, obstetrics. Married, three children. House with garden essential.—Box 6609, B.M.J.

Wanted, in Northern Ireland, Assistantship or Locum by experienced G.P. Available April.—Box 6680, B.M.J

Wanted, Assistantship with early View Partnership. M.B., Ch.B. Glasgow. Hospital and G.P. experience. Ex-I.M.S., aged 37 years, married, Scot. Accommodation essential. Country town preferred.—Box 6670, B.M.J.

Wanted, Assistantship with View by M.B., B.S., aged 31, married. Own car. Southern England. Preferably country practice.—Box 6669, B.M.J.

Wanted by Glasgow graduate, 32, hospital, Service, and G.P., Assistantship in rural practice preferably in North England or Scotland, married. Own car.—Box 6667, B.M.J.

Wanted, Assistantship, Partnership or Practice by M.B., B.S. (Guy's), married, Horsham, Crawley, Haywards Heath area, but any good country practice in South considered, 13 years' hospital and G.P. experience. New car.—Box 6626, B.M.J.

Wanted, Assistantship by London M.B., B.S. in practice near Worple Road, Wimbledon. Live in own home, willing to do night calls. Experienced general practitioner.—Box 6625, B.M.J.

Wanted, Assistantship, with or without View, in country practice in Lake District or N.W. England, by M.B., Ch.B., ex-R.N.V.R., single, own car, G.P and obstetric experience, good testimonials.—Box 6637, B.M.J

Wanted, Assistantship with View. Scotsman, age 32, married. Own car. Hospital and good G.P. experience. Unfurnished accommodation essential. Southern England preferred.—Box 6655, B.M.J.

Wanted, Assistantship, with View by M.B., B.Ch., aged 29, married. Ex-R.A.M.C. Own car. Good hospital and G.P. experience. South or West England. Accommodation advantage.—Box 6653, B.M.J.

Assistantship, Scotland, rural, semi-rural. St. Andrew's graduate, 26, H.S., casualty, district midwifery. Own car. Unfurnished house essential. Free mid-February.—Box 6682, B.M.J.

Assistantship wanted, preferably with View. Rural area of country town. Cambridge and London graduate, age 31, married, two children. Own car and furniture. Capital available.—Box 6671, B.M.J.

Assistantship with early View wanted by M.B., B.S. (Bart's), 32, married. Postgraduate hospital and G.P. experience since demobilization. Unfurnished house required. Practice in country town preferred. Available immediately. Car owner.—Box 6654, B.M.J.

Assistantship, with early View in Scotland, wanted by Glasgow graduate, age 30, married, one child. R.A.M.C. hospital and three years' G.P. experience. Own car.—Box 6608, B.M.J.

Experienced M.D., recently own practice, free Surgeries, etc., travelling distance Ealing, or Light Assistantship anywhere England, board. Salary by arrangement.—Box 6689, B.M.J.

Experienced woman doctor desires Assistantship, Permanent or with View to Partnership. N.E. England preferred, but not essential. Small house or flat appreciated. Car owner. Capital.—Box 6683, B.M.J.

London doctor, available for Evening Surgeries once or twice a week and/or Week-end Work.—Box 6602, B.M.J.

Married woman doctor (M.B., Ch.B., D.Obst. R.C.O.G.) requires Part-time Work, living Bedford. Own car. 4½ years hospital, 3 maternity and child welfare experience.—Bedford 5200 or Box 6666, B.M.J.

M.B., B.S., hospital experience, 33, married, desires Assistantship with View in small cathedral city or country town. Congenial work and partnership considered more important than large income. Capital available.—Box 6665, B.M.J.

Postgraduate (male), reading for M.R.C.P. Lond., desires Part-time Work any sort, or Evening Surgeries in London or Cambridge.—Box 6681, B.M.J.

Woman doctor doing postgraduate work, experienced hospital, G.P., children, wishes Part-time Work London area.—Box 6668, B.M.J.

LOCUMS

VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars. —British Medical Bureau, 33, Cross Street, Manchester, 2.

Wanted, Locum for three months, to start immediately, preferably a woman.—Dr. Brown, 29, Ripon Road, Harrogate.

AVAILABLE

Available for Evening and Week-end Surgeries in London. Experienced G.P. studying for higher exam.—Box 6627, B.M.J.

Experienced Locum available for Part-time Work London area. G.P., midwifery. Excellent references, conscientious, abstainer.—Box 6672, B.M.J.

PARTNERSHIPS

OFFERED

Half-share Partnership, after preliminary assistantship, offered to keen young man. Country town, Worcester. Panel 2,000. Obstetrical qualification appreciated. Should have own car and capital. Flat and small garden to rent for a married man.—Box P5522, B.M.J.

London, pleasant surburban area, Panel almost 3,000 units, receipts £5,000, which includes several factory appointments. 1/3 share offered for sale to young, well-qualified doctor at 2 years' premium. Must possess own car and capital.—Box P6610, B.M.J.

North London, Partnership in old-established mixed practice offered to Jewish doctor, married preferred. Partly furnished accommodation available.—Box P6684, B.M.J.

South-West Residential and Spa City. Partner required. Gross receipts between £4,000 and £5,000. Half share, 2 years' purchase. House available. One partner, about 40, retiring to take up specialist appointment.—Box P6611, B.M.J.

Third Share. Panel 4,100. North London, ten minutes West End. Premium £2,000. Preliminary Assistantship if desired.—Box P6628, B.M.J.

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British Medical Journal,
B.M.A. House,
Tavistock Square, W.C.1.

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WANTED

Wanted, urgently, Partnership in South Coast area, well established practice, Scottish graduate, experienced, energetic. Capital available.—Box P6613, B.M.J.

M.D. London, 38, three children, requires Partnership or small Practice in South Coastal area or Scotland.—Box P6640, B.M.J.

Retired I.M.S., age 44 (U.C.H.), married, desires Partnership or single Country Practice. Ample capital. Good house to rent, purchase later.—Box P6639, B.M.J

Required, Partnership, preferably Jewish, in South Coast area, experienced practitioner, energetic, Scottish. Capital available immediate settlement.—Box P6612, B.M.J.

MEDICAL POSTS

WANTED

M.B., F.R.C.S., age 48, with wide experience home and abroad of general work, including surgery with gynaecology as speciality, seeks Post Abroad.—Box 6615, B.M.J.

PRACTICES

FOR SALE

Essex coastal town, well established mixed Practice, pleasant district. Panel 1,100. Receipts £2,500. Detached, modern house. Vendor going abroad. House and practice £8,200.—Box P6630. B.M.J.

For Sale. Old-established Practice, 9 miles from Birmingham, on edge of country. Panel 4,200 units. Clubs over £1,300. Average receipts over £4,500. 1946, £5,227 (certified figures). Detached house with good garden and garage. £2,500. Second house to rent, £50 per annum. Vendor leaving England. Terms 1½ years'.—Box P6673, B.M.J.

Favourite coastal district near Bournemouth, small easily worked Practice, non-dispensing, scope for increase. £800 to £900. Fees 7s. 6d. to £1 1s. 2 years' purchase.—Box P6634. B.M.J.

Kent, Well-established Mixed Practice. Panel 1,200. Average receipts past three years £3,300. Accountants' figures. Modern residence with separate surgery. House and practice £9,500.—Box 6675, B.M.J.

Midlands, Clean city. Good class mixed general practice, receipts over £4,000, from contract about £2,300. Easily run and transferable. Very little night work. Capital essential. Substantial house.—Box P6343, B.M.J.

Midlands, west of Birmingham, sound mixed Practice, panel 3,500, gross receipts over £4,000. Two houses, one partly furnished, for sale or rent. Suit partners or principal and assistant. Health reasons for sale.—Box P6674, B.M.J.

North East Scotland. Old-established Practice. Gross receipts over £2,000. Panel 1,350. Superior modern house in excellent position for sale with practice.—Box P6686, B.M.J.

Old-established panel and private Practice for Sale in Lancs industrial town. Average receipts about £1,000. 1½ years' purchase. Cash only.—Box P6631, B.M.J.

Practices and Partnership Shares for sale in Midlands and Northern Counties. Full details free on request.—British Medical Bureau, 33, Cross Street, Manchester, 2.

Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool. Telephones: Royal 8116 and Royal 7480 Telegrams: "Organic," Liverpool.

Rapidly expanding Mixed Practice on Kentish border of London. Last year's income approx. £2,500. Unfurnished house to rent. Appointments, midwifery. Premium £3,750.—Box P6307, B.M.J.

South-west coast and country Practice. Income panel £1,000, private £1,000. Moderate sized convenient house, modern conveniences. Good garden. Freehold. Good scope for energetic man fond of country. House and practice £7,500.—Box P6629. B.M.J.

S. Wales Seaport, rapidly increasing Practice, panel 1,100. Receipts 1947 approx. £1,750. Good leasehold house with separate surgery. For sale together, £3,500. Vendor specializing.—Box P6632, B.M.J.

Well established Mixed Practice in rural and mining area. Panel 2,200, P.M.S. and Clubs. Receipts approx. £3,000. Good flat, 3 bedrooms and garage to let. Separate surgery accommodation included in premium of £4,500 for quick sale. Very easily worked.—Box P6685, B.M.J.

WANTED

Wanted, Practice or Partnership, within 100 miles London preferably, by Protestant, married, qualified Dublin University March 1944. Experienced.—Box P6614, B.M.J.

Wanted, Practice, income approx. £1,000, with scope for expansion, in Southern England. University town preferred. Must have suitable house for rent or purchase.—Box P6661, B.M.J.

Wanted, small Practice or Nucleus by experienced practitioner in London area, replies in confidence.—Box P6635, B.M.J.

Wanted, small mixed Practice or Nucleus, in or near the Lake District.—Box P6636, B.M.J.

Wanted, Panel Practice central London, close Baker Street, about £2,000 per annum. House to rent essential.—Box P6657, B.M.J.

Wanted, Practice or Partnership, Dublin area, by M.B., B.Ch., R.C. (N.U.I.), aged 49. Only good-class practice considered. Confidential.—Box P6656, B.M.J.

Wanted immediately, Town Practice, Partnership or Assistantship with View. Income £1,500 to £1,800. Good panel. Capital available. House to rent preferred. Replies strictly confidential.—Box P6330, B.M.J.

London or Home Counties, Practice or Nucleus with scope wanted. Short Assistantship with View or Partnership required by experienced medical man. —Box P6677, B.M.J.

London, Home Counties, Practice or Nucleus with scope. Partnership considered. House essential, reasonable panel, experienced practitioner.—Box P6687, B.M.J.

London or Suburbs. Practice or Nucleus required. Assistantship with View considered. Ample capital. Accommodation desirable, but not essential.—Box P6676, B.M.J.

Northern Ireland. Practice Wanted in market town. Panel about 1,500. Vendor should be R.C.—Box P6638, B.M.J.

Practice with good panel, North-west London, Brighton or Bournemouth preferred. Lock-up or good house desirable. Ample capital available immediately for early succession.—Box P6659, B.M.J.

Practice required large enough for partnership for two. Gross income at least £5,000. Country town or rural preferred but suburbs of city (light industry) would be considered.—Box P6333, B.M.J.

Practice or Partnership wanted in London by 12 years' successful G.P. with hospital experience. Interested group practice, health centre, special medicine, obstetrics.—Box P6603, B.M.J.

Practices and Partnerships wanted anywhere. England, Scotland, Wales. Purchasers waiting Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1

DIETITIANS, DISPENSERS, NURSES

VACANT

Dispenser Wanted at once. Accommodation available. Send particulars.—Drs Bernard & Halfpenny, 11, Lower Stone Street, Maidstone.

Dispenser-Bookkeeper Wanted immediately for mixed practice with principal and assistant.—Dr. Walton, Wellingborough (Phone 2309).

Dispenser-Bookkeeper required. Hall qualified, able to type, and with experience of general practice work. Apply stating age and experience, etc.—Dr. V. N. Fenton, Brand House, Ludlow, Salop.

Dispenser Wanted, either sex, resident or non-resident. 5 unfurnished rooms at surgery for resident. Good salary for capable, experienced applicant. Small town near Nottingham.—Box 6641, B.M.J.

London College of Pharmacy for Women supplies Dispenser-Bookkeeper or Laboratory Technician. Training for Apothecaries' Hall Assistants' Examination, and in Clinical Pathology.—Secretary, 7, Westbourne Park Road, W.2 (Bayswater 0969).

Required Immediately, Dispenser-Bookkeeper. Alternate evening duty.—Drs. Reynolds, Wilson & Ellis, 4, Priory Road, High Wycombe, Bucks. Tel.: H.W. 129.

AVAILABLE

Dispenser-Secretary, 21, requires Post full- or part-time in hospital or specialist. Two years hospital and surgery experience. Preferably London or Herts. —Jefferson, "Martins," Potten End.

S.R.N., S.C.M., modern Midwifery Sister, 5 years' recent practice. Available for private cases for specialist.—Box 6616, B.M.J.

"Hall" Dispenser requires Post with doctor. Hospital and general experience. Typing and Book-keeping. Free now.—Box 6645, B.M.J.

TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

Wanted, Nannie for boy 3½ years, baby due April. Comfortable home in doctor's private house Moseley, Birmingham.—Box 6570, B.M.J.

Required, Typist with knowledge of medical terms, for copying, duplicating and clerical duties. Write the Secretary, Medical Correspondence College, 19, Welbeck Street, W.1, for interview.

Secretary Wanted for physician Wimpole Street. Must be competent shorthand-typist and book-keeper.—Box 6642, B.M.J.

TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

AVAILABLE

The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

Duplicating, Typewriting, Testimonials, Applications. Lecture Papers, Reports, etc. expertly duplicated or typewritten. Recommended.—Miss Stone, 6, Duke Street, S.W.1. Whitehall 9682.

Lady Nurse Housekeeper seeks Entire Charge doctor's household where motherless children or mother invalid. Own quarters essential and resident maid(s). Please telephone Macaulay 5903.

Medical Secretaries supplied permanently, temporarily and by the hour. Professional papers copied. Highest references.—Cavendish Secretarial Service, 13, Princes Street, Cavendish Square, W.1. MAYfair 2772.

Secretarial Services. All branches of Secretarial work undertaken. Prompt, accurate and confidential work at reasonable prices. Private room available for dictation. Secretaries, with or without machines, supplied temporarily.—The Curzon Secretarial Bureau, 2, Queen Street, Mayfair (rear ground floor, upstairs). Tel.: GROsvenor 4670.

Secretary-Shorthand-Typist, English, French, German, scientific abstracts, translations, seeks post. —Box 6646, B.M.J.

Typewriting, Duplicating, Printing, Addressographing. Theses accurately and quickly undertaken. Greeting Cards, Calendars, etc., 200 letterheads with envelopes, 20s.—Apply Freshfield, 15, Triangle, Clevedon, Somerset.

Young lady (S.E.A.N.) requires Post in or near London with doctor or in clinic as Secretary-Receptionist. Resident or non-resident. Previous experience, no shorthand, excellent references. Apply.—Miss Sands, 37, Mitcham Park, Mitcham, Surrey.

MISCELLANEOUS

PRIVATE

Anatomical or Surgical freehand drawings undertaken evenings by doctor's daughter. Apply Miss Niven, 8/9, Lancaster Gate, Paddington, W.2.

Airds Notes. Bound copy. Best offer over 6 guineas secures.—Box 6647, B.M.J.

For Sale, Roll-top Desk (oak), size 36 in. long, 27 in. deep and 45 in. high. Price £30.—Box 6688, B.M.J.

Leitz Microscope for sale. Perfect condition. 1/3, 1/6 and 1/12 objectives. Movable stage. Substage condenser. Price £50.—Box 6619, B.M.J.

Microscope, Zeiss, mechanical stage, racking sub-stage, eyepieces monocular × 12, × 10; binocular (Zeiss) × 15; objectives: 1/3, 1/6, 1/12 (oil immersion); cabinet. Excellent condition. £90.—Box 6648, B.M.J.

Nelson's "Loose-Leaf" Medicine, up-to-date, comprehensive, includes latest "renewals," fine condition. Excellent investment for consultant, library, postgraduate student. Best offer over £25.—Box 6643, B.M.J.

Sale, all new, unused, Freedman's Trilene Inhaler, 4-drawer hide equipment case. Diagnostic Instruments, Syringes. Also unopened Dispensary Stock and Set of Bones. Details, Kind, 23, Montpelier Road, Ealing, W.5.

Monocular or Binocular Microscope required of recent make, preferably Zeiss or Leitz model. 2/3rds; 1/6th; and 1/12th Oil Immersion Lens, with moving stage. Forward details and price required to R. E. Lawson, House Governor and Secretary, The Gordon Hospital, Vauxhall Bridge Road, S.W.1.

TRADE

Wanted to Purchase. Good quality used Micro-scopes and Accessories. Highest prices paid.—Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. MAYfair 7511.

Wanted, Second-hand Surgical Instruments, furni-ture for surgery and consulting room, blood pressure apparatus, electric diagnostic sets, ophthalmoscopes, auriscopes, microscopes, etc.—Particulars to A. Fleming & Co. (Succrs.), 51, Mortimer Street, London, W.1. (Telephone: Mus. 6292.)

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire.

Doctors' Watches.—Franklands can still supply your requirements in watches. Write for particulars.—E. J. Frankland & Co., Ltd., Marle House, South Godstone, Surrey; or London Showroom, New Bridge Street House, 30-34, New Bridge Street, Ludgate Circus, E.C.4.

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept. B.M.J.), 3, Railton Road, London, S.E.24.

Re-upholstering completed within 10 days for the medical profession. Curtain, cushion and lamp-shade work also speedily executed.—Larew, 58, Crawford Street, W.1 (Pad. 6701).

Wigmore's, Ltd., 63, Baker Street, London, W.1. (Welbeck 5668.) Dispensing Opticians by appointment to Western Ophthalmic Hospital, Marylebone Road, London, N.W.1. Doctors' prescriptions accurately dispensed.

AUCTION

By Order of the Ministry of Supply. Exhibition Buildings, White City, Shepherds Bush Green, London, W.12, Hospital Appliances and Requisites. Sterilizers by "Dent & Hellyer," Inhalers, 70,000 First Aid Kits, 10,000 Glass Bottles, Enamel Bowls, Steel Stands, Food Containers, Kitchen Utensils, 10,000 Test Tube Stands, Avery Counter and other Scales, Box Waggons and Trucks, 10,000 Brushes, Cooking Stoves, Leather and Fibre Cases. **Leopold Farmer & Sons** will sell the above by auction on the premises **Tuesday, January 27, 1948 and following day at 11 a.m. each day. On view January 22, 23, 26, 1948, from 9 a.m. to 4 p.m.** Catalogues 6d. each (Postal Order) obtainable from Leopold Farmer & Sons, Auctioneers, Surveyors and Valuers, 46, Gresham Street, London, E.C.2.

APARTMENTS, BOARD, ETC.

VACANT

Doctor's widow offers Bed Sitting-room with Service. Most meals. Few minutes from District railway, on bus route. Refs. given and required.—Box 6649, B.M.J.

Single or Double Room in beautiful home, Rom-ford (25 mins. Liverpool Street). Professional men, especially Christians, welcome. From £2 15s. including morning and evening meal.—Box 6660, B.M.J.

St. John's Wood, near Lord's, Sitting, two medium and one small Bedroom, Kitchenette, Bath, Carpets, Linoleum, Curtains, etc. State family when replying.—Box 6348, B.M.J.

WANTED

Wanted, House or preferably Self-contained Flat, unfurnished, to rent. 3-4 rooms with kitchen and bath. In area Harrow, Ealing, Uxbridge. One child. —Dr. Price, Hillingdon County Hospital, Uxbridge.

Wanted immediately, Modern Self-contained Flat, 3 to 4 rooms. Furnished or unfurnished, West London area.—Box 6617, B.M.J.

Doctor retiring shortly wishes rent small Un-furnished House, Flat, moderate rent, Southern England, Coast preferred.—Box 6618, B.M.J.

Ex-Naval officer and wife, both doctors, no children, urgently require small Unfurnished Flat. Central or South London.—Box 6644, B.M.J.

Furnished or Unfurnished Accommodation Required anywhere Central or North London by postgraduate (two children). Willing part-time work. Can exchange furnished house near Reigate.—Box 6650, B.M.J.

HOTELS

"A Model Hotel in Miniature" (Press). Checkers, Pulborough, Sussex. One hour London, near station. Unusual comfort, old-world charm. Central heating, log fires, etc.—really warm. Delightful sunny location. Farm and garden produce; varied and appetizing meals—invariably commended. Excellent gold and riding; lovely walks. Licensed. Telephone Pulborough 86.

"Difficult Times!" See how good we make them at Aventine Hotel, 13/15, Belsize Avenue, Belsize Park. Tube 15 mins. Leicester Square. A few vacancies from 4 guineas. "Courtesy the Keynote." 'Phone: PRI. 1355.

Seaton Beach Hotel, Seaton, S. Devon, A.A.**** R.A.C. Recognized as one of Devon's best hotels. Sea front. Fully licensed. Central heating and log fires. Billiards, good shooting, golf. High sunshine record and mild climate in winter. Special terms for extended visits. Tel.: 17.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild, allowing visitors to be out in the wonderful air. The Hotel is central heated, individual heating in bedrooms, H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

St. Ives, Cornwall, Porthminster Hotel. Winter at sunny St. Ives and enjoy the charm and first-class service and comfort at this noted hotel, from 6 gns. for extended visits. Overlooks sea. Fully licensed. Tel.: 324.

Weston-super-Mare, Royal Pier Hotel. Super comfort, exceptional amenities and a site just above the sea ensures the ideal for winter visits. Special h. and c. water baths. Vita-glass lounge and dining-room. Most rooms, double and single, private bathrooms. Lift all floors. Own dairy farm. Fully licensed. Tel.: 290.

HOUSES, CONSULTING ROOMS

Furnished Consulting Rooms to let full- or part-time. All amenities, 9, Queen Anne Street, Harley St., W.1. Also large basement suitable laboratory.

For Houses and Consulting Rooms in Harley Street and the medical area apply to C. E. Bedford & Co., Ltd., 10, Wigmore Street, W.1. Telephone: Langham 3927 and 3928.

Harley Street. Prominent Corner, modern build-ing. Gd. and 1st floor Consulting Suites to be let.—Box 6604, B.M.J.

Harley Street. Large First Floor Consulting Room now available for one or two. One name plate allowed.—Box 6620, B.M.J.

Harley Street, W.1. Modern rooms, ground floor, available. Decorated and all services installed. —Box 6042, B.M.J.

FOR SALE

Finchley Road. Modern house on two floors. Two large front reception rooms, cloakroom, W.C., kitchen, scullery, etc. On first floor two double, three single bedrooms, bathroom, W.C. Small garden. Long lease. Low ground rent.—Apply Richard Ellis & Son, 165, Fenchurch Street, E.C.3. Mansion House 8321.

MOTOR CARS

MILHALL MOTOR CO., LTD.

1946 (first registered) Rolls Royce Phantom III DL series 7-seater limousine Mulliner. 6,500 miles. New throughout.

1939 Rolls Royce Wraith owner-driver saloon with division Park Ward. Speedometer reading 26,000. Many extras.

1939 Rolls Royce Hooper owner-driver saloon. Excellent condition.

1940 Morris 10 h.p. saloon. Small mileage. Show-room condition.

1938 Rover 20 Sports saloon.

Showrooms: 5, ST. JAMES'S STREET, S.W.1 (Whitehall 1952-4)

Service: 55-57, South Edwardes Square, W.8 (Western 2269)

We undertake overhauls of any description efficiently, economically and expeditiously.

Bentley 6½ litre. Speedometer mileage only 45,000. Flywheel teeth unworn. Superb saloon body.—Dr. Leyton, 10, Harley Street, W.1. Lang. 4280.

Gentleman urgently requires 1946-7 Car or low-mileage pre-war model.—King, The Crest, Ruggleswood, Chislehurst, Kent. Imperial 3527.

Kingswood Hire Service, 1947 Saloons, 8 and 10 h.p., for self-drive Hire.—Imperial 3527 (Chislehurst).

Motourists (London), Ltd., of Great North Road, East Finchley Station, N.2, urgently require late model cars of all makes, any h.p. Representative will call by appointment. Tudor 2301-2.

1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

1939 Buick, approx. 30,000 miles, laid-up war years. Original paint-work unscratched testifies to meticulous care and upkeep. Six tyres almost new, battery just replated. 7-valve Radiomobile, twin Notek foglamps, twin heaters, twin defrosters, etc. For private sale.—Box 6658, B.M.J.

1939 Morris 10 h.p. 4-door sun saloon, completely reconditioned last year at cost of £105 (bills available). Recellulosed black, brown leather upholstery. A magnificent car in every detail. A.A. inspection welcomed. £475.—George Clarke (Motors), Ltd., 278, Brixton Hill, London, S.W.2.

NURSING HOMES

Acute Medical Nursing Home. Proportion of chronic cases taken.—Carlton Nursing Home, 1, Carlton Road, Ealing, W.5. Telephone: Perivale 2819.

Munster-Royal Nursing Home (Kingston 0111), Teddington, within easy reach of London, has private accommodation for medical, surgical or maternity cases, and a few chronic invalids from 5½ guineas. Children for tonsillectomy specially accepted at 10 guineas inclusive, without undue delay. Reduced terms to doctors' families.

FOR SALE

Bath. A fully equipped Maternity Nursing Home for sale. 2 reception, 21 bedrooms or wards. Modern labour room, bathroom, kitchen, etc., conservatory, greenhouse, garage.—Tilley & Culverwell, 14, New Bond Street, Bath.

Surrey. Excellently equipped and busy Nursing Home in high-class locality 30 miles London, is offered for sale complete for £4,500.—Commercial Development Company, 199, London Road, Sevenoaks, Kent.

APPOINTMENTS

(Continued from page 23)

Have you read the notice at top of page 12 ?

VICTORIA HOSPITAL, Worksop, Notts (150 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the above appointment, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment, which is for six months, will be vacant on January 17, 1948. Salary is at the rate of £250 per annum, with full residential emoluments. The hospital has a full panel of Visiting Consultants and Out-patient clinics. Applications to be addressed to the Secretary-Superintendent.

VICTORIA HOSPITAL, Worksop, Notts (150 beds)
CASUALTY OFFICER AND HOUSE SURGEON TO E.N.T. DEPT. (A)

Applications are invited from registered medical practitioners for the above appointment, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment, which is for six months, will be vacant on February 1, 1948. Salary is at the rate of £250 per annum, with full residential emoluments. The hospital has a full panel of Visiting Consultants and Out-patient Clinics. Applications to be addressed to the Secretary-Superintendent.

VICTORIA HOSPITAL FOR SICK CHILDREN
Park Street, Hull
RESIDENT HOUSE SURGEON (A)
HOUSE PHYSICIAN (A)

The Board of the above hospital requires a Resident House Surgeon and House Physician (female, A posts), vacant on January 22, 1948. Salary £200 per annum, with board, residence and laundry. Applications to the Secretary not later than January 17, 1948.

WOMEN'S HOSPITAL, Liverpool
HONORARY SURGEON

Applications are invited for the post of Honorary Surgeon. Candidates must hold the Fellowship of the Royal College of Surgeons of England, Edinburgh or Ireland, or the degree of Master of Surgery of a recognized University of the United Kingdom. Possession of the Membership of the Royal College of Obstetricians and Gynaecologists will be taken into account. Applications, and the names of three referees, should reach the undersigned not later than January 22, 1948.—M. J. Harley, Secretary.

WESTON-SUPER-MARE GENERAL HOSPITAL (100 beds)
HOUSE SURGEON (A)

Applications are invited from medical practitioners for the appointment of House Surgeon (A). Duties to commence on February 1, 1948. Salary at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary.

WALSALL GENERAL HOSPITAL (181 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A), vacant February. Salary £150 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months Salary is at the rate specified above with full residential emoluments. Applications should be forwarded to the House Governor and Secretary.

WESTMINSTER HOSPITAL (ALL SAINTS') UROLOGICAL CENTRE
Austral Street, West Square, S.E.11
SURGICAL REGISTRAR (B1)
(part-time, non-resident)

Applications are invited for the post of Surgical Registrar (B1) (part-time, non-resident), vacant on February 18, 1948. The appointment is for a period of twelve months in the first instance, with possible extension for a further period of twelve months. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Candidates should hold one of the Surgical Fellowships. Salary will be at the rate of £250 per annum, but if the selected candidate is a demobilized officer eligible under the Government Postgraduate Scheme a full time appointment at £550 per annum will be considered. Applications should be sent to the undersigned not later than January 24, 1948.—D. H. Eade, Secretary.

WESTMINSTER HOSPITAL (ALL SAINTS') UROLOGICAL CENTRE
Austral Street, West Square, S.E.11
TWO RESIDENT SURGICAL OFFICERS (B1)

Applications are invited for two posts of Resident Surgical Officer (B1), one vacant on February 10 and one on March 10, 1948. The appointments will be for periods of six months in the first instance. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary payable by the Centre will be at the rate of £300 per annum for each post. If the selected candidate is a demobilized officer eligible under the Government Postgraduate Scheme, total salary will be at the rate of £550 per annum. Applications should be sent to the undersigned not later than January 24, 1948.—D. H. Eade, Secretary.

WESTMINSTER CHILDREN'S HOSPITAL
(Formerly the Infant's Hospital)
Vincent Square, S.W.1
CASUALTY OFFICER (B2)

Applications are invited for the office of Casualty Officer (B2), including R practitioners who hold A posts, vacant in January, 1948. The appointment will be tenable for a period of six months at a salary of £150 per annum, with full residential emoluments. Candidates should have held previous house appointments. Applications should be submitted to the undersigned within two weeks of the insertion of this notice.—Charles M. Power, House Governor and Secretary, Westminster Hospital, S.W.1.

WEST SUFFOLK GENERAL HOSPITAL
Bury St. Edmund's (335 beds)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification who are liable for service under the National Service Acts, for the following appointments :—

1. **HOUSE SURGEON (A)** with special responsibility for Ophthalmic and Orthopaedic cases, vacant immediately. Salary at the rate of £200 per annum.
2. **HOUSE ANAESTHETIST (A),** vacant immediately. Salary £200 per annum. The hospital is recognized for the D.A.

All appointments will normally be for a period of six months. Applications should be addressed to the Secretary, E. E. Hardwicke, F.H.A.

WOKING VICTORIA HOSPITAL
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Medical Officer (B2), vacant February 1, 1948. Salary £240 per annum, with full residential emoluments. R practitioners who hold A posts may apply, when the appointment will be limited to six months. Applications to be addressed to the Honorary Secretary.

YORK CLINIC FOR PSYCHOLOGICAL MEDICINE, GUY'S HOSPITAL
FIRST ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from qualified medical practitioners for the post of full-time First Assistant Medical Officer (B1) in the York Clinic for Psychological Medicine in Guy's Hospital. This post carries a salary at the rate of £500 per annum, with full residential emoluments. The appointment will be for one year in the first instance, but this may be extended for a further period. Applications in writing, with the names of two referees, should be submitted to the Secretary of the York Clinic, Counting House, Guy's Hospital, London, S.E.1. Applications should reach the Secretary not later than January 31, 1948

YORK COUNTY HOSPITAL (222 beds)
ORTHOPAEDIC AND GENERAL HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of Orthopaedic and General House Surgeon (A), vacant on February 2, 1948, including practitioners within three months of qualification who are liable under the National Service Acts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned not later than January 17, 1948.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B1), vacant on February 1, 1948. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £350 per annum, with full residential emoluments. Applications should be sent to the undersigned not later than January 17, 1948.—J. R. Mackrill, Secretary.

HOMES

The Psychoneuroses and Neurasthenia

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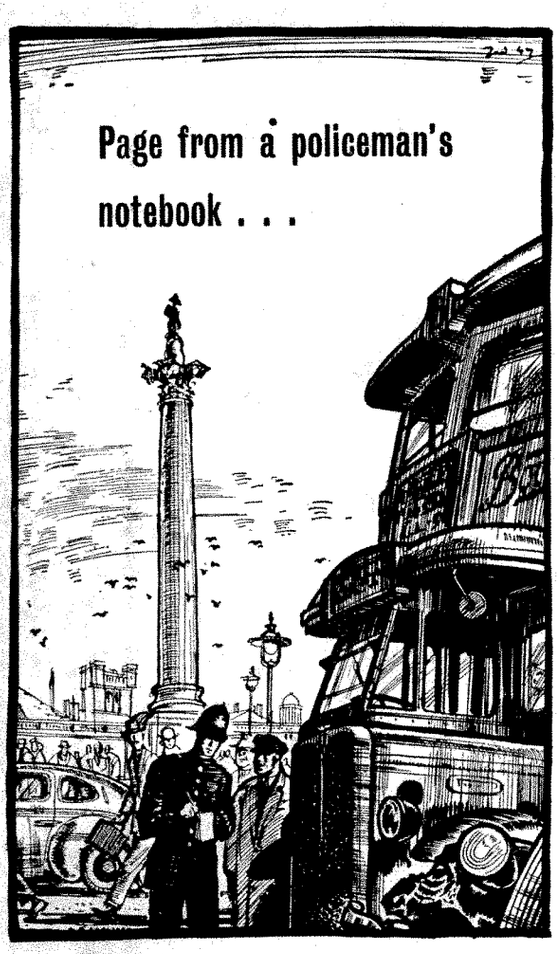

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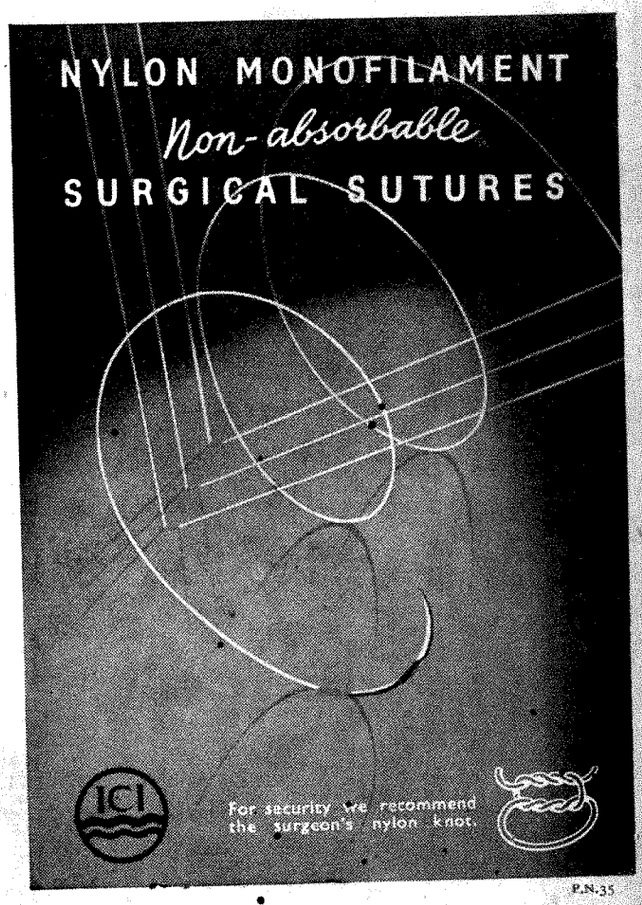

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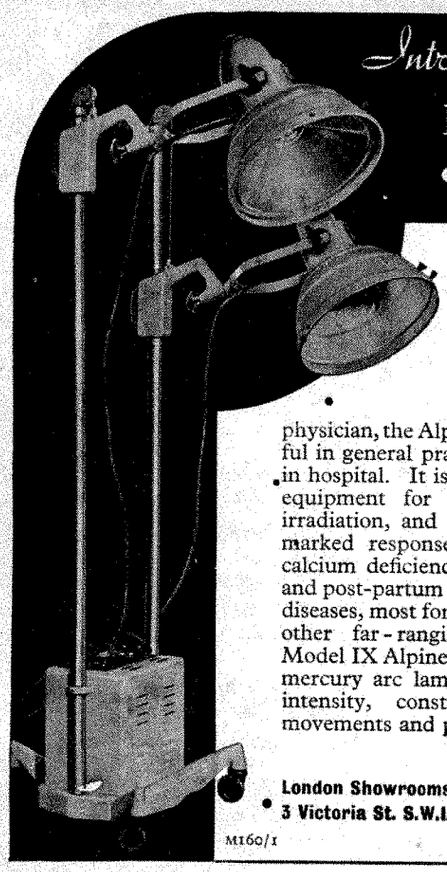

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STREPTOMYCIN: A VALUABLE ANTI-TUBERCULOSIS AGENT

BY

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To find a specific therapeutic substance that will arrest or impede the progress of tuberculosis and permit the intrinsic factors of healing to operate successfully has been the goal of countless investigators since the beginning of the modern era of chemotherapy. Certainly the need for a specific drug treatment to assist in combating human tuberculosis has been and continues to be a compelling one.

During the past decade many infectious diseases have proved to be highly vulnerable to therapeutic attack by a variety of chemotherapeutic agents. Tuberculosis, however, has until recently resisted specific drug treatment successfully. In the quest for an effective substance in the treatment of tuberculosis little, if any, real basis for encouragement was evident until the advent of the sulphonamide compounds.* The observations that sulphanilamide had exerted a slight but definite deterrent action on the pathogenesis of tuberculosis in guinea-pigs prompted additional work with a large number of other sulphonamides in experimental tuberculosis. The results indicated that none of these drugs met the requirements of a therapeutic weapon sufficiently to justify their use in clinical tuberculosis.

Eventually drugs remotely related to sulphanilamide but chemically definitely dissimilar in certain important aspects were found to be greatly superior to any of the sulphonamide compounds in combating experimental tuberculosis. These latter drugs—known commonly as sulphone compounds—were derivatives of 4,4′-diaminodiphenyl sulphone. Among the better-known sulphone drugs that have figured in the recent revival of chemotherapy of tuberculosis are "promin" (known as "promanide" in Britain), "diasone," and "promizole"

Historical Résumé

Since the ability of certain of the sulphone compounds to suppress tuberculosis almost completely in the highly susceptible guinea-pig was so unprecedented, and since the significance of this phase of the recent development of tuberculo-chemotherapy to the present status of the drug treatment of leprosy is seldom recounted, a brief résumé of the development of the more recent antibacterial attack on tuberculosis seems appropriate.

As mentioned previously, the observations concerning the effects of sulphanilamide on the progress of tuberculosis in guinea-pigs suggested that the sulphonamide drugs and related compounds were worthy of further exploration. In October, 1940, Feldman, Hinshaw, and Moses reported the first experimental study of the use of promin in experimental tuberculosis induced by human tubercle bacilli.† The results when confirmed provided sound evidence that the drugs had exerted marked deterrent effects on the progress of a potentially lethal infection. With the recognition of this fact tuberculosis could properly be removed from the list of infections previously considered resistant to the suppressive action of chemotherapeutic agents.

After this initial observation with promin the effectiveness of several other sulphone compounds as anti-tuberculosis agents was demonstrated (Feldman, 1946b). This phase of the work served to establish firmly the ability of a number of complex synthetic organic compounds to exert a measurable therapeutic effect on infections induced experimentally by human tubercle bacilli.

Parenthetically it is of interest to note that the work with the sulphone compounds, especially promin, in experimental tuberculous infections stimulated an important development in the chemotherapeutic attack on leprosy. Several reports now available indicate definitely that promin and subsequently promizole and diasone have ushered in an important new era in the specific drug treatment of this disease. An objective appraisal of the results up to the present time indicates that this newer therapy in leprosy is definitely encouraging (Faget *et al.*, 1946).

The advent of specific therapy with antibiotics which followed the development of penicillin again focused attention on the possibility of successful chemotherapy of tuberculosis with antibiotic substances. This was not a new approach to the problem of specific drug therapy in tuberculosis by the use of antagonistic substances of bacterial origin. As a matter of fact a report on this form of therapy had been published by Cantani in 1885. A review of the many subsequent reports of different investigators who have explored this approach to the treatment of tuberculosis discloses many antibiotic agents capable of antagonistic action against tubercle bacilli (Feldman, 1946a, 1946b, 1946c; Hart, 1946; Waksman, 1947). However, observations on the range of activity of the substances studied were, with few exceptions, limited to *in-vitro* tests. A notable exception is streptomycin, which, in addition to demonstrating its antagonism to tubercle bacilli in the test-tube, has demonstrated its effectiveness against tuberculous infections (Feldman and Hinshaw, 1944; Feldman, Hinshaw, and Mann, 1945; Youmans and McCarter, 1945). As the search continues, the possibility exists of eventually obtaining not one but perhaps several additional antibiotic agents that will be equal if not superior in potency to streptomycin.

As a result of the information that has accumulated since the first report on the use of sulphanilamide in experimental tuberculosis was published, a chemotherapy of tuberculosis

* For a review of the development of the chemotherapy of tuberculosis the lectures by Feldman (1946a, 1946b, 1946c), by Hart (1946), and by Waksman (1947) may be consulted.

†A few months previously Rist, Bloch, and Hamon (1940) had reported independently a definite antagonistic effect of 4,4′-diaminodiphenylsulphone on tuberculosis of rabbits and guinea-pigs infected with avian tubercle bacilli.

of practical significance has been evolved. At last, after countless disappointments, the practical therapeutics of tuberculous infections has been advanced by a drug of considerable specificity and usefulness. By the use of streptomycin it is now possible for the first time to arrest by specific chemotherapy the progress of several different clinical types of potentially fatal tuberculosis.

Streptomycin in Experimental Tuberculosis

Therapeutic Efficacy.—The effect of streptomycin on the course of experimental tuberculosis in guinea-pigs and in mice is striking. Under prescribed conditions the potency of this antibiotic is sufficient to alter to a marked degree the usual pathogenesis of infections established by fully virulent tubercle bacilli of the human and of the bovine types. It is of much significance that guinea-pigs inoculated subcutaneously with an effective dose of tubercle bacilli will respond to treatment usually in a dramatic manner. Compared with untreated controls, such animals have an extended longevity, and the residual signs of infection either are not demonstrable grossly or microscopically or, if present, are usually inactive lesions characterized by fibrosis, calcification, or other signs of quiescence. In the experimentally infected animals the tempo of the therapeutic effects is relatively rapid. Evidence of deterrent action may be observed after three weeks' treatment.

The specificity of streptomycin for tubercle bacilli and its ability to alter the course of otherwise irreversibly fatal infections are convincing as shown by experiments wherein guinea-pigs are inoculated intravenously with large doses (1 mg.) of virulent tubercle bacilli. Tuberculosis established by this procedure usually becomes a rapidly fulminating process within a short time. However, if treatment with streptomycin is started within three to four days after the animals have been inoculated the treated animals will live many months longer than those not treated (Feldman, Karlson, and Hinshaw, 1947). The same therapeutic restraints can also be observed in white mice inoculated intravenously with virulent tubercle bacilli and treated with streptomycin (Youmans and McCarter, 1945).

Considering the exceedingly formidable character of the widely disseminated infection that follows the introduction of tubercle bacilli direct into the venous circulation, one cannot avoid the conclusion that streptomycin is an anti-tuberculosis agent of considerable potentiality (Feldman, Karlson, and Hinshaw, 1947). It is suggested that in the future new substances antagonistic to tubercle bacilli be subjected to trial in tuberculous infections induced intravenously. Such a procedure should provide valuable data for comparison with the effectiveness of streptomycin.

Dosage.—The therapeutic range of streptomycin in the treatment of tuberculous guinea-pigs appears to vary within rather wide limits. In our experience a daily dose of 4 to 6 mg. administered subcutaneously is therapeutically effective for animals weighing 500 to 800 g. Much larger doses do not seem to be more effective. We have found daily doses of 2 mg. inadequate. However, in many infected animals this smaller dose does exert a definite deterrent influence, but the results are, generally speaking, inferior to those produced by doses of greater magnitude. In the treatment of tuberculous mice with streptomycin a daily dose of 3 mg. divided into four injections has proved effective (Youmans and McCarter, 1945).

Frequency of Medication.—In our earlier studies on streptomycin in experimental tuberculosis we administered the daily dose of the drug in four equally divided injections six hours apart. Later, as a result of experimental observations (Feldman, Hinshaw, and Karlson, 1947), we found that the frequent administration of streptomycin was not essential to a satisfactory therapeutic effect. It was observed that daily doses of 6 mg. divided into two equal injections twelve hours apart were adequate. Furthermore, we observed that animals treated every alternate week appeared to receive essentially the same therapeutic benefit as those on a daily schedule of treatment.

We now prefer to administer the drug every twelve hours. However, it is our impression that streptomycin can be given to tuberculous guinea-pigs, with satisfactory results, once daily or perhaps once every second or third day. There is no evidence indicating that its therapeutic effectiveness in experimental tuberculosis is dependent on frequent administration of the drug. Certainly it is not necessary to administer streptomycin every two to three hours to obtain the desired effects.

Toxicity for Animals.—Although the administration of streptomycin to tuberculous human beings usually provokes certain objective signs of toxicity of varying severity, this drug is well tolerated by guinea-pigs and by mice in doses within the therapeutic level. Guinea-pigs treated daily for five to six months have shown a normal increase of weight and size and have at the end of the experiment the appearance of normal healthy animals. What the maximal tolerated dose for guinea-pigs may be is uncertain. So far as we know, doses of streptomycin even in excess of the therapeutic effective dose do not induce demonstrable damage in the liver or kidneys of guinea-pigs or mice.

In some animals, particularly monkeys and dogs, signs of toxicity have been reported (Molitor *et al.*, 1946). In these animals toxicity was indicated by transient anaemia, mild to severe proteinuria, and casts and blood cells in the urine. Dogs receiving streptomycin have been noted to manifest signs of vestibular dysfunction. Disturbance of metabolism of fat in the liver and kidneys of monkeys and dogs has been reported (Molitor, 1947).

Summary of Evidence in Support of Clinical Trials

In reviewing the evidence to justify the use of streptomycin in the treatment of tuberculous patients several facts of considerable signficance may be recounted:

(1) The experimental animal used was the highly susceptible guinea-pig, which has a minimum of intrinsic resistance to infection by virulent mammalian tubercle bacilli. (2) The beginning of treatment was delayed usually from two to seven weeks after the animals had been inoculated with tubercle bacilli. Thus the conditions of the experiments were severe. Furthermore, the conditions were those of therapy and not of prophylaxis. (3) Treatment extended the lives of the infected animals indefinitely. (4) In many treated animals there was a reversal of a previously positive to a negative reaction to tuberculin. (5) As a consequence of treatment the usual course of the disease was dramatically modified even though the animals had been infected by intravenous inoculation. (6) There was a marked tendency for infected tissues to mobilize factors of repair and resistance, and as a result lesions resolved, fibrosed, hyalinized, or calcified. In a word, under the influence of treatment with streptomycin the tuberculous lesions in an infected animal were converted from an advancing destructive process to one of regression and arrest.

The evidence obtained from the experimental studies amply justifies the conclusion that streptomycin is a highly potent antagonistic agent against tuberculous infections in animals.

The favourable therapeutic index of streptomycin in tuberculous guinea-pigs and the further fact that the drug was well tolerated by these animals provided acceptable reasons for extending the investigation to tuberculous patients.

Residual Infectivity after Treatment.—It is our impression that in tuberculous guinea-pigs streptomycin in most

instances exerts its beneficial effects by suppressing the normal growth-progression of the tubercle bacilli rather than by acting in a bactericidal capacity. We have, however, observed infected guinea-pigs, treated for a prolonged period with streptomycin, in which no residual infection could be demonstrated in the spleen by *in-vivo* tests. In addition the same animals failed to react to tuberculin, although at the beginning of treatment sensitivity to tuberculin had been noted (Feldman, Hinshaw, and Mann, 1945).

Although the question is difficult to decide with finality, it seems likely that at least in some infected animals most if not all of the infective bacteria are eventually eliminated as a direct or an indirect consequence of treatment. However, in our experience this is not true in the majority of instances. Even after treatment for many months and in the absence of recognizable alteration of tissue the presence of fully virulent tubercle bacilli can be demonstrated in the guinea-pigs by suitable procedures. For this reason it must be concluded that the major effect of streptomycin on tubercle bacilli is that of a bacteriostatic agent.* It appears that the concentrations of streptomycin which are attained in the blood and tissues of animals and man are too low to have a direct bactericidal effect.

Streptomycin in Clinical Tuberculosis

The bacillus of tuberculosis produces a number of different diseases in human beings. With this fact recognized, it should not be anticipated that any one form of treatment should be equally applicable to all these diseases. However, these several diseases are all caused by the same micro-organism, *Mycobacterium tuberculosis*, and if the organism is so situated as to be exposed to the antagonistic action of streptomycin the suppressive action of the drug should have a certain degree of effectiveness. Studies have shown that streptomycin is not distributed through all tissues of the body in equal concentration (Baggenstoss, Feldman, and Hinshaw, 1947). Furthermore, the mechanical defects which are produced in different structures by the destructive action of tuberculosis will create special clinical and surgical problems which cannot be met completely with any antibacterial agent, regardless of its efficacy (Hinshaw, 1947a).

Miliary and Meningeal Tuberculosis

Generalized haematogenous tuberculosis of human beings most closely resembles the form of tuberculosis which is produced in guinea-pigs and mice experimentally. Such haematogenous forms of tuberculosis as miliary tuberculosis and tuberculous meningitis have in the past been totally refractory to all therapeutic efforts and have had a mortality rate approaching 100%. Until the advent of streptomycin there was no method of treatment which produced even temporary suppression of these diseases or amelioration of the distressing symptoms caused by them.

It is now well established that streptomycin treatment may be effective in bringing about a clinical remission in a considerable percentage of cases of miliary tuberculosis and of tuberculous meningitis (Hinshaw, Feldman, and Pfuetze, 1946; Council on Pharmacy and Chemistry, 1947). It remains to be seen how often these remissions may be prolonged and extended to the point at which one is justified in regarding the disease as cured. We have observed remissions which have lasted for more than two years, and we have patients now under observation who apparently remain well and who eventually can be pronounced essentially cured if this favourable progress continues. When miliary tuberculosis and tuberculous meningitis have been diagnosed at an early stage of the disease and have been treated promptly and adequately, more than 50% of these patients may enjoy a complete remission of all symptoms and of all radiographic and bacteriological evidence of the infection. Unfortunately, some of these patients will suffer from recurrence of the disease process. In those instances in which the recurrent disease is due to a streptomycin-resistant strain of tubercle bacilli no hope of recovery from the second attack should be entertained. It will probably be at least five years before it can be known to what degree streptomycin treatment will reduce the formerly almost universal mortality rate from these diseases. In the meantime, we would emphasize the importance of starting treatment with streptomycin at the earliest possible moment after the diagnosis of miliary tuberculosis or of tuberculous meningitis has been made.

Pulmonary Tuberculosis

This constitutes the cause of more than 90% of all the deaths from tuberculous infection. The wide variability of tuberculous lesions produced in the lungs and the frequency with which spontaneous recovery from pulmonary tuberculosis is realized make the evaluation of any remedy in this form of disease most difficult (Hinshaw and Feldman, 1944).

Several hundred patients with varying forms of pulmonary tuberculosis have received treatment with streptomycin during the past three years in various American hospitals, and certain conclusions are now tenable (Council on Pharmacy and Chemistry, 1947; Hinshaw, 1947b). All physicians who have employed streptomycin extensively in the treatment of pulmonary tuberculosis have agreed that patients with progressive disease whose symptoms have been marked often enjoy relatively prompt improvement of symptoms, with reduction in the amount of expectoration. There are also a decrease of fever and an improvement of the systemic manifestations of pulmonary tuberculosis. Previously progressive disease becomes at least temporarily quiescent under the influence of streptomycin therapy, and this suppression of the acute disease process is quite uniform during the first few weeks of treatment.

The clinical trend after the first few weeks of treatment depends on whether or not the tubercle bacilli are resistant to the effects of streptomycin and whether or not the destructive nature of the disease is such as to prevent its arrest and the disappearance of bacilli during this period of effective action. Some patients continue to improve for many weeks or months, whether or not streptomycin treatment is continued. The physician is occasionally disappointed to observe a reactivation of the disease within a short time after streptomycin treatment has been discontinued. This tendency to reactivation of previously progressive tuberculosis constitutes strong evidence in favour of the thesis that the drug *in vivo* is a truly effective suppressive agent. There is increasing evidence that streptomycin combined with collapse therapy and other forms of treatment may be effective when either one alone would probably fail.

Tuberculous Laryngitis and Endobronchitis

Tuberculous Laryngitis.—Streptomycin has also been found to be useful in some of the most distressing complications of pulmonary tuberculosis which had previously been refractory to nearly all therapeutic efforts. Tuberculous laryngitis has responded to streptomycin treatment (Figi and Hinshaw, 1946) in a very large percentage of cases, and it is now widely believed that use of the drug is clearly indicated in the more severe and acute phases of this tuberculous disease, even when such treatment is likely to achieve only palliative results. Other ulcerating lesions about the oropharynx and tongue respond to streptomycin in a similar manner. In our experience the most spectacular results with streptomycin treatment of lesions in the larynx have been in those patients with maximal laryngeal involvement and with acute forms of pulmonary tuberculosis without extensive cavitation, and in those patients who have tuberculous laryngitis with minimal evidence of pulmonary tuberculosis.

Endobronchial Tuberculosis.—Active ulcerating lesions of the tracheo-bronchial tree, which are being observed with increasing frequency in the United States, have also responded in a uniform manner to streptomycin treatment (Hinshaw, Feldman, and Pfuetze, 1946; Council on Pharmacy and Chemistry, 1947). The serious potentialities of this type of tuberculosis would justify streptomycin treatment under many circumstances. The end-result of tracheo-bronchial tuberculosis is often a bronchial

* The question of the action of streptomycin on tubercle bacilli *in vitro* was the subject of a recent report by Smith and Waksman (1947).

stricture as a result of peribronchial fibrosis. It is immediately obvious that bronchial strictures of this type cannot be precluded and will not yield to any type of antibacterial treatment, and if the degree of obstruction is considerable, pulmonary resection is likely to be required if the stricture is so situated as to make such operation feasible.

Tuberculous Sinuses, Lymph Nodes, Bones, and Joints

Tuberculosis of lymph nodes, of bones and joints, and other types of tuberculosis that produce draining cutaneous sinuses have been treated with streptomycin in a sufficient number of cases to indicate that clinical results are satisfactory in a very high percentage of cases (Hinshaw, Feldman, and Pfuetze, 1946; Council on Pharmacy and Chemistry, 1947; Hinshaw, 1947b). Within a few days to a few weeks after starting treatment the drainage of pus ceases and a scab forms over the sinus, and within a few more weeks, when this scab is dislodged, the sinus appears to be healed. If the sinus tract leads to some large accumulation of pus, such as a cold abscess or an empyema cavity, healing is much less likely to occur, and if it does occur there is much greater danger of a recurrence of drainage of pus. It begins to seem probable that large accumulations of tuberculous pus should be drained by wide-open incision as soon as possible after streptomycin treatment has been instituted. This is in contrast to previously accepted surgical practices. It is probable that tuberculous suppuration may be treated in much the same way as suppurative diseases due to pyogenic bacteria have been treated in the past, provided streptomycin treatment is combined with such surgical intervention.

Cutaneous tuberculosis has not been studied sufficiently to warrant the formation of conclusions, except in the case of scrofulodermia which is associated with tuberculous draining sinuses (O'Leary *et al.*, 1947). This has been discussed in the preceding paragraph. A few patients with lupus vulgaris have been treated, and have appeared to respond sufficiently well to indicate the need for further studies.

Tuberculosis of bones and joints involves a series of problems almost as complicated as those afforded by pulmonary tuberculosis. It is immediately evident that no antibacterial drug can promote the regeneration of destroyed structures, and a comparison with chronic osteomyelitis appears logical. Experience gained thus far has indicated that the principal uses of streptomycin for treatment of tuberculosis of bones and joints are to prevent progression of the disease and to afford protection during and after surgical procedures on the tuberculous joints. In early forms of tuberculosis of joints involving the synovial membrane alone, streptomycin treatment in itself may be adequate to arrest the tuberculous process and hence to avoid subsequent destructive changes, crippling deformities, and the need for surgical treatment.

Tuberculous Enteritis and Peritonitis

Tuberculous enteritis is another most distressing complication of pulmonary tuberculosis. It now seems that streptomycin treatment of this disease yields a gratifying degree of symptomatic relief very promptly in a large percentage of patients. It remains to be determined how permanent these effects may be, but, even if the results prove to be merely palliative, treatment is well worth while, and in some other instance may be the crucial factor in permitting the eventual recovery of the patient.

Tuberculous peritonitis has appeared to respond to streptomycin treatment in the small number of cases in which this treatment has been applied thus far. Judgment of therapeutic results in this disease is more difficult than in other forms of tuberculosis because of the fact that the diagnosis has usually been arrived at as a result of surgical exploration and because of the fact that surgical exploration in itself is thought frequently to exert a beneficial effect on tuberculous peritonitis.

Use of Streptomycin Before and After Surgical Procedures

The prophylactic use of streptomycin in conjunction with radical types of thoracic surgical treatment is being put to test in a number of institutions in the United States (Council on Pharmacy and Chemistry, 1947; Glover, Clagett, and Hinshaw, 1947). It has already been determined that streptomycin is of little value in the treatment of advanced and chronic tuberculous empyema (Hinshaw, Feldman, and Pfuetze, 1946). Whether better results will be achieved by surgical treatment of tuberculous empyema in combination with streptomycin remains to be ascertained. There is reason to hope that streptomycin treatment may prevent the development of tuberculous empyema; our surgical colleagues have not witnessed tuberculous empyema following intrathoracic operations for tuberculosis when operation was performed in combination with streptomycin treatment, except in a few instances in which operation was carried out after the tubercle bacilli had become resistant to the effects of streptomycin.

Clinical Toxicity.—Streptomycin is a drug of moderate toxicity when compared with such drugs as the sulphonamide compounds, but it is definitely more toxic than penicillin. The toxicity of streptomycin is negligible when the drug is used for brief periods in the treatment of non-tuberculous infections. However, when tuberculosis is treated with streptomycin it probably is necessary to utilize the drug for many weeks, and this results in neurotoxic manifestations which are described later. Our colleague Dr. Karl Pfuetze (Medical Director, Mineral Springs Sanatorium, Cannon Falls, Minnesota) has been interested especially in toxicity of streptomycin and the efficacy of the drug when given in small doses. His studies, which have now been in progress for at least two years, have shown clearly that streptomycin is effective in doses as small as 1 g. a day, and perhaps the dose may be still further reduced in many clinical circumstances. When the total daily dose is 1 g., fewer than 50% of patients experience any toxic manifestations whatsoever, and only a few of these complain to any considerable degree. Even these usually recover when treatment is discontinued (Pfuetze, personal communication).

Dosage

The minimal effective dose of streptomycin has not been determined for the various clinical types of disease, but we would suggest that in tuberculosis the average daily dose be approximately 1 g. for a patient of average weight. McDermott (personal communication) has suggested a dose of 20 mg. per kilogram of body weight, which appears to be a reasonable and effective dose and one which will yield minimal toxic results. In previous communications we have recommended that streptomycin be injected at frequent intervals so as to maintain a constantly elevated blood level of the drug. However, as a result of experiments carried out on guinea-pigs (Feldman, Hinshaw, and Karlson, 1947), mentioned above, we have modified this conclusion, and in recent months we have been treating patients by giving the daily dose in a single injection or by dividing the total dose into two injections administered at intervals of twelve hours. The results seem to be equally satisfactory, and this has greatly simplified the clinical use of streptomycin. It remains to be determined whether these infrequent injections and lower doses will be adequate to produce and maintain remissions in such malignant forms of tuberculosis as tuberculous meningitis and miliary tuberculosis.

In previous publications we recommended that in treatment of tuberculous meningitis streptomycin be administered intrathecally as well as intramuscularly (Hinshaw, Feldman, and Pfuetze, 1946). Studies have not been completed to ascertain whether intrathecal injection alone or intramuscular injection alone may possibly suffice. In view of the severe reactions which have occasionally followed the intrathecal administration of streptomycin in doses of 100 to 200 mg., which we recommended previously, we have recently reduced the amount of streptomycin injected intrathecally to 25 to 50 mg. a day. It seems probable that such intrathecal injections every alternate day may suffice.

In the treatment of lesions of the larynx and tracheobronchial tree streptomycin administered by either aerosol or atomizer has often been employed in addition to intramuscular treatment. Recent observations make it seem possible that intramuscular administration of streptomycin alone is adequate for the treatment of these forms of the disease. In the treatment of tuberculous enteritis intramuscular administration of streptomycin is recommended, and it is doubtful if any advantage is gained by the addition of orally administered streptomycin. However, this phase of streptomycin therapy is worthy of further investigation.

Therapeutic Limitations of Streptomycin

Streptomycin, like all other substances of value in chemotherapy, has certain definite shortcomings or limitations.

Antibacterial Potency

Compared with other antagonistic agents effective against tubercle bacilli the antibacterial efficacy of streptomycin against tubercle bacilli is amazingly high. Yet, as was mentioned previously, the major influence of streptomycin on tubercle bacilli in tuberculous infections appears to be that of suppression of the normal pathogenic activities of the organisms. Sterilization of the infective process, even when observed, cannot be attributed to the direct antibacterial action of streptomycin alone. In many instances in clinical tuberculosis during the treatment with streptomycin a marked diminution and eventual disappearance of tubercle bacilli in sputum or other discharges may occur. However, the final elimination of tubercle bacilli from the infected tissues may be dependent only indirectly on the specific action of streptomycin. Most human beings are intrinsically capable of mobilizing mechanisms of resistance and repair which are effective in disposing of tubercle bacilli or inhibiting their aggressive action.

While it would be desirable in the treatment of tuberculosis to have a chemotherapeutic substance of such potency and safety that all tubercle bacilli could be eliminated from the infected host immediately or soon after the administration of a single dose of the drug, the probable results would still be inadequate. In other words, we should distinguish the specific antagonistic effect of the therapeutic substance on the bacterial parasites from the anatomical and purely mechanical factors that were created as a result of the infection. It is illogical to assume that a chemotherapeutic substance, no matter how potent and effective its antibacterial properties may be, can cause in some incredible manner the immediate and complete restoration of tissues that have been irreversibly damaged or destroyed as a consequence of the pathogenicity of the infective agents.

Toxicity*

Toxicity must also be considered as another of the limitations of streptomycin as a specific agent in tuberculosis. Like all other agents used in chemotherapy, streptomycin has certain toxic potentialities. However, compared with most other chemotherapeutic agents streptomycin has a reasonable margin of safety when the treatment of severe types of tuberculous diseases is considered. The most important toxic manifestation associated with streptomycin therapy in clinical tuberculosis is the unusual neurological reaction giving rise to dysfunction of the vestibular apparatus. Rarely, auditory function is impaired when large doses are given for prolonged periods or when impaired renal function interferes with the excretion of the drug. Other toxic reactions that have been noted include erythematous rash, fever, eosinophilia, and abnormal urinary sediments.

The toxic reaction to streptomycin referable to the eighth cranial nerve or its end-organs which results in a reduction of the vestibular function is the most serious and was one of the first evidences of toxicity described (Hinshaw and Feldman, 1945; Brown and Hinshaw, 1946; Fowler and Seligman, 1947). The incidence of occurrence of this untoward effect is rather high. At least 90% of patients receiving a daily dose of 2 g. of streptomycin for more than one month will exhibit symptoms of vestibular dysfunction. If the dose is reduced to 1 g. a day fewer than 30% of patients will experience any subjective symptoms or exhibit any objective signs of vestibular dysfunction. Fortunately in most cases the symptoms largely disappear within sixty to ninety days or longer after treatment has been stopped. The most severe symptoms of decreased vestibular function occur in patients receiving doses of 3 g. or more of streptomycin daily. Restoration of vestibular function or compensation phenomena occur more rapidly and more completely in children and young adults than in persons beyond the age of 50 (Hinshaw, Feldman, and Pfuetze, 1946).

While the possible toxic effects of streptomycin should be recognized and carefully considered, extensive clinical trials indicate that in cases of tuberculosis in which the prognosis is unfavourable or uncertain the possible toxic effects of streptomycin do not constitute a valid contraindication to its use (Hinshaw, 1947b). In cases of tuberculosis in which the prognosis is favourable under conventional forms of treatment streptomycin therapy should be used only in exceptional circumstances, if at all.

*A report on the toxicity of streptomycin in human beings has been given by McDermott (1947).

Streptomycin Resistance

One of the most serious obstacles to the achievement of maximal therapeutic benefits from streptomycin in clinical tuberculosis is the problem of streptomycin-resistant tubercle bacilli. Although the problem of drug-resistant microorganisms is not entirely understood there is evidence that this phenomenon represents a selective process dependent on the capacity of bacteria to undergo spontaneous variation or mutation (Demerec, quoted by Selbie, 1946).

In clinical tuberculosis, while the largest proportion of the bacterial population is sensitive to streptomycin before treatment is started, a few variants are present that are drug-resistant in varying degrees (Pyle, 1947). During treatment with a sufficiently potent antibacterial substance such as streptomycin the more sensitive bacterial cells are gradually inhibited and eventually eliminated, while the more resistant cells continue to be propagated. Eventually, if treatment is long continued, there frequently occurs a gradual replacement of the population of tubercle bacilli from one that was predominantly sensitive to streptomycin when treatment began to one that is predominantly streptomycin-resistant. The degree of resistance may be several thousandfold greater than is true of tubercle bacilli sensitive to streptomycin.

In clinical tuberculosis the exact significance of the appearance of varying percentages of streptomycin-resistant tubercle bacilli is somewhat uncertain at the present time. Evidence obtained by animal experimentation shows definitely that infections induced in guinea-pigs by apparently pure cultures of highly streptomycin-resistant strains of tubercle bacilli are not amenable to the therapeutic action of streptomycin (Feldman, Karlson, and Hinshaw—unpublished data; Youmans and Williston, 1946). However, clinically the occurrence after weeks of therapy of some tubercle bacilli highly resistant to streptomycin does not necessarily indicate that the preponderant bacterial population is resistant, and must not be accepted as an indication that treatment may be of no benefit if the need for treatment continues to exist. The fact that patients may continue to improve spontaneously after administration of streptomycin has been discontinued and eventually may become bacteriologically negative (by guinea-pig tests) for tubercle bacilli indicates that treatment may not be required for extended periods.

The time required for the appearance of streptomycin-resistant tubercle bacilli after the beginning of treatment with this substance is variable. Ordinarily, however, the drug-resistant bacteria cannot be demonstrated in appreciable numbers until treatment has been in effect sixty to ninety days. While it is desirable to obtain cultures for the purpose of bacteriological assays for the determination of streptomycin sensitivity* at regular intervals after treatment has been started, there is no adequate practical quantitative method of determining when resistant organisms have gained ascendancy. All available tests are only qualitative, and merely indicate that at least a few resistant bacilli are present. This must not be accepted as convincing proof that the end-point of practical treatment has been reached.

Whether or not the administration of streptomycin should be continued after the bacterial population has become predominantly drug-resistant is at the present time a controversial question. It is our opinion, however, that when the vast majority of bacterial cells are no longer susceptible to the antibacterial action of streptomycin further administration of the drug is unwarranted and may even be deleterious. If at a later time streptomycin-sensitive tubercle bacilli again predominate, and other indications are favourable, treatment with streptomycin may be resumed.

How best to meet the problem of streptomycin-resistant tubercle bacilli is at present one of the most important of

*A method for the determination of sensitivity of tubercle bacilli to streptomycin *in vitro* has been described by Karlson and his associates (1947)

the many unsolved problems that confront the experimentalist and the clinician. A logical approach would seem to be to use as the therapeutic regimen a combination of two or more drugs each having a high antagonistic efficacy for tubercle bacilli. Streptomycin utilized simultaneously with some other (as yet unknown) antibiotic might prove effective. Streptomycin combined with sulphone compounds or with other synthetic anti-tuberculosis drugs offers possibilities that are now being explored.

Final Comment

During recent years studies in the antibacterial attack on tuberculosis have yielded results sufficient to change to a considerable degree many of the previously held therapeutic concepts of tuberculosis. Most important, it has been adequately demonstrated that this disease is no longer beyond the range of specific drug therapy. Instead, the vulnerability of tuberculous infections to a chemotherapeutic attack has been established experimentally and clinically. While to date the completely ideal anti-tuberculosis drug has not been reported it seems probable that substances equal or superior in effectiveness to known agents may be found. These possibilities warrant expenditure of great effort, and this search may become one of the most important and exciting adventures in medical research.

In the meantime streptomycin seems likely to become generally accepted as a useful drug in certain types of clinical tuberculosis. It must, however, be used intelligently, with full recognition of its shortcomings and limitations. It should frequently be used in combination with other effective methods of treatment, rather than as a substitute for such proved therapeutic procedures as care in a sanatorium, collapse therapy, and surgery.

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CANCER OF THE STOMACH IN ADDISON'S ANAEMIA

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Among some clinicians there is a feeling that patients suffering from pernicious anaemia are more liable to gastric carcinoma than normal individuals of the same age groups. Kaplan and Rigler (1945) suggested that this feeling had statistical backing, and reported (Kaplan and Rigler, 1947) 18 cases of cancer and 17 simple tumours in 259 cases of pernicious anaemia. During the past two years 15 of my own cases have been observed by radiograph and gastroscopy in the hope of detecting carcinoma of the stomach at an early stage. Occasional estimations of the blood sedimentation rate have also been made, since Whitby and Britton (1946) state that the test is of great value in suggesting the onset of carcinoma. Cases were not selected, and there can be no pretence that they form a series. These observations have resulted in the discovery of three cases of carcinoma in patients free from symptoms and clinical signs: one was certainly operable and one probably operable when first detected. One further case has been found to have a leiomyoma. Two others are under particular observation because of a persistently high blood sedimentation rate; one of these has a nodule of uncertain nature in the pyloric antrum.

The cases observed are here tabulated. The total is made up of 11 females and 4 males. Radiological examination consisted of a barium swallow, fluoroscopy, and, usually, a film. Gastroscopy was performed with the Hermon Taylor

Case No.	Sex	Age	Duration of Anaemia	X-ray Film	Gastroscopy	E.S.R.	Conclusion
1	F	41	3	Normal	—	—	—
2	F	41	7	"	—	20	—
3	F	47	2	"	—	1	—
4	F	49	4	"	Normal	40	—
5	F	50	11	"	—	—	—
6	M	52	1	"	—	—	—
7	F	55	11	"	—	26	—
8	F	60	4	"	Polyp	—	Leiomyoma
9	M	65	10	Abnormal antrum	Abnormal antrum	—	Carcinoma
10	F	70	13	Normal	—	—	—
11	M	70	13	Abnormal antrum	Carcinoma	—	Carcinoma
12	F	73	6	Normal	—	—	—
13	F	75	2	"	—	—	—
14	F	75	12	Abnormal antrum	Abnormal angulus	—	Carcinoma
15	M	77	1	Normal	Nodule in antrum	30	Solitary polyp

or Schindler instrument if the radiological report was doubtful, if there was failure to improve clinically, and once when there was a persistently high sedimentation rate in the absence of abnormal radiological findings. The sedimentation rate was determined by Wintrobe's method corrected for anaemia, and was asked for quite at random. It must be emphasized that no patient had dyspepsia when examined.

Case 9

A retired jockey aged 65 was diagnosed as suffering from pernicious anaemia in Berlin in 1937, and had been on liver treatment with satisfactory results thereafter. Though asymptomatic he was *x*-rayed on Sept. 18, 1945, and the report stated: "There is some rigidity in the prepyloric region which is somewhat suggestive of early scirrhous carcinoma, but it may be due only to fibrosis. If other signs are equivocal, a repeat examination in a few weeks' time would be advisable for comparison." Gastroscopy on Oct. 31 showed that the lower third of the stomach was fixed and pale, with no peristalsis. Laparotomy was performed on Feb. 27, 1946. At this time he

was feeling fit, was putting on weight, had a good appetite with no abnormal symptoms, and nothing abnormal was found on clinical examination. A blood count showed : Hb, 98% ; red cells, 5,050,000 ; colour index, 0.97 ; white cells, 6,500 (polymorphs 84%, lymphocytes 14%, monocytes 1%, eosinophils 1%) ; red cells normal.

At operation there was no evidence of neoplasm, though the stomach was not opened. He continued on liver therapy as before until, in March, 1947, he gave a four-weeks history of constant abdominal pain, worse after meals, and relieved by immediate vomiting of undigested food. During this four weeks his appetite had failed, he had lost 10 lb. (4.5 kg.) in weight, and the bowels were opened regularly. There was no paraesthesia. Clinically he was wasted, with a smooth tongue and flat nails. There was no abdominal tumour or lymph-node enlargement. The blood count showed : Hb, 64% ; red cells, 3,400,000 ; white cells, 9,700 ; colour index, 0.94 ; the red cells showed a little anisocytosis and no evident macrocytosis. A test of occult blood in stools was positive. An alcohol test meal showed no free HCl, no blood or bile, and no lactic acid. *X*-ray report stated : "There are huge irregular filling defects in the pyloric portion of the stomach, indicating the presence of a large tumour mass encroaching on the lumen of the stomach." Laparotomy on April 9 revealed a large carcinoma of the pyloric end of the stomach ; glands in pyloric region, portal region, and fissure much enlarged. Post-colic jejunostomy was performed. The patient died on April 22.

Comment.—It seems very probable that when first operated on this patient, with radiological and gastroscopic abnormality in the lower third of the stomach, had early carcinomatous change, not detectable surgically. This did not show itself clinically for eighteen months, when, after only a month's symptoms, the diagnosis was certain. Achlorhydria and length of history render the diagnosis of pernicious anaemia probable. Surgical evidence confirms the radiological and gastroscopic impression that the original lesion was in the pyloric region.

Case 14

A housewife aged 75 had been treated for pernicious anaemia for twelve years with monthly liver injections. In May, 1947, she was admitted to hospital with a three-months history of vomiting three or four times daily at no special time, but occasionally after meals. Nausea and retching were frequent, with production of green bile. There was a non-localized gnawing feeling in the abdomen, but no true abdominal pain. One recent diarrhoeic attack occurred lasting 24 hours. She gave a long-standing history of piles with occasional bleeding, and of a productive cough with dyspnoea. She had recently lost some weight and had tended to constipation. There was no family history of anaemia. Clinically, the tongue was smooth, cracked, and shiny, the conjunctivae pale. Nothing significant was found except transient hypertension and crepitations at both lung bases. The abdomen appeared normal and there were no enlarged lymph nodes. Urinary culture was sterile, and the stools were negative for occult blood. A blood count on May 3 showed : red cells, 2,710,000 ; Hb, 60% ; colour index, 1.1 ; red cells showed marked anisocytosis with macrocytes, microcytes, poikilocytes, an occasional diffuse polychromasic cell, and an occasional cell showing punctate basophilia ; white cells, 3,400 (polymorphs 60%, lymphocytes 38%, monocytes 2%).

Intensive liver therapy was started on May 9, when the blood count showed : red cells, 2,550,000 ; Hb, 60% ; colour index, 1.2 ; white cells, 5,400 ; reticulocytes, 1.5%. On May 15 the blood count was : red cells, 3,670,000 ; Hb, 70% ; colour index, 0.97 ; white cells, 9,800 ; reticulocytes, 9.5%. On May 22 it was : red cells, 4,600,000 ; Hb, 90% ; colour index, 0.98 ; white cells, 7,700 ; reticulocytes, 2.5%. A histamine test meal revealed complete achlorhydria ; the blood Wassermann reaction was negative.

X-ray reports were as follows:—May 9 : "There is some increased opacity at the right lung base"; May 15 (opaque meal) ; "Stomach is rather small, shows normal tone ; peristalsis somewhat diminished ; mucosal pattern normal. Pyloric antrum appears to be narrowed, but peristaltic waves pass through this portion and it is distensible. No evidence of gastric ulcer. Duodenal cap is large, fills out readily, has a normal contour, and is neither tender nor spastic. No evidence of duodenal ulcer."

Gastroscopy revealed small reddish nodular protuberances at the angulus ; antral peristalsis and pyloric closure active. Impression, neoplasm.

At laparotomy on May 27 the surgeon was induced to perform a not very extensive resection of the lower third of the stomach. On opening this a nodular area was seen on the mucosa of the stomach on the lesser curve near to the pylorus, not adherent to the outer coats.

Pathological report by Dr. L. R. Janes.—"The suspicious plaque in the stomach wall shows an adenomatoid appearance of the mucosa with increase in the number of the glands and hyperchromatism of the cells. The cellular arrangement in the gland acini is everywhere regular save at one point where, in a single acinus, there is a de-differentiation of epithelium, the cells of which cannot be identified as gastric epithelium. ? Earliest possible malignant change. The muscularis mucosae is prominent and intact."

The patient was discharged on June 27, and is progressing well.

Comment.—The radiological appearances resembled those in Case 9. Gastroscopically, the angulus was clearly abnormal. Histologically, the thin mucosa, with definite superficial intestinal heterotopia, thickens, Prof. Stewart comments, to about five times its depth, with hyperchromatic vegetative epithelium, no doubt proliferating actively. This appearance is probably precancerous, and in a single acinus Dr. Janes now recognizes genuine early carcinomatous de-differentiation. The general picture much resembles appearances described by Waldeyer (1867) at the site of origin of gastric cancers, when, by serial sections, he first clearly showed their origin in the mucosa and not in connective tissues ; and is similar to the areas of malignant degeneration in intestinal polyps (Saint, 1927) and to the non-invasive *carcinoma in situ* of the pars pylorica described by Mallory (1940). I feel strongly that it would have been most dangerous to leave the stomach unoperated and that the history of Case 9 would have been repeated. The case must be regarded as one of cancer, and if there is retrospective criticism it is, as Prof. Hardy has said, that the excision was not wide enough.

Case 11

A violinist and violin maker aged 70 was diagnosed as suffering from pernicious anaemia at Middlesex Hospital in 1934 and has been treated continuously since. On May 30, 1947, he was in good health. An opaque meal showed a pyloric antrum somewhat narrowed, but peristaltic waves passed through this region, which is against the presence of malignant neoplasm. Otherwise, nothing abnormal was discovered in stomach or duodenum, though the stomach is small and empties rapidly.

Gastroscopy on June 25 revealed some difficulty in passing the cardia, but nothing abnormal seen in this area. The angulus appeared irregularly nodular and the pylorus indurated and closing irregularly. On Aug. 24 he was admitted for laparotomy, symptom-free. A blood count showed : red cells, 4,970,000 ; Hb, 94% ; colour index, 0.95 ; Wassermann reaction negative. On the night before operation he developed right-sided pneumonia. A radiograph on Oct. 7 showed lung fields clear except for thickened interlobar septum. Laparotomy on Oct. 8 revealed a large hard malignant ulcer of the antrum invading the peritoneum, with secondary growths in liver, glands of portal fissure, and pelvic peritoneum.

Comment.—This case was an advanced but asymptomatic carcinoma, which might have been detected if *x*-ray examination had been carried out earlier. The diagnosis of pernicious anaemia made at the Middlesex Hospital is accepted, and appears to be confirmed by the length of history. Radiologically, antral change was more advanced

than in the two earlier cases, but of the same type; and surgically only the lower third of the stomach was involved. Gastroscopy left little doubt of the diagnosis, but, as in some of these cases, infiltration at the angulus probably imitated the pylorus closely.

Other Cases

Case 8 was that of a woman of 60 with a four-year history of anaemia needing continued intensive liver therapy. She was found at operation to have a small stomach, only 2 to 3 in. (5 to 7.5 cm.) in diameter, with a dumbbell-shaped tumour in the fundus; this was removed with difficulty, and consisted of a benign leiomyoma. *Case 15* is that of a man of 77 with a one-year history who has a sedimentation rate, repeated at several months' interval, of 30 mm.: normal for the method, 0–10 mm. only. *X*-ray examination showed a normal stomach, but gastroscopy revealed a reddish nodule on the greater curve of an otherwise (gastroscopically) normal pyloric antrum. This patient is still under observation, though unsuitable for operation without stronger reason.

These cases illustrate the recognized liability of patients with pernicious anaemia to gastric abnormality, and the desirability of watching them from this point of view.

Discussion

The limitations of this investigation are recognized. Swayed by the weight of others' experience (Wilkinson, 1945) and by the apparently negative result of the first case, observations have been more casual than now seems desirable. The results justify further observation. Investigation in these cases is not difficult: the patients are generally placid and co-operative, their stomachs are easy to examine radiologically (Rigler, Kaplan, and Fink, 1945) and gastroscopically, and they tolerate operation well even in the eighth decade.

Of 15 patients examined for gastric lesions while free from dyspepsia, carcinoma has been found in three. In these cases the carcinomatous area was in the lower third, where radiology demonstrated narrowing even in the two cases which were at a very early stage. There seems to be no pathological reason for this general contraction of the pyloric area, though it may be the first indication of carcinomatous change. On the other hand, it may be a permanent characteristic of these stomachs. It was not productive of delay, and is not mentioned by Jacobson and Palmer (1943) in a radiological study of gastric emptying in pernicious anaemia. The lower stomach is not usually abnormal in pernicious anaemia (Magnus and Ungley, 1938), and gastroscopy confirms this. An abnormal antral mucosa, especially when associated with a narrow antral canal, may predispose to malignancy. It is well recognized that the prepyloric area is particularly liable to develop cancer. Cases of pernicious anaemia showing an abnormal mucosa there should be viewed with as much suspicion as hyperchlorhydric cases with prepyloric ulcers. There is reason to believe, also, that simple neoplasms of the stomach are unduly frequent in pernicious anaemia. Carcinoma originating in these may appear in any gastric area, and is characteristically a bulky polypoid tumour. No such case has been found in the small number now reported, though I have records of other casual ones.

Conceivably, therefore, in pernicious anaemia carcinoma may arise in two ways. It is suggested as a basis for further full observation that the commoner prepyloric carcinoma does not arise in localized polyposis but is associated with rather diffuse mucosal changes detectable by gastroscopy at an early stage, and with narrowing of the prepyloric area demonstrable radiologically.

The patients developing carcinoma were all over the age of 65, and had been treated for ten years or more. With increasing age abnormal stomachs would be expected to become more liable to malignant change; and liver treatment, by keeping patients alive, may predispose to this form of cancer—if liver extract is not a carcinogen (Kaplan and Rigler, 1947).

The cases observed indicate once again how late in the course of gastric cancer symptoms appear. If, however, these cases are operated on early, then, as Mallory (1940) remarks of early gastrectomy for other prepyloric lesions, histological appearances are not infrequently doubtful. To cure more cancers we must alter our pathological, radiological, and gastroscopic criteria so as to present our histologists with precisely this problem. Kaplan and Rigler (1947) urge that watching cases of pernicious anaemia is the main method of achieving this object obvious at the moment, few as such cases are.

Summary

Examination of 15 symptom-free pernicious-anaemia patients revealed cancer in three. Periodical *x*-ray and gastroscopic studies are strongly indicated in all cases of Addison's anaemia in remission or relapse.

I am grateful to my hospital colleagues, especially to Dr. L. R. Janes, for much help and restraining criticism. I am indebted to Prof. T. L. Hardy for encouragement and advice, and to Prof. M. J Stewart for comments on the histology of Case 2.

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THE COMPLICATIONS OF MUMPS

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In 1946 a few cases of mumps occurred in a military camp in New Zealand just before the departure of a contingent of about 2,000 soldiers for Japan. A number of cases occurred on the ship during the journey, and after the arrival of the force in Japan the disease spread rapidly, giving rise to a sharp epidemic of 235 cases in seven months. It has since been possible to follow up 208 of these cases and to examine and to interrogate them. This paper embodies the result of the investigation, which was of particular interest so far as the complications of the disease and their permanent after-effects are concerned. Of the 208 patients 189 were white men, 14 were Maoris, and 5 were white women. There was no difference in the course of the disease in the Maoris except that they did not report sick until much later in the illness. Except where specially mentioned the figures refer to the 203 men, whose average age was 22 years, the women being considered separately.

We believe the value of this investigation lies largely in the fact that such a complete follow-up was possible so long

after the illness, and that any residual disabilities may be considered unlikely to improve further. The average time of follow-up was seven months after the onset, but in individual cases it varied from four to eleven months. Each patient was interviewed, and so far as possible his notes were studied simultaneously.

The commonest mode of onset of the illness was the appearance of parotid enlargement. However, in 54 cases the onset was with general symptoms (tiredness, malaise, headache, etc.), which were present for up to two days before any glandular enlargement. Enlargement of the submandibular glands alone occurred in 13 cases. Orchitis was the only manifestation of mumps in five cases.

Nervous Complications

At the follow-up each patient in the series was directly interrogated for these symptoms: headache, neck stiffness, drowsiness, facial weakness, disturbances of hearing, and acroparaesthesiae. The statements were noted and compared with the case records written at the time of illness.

There had been symptoms or signs of meningeal involvement in 60 cases: 18 patients complained of moderate headache only, and this single symptom is of rather doubtful significance as no lumbar punctures were performed; 36 complained of severe headache and, in addition to marked pain, were drowsy and had a positive Kernig sign or neck rigidity; and six showed a definite meningo-encephalitis, these being recorded below. One man complained of deafness and vertigo, and two men had vague aural symptoms on one side during the early stages of the illness.

Unfortunately, owing to the size of the epidemic and the limited facilities available at the time, lumbar puncture was not performed in some cases in which the results would have been interesting and probably abnormal. Where performed the findings are recorded with the individual cases.

Case Histories

Case 1.—A. J. S., aged 21, noticed the onset of throbbing retro-orbital headache with slight sore throat and swelling below the right ear on Aug. 19, 1946. The swelling increased until the 21st, when he was admitted to 6 N.Z.G.H. He was found to have tender swelling of both parotid glands, more marked on the right, and a small non-tender swelling of the left submandibular gland. By Aug. 25 both submandibular glands had become grossly swollen and tender. Next morning he complained of swelling and pain in the left testicle, and was found to have a well-developed epididymo-orchitis. At 7 p.m. on the same day he complained of frontal headache, drowsiness, nausea, and photophobia. His temperature, which had varied between 98.4 and 100° F. (36.9 and 37.8° C.) rose to 105° F. (40.6° C.) at 10 p.m. Flexion of the neck caused pain in the lumbar region, but no other abnormality was found. On Aug. 27 he felt better but was still drowsy, and he vomited all food and drink. Neck rigidity was still present and Kernig's sign was positive. The enlarged salivary glands were subsiding. The same evening he became more drowsy and disorientated. On examination marked weakness was found in both legs, right more than left, absent knee- and ankle-jerks, and extensor plantar responses. Cerebrospinal fluid examined on the 28th contained 30 mg. of protein per 100 ml. and 4 lymphocytes per c.mm. By Sept. 3 he felt quite well and was symptom-free, although examination of his nervous system revealed a marked right-upper-motor-neurone facial weakness, weakness and incoordination of right arm and leg, with normal tendon reflexes and an extensor plantar response on the right. Appreciation of light touch, pain, and temperature was impaired on the right side of the face and body. Position sense was impaired in the right hand. After convalescing for a further two weeks he returned to his unit, where he began to suffer from "dizzy attacks and blackouts." These at first occurred at any time of day when up and about, but by the end of the year they occurred only if he stood at attention for any length of time. His symptoms were immediately relieved by sitting or by lying down. When examined at this time he still had obvious facial weakness, with slight weakness of grip in the right hand and of dorsiflexion of the right wrist. There was slight sensory impairment to light touch, pain, and temperature over the right face, chest, and arm. The right leg was normal, with a flexor plantar response. The left testicle was slightly smaller than the right. After a month's physical training at a convalescent camp his fainting attacks ceased. Eight months later the patient was completely normal apart from a still apparent facial weakness.

Case 2.—G. H. M., aged 22, was admitted to 6 N.Z.G.H. on July 5, 1946, complaining of a sore throat and swelling under the right jaw for 18 hours. Frontal headache and flitting limb pains had been present for eight hours. Examination revealed a swollen right submandibular gland, marked neck rigidity, and a positive Kernig sign. There was slight weakness of the right arm and leg, with normal tendon reflexes and an extensor plantar response on the right. Temperature was 103° F. (39.4° C.). That evening he became very restless and complained of aching pains all over his body; his headache was worse. The weakness of his right arm and leg became more marked and a left facial paresis developed. Lumbar puncture gave a slightly turbid fluid containing 680 cells per c.mm. (97% lymphocytes, 3% polymorphs); total protein, 100 mg. per 100 ml.; Pandy's reaction positive; chlorides, 659 mg. per 100 ml.; 13,700 white cells per c.mm. (79% polymorphs, 9% lymphocytes, 12% monocytes). On July 8 the patient felt much better, but still had slight neck rigidity. The right hemiparesis and left facial weakness had not improved. On the 10th the left parotid gland became swollen, but his general and neurological condition had improved. He made a rapid recovery and was discharged to his unit, with no abnormal physical signs after four weeks in hospital. When seen 11 months later he had no complaints, and his nervous system was normal except for a mild left facial weakness.

Case 3.—F. B. C., aged 20, developed a frontal headache and bilateral parotid and submandibular enlargement on Aug. 22, 1946. On Sept. 3 he developed bilateral orchitis. Two days later he complained of frontal and occipital headache and his temperature rose to 103° F. (39.4° C.). Kernig's sign was positive. Next day the headache was more severe, with photophobia and neck rigidity, and he had diplopia on looking upwards. No definite ocular muscle paresis could be detected clinically. White blood cells numbered 6,600 cells per c.mm. (60% polymorphs, 36% lymphocytes, 4% monocytes). The diplopia lasted seven days. On Sept. 17 he went to a convalescent camp, where he continued to complain of dull frontal headaches. These continued intermittently for five months, although they may have been partly due to an infected maxillary sinus for which he was being treated.

Case 4.—R. H., aged 22, was admitted to 6 N.Z.G.H. on Aug. 29, 1946, with an enlarged right parotid gland. Next day he complained of malaise, severe frontal headache, and nausea, and he vomited several times. The temperature was 102° F. (38.9° C.). On Sept. 3 he was still vomiting; the temperature was 103° F., Kernig's sign was positive, and the knee-jerks were absent. Marked neck stiffness developed during the course of the day. Lumbar puncture gave a slightly turbid fluid containing 700 cells per c.mm. (95% polymorphs, 5% lymphocytes); total protein, 60 mg. per 100 ml. On the 5th he felt better (temperature 102° F.), and there was slight weakness of flexion of the right hip, knee, and ankle. Knee-jerks were still absent. White blood cells numbered 5,200 per c.mm. (42% polymorphs, 52% lymphocytes, 4% monocytes, 2% eosinophils). His pulse rate fell below 50 on the 14th and 18th days of illness. By Sept. 24 he was quite well and there were no abnormal signs in his nervous system.

Case 5.—A. J. M., age 22, was admitted to 6 N.Z.G.H. on Feb. 18, 1947, complaining of headache and shivering, with pain in the right hypochondrium and nausea for eight hours. Examination revealed tenderness and rigidity in the right hypochondrium and tenderness in the right loin. The psoas sign was positive on the right. Next day he was drowsy

and developed photophobia, slight neck rigidity, and tenderness in the right iliac fossa. On Feb. 20 the left parotid gland became swollen. Lumbar puncture showed: C.S.F. pressure of 160 mm.; 545 cells per c.mm. (99% lymphocytes, 1% polymorphs); total protein, 70 mg. per 100 ml. Pandy's test was positive and urinary diastase normal. There were no abnormal physical signs in the nervous system except a positive Kernig sign and neck rigidity. His headaches ceased gradually over a period of about a month. On Feb. 27 the C.S.F. contained 220 cells per c.mm. (99% lymphocytes, 1% polymorphs); total protein, 50 mg. per 100 ml. Pandy's test was negative. On March 7 he complained of epigastric discomfort after food, and on the 10th the C.S.F. contained 62 cells per c.mm. (all lymphocytes); total protein, 40 mg. per 100 ml. On March 25 a small area of pulmonary collapse developed at the left base, with hilar gland enlargement. This cleared up completely after two weeks, and he was symptomless throughout. The indigestion persisted for several weeks in spite of treatment; it was considered to be largely psychological in origin. Several examinations for urinary diastase gave normal figures. When last seen ten weeks after leaving hospital the patient was quite fit.

Case 6.—J. A. G., aged 21, was admitted to 6 N.Z.G.H. on Sept. 9, 1946, complaining of malaise. The following day both parotid glands became slightly enlarged. On Sept. 12 he developed a right-sided orchitis and next day he complained of severe headache and vomited. On Sept. 15 his speech was slurred and there was marked neck rigidity. Kernig's sign was positive. On the 17th he developed a left facial paresis; there was weakness of his right leg, with normal tendon reflexes and bilateral extensor plantar responses. On the following day the plantar responses became flexor, but his condition was otherwise stationary. The cerebrospinal fluid was slightly turbid and contained 420 cells per c.mm. (98% lymphocytes, 2% polymorphs); total protein, 90 mg. per 100 ml.; Pandy's test positive. By Sept. 30 he had completely recovered except for a slight left-upper-motor-neurone facial paresis. In February, 1947, he had an attack of measles with severe headache. Lumbar puncture performed when the rash was fading (sixth day) showed that the C.S.F. contained 33 cells per c.mm. (32 lymphocytes, 1 polymorph); total protein, 40 mg. per 100 ml. Pandy's test was negative. White blood cells numbered 9,150 (64% polymorphs, 32% lymphocytes, 4% monocytes). There were no physical signs in the nervous system except for the slight left facial paresis, a relic of his previous illness.

Case 7.—F. H. G., a woman aged 27, was admitted to 6 N.Z.G.H. on Sept. 7, 1946, complaining of headache and malaise; there was bilateral parotid swelling, more marked on the left. On the second day she developed a dull peri-umbilical pain with tenderness. Next day the headache became worse and she became drowsy; slight neck rigidity was present. On the ninth day a right facial paresis developed. There was mild bilateral mastitis during the illness. She was discharged fit after three weeks, although the facial weakness was still obvious. At the follow-up seven months later there was still a trace of facial weakness, and the patient complained that she had had amenorrhoea since the illness.

Case 8.—C. O. N., aged 26, developed bilateral parotitis on June 6, 1946. Next day he noticed a slight degree of deafness in the left ear, which became severe during the next 24 hours. There was also vertigo. At the follow-up nine months later he was found to have a pronounced degree of nerve deafness in the left ear.

Discussion

The literature on the nervous complications of mumps is adequately reviewed by Lightwood (1946), Church (1946), and Holden *et al.* (1946). The incidence is reported in various studies as varying from *nil* to 40%. Meningitis is undoubtedly the most frequent manifestation of nervous involvement in mumps, in addition to which numerous neurological syndromes have been recorded less commonly —generalized meningo-encephalitis with or without fits, dysphasia, monoplegia, hemiplegia, tetraplegia, cranial-nerve palsies (particularly 3, 7, and 8, acoustic and vestibular divisions), optic neuritis, bulbar palsy, involuntary movements, and myelitis. From all of these complete recovery is usual, and consequently pathological studies are few. Demyelination of the corona radiata and encephalitic patches in the cerebral cortex and brain stem have been observed. The changes in the C.S.F. have been recorded often and at length, and are well known.

The nervous symptoms and signs are generally said to have their onset at the height of the illness, usually before the development of orchitis. In the eight cases recorded above the onset ranged from one in which the patient reported sick with nervous involvement and possible pancreatitis (Case 5) to one in which there was no nervous involvement (unless the early headache is regarded as such) until the 14th day (Case 3). The average day of onset was the fifth. In most of the cases recorded above it was not possible to localize the encephalitis to a single site, which is what would be expected in this type of disease. Case 1 presented a rather mixed picture, which could be accounted for by bilateral involvement of the corona radiata, more marked on the left. During convalescence the picture of an uncrossed hemiparesis, most pronounced in the face and arms and less severe in the leg, with sensory change over the upper part of the body, supports a subcortical localization, although affection of the brain stem could also account for it.

Case 2 showed a crossed hemiparesis (left face and right limbs), which is most likely to be due to a brain-stem lesion. Case 6 was of considerable interest in that the patient had an abnormal C.S.F. during an attack of measles five months later. It is not known whether the fluid was normal in the interval, but usually it fairly rapidly becomes so after mumps encephalitis, and it would therefore seem that this man is constitutionally susceptible to potentially neurotropic viruses or that this susceptibility dates from and is due to the mumps encephalitis. Case 8 showed involvement of both the acoustic and the vestibular portions of the eighth nerve. Recovery from the facial weakness in Cases 1, 2, 6, and 7 was still incomplete at the follow-up, and it seems more likely that some permanent damage has been done. Apart from this and the vasomotor instability of Case 1 and the deafness of Case 8, all recoveries from nervous involvement were fairly rapid and complete.

Orchitis

Orchitis occurred in 53 (26%) men—in 17 cases while still confined to bed, in 5 at onset, in 6 before reporting sick, and in 21 after starting to get up. For the remaining 4 no information was available. The follow-up period was four months in two cases, five months in one case, and between six and ten months for the remainder. The onset occurred during the first week in 34 cases and during the second week in 16. One case developed on the 15th day and two cases on the 22nd day. The disease was bilateral in five patients. Orchitis was the first definite sign in five cases, appearing on the second or third day after a prodromal stage of lassitude and anorexia. In four of these the orchitis was the only clear manifestation of the disease, there being no subsequent parotitis.

In the follow-up 31 cases (57%) were perfectly normal. There was no testicular atrophy, the consistency and the sensation of the testes were unaltered, and sexual activity was unimpaired. In four cases there was or had been some residual pain after exercise, mild in all cases and usually transitory. In two the aching still occurred seven months after onset, and was associated with some degree of atrophy. In the other two there was no atrophy; one man's discomfort had ceased three to four months after onset, while the other's was improving at ten months.

Assessment of atrophy was based mainly on a difference of more than 1/4 in. (0.6 cm.) between the length of the two testes. This criterion is open to certain objections, including some degree of difference between the two sides in healthy people. It was applied only when the unaffected side appeared to be well developed and healthy. In none of the bilateral cases was there any reason to suspect any degree of atrophy. The patients' observations were invited in each case as a rough check. There was no case of complete atrophy in the series. Some degree of difference between the healthy and the affected sides was noticed in 22 cases (42% of those with orchitis), amounting to 1/2 in. (1.25 cm.) in 3 men, 3/4 in. (1.9 cm.) in 10, 1 in. (2.5 cm.) in 7, and 1¼ in. (3.2 cm.) in 2. Of these 22 testes 4 were softer than on the healthy side. Testicular sensation was normal in all. A decrease in size after the orchitis had been noticed by 13 patients, no change had been observed by 2, while the remaining 7 had no observations.

Sexual activity, as judged by intercourse, masturbation, or nocturnal emission, was unimpaired throughout the whole orchitis series. It remained unaltered in one man whose other testicle was completely atrophied from a preceding and independent cause; no atrophy of the remaining testis followed the mumps orchitis.

One patient had had an attack of mumps two years earlier, with orchitis on the san side in each attack. By contrast, another man had had orchitis with mumps five years earlier without developing orchitis in his second attack.

Considering the absence of complete atrophy in the series, the fact that 1 in. or more of atrophy occurred in only nine cases and that there was a lack of any impairment of sexual activity, it is doubtful if we are justified in recommending a decompression operation in all cases of mumps orchitis. It might perhaps be advised for those with orchitis of a single functioning testicle or for those with severe bilateral orchitis, though the present small series would hardly justify the latter indication; but for the remainder it is not indicated in the present state of our knowledge.

Other Complications

Pancreatitis and Mastitis.—Some degree of pancreatitis was considered to be present in 16 (8%) of the complete series. Symptoms lasted from one to five days. No sugar was found in the urine of 11 cases tested at follow-up, nor were there any sequelae. One woman complained of tenderness of the breasts during the early part of the illness, and one man had vague fleeting pains round his nipples soon after the onset of mumps.

Cardiovascular System.—Myocarditis has been reported in mumps, and Rosenberg (1945) undertook a full electrocardiographic study, in which he obtained abnormal records in 15% of cases. Although no thorough investigation could be carried out in this epidemic it was thought that it might be of interest to note the number of patients in whom the pulse rate fell below 50. Only 131 pulse charts were available, and 52 showed readings of less than 50 for varying periods, chiefly in the second and third weeks. One of these cases also had an apical systolic murmur which was still present at the follow-up. There were five cases of apical systolic murmur without bradycardia: in only one of these had the murmur disappeared at the follow-up several months later. It is not proposed to attempt to draw any conclusions, as there are obviously insufficient data, but these results seem to confirm the opinion that the cardiovascular system deserves more attention in cases of mumps than it has hitherto received.

Relapse and Second Attack.—Two cases relapsed with recurrence of glandular enlargement after discharge from hospital. A third patient relapsed with submandibular sialo-adenitis after an initial orchitis. Eighteen men gave a definite history of a previous attack of mumps and six thought they had probably had mumps before but were not certain.

There were no cases of urethral discharge, pericarditis, arthritis, nephritis, or suppuration of glands, all of which have been recorded as complications of mumps.

Complications in Women.—In one case the disease started with diarrhoea and vomiting, and the patient had amenorrhoea for six months afterwards and felt generally run-down. A second case (No. 7) showed evidence of mild meningo-encephalitis and mastitis. The remaining three cases complained spontaneously of tiredness since the illness—a complaint which was not made by any of the men.

Summary

An epidemic of mumps was investigated with the view of determining the incidence of complications and any permanent after-effects resulting from them. Eight cases of meningo-encephalitis are described. It was found that recovery tended to be slow and that when facial palsy occurred recovery was incomplete.

The incidence of orchitis was 26%. There were no cases of complete testicular atrophy following this complication, but 42% showed minor degrees of atrophy. Sexual activity was unimpaired.

We thank Col. C. R. Burns, senior medical officer of 2 N.Z.E.F. (Japan), for encouragement and permission to carry out this study, and also the regimental medical officers of the units concerned for their help in collecting the men for the follow-up examinations.

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FATAL AIR EMBOLISM DURING MASTECTOMY

BY

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Air embolism may be associated with a large number of conditions. The circumstances in which it most frequently occurs are as follows: (1) Gynaecological and obstetrical (often criminal) procedures involving the manipulation of the pregnant or puerperal uterus. Many deaths have been recorded after insufflation of the vagina during pregnancy or the puerperium, and death has even occurred following insufflation of the Fallopian tubes. Placenta praevia is also an especially dangerous condition. (2) Intentional introduction of air or other gas into cavities or potential cavities such as the bladder, joint cavities, paranasal sinuses, and peritoneal and pleural cavities. Perirenal insufflation has given rise to air embolism. (3) Unintentional introduction of air into vessels during transfusions or infusions or into solid organs such as the liver. (4) Operative procedures to the breast, thyroid, lungs, etc. Air embolism may follow injury to vessels by stab wounds, bullet wounds, etc.

The effects of air embolism are very variable in severity, depending mainly on the condition of the patient, the

amount of air entering the circulation, and especially on the rate of access to the circulation. Symptoms may be absent or they may be slight and transitory. On the other hand, death may supervene, and this may be rapid or delayed. A rapidly fatal case which occurred during mastectomy is here described.

Case Report

The patient was a healthy-looking woman of 52 who had a fairly advanced carcinoma of the right breast. At the age of 37 her heart had been examined and it was suggested that she might have a lesion of the aortic valve, but she had remained in good health since that time. On examination the day before the operation no abnormal physical signs could be found in the heart.

A radical mastectomy was performed under general anaesthesia, induction being by intravenous thiopentone and maintenance by nitrous-oxide–oxygen in a closed circuit. A small amount of ether was added during the first ten minutes. The operation and anaesthesia proceeded without incident until the breast had been removed and glands were being dissected out from the axilla. Some haemorrhage took place from the axillary vein, and a few minutes elapsed before a ligature was passed round the vein and tied. At the moment of ligation the patient gave a sharp inspiration and stopped breathing. Simultaneously the colour became grey and the pulse imperceptible. The breathing circuit was at once emptied and refilled with oxygen, and after four or five compressions of the rebreathing bag spontaneous respiration started, the colour became pink, and the pulse returned, although it was poor in volume. The operation was finished with the patient breathing pure oxygen. An intravenous injection of 20 mg. of "methedrine" did not improve the pulse.

As dressings were being applied the colour again faded and the pulse and respiration ceased. Right auricular puncture at first showed a few twitches at the end of the needle, but these soon ceased. Cardiac massage also produced no response, and after about twenty minutes resuscitation was abandoned.

The cause of death was at first thought to be primary cardiac failure, but on further reflection this theory was found to be untenable. The conditions known to predispose to this event were not present. No drug or combination of drugs likely to produce cardiac failure had been given and no reflex stimulation had occurred. Furthermore, cardiac stimulation and massage, although carried out promptly, produced no response. Secondary cardiac failure from advanced operative shock was inadmissible, as the condition of the patient immediately preceding the first collapse was perfectly satisfactory. An acute circulatory crisis seemed to offer the most reasonable explanation of death. Coronary thrombosis appeared unlikely, and some form of gross embolism as the cause of death was arrived at by a process of exclusion. Air embolism seemed a distinct possibility, as venous bleeding had occurred immediately before the collapse, although it was not severe and no sucking had been heard. On the other hand, the right shoulder had been slightly raised on a sand-bag, and under these circumstances there is usually a negative pressure in the axillary vein during inspiration.

Post-Mortem Examination

Death occurred at 4.45 p.m., and a post-mortem examination was begun next day at 10 a.m. The essential findings were as follows.

No evidence of putrefactive change was found. As air embolism was considered as a possible cause of death the front of the thoracic cage was very carefully removed. The heart was seen to be distended on the right side, and on elevating the apex with the fingers the coronary sinus and its tributary vessels were seen to contain large numbers of air bubbles. The thorax was then filled with water and the heart showed a marked tendency to float. The heart was depressed with the fingers so that it was completely immersed below the surface of the water, and the lateral margin of the right ventricle was snipped with scissors. An impressively large volume of gas rose to the surface. This must have almost completely filled the right side of the heart, because very little blood escaped after opening the heart and only a small clot was present.

On further examination of the heart the foramen ovale was found to be patent but well guarded by valve action. The anterior cusp of the aortic valve was adherent to the right posterior cusp, and this may have slightly impaired the efficiency of the valve, but the defect was not a gross one. No marked pathological changes of the other valves were seen. The coronary arteries showed only minor atheromatous changes.

Discussion

Air embolism may involve the right side of the circulation, the left side, or both sides. In this case it seems that air entered the torn slightly elevated axillary vein and made its way to the right side of the heart, where it was found in large quantity. This was undoubtedly the cause of death. Post-mortem examination confirmed the presence of a minor lesion of the aortic valve which had been detected clinically fifteen years previously, and the condition of the heart may have been a contributory factor.

Opinions differ regarding the minimum volume of air that, by entering the circulation, may produce a fatal result. Richardson, Coles, and Hall (1937) examined the results of experiments carried out on dogs by Harkins and Harmon (1934) and, applying these results to man, came to the conclusion that the rather large amount of 480 c.cm. would be necessary to cause death. In the course of their own work on dogs, however, Richardson and his colleagues showed that several factors governed the amount of air necessary to kill their animals. Chief of these was the rate of entry of the air, but they also found that the general condition of the animal as evidenced by the systemic blood pressure played a great part in determining tolerance to intravenously injected air. Much less air was fatal to animals with low blood pressure than to those with a normal blood pressure. These investigators considered that such factors as trauma, pain, apprehension, loss of blood, etc., were also of paramount importance. Simpson (1942) claims that under certain circumstances even 10 to 15 c.cm. may cause a fatal outcome in human beings. Whitby and Britton (1946) accept his statement that while a surprisingly large volume of air can be tolerated by a healthy subject, no more than a few cubic centimetres may precipitate death in a patient gravely ill.

Although air embolism was suspected as the cause of death in our case, post-mortem examination was necessary to prove that this was correct. In some cases a hissing noise may be heard as air enters the vein, and in animals splashing and churning noises may be heard with the unaided ear. In human beings, however, such findings must be rare, and the cause of death may be unsuspected until revealed at necropsy. Evans and Murley (1945) report such a case, and state that necropsy prevented the death being written off as due to a complication of severe malaria. Auer and Krueger (1946) report a similar experience following operative procedures on the spinal cord and skull in a number of rabbits. These animals died more or less acutely, and death was at first attributed to "vascular shock." After careful necropsy death was ascribed to air embolism associated with fibrin formation in the right ventricle of the heart. There is no doubt that the diagnosis of air embolism must often be missed unless a post-mortem examination is carried out, and Simpson has suggested that the diagnosis of air embolism may be missed even at necropsy if not previously suspected.

Summary

A case of fatal air embolism during mastectomy is described. Diagnosis of air embolism may be missed unless a post-mortem

examination is made, and even then may, in view of the small volume of air sometimes involved, be overlooked unless previously suspected.

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HYPERTROPHIC PYLORIC STENOSIS IN THE ADULT

BY

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Hypertrophic pyloric stenosis in the adult is a somewhat unusual condition but is perhaps not quite as rare as it is held to be. In four years I had two cases that showed one or two unusual features, and therefore put them on record. A full bibliography and a discussion of the condition appear in an article by Howard Wakefield (1944).

The condition appears much more often in men (80%). Most patients have persistent stomach trouble, mild in character, from birth onwards. This characteristic suggests that, aetiologically, the stenosis is a persistence of a milder congenital stenosis. The usual complaint is of bouts of vomiting or of a feeling of nausea after meals. Pain is absent or slight. Few, if any, develop gastric or duodenal ulceration. The cases are nearly always diagnosed as carcinoma ventriculi and operated upon as such. In fact, the consensus of opinion is that diagnosis of the condition before operation, or even at operation, is difficult if not impossible with safety to the patient. In other words, the condition must be treated as a carcinoma even if a strong suspicion is felt as to the correct diagnosis. A mass is rarely palpable before operation.

Radiography reveals an elongated pyloric canal devoid of peristalsis (Berk and Dunlap, 1944). Macroscopically, the muscular coat of the pylorus is much hypertrophied and the circular coat on section tends to present the appearance of a palisade. The thickening ends abruptly on the duodenal side but shades off into normal thickness towards the stomach. To the naked eye the resemblance to "leather-bottle" stomach is close. The maximum thickness of the hypertrophied muscle yet reported appears to be about 1/3 in. (0.8 cm.). Microscopically, chronic gastritis is shown. About 100 cases are on record, including 81 out of 60,000 gastric patients treated at the Mayo Clinic from 1927 to 1931.

The two cases here reported were both in females, and were unusual in the complete absence of any history of gastric upset until very shortly before operation. The *x*-ray picture in both cases was typical, and, except for the extraordinary thickness of the pylorus in the second case, the appearances at operation and pathologically were again typical. One of these patients, who was somewhat peculiar mentally and who was in the habit of consuming large quantities of raw rice and lentils (whether the cause of the disease or a consequence cannot be said), had a hyperchlorhydria, the other an achlorhydria. It has been noted that the condition seems to occur in "aggressive and martial" types. Both these patients were quiet and somewhat subdued.

As I have had these two cases within such a comparatively short time, it is quite possible that milder degrees of hypertrophic pyloric stenosis are commoner in adults than is supposed and may be missed if not specially looked for. In cases of persistent gastric trouble, with some stenosis revealed on radiography and little or nothing found at operation, it would seem advisable to keep the condition in mind. Whether any less drastic treatment than partial gastrectomy would suffice to bring about a cure in the milder cases it is difficult to say, but it would seem well worth while to try the effect of simple gastrojejunostomy or a plastic operation on the pylorus, provided the diagnosis was clear enough at the time of operation.

Case 1

Mrs. B. E. V., aged 55, had had an epigastric pain radiating to the left side of the abdomen for two months; vomiting for three to four weeks, chiefly in bed at night; a feeling of fullness later and of a heavy weight across the upper part of the abdomen; and a loss of appetite for more than a year. There had been much loss of weight during the last few months (this is the patient who had a passion for raw rice). She had been in hospital two months previously with a mild chronic nephritis.

Examination showed the patient to be somewhat thin; there was a systolic murmur in all areas, and tenderness in the epigastric region. No mass was felt. Cystocele was present: she had to get up three times a night to pass water. Radiographs showed a persistent filling defect of the antrum, with an irregular outline typical of carcinoma ventriculi. There was a considerable gastric residue at six hours. A test meal revealed hyperacidity and no blood. A blood count showed: red cells, 4,000,000; Hb, 74; colour index, 0.9.

At operation the pyloric end of the stomach was found to be much thickened but soft. A partial gastrectomy was performed, with a posterior gastrojejunostomy after dividing the ligament of Treitz. On the day after operation there was a little basal collapse; this soon cleared up, and the patient progressed very well. When readmitted to hospital two months after her operation for a colporrhaphy she was in very good health and underwent the operation without untoward effects. One year later she was still in very good condition, with no gastric symptoms, good appetite, and a more normal weight.

On section of the pylorus the pathologist reported: "Chronic gastritis with oedema of slightly fibrotic hypertrophied muscle of pyloric part of stomach." Naked-eye inspection of the pyloric end of the stomach revealed a great thickening of the muscular coats, which measured quite 1/3 in. (0.8 cm.) across. The muscle showed a typical palisade appearance. The hypertrophy stopped short at the duodenum but gradually shaded off into normal stomach wall at about the middle of the lesser curvature.

In view of the connexion between pyloric stenosis and uraemia it is interesting to note that two months before gastrectomy her blood urea was 94.28 mg. per 100 ml.; at the time of operation it was 40.5 mg., and three months later it was only 17.15 mg.

Case 2

Mrs. F. A., aged 54, complained of pain in the lower chest for six weeks, with a loss of 12 lb. (5.4 kg.) in the last four months. She felt sick all the time, bringing up water, and occasionally food. Pain came on a quarter of an hour after food and lasted a few minutes. There was a tendency to feel faint. She started to get a little indigestion about 18 months before. Her appetite was poor.

On examination a definite mass could be felt at the pyloric end of the stomach.

Radiography (see illustration) showed a filling defect, giving a smooth and non-contractile outline to the pyloric end of the stomach extending from the pylorus to half-way along the lesser

curvature. The radiologist reported: "Findings consistent with an extensive pyloric carcinoma." A test meal showed complete achlorhydria with a low total acidity. Occult blood, negative; blood urea, 50 mg. per 100 ml.

Tracing of radiograph of Case 2. X=filling defect.

At operation the pyloric end of the stomach was found to be thickened and the transverse mesocolon was adherent to the stomach, the adhesions involving the middle colic artery. A partial gastrectomy with a posterior anastomosis was performed with some difficulty. The patient made an uninterrupted recovery.

The following is a report on the pathological findings, naked eye and microscopical, by Dr. Stanley F. Marshall: "There is marked hypertrophy of the outer muscular coat, which is visible macroscopically on the slide. Microscopically, large bundles of smooth muscle fibres are seen—presumably the longitudinal coat beneath the serous coat and occupying about two-thirds of the thickness of the wall, which is about 1/2 in. (1.25 cm.) thick at its widest. Lymphocytic aggregations are scattered among and superficial to these hypertrophied muscle fibres. Numerous granulation and inflammatory cells are seen in the submucous coat. Three lymph glands in the vicinity show moderate inflammatory reticulosis only. No evidence of malignancy was seen." Naked-eye examination showed typical palisading of the muscular coat, which when first removed from the patient was nearly 3/4 in. (1.9 cm.) thick.

Summary

Two cases of hypertrophic pyloric stenosis in the adult are reported. Both show an absence of the usual lifelong history of gastric discomfort. One had a remarkably thick muscular coat and presented a palpable mass before operation.

The view is expressed that mild degrees of the condition may be relatively common, and the suggestion made that if the difficulties of accurate diagnosis can be overcome some less drastic treatment than partial gastrectomy may be possible.

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Under the new national insurance scheme, which comes into full operation on July 5, 1948, a single contribution card will be issued for each insured person. The contribution will be paid by affixing a single stamp to this card. The standard card, which will be current for 52 weeks, will consist of two leaves, but some of the cards issued at the outset of the new scheme will cover a period of 74 weeks and will consist of three leaves.

CONGENITAL HYPERTROPHIC PYLORIC STENOSIS

REPORT OF FOUR CASES IN BROTHERS

BY

A. A. H. GAILEY, M.D., D.C.H.

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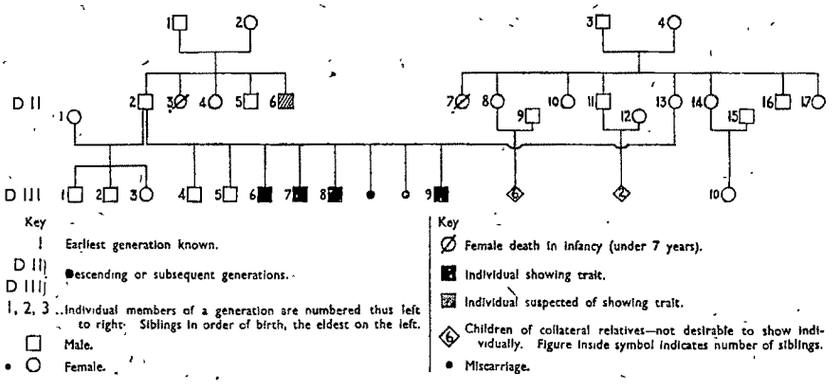
Several authors have reported two or three siblings with congenital hypertrophic pyloric stenosis, but in search of the literature I have been able to find only one instance of this condition being discovered in four members of the same family—a family reported by Finkelstein, quoted by Sauer (1924). Each of the four cases here reported shows the classical clinical picture. They were the children of the father's second marriage, and were preceded by two stepbrothers, one stepsister, and two brothers, all of whom were normal. The clinical features are outlined in the table.

Clinical Features of the Cases

Clinical Features	Peter D III/6	John D III/7	Brendon D III/8	Patrick D III/9
Date of birth	29/3/39	9/6/41	30/7/43	6/2/47
Gestation, labour, delivery	Normal	Normal	Normal	Normal
Sex	Male	Male	Male	Male
Position in family	3rd	4th	5th	6th
Birth weight	9 lb. 8 oz. (4·3 kg.)	6 lb. 10 oz. (3 kg.)	9 lb. (4·08 kg.)	10 lb. (4·53 kg.)
Foetal abnormalities	None	None	None	Hypospadias
Feeding prior to symptoms	Breast	Breast	Breast	Breast
Age at onset of symptoms	59 days	7 days	15 days	10 days
Projectile vomiting	Yes	Yes	Yes	Yes
Visible peristalsis	Yes	Yes	No note	Yes
Pyloric tumour palpable	Doubtful	Doubtful	No note	No
Bowel action	Constipated	Constipated	Normal	Constipated
Age on admission	78 days	18 days	27 days	37 days
Dehydration before operation	Yes	No	Yes	No
Age at operation	80 days	19 days	28 days	38 days
Age on discharge	85 days	21 days	31 days	42 days



In each of these cases Rammstedt's operation was successfully performed and convalescence was uneventful. The three older boys have "never looked behind them," and have developed into normal healthy boys. The baby (Patrick), more than two months after his operation, is thriving and putting on weight regularly.

An attempt was made to gain enough information to prepare a family tree, but the parents (Mr. and Mrs. C.) were unable to remember any details before their own generation, and as the grandparents are dead and the rest of the family scattered it was impossible to build up a complete picture of the family. However, the accompanying genealogical table shows the details that were obtained of the two generations. The symbols used are those recommended by the Eugenics Society.

In the generation D II there are three interesting members. D II/3 and D II/7 were sisters of Mr. C. and Mrs. C. respectively, and both died at the age of 2 years, the cause of death and the nature of the illness being unknown. D II/6, a brother of Mr. C., was reported to

have been ill from shortly after birth with severe "gushing" and persistent vomiting, so that both breast-feeding and bottle-feeding were impossible, and he was able to keep anything down only by receiving very small feeds from a spoon. After a very stormy illness, during which there were times when his life was despaired of, he started to make a recovery about the age of 1 year and is now reported to be a very healthy man in Canada. This boy's illness was considered by his mother, I/2, to have been exactly the same as that of her grandson, Peter D III/6, the first case of this report. In view of this story I have ventured to record him as a suspected case of congenital hypertrophic pyloric stenosis, and have represented him as a shaded square.

While there is still disagreement on the aetiology of congenital hypertrophic pyloric stenosis, most authorities seem to agree that the condition is congenital, that the hypertrophy is primary, and that the spasm, to which the clinical picture is probably due, is secondary to the hypertrophy. In this family the condition appears to have been transmitted as a Mendelian recessive character.

I am grateful to Dr. F. M. B. Allen, under whose care they were, and to Mr. H. P. Hall and Mr. J. S. Loughridge, who performed the operations, for permission to publish notes of these cases.

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Medical Memoranda

A Case of Epidermolysis Bullosa

The following case is considered to be an example of epidermolysis bullosa and to belong to a rare variety which develops in adult life. It is stated in the literature that some cases resolve spontaneously; it is therefore notable that in the present case relapse occurred two years after spontaneous recovery from the disease.

CASE HISTORY

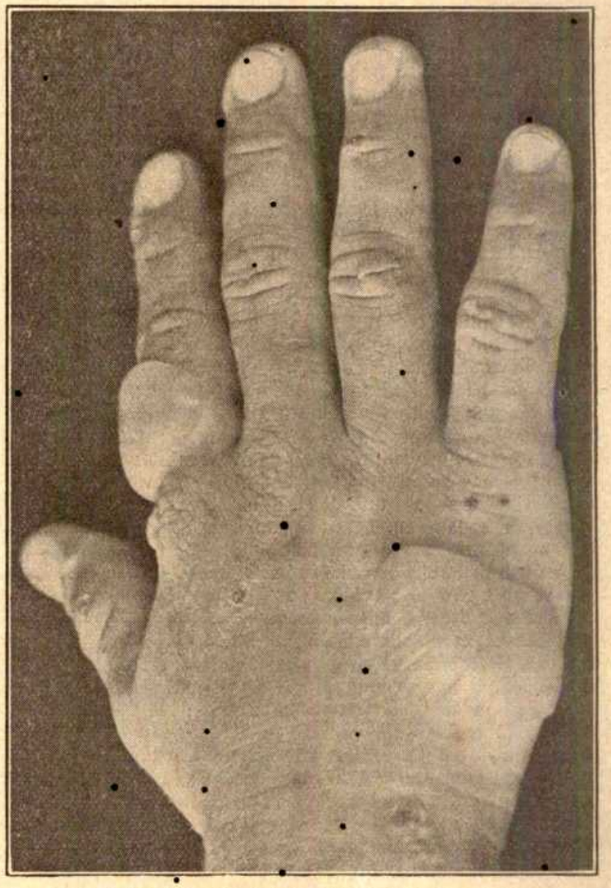
A naval telegraphist aged 19 was sent to hospital complaining of blisters forming on his hands. It appeared that for about two years he had been liable to lose large areas of skin if he slipped and bruised himself. The skin "slid off." Confirmation of this was supplied by the numerous discoloured areas in places where trauma was readily sustained, but there was no scarring anywhere. About eighteen months previously he had a similar attack involving the hands; this cleared up quite quickly, and recently he had been under treatment with impetigo of the face, which was also of a vesicular nature and which cleared with penicillin cream. There was no other relevant previous history or any relevant family history.

On examination many flaccid and unilocular blisters varying in size from 3 by 2 in. (7.5 by 5 cm.) to minute vesicles were seen arising off normal skin and unattended by itching, soreness, or malaise (see photograph). The skin enclosing the blisters was noticeably tough. Burst blisters dried up and did not form crusts, nor did the blister contents tend to become purulent. The bullae were at the time confined to the hands, but there were discoloured marks of old lesions on the elbows and a few on the shins and knees. His nails and teeth were normal. Examination of other systems revealed no abnormalities. The fundi were normal, and there was no hyperhidrosis. A blood count showed: R.B.C., 4,960,000 per c.mm.; haemoglobin, 96% (Sahli); colour index, 0.97; W.B.C. 9,600 per c.mm. (polymorphs, 37%; lymphocytes, 57%; monocytes, 3%; eosinophils, 3%). A further count seven days later gave a similar result. The Paul-Bunnell reaction was positive to 1 in 16 only. A radiograph of the chest revealed nothing abnormal. The urine was normal; there were no bromides or iodine, and no darkening on standing. The Kahn test was negative. The blister fluid was sterile on culture; cytology: 3% polymorphs, 96% lymphocytes, and 1% eosinophils.

A small area of skin on the back of the hand was rubbed firmly and a blister formed in 18 hours.

COMMENT

Differential Diagnosis.—Apart from many easily excluded bullous diseases, there are a few which can give trouble in differentiation. These, with the main points of difference, are: (1) *Pemphigus*:—The health deteriorates, and the patient with well-developed pemphigus is usually an ill person; widespread and not confined to traumatic areas. (2) *Impetigo bullosum*:—Typical lesions elsewhere and presence of infection. (3) *Iodism* and *bromism*:—Test urine. (4) *Syphilis*:—History and positive



The patient's hand on admission. (Photograph by courtesy of the Fleet Photographic Officer, Malta.)

Kahn reaction. (5) *Syringomyelia*:—No other confirmatory signs. (6) *Dermatitis herpetiformis*:—Polymorphism and itching.

Treatment.—Arsenic in various forms is recommended, but it has had no effect in this case. Ultra-violet light is also said to be of use, but, in the main, treatment must be symptomatic until the cause of this disorder is discovered. It is perhaps notable that the first attack in this case subsided after six weeks without any other than protective treatment.

I am indebted to Surgeon Rear-Admiral Brownfield for permission to publish this case.

B. S. LEWIS, D.S.C., M.R.C.S., L.R.C.P.,
Surgeon Commander, Royal Navy.

Speaking at the annual general meeting of the Industrial Welfare Society on Nov. 25, 1947, Lord Trent said that there had been a considerable increase in membership. Requests for information about personnel policy poured into headquarters all the year round, and more than 2,500 such inquiries had been dealt with. During the year some 715 firms had been visited. Specialist advice was given on such subjects as education and training schemes, canteen planning, joint consultative machinery, the organization of personnel departments, and many others.

Reviews

DERMATOLOGY

An Introduction to Dermatology. By G. H. Percival, M.D., Ph.D., F.R.C.P.Ed., D.P.H. (formerly by Norman Walker, M.D.). Eleventh edition. (Pp. 349; 233 illustrations, 146 in full colour. 35s.) Edinburgh: E. and E. Livingstone. 1947.

Précis de Dermatologie. By A. Civatte, M.D. (formerly by Prof. J. Darier). Fifth edition. Collection de Précis Medicaux. (Pp. 1152; 269 figures. 1,700 francs.) Paris: Masson et Cie. 1947.

These two books are among the classics of dermatology. Sir Norman Walker brought out his original edition in 1899, and Prof. Darier's *Précis* appeared in 1909. Both have therefore attained a respectable antiquity as textbooks in their specialty. Though we have to deplore the loss of their creators, they have been fortunate in finding the successors to carry on and re-invigorate their work. Dermatology has changed greatly during the last forty years and the art of treatment especially has developed. At the beginning of this century neither the powers nor the limitations of radiotherapy had become apparent, and chemotherapy had yet to be born. Though the out-patient clinics are still as crowded as ever they were, the type of case occurring most commonly has changed a good deal, partly owing to the hygienic education of the people by medical officers of health and their technical assistants, the sanitary inspectors and health visitors, and partly to improved methods of therapy. Except during wars and revolutions the more severe forms of pediculosis are seldom seen, and the incidence of scabies has greatly diminished; alopecia areata has superseded ringworm as the commonest affection of children's scalps. The late cutaneous manifestations of syphilis have become rarities in Western Europe and North America, and the growth of public conscience has caused industrial dermatitis to take on a new importance.

These and other changes, too numerous to detail here, have had their effect on the contents of these two excellent books, but they still preserve to a considerable extent their original characteristics and ground plan. Sir Norman Walker's book originated in the lectures which he used to deliver to his students at the Royal Infirmary, and in the eleventh edition Prof. Percival continues the tradition of teaching dermatology with special regard for the needs of students most of whom will become general practitioners. He therefore emphasizes the practical side of the subject. Prof. Darier's work, now edited by his friend and pupil Dr. A. Civatte, is more philosophical and detached in outlook and rather more comprehensive in scope. As the author points out in the introduction, it is primarily intended for those starting to specialize in dermatology and for other postgraduate students. It is still divided into two parts. The first is on the morphology of the pathological changes which may develop in the skin; in spite of their wonderful variety most of them can be regarded as derived from certain fundamental primary lesions. The second is on nosography—i.e., the aetiology and development of different skin diseases. Dividing the book into two such sections is bound to cause some repetition, but the author has reduced it to the minimum.

As is almost always the case, the book has increased in size with each edition, but Sir Norman Walker, and now Prof. Percival, have prevented excessive overgrowth by careful pruning. It is set in somewhat smaller type, and the paper is rather thinner, so that although there are twenty more pages than in the fourth edition the volume is rather slighter and easier to handle. Prof. Darier's *Précis*, on the other hand, has increased from 700 to 1,100 pages of rather larger size. Both books are copiously illustrated, and Prof. Percival has included no fewer than 146 coloured plates; the illustrations in Dr. Civatte's book are all in monochrome, though the photographs are beautifully reproduced. It is still doubtful whether coloured photographic reproductions are best for illustrating dermatological books; at any rate they must be of the highest technical excellence. Occasionally the colour values in Prof. Percival's book fall short of perfection. Nevertheless we have no hesitation in warmly recommending both these works to the medical public, especially to those particular sections for which they are primarily intended—Prof. Percival's *Introduction* to the undergraduate and general practitioner, Dr. Civatte's *Précis* to those who intend to make dermatology their chief study.

H. HALDIN-DAVIS.

SEROLOGY

Nozioni di Immunologia. Le Reazioni Antigene-Anticorpo Applicate alla Diagnostica, Terapia e Profilassi. By Prof. E. Carlinfanti. (Pp. 760; illustrated. No price given.) Milan: Istituto Sieroterapico Milanese Serafino Belfanti. 1946.

The field of serology is now so large that few workers can hope to cover it completely. An extensive practical experience of serological work does not necessarily connote an understanding of the fundamental principles of antigen-antibody reactions; nor do those who have devoted many years of their lives to the study, let us say, of antigenic structure necessarily have more than a circumscribed view of serological reactions as a whole. It is therefore all the more interesting and praiseworthy that a single worker should have attempted to present a conspectus of modern knowledge on the subject. Prof. Carlinfanti has set himself the difficult task of reviewing the theoretical, technical, and statistical aspects of serology. It is difficult to define exactly the scope of this work. The title suggests that he would discuss the cellular defence mechanism of the body and the multiple factors determining the reaction of the host, but he does not. It would, perhaps, be better to have omitted the main title, which is somewhat misleading, and to have adopted the subtitle of "Antigen-antibody reactions applied to diagnosis, treatment, and prophylaxis." Even this, however, is hardly suitable for a book that seems not to include any description of the tuberculin reaction and yet contains a long account of the preparation, testing, and practical use of bacterial vaccines.

The volume begins with chapters on the properties of antigens and antibodies, on the concept of specificity, and on the antigen-antibody reaction. Then follows a general section containing an account of the main serological reactions, with notes on technique, on the preparation of immune sera, and on the measurement of the antigenic potency of vaccines. In the main part of the book the author considers the various serological reactions in different diseases. He finds it difficult to decide how much to restrict his account to diagnosis of the disease and how much attention to devote to the exact identification of the infecting organism. On the whole he has emphasized the former, with the result that the serological classifications, for example, of the streptococci, the dysentery bacilli, and the leptospirae, all suffer from what might be regarded as inadequate treatment. In this part of the book he briefly describes the antigenic structure of some of the commoner animal viruses, the fungi, protozoa, helminths, venins, and neoplasms, and includes two long sections on blood groups and the Wassermann reaction.

The author considers some subjects more fully than others, and it is clear that, like many other workers, he has suffered from being deprived of access to a great deal of the scientific literature during the war years. This has resulted in the omission of much that has been reported in British and American publications. Within the limits, however, of the space allowed him he has made a brave attempt to fulfil his task, and we wish the book every success.

G. S. WILSON.

MEDICINE AND SOCIETY

Medical Services by Government. Local, State, and Federal. By Bernhard J. Stern, Ph.D. Studies of the New York Academy of Medicine Committee on Medicine and the Changing Order. (Pp. 208. $1.50 or 8s. 6d.) New York: The Commonwealth Fund. London: Geoffrey Cumberlege, Oxford University Press. 1946.

Our colleagues in the U.S.A. are tackling with characteristic energy and thoroughness the national aspect of a world-wide problem—namely, how to provide a complete medical service for all who need it. The New York Academy of Medicine set up a committee whose reference is "to review the nature, quality, and direction of the economic and social changes that are taking place; to define how these are likely to affect medicine; and to determine how the best elements in medicine may be preserved, embodied, and extended in whatever social pattern

may ultimately appear." It was obvious that in recent years there had been in the U.S.A, a great extension of State and Federal activities in this field and that one of the first requirements of the committee was to know how far and in what ways this tendency had evolved. This book, fathered by the Commonwealth Fund and written by Dr. Bernhard Stern, lecturer in sociology, Columbia University, seems to supply the need very adequately.

Dr. Smillie in a preface says that practically all government procedure in medical care stems from the original local community responsibility for the care of the sick poor. Dr. Stern confirms this and traces it from the ground upwards. Many of the problems dealt with are familiar to us, but we have been mercifully spared one of the toughest which is inherent in the federal system of government in an immense country. The individual States are shown to be jealous of Federal encroachments on their rights, and in their turn find similar jealousies in smaller community authorities. This attitude has led to great discrepancies in the amount and quality of medical services provided communally. Though Dr. Stern does not directly suggest remedies for this, it seems probable that many of them will be met by increasing central financial grants, with, no doubt, increasing central direction. The book is very fully documented.

ALFRED COX.

VIENNESE TWILIGHT

The Art of Healing. By Bernard Aschner, M.D. (Pp. 336. 12s. 6d.) London: Research Books, Ltd. 1947.

This book is written by a gynaecologist who taught "medicine at the University of Vienna from 1918 to 1938" and who is said to have written several medical textbooks in explanation of the methods used by himself in the treatment of disease and now dignified by the title of "Constitutional Therapy." These methods include bleeding, cupping, and leeches as a means of eliminating various toxins (menstruation is highly commended for the same reason, which makes the male reviewer feel for the first time that he may have missed something after all), emesis as a treatment for schizophrenia, and the employment of many drugs long since excluded from orthodox medicine by reason of their pharmacological inertness. This system of "Constitutional Therapy" should not be confused with that described in the excellent book by Julius Bauer, another physician from Vienna, entitled *Constitution and Diagnosis*—medical philosophy of a very different order.

The author supports his claims by a series of dogmatic statements whose refutation would occupy a regiment of research workers for a lifetime. He quotes, with disapproval, the retort of a scientist to whom he was explaining the importance of the colour of hair, eyes, and skin in assessing constitution: "You are quite right. Unfortunately I still have another twenty years of cranial measurement to do, and then perhaps I shall find time for the problem of complexion." Dr. Aschner has preferred what Almroth Wright used to call the *saltus empiricus* and has no doubt already received his reward, but he cannot hope to succeed in his avowed aim "to re-establish fully the partially shattered confidence of the public in scientific medicine." British physicians see more clearly than the author the limitations of present-day therapy—its mechanism, its preoccupation with the end-results of disease processes, its failure to consider the whole man—but that does not mean that we wish to return with him to the mediaeval mess of leeches, purges, emetics, and clysters from which we have just painfully emerged.

D. V. HUBBLE.

As Rhine and Carington have shown, it is possible to write dispassionately about extra-sensory perception, telepathy, precognition, and similar subjects. These workers and Dr. Soal have accumulated valuable experimental data under rigid laboratory conditions. It is a pity that Mr. G. N. M. Tyrrell has not found more space in *The Personality of Man: New Facts and their Significance* (Pelican Books, Harmondsworth, 1s.) to discuss work of this kind; he makes good the deficiency by an abundance of material of a more anecdotal and dramatic nature. His book is frankly polemic. He has a bone to pick with the scientific critics, whose attitude he attributes to "a quite primitive psychological foundation"; and he underestimates the force of their objections. It is to be feared that his aggressive partisanship will come between him and the inquiring reader.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

The Transactions of the Hunterian Society. Vol. V. Edited by Mr. A. E. Mortimer Woolf. (Pp. 119. No price.) London: Metropolis Press. 1946–7.

Includes Hunterian Oration on "Literary Surgeons," by Zachary Cope, a discussion on "Flatulence," opened by Geoffrey Evans, and a discussion on "Sprains and Strains," opened by Sir R. Watson-Jones.

The Medical Annual, 1947. 65th Year. Edited by Sir Henry Tidy, K.B.E., M.A., M.D., F.R.C.P., and A. Rendle Short, M.D., B.S., B.Sc., F.R.C.S. (Pp. 441. 25s.) Bristol: John Wright and Sons, Ltd.; London: Simpkin Marshall (1941), Ltd.

Recent advances in medical and surgical treatment.

A Memory of Solferino. By J. Henry Dunant. (Pp. 64. 6s.) London: Cassell and Co., Ltd. 1947.

A short story of battle by the founder of the Red Cross.

Gifford's Textbook of Ophthalmology. By Francis H. Adler, M.D. 4th ed. Illustrated. (Pp. 512. 30s.) London and Philadelphia. W. B. Saunders Company.

Intended particularly for the medical student and general physician.

Developmental Diagnosis. By Arnold Gesell, M.D., and Catherine S. Amatruda, M.D. 2nd ed. (Pp. 496. 32s. 6d.) London: Hamish Hamilton Medical Books. 1947.

An account of abnormalities of physical and mental development.

Some Lessons of War-time Psychiatry. By Kenneth Soddy, M.D., D.P.M. (Pp. 23. 1s.) London: National Association for Mental Health.

Makes suggestions about a psychiatric service in the light of experience gained during the war.

The Story of St. Thomas's, 1106–1947. By Charles Graves. (Pp. 72. 8s. 6d.) London: Adprint, Ltd. 1947.

A short illustrated history of the famous teaching hospital.

Johannes Fibiger. By Knud Secher. (Pp. 206. £1.) London: H. K. Lewis. 1947.

A biography stressing particularly Fibiger's contributions to cancer research. In English.

Lectures on the Liver and its Diseases. By H. P. Himsworth, M.D., F.R.C.P. (Pp. 204. 18s. 6d.) Oxford: Blackwell Scientific Publications. 1947.

An account of recent knowledge about the liver, its functions and disorders.

Hipertensión Arterial y Tiocianato de Potasio. By Alfredo Claudio Carrera. (Pp. 434. No price.) Buenos Aires: Estudio Clinico y Experimental. 1946.

A monograph on hypertension and its treatment by potassium thiocyanate.

The Internal Fixation of Fractures. By C. S. Venable, M.D., M.S., F.A.C.S., and W. G. Stuck, M.D., M.S., F.A.C.S. (Pp. 237. 30s.) Oxford: Blackwell Scientific Publications. 1947.

An account of the history and modern methods of fracture fixation by means of internal appliances.

A Hand-Book of Ocular Therapeutics. By the late Sanford R. Gifford, M.D., F.A.C.S. Revised by D. Vail, M.D., D.O., F.A.C.S. 4th ed. (Pp. 336. 25s.) London: Henry Kimpton. 1947.

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WHY BE FEARFUL?

The Representative Body last week said No with a determined voice. Some doctors were naturally anxious about the financial risks of saying No. The fear of the paymaster was upon some of them—a fear, no doubt, that Mr. Bevan counts upon in his estimate of the chances of successful resistance by the profession to his Health Service Act in its present form.

Mr. Bevan has the power of the purse—or will have if the profession decides to enter his Service on July 5. But, as Dr. Dain told the Representative Meeting last week, we have only one thing to fear—"and that is that the profession does not know its own mind." It is for medical men and women to state the mind of the medical profession without fear in answering the questions on the plebiscite form to be sent out on Jan. 31. Opposition to the Act will be offered if a sufficient majority which includes 13,000 general practitioners votes No.

In its present form the Act is the first and irrevocable step towards a whole-time State Medical Service (not "Health" Service). If doctors are convinced that this is so, and if they hold fast to their centuries-old detestation of State medicine—then the Noes will have it. The Council and the Representative Body have given the lead asked for. It will abide by the decision of the majority as stated.

Medical men and women must vote on the merits of the case. If they believe their case to be good and just, their fears will once again be traitors. Montgomery knew it was fear that would defeat our Army at El Alamein—not the supposed superiority of the enemy. He forbade his officers to use phrases such as "It's bound to come." His first job was to eliminate fear and the use of fearful slogans by his troops. And he won his battle. If the plebiscite provides the necessary volume of Noes we shall win our fight with the Minister of Health if we succeed in banishing fear and move forward with the strength of conviction.

What are the fears that men have? Doctors are not business men. They do not form a class whose money comes to them by heredity. They work hard—probably harder and certainly for longer hours than any other section of the community. They are subject to great strain and risk of ill health. The love of their work makes them put up with much that no other group of workers would tolerate. Next to their work what they most prize is freedom—freedom to practise what they are taught and to carve out a career by hard endeavour. In Britain this freedom is secured by the ownership of general practices and by voluntary service in hospitals. This freedom is now being undermined. What medical men most fear is this loss of freedom. By standing firm they can retain it.

Mr. Bevan thinks he has a trump card in denying compensation to those general practitioners who do not enter the Service on July 5. Is he right? The Association will advise general practitioners not to enter the Service only if the number who say No is sufficient to defeat Mr. Bevan. This number must be large enough on Jan. 31 and remain large enough until July 5. Faced by what will probably be overwhelming opposition Mr. Bevan will choose between postponing the appointed day or adhering to it. If he postpones it the compensation and other issues will also be postponed, and National Health Insurance will continue. If he does not postpone it he will be unable to operate his Service because he will not have the man-power. Again, he is defeated. He must in that case come to terms with the medical profession, terms which will have to be acceptable to those who have voted No. The strength of the profession will lie in the size of the majority against the Act.

The doctor who votes No may temporarily suffer because a doctor in the next street votes Yes. The B.M.A. has substantial funds at its disposal to tide him over this difficulty. In any case the Yes man is unlikely to be a superman, nor even, may it be said, a better doctor. A doctor gives his services and has a right to be paid for them. Mr. Bevan's Health Service is not an insurance scheme, as National Health Insurance is. The man between 18 and 65 who pays his social insurance contribution of 5s. a week is providing only 10d. a week to the Health Service. And nearly half the population of Britain will not even be paying this.

Those who fear that some men may change their No into Yes between February and July may be assured by the knowledge that the B.M.A. will know exactly to what extent this is occurring even if it occurs at all. The B.M.A. will persist in opposition only if the necessary majority is maintained. If the Noes are in the sufficient majority medical men will be asked to form small security groups in each division. They will be asked to enter into bonds with one another, and thus keep firm their Noes.

Consultants and specialists have little or nothing to fear. They will not be able to sign contracts with hospitals, because such contracts will not be ready. In any event the hospitals cannot do without them. Those who sincerely believe that the Act in its present form is directed towards the establishment of State medicine are asked to sign No. Hospital residents—those temporarily in whole-time employment—are asked not to enter the Service as general practitioners or consultants but to carry on with their work.

Doctors have been criticized for being "emotional" over the present conflict. It was the strength of emotion that held this country firm between 1939–45. Emotion, if we are to believe modern psychology, is the driving force behind reason and action. Opposition to State medicine certainly has a basis in reason, but perhaps a much sounder basis in emotion. Five hundred years ago Medicine had to free itself from the dictatorship of authority—the authority of Galen. This freedom was won by men who thought fearlessly. To-day we are faced with that recurring historical phenomenon—the dictatorship of the State. We can defeat this in Medicine if we think and fight fearlessly, and we need not be ashamed of emotion if we avoid that perversion of emotion called hysteria.

STREPTOMYCIN IN TUBERCULOSIS

Streptomycin is so far the only antibiotic of many studied since the discovery of penicillin to take an assured place among systemic chemotherapeutic agents. Experience of its use in this country is so far limited, although it is now a year since the Medical Research Council allocated supplies to a limited number of hospitals with the object of studying its effects both in certain forms of tuberculosis and in other infections specially susceptible to it. The scheme for the treatment of miliary and meningeal forms of tuberculosis has now been extended by the Ministry of Health, and many such cases have been or are being treated, but it is too early to assess results in terms of ultimate prognosis. In the U.S.A., on the other hand, therapeutic studies were begun two years earlier and have since been extended on a scale which our present supplies do not permit. The accumulated experience of American workers is thus a valuable, and indeed almost our only, guide to the clinical use of streptomycin. A leading part in the study of the treatment of tuberculosis has been taken by W. H. Feldman and H. C. Hinshaw, of the Mayo Clinic, the former from the experimental and the latter from the clinical point of view. It is our privilege to publish to-day a paper in which they give a general account of this work and an assessment of its results. Their conclusions are the up-to-date outcome of extensive experience and will command wide attention, even though some of the practical lessons cannot yet be put into effect.

There are two main facts about the acute forms of the disease which we are now treating ourselves. One is that in tuberculous meningitis and miliary tuberculosis early treatment brings about a remission in 50% of cases; the second that such remissions have been observed to last for over two years. On the other hand, if a recurrence takes place, and if the tubercle bacillus has acquired resistance to the drug, further treatment is useless. It will be interesting to have more details of American experience in the treatment of tuberculous meningitis to compare with the remarkable series described by R. Debré and his colleagues in the *Journal* a few weeks ago.[1] Within the compass of a general survey it was naturally not possible to embody a discussion of the indications for streptomycin treatment in pulmonary forms of the disease; these have been defined elsewhere. Further experience has confirmed the earlier conclusion that actively progressive disease is often at least temporarily arrested, with obvious and immediate benefit. Ulcerative lesions of the air passages, notably laryngitis but including similar lesions of the trachea and bronchi and of the pharynx and tongue, appear to respond well and regularly, and treatment is considered to be clearly indicated even though its object may be only palliative. Symptomatic relief can also be obtained in tuberculous enteritis, and here again administration is justified even without hope of effect on the ultimate prognosis. In "surgical" forms of tuberculosis it has also been found that the drug can play a valuable part. As might perhaps be expected by analogy with the action of penicillin, it is without any radical effect on established disease of bones and joints. Unlike penicillin, it is incapable of sterilizing large collections of pus; it has previously been pointed out that this is probably due to the great diminution in activity of streptomycin in an acid medium. On the other hand, with the protection afforded by the drug, such collections can now be drained, a procedure which otherwise is usually inadvisable. As an aid to surgical treatment in general, and particularly radical thoracic surgery, streptomycin is likely to prove of great value. Like other forms of chemotherapy, it is seen at its best when combined with appropriate surgical treatment rather than when relied on alone.

There is another side to this picture which is less encouraging; indeed, if one looks to the ultimate future of streptomycin treatment it can encourage nothing but frank pessimism. The unexampled degree and rapidity of bacterial habituation to streptomycin were recently discussed in these columns[2]; unfortunately *Myco. tuberculosis* is no exception, although its acquisition of resistance, like everything else it does, seems to proceed in a more leisurely fashion. It has been shown in connexion with other species, notably *H. influenzae*,[3] that large bacterial populations contain a small minority of naturally resistant cells, the exclusive multiplication of which during exposure to streptomycin, whether *in vivo* or *in vitro*, is evidently the source of the resistant populations produced. It appears from the studies of Marjorie M. Pyle[4] that this is also true of the tubercle bacillus. Her method was to make quantitative cultures of the sputum of patients before and during streptomycin treatment for pulmonary tuberculosis, using sealed plates of an egg medium containing 9 different concentrations of streptomycin, from 1 to 1,000 micrograms per ml. In 7 out of 8 cases a few colonies (representing one in many thousands of the numbers on normal medium) were obtained on media containing 5 or 10 micrograms per ml. before treatment began. During a course of treatment occupying several months there was in 5 of the cases a steady increase in the proportion of resistant organisms and in the degree of their resistance; in one case of which the findings are given in full there were innumerable colonies resistant to 1,000 micrograms per ml. after 12 weeks. In two patients no increase in the resistance of the organism was observed, and in one the increase was only slight. These observations show incidentally that estimations of sensitivity performed with cultures derived from a single colony are of very limited value; we are dealing here with a mixed population in which a wide range of degrees of sensitivity may be represented. But their main lesson is that in perhaps a majority of patients the drug has only a limited time in which to do what good it can; thereafter that strain of tubercle bacillus will be quite unaffected by it. Presumably its resistance will continue in a further host, and patients uncured by this treatment should consequently be looked upon as peculiarly dangerous sources of infection.

Much as we may learn from clinical experience in the U.S.A. there is ample scope for further study, particularly in relation to systems of dosage and the theory of streptomycin action. The tendency has been to reduce both the total dose and the number of daily doses given, a common practice now being to give only two daily. This policy is supported by Feldman's observations in guinea-pigs, when still longer intervals or even treatment during alternate weeks did not appear to impair therapeutic effect. The efficacy of such intermittent attack on the tubercle bacillus seems inconsistent with the idea of a predominantly bacteriostatic effect; surely if this is the mechanism the

[1] *British Medical Journal*, 1947, **2**, 897.
[2] Ibid., 1948, **1**, 20.
[3] *J. exp. Med.*, 1947, **85**, 329, 607.
[4] *Proc. Mayo Clin.*, 1947, **22**, 465.

constant maintenance of an adequate level in the blood and tissues by four-hourly administration should produce better results. Even though penicillin is known to have a bactericidal as well as a bacteriostatic effect, great ingenuity is still being displayed in devising methods of obtaining a more prolonged effect from each dose, on the well-founded assumption that continuous action at the site of infection is superior to intermittent. If this principle is true of penicillin but inapplicable to streptomycin we have yet to find the reason for the difference. Evidently there is one, and the possibilities of experimental study which may throw some light on it have not been exhausted. In the meantime the present system of administration need by no means be regarded as final, and users of streptomycin in this country have the opportunity of trying to better it. The policy advocated by Debré of a week's intensive treatment followed by a smaller maintenance dose is rational and worthy of further study. Perhaps the most difficult question of all is when to stop treatment; in view of the diminishing effect obtained while the bacillus gains resistance, and of our exiguous supplies of the drug, one contribution we might well make to this study is to observe the effects of a shorter course.

RICKETS IN PREMATURE BABIES

Immaturity at birth is the chief cause of death during the early months of life. According to the Registrar-General's *Statistical Review of England and Wales* for 1945 there were 7,530 deaths certified as due to premature birth out of a total of 13,136 deaths ascribed to "diseases peculiar to the first year of life." Sometimes the immature infant dies because it is functionally incapable of adjusting itself to the conditions of post-natal life; perhaps more often an additional factor such as birth injury, asphyxia, or infection is responsible.

The prospects of a premature baby's survival have improved considerably during the present century. It is now realized that with adequate co-operation between general practitioners, obstetricians, paediatricians, and administrative medical officers, and with the necessary financial support, valuable lives may be saved and guided to a normal childhood. The practical possibilities of this work will be appreciated when it is recalled that about 45,000 to 50,000 immature babies are born each year in England and Wales. These infants are prone to anaemia, rickets and other nutritional disorders, infections, delayed intellectual and physical development, and abnormal psychological reactions. A recent paper by Gert v. Sydow[1] presents a study covering a period of six years of the part played by vitamin D and minerals in the development of rickets in premature babies. The most important practical aspects of this work centre around the diagnosis of rickets and the value of human milk in its prevention. The report of the British Paediatric Association on the incidence of rickets in wartime[2] called attention to the difficulties of clinical and radiological diagnosis. Gert v. Sydow's study is especially useful in its correlation of the radiological findings with the changes in the blood. A series of 236 premature babies, whose birth-weights were under 2,000 g. (approximately 4 lb. 6½ oz.), was compared with 292 normal full-term babies. The diagnosis of rickets was made on estimations of the serum phosphatase, inorganic phosphorus, calcium, and total protein and radiological examinations of the left wrist, and the results were studied by careful statistical methods. Metaphyseal decalcification was the earliest radiological change observed in infants subsequently showing signs of rickets. It was noted in more than half the premature infants after the first month of life. Fringing and cortical spurs, seen in the first half of the second month, are the earliest of the definite radiological changes. Cupping, spreading, and periosteal proliferation, to which von Chiari[3] and Malmberg[4] had previously drawn attention, were found only infrequently and were then coincident with or subsequent to calcification at the epiphyseal line, which v. Sydow regards as a sign of healing but not of health. The author makes no reference to symptoms or clinical signs, and perhaps this should be taken to mean that there were none. The point is important and should be settled authoritatively.

The premature baby is in special need of vitamin D because its rate of growth is rapid, fat absorption from the intestinal tract is poor, and its calcium stores are low. Human milk, which has always occupied pride of place as the ideal food for all newly born babies, and especially for those born prematurely, is relatively poor in calcium, phosphorus, and protein when compared with cow's milk. It has been suggested therefore that human milk should not be given to immature babies unless supplemented by additional calcium, phosphorus, and vitamin D.[5] To study this question v. Sydow divided the patients into groups which were offered (*a*) human milk without supplements; (*b*) human milk and large doses of vitamin D; (*c*) cow's milk alone: (*d*) cow's milk and large doses of vitamin D; and (*e*) human milk and various additional calcium and phosphorus preparations. The following conclusions were drawn: human milk may not provide the premature infant with enough phosphorus, though it gives a fairly adequate supply of calcium; the calcium will be insufficiently absorbed unless vitamin D is also given. When cow's milk is used enough phosphorus but not enough calcium will be absorbed unless vitamin D is given.

1 *Acta paediatr.*, 1946, 33, Suppt. II.
2 *Ministry of Health Report on Public Health and Medical Subjects*, 1944, No. 92, London.
3 *Arch. Kinderheilk.*, 1938, 115, 66.
4 *Acta paediatr.*, 1945, 32, 626.
5 Gordon, H. H., *Advances in Paediatrics*, 1947, 2, 315. New York

TRAUMATIC AMNESIA

Transient loss of consciousness without physical after-effects is the common result of a head injury. The recovery of consciousness does not necessarily mean the full return of all cerebral functions. In the acute phase the cerebral paralysis involves motor, sensory, reflex, and mental functions. As is usual in the nervous system, recovery begins with the simplest mechanisms. Memory is the last function to return, and the total duration of the lapse of memory from the time of the injury—the period of post-traumatic amnesia—was regarded by Russell[1] as a measure of the severity of the injury. If the head injury is more than trivial it is not uncommon for recollection of the moment of the impact to be obliterated, but this retrograde amnesia rarely extends appreciably into the past life of the individual. Ritchie Russell and Nathan[2] have shown that the length of the phase of post-traumatic amnesia may indicate not only the severity of the immediate brain damage but also the future efficiency of the individual. This cerebral damage, which is entirely reversible with complete recovery in the mild cases and partial recovery in more severe cases, is not structural. In their work on experimental concussion Denny-Brown and Russell[3] found no histological changes. They felt that the term "cerebral concussion" should be reserved for this immediate functional paralysis of the neurones. The neuronal damage is attributed to a general shake-up of the brain inside the skull produced by a change

1 *Brain*, 1932, 55, 549.
2 Ibid. 1946, 69, 280.
3 *Lancet*, 1941, 1, 371
Ibid., 1943, 2, 438.

in the acceleration, positive or negative, of the skull and an opposite movement of the brain. Denny-Brown and Russell inferred that this change in acceleration was linear, but Holbourn[4] has produced evidence that it is rotational, and his view is strongly supported by work undertaken by a research section of the U.S. Navy medical services with the "lucite" calvarium. A film of this research was shown in this country in 1945. That a change in acceleration, whether linear or rotational, is the cause of concussion can be seen if the results of "accidental" and "gun-shot" injuries of the head are compared. In the former group only 10% of 1,022 cases had no amnesia; in the latter 32% of 200 cases had no amnesia. This is presumably due to the failure of small high-velocity missiles to concuss the brain as a whole, though the focal damage may be intense.

Amnesia following an injury is relatively easy to understand. During the period of unconsciousness and confusion events fail to register. In retrograde amnesia the injury intervenes to blot out memories which have already been acquired. During recovery the retrograde amnesia will often shrink from months or days to a few minutes. Recovery is always chronological, those memories nearest the injury being the last to return. The importance of the memories has no effect on this sequence except that occasionally a "vision" of some event within the period of amnesia indicates that some vivid form of mental registration, though it cannot be voluntarily recalled, can reproduce itself from a relatively low level in the form of a vision. Here the injury may have blocked the process of retention half way. Russell and Nathan's observations suggest that remembering is a dynamic process in which the neuronal circuit patterns responsible for memories become more strongly emphasized with time. The longer the pattern has been established the more strongly does it resist not only the generalized disruptive neuronal shake-up called concussion but also the intellectual impairment occurring in degenerative states such as senility.

MASCULINIZING TUMOURS OF THE OVARY

Masculinizing tumours of the ovary have for many years afforded a fascinating subject for study by clinicians and laboratory workers. Yet neither clinical manifestations, hormone assays, histological appearances, nor chemical analyses have, separately or together, completely solved the problems of histogenesis, classification, and differential diagnosis; and our knowledge of the factors underlying sex differentiation remains incomplete. One of the difficulties is illustrated by a recently reported case[1] in which, despite masculinizing stigmata, including baldness, caused by an ovarian tumour of the adrenal type, the urinary excretion of 17-ketosteroids was within normal limits. The author suggests that either androgens in large amounts are not always necessary to produce masculinization, or our means of measuring them are not yet sufficiently refined to be reliable.

Characteristic of the lack of definite knowledge is the confusion which surrounds the neoplasm of the ovary which has been variously designated "masculinovoblastoma," "masculinizing tumour of the ovary of the adrenal type," "virilizing lipoid tumour of the ovary," "ovarian adrenal rest tumour," "ovarian hypernephroma," "masculinizing luteoma," and "luteinoma." The origin of this tumour is thought by most workers[2] to lie in adrenal rests in the ovary. This theory is supported by the close embryological relations between the gonads and the adrenal cortex, and by the finding by Novak[3] of islets of typical adrenal cells near the ovarian hilum in two cases which showed no manifestations of virilization. Other workers,[4] appreciating the histological similarity of the tumour cells to paralutein cells, have postulated a luteal origin; and this view has been supported more recently by evidence that progesterone may under certain conditions exert an androgen-like action.

On the other hand, the features of the other masculinizing tumour of the ovary, the arrhenoblastoma, have been more sharply delineated. This type of tumour is held to originate in male-directed cells persisting in the ovary from the early stages of gonadogenesis. In a recent survey of the subject Iverson[5] reports a case which may provide the missing link between these two types of tumour. The histological features of this case were the intimate association of adrenal-like tissue with typical arrhenoblastoma in the same tumour, and the identification by cytological studies of the cells of the adrenal-like tissue with the so-called interstitial cells found in the arrhenoblastoma. After a critical review of the generally accepted theories of histogenesis of the two types of tumour the author assembles considerable evidence in addition to histological features in support of his contention that the two tumours are very closely related and that the ovary is their common source of origin. Further evidence on this point is necessary, but this theory of Iverson is attractive, if only because it obviates the necessity for injecting the theory of adrenal rests into the histogenesis of ovarian tumours.

1 Douglass, M., *Amer. J. Obstet. Gynec.*, 1947, **53**, 190.
2 Rottino, A., and McGrath, J. F., *Arch. intern. Med.*, 1939, **63**, 686
3 *Amer. J. Obstet. Gynec.*, 1938, **36**, 840.
4 Glynn, E., *J. Obstet. Gynaec. Brit. Emp.*, 1921, **28**, 23.
5 *Surg. Gynec. Obstet.*, 1947, **84**, 213.

RHEUMATISM IN SWEDEN

The incidence of acute rheumatism varies in different parts of the world, and it is of interest therefore to consider the course and prognosis of the disease in different countries. A considerable amount of work has been published on these problems as they appear in Great Britain and the U.S.A., and it may be claimed that we know the broad pattern of the clinical course taken by acute rheumatism in these countries. Similar information from other regions has hitherto been lacking, and a recent study of the disease in Sweden by Jacobsson[1] helps to fill this gap in our knowledge. He has presented an exhaustive follow-up of 689 children treated at the Children's Hospital, Gothenburg, during the years 1922–40. The follow-up was very successful, for 655 of the whole group were traced. As would be expected, the maximum incidence of the disease was found to occur between the ages of 7 and 11 years, but studies in this and other hospitals of Gothenburg showed that of 1,991 cases of acute rheumatism the first remembered attack occurred after the age of 20 in about half. This observation differs notably from those made in Great Britain, where, for instance, Coombs found that about three-quarters of the cases started before the age of 15. The mortality and the risk of relapses were found to be higher the younger the age of onset, a finding which of course agrees with those of previous workers.

Discussing the prognostic significance of different clinical features of the disease, Jacobsson confirms the generally held opinion that the prognosis is bad when clinically recognizable pericarditis and subcutaneous nodules are present. It is well known that a varying degree of anaemia is associated with acute rheumatism, and he shows that its severity is a useful guide to both the immediate prognosis and the risk of subsequent relapses. What does not accord with previous observations is his finding that the occurrence of erythema annulare was as bad an omen as the development of subcutaneous nodules. He was un-

1 *Acta paediatr.*, 1946, **33**, Suppt. 7.

able to show that tonsillectomy had any effect on the course of the disease whether it was performed before or after the first attack. Since doubts have recently been expressed about the exact relation of chorea to acute rheumatism he made a special study of the course of the disease in children with chorea as an initial or main manifestation. He found that these children showed no significant difference from the others, and concluded that chorea must be regarded as a major manifestation of rheumatic fever.

In Britain the incidence and severity of acute rheumatism have progressively declined during the last 40 years, which we are apt to attribute to the general rise in the standard of living. In Sweden, on the other hand, Jacobsson found no change in the incidence of the disease from 1922 to 1940, though he did note a significant decrease in its severity during that period. While admitting that this may be due to an alteration of the "genus epidemicus," he considers that the real cause is to be found in better and more efficient treatment as a result of earlier admission to hospital and longer rest in bed and care. Thus it is seen that, while in Sweden the natural history of acute rheumatism is broadly similar to that in Britain and the U.S.A., there are interesting differences of detail which should be studied similarly in different countries with varying climatic and social conditions.

NEEDLE BIOPSY

The attempt to obtain pathological material for histological diagnosis by some means short of open operation is a laudable one, and established techniques are already available for diagnostic puncture of the bone-marrow, the spleen, and the liver. Martin and E. B. Ellis[1] applied a similar technique to the biopsy of tumours, and other authors[2-10] have since reported favourably on their method. Frank Ellis[11] has now performed some hundreds of biopsies by a puncture method, and has obtained approximately 60% of useful results in tumours of glands, bones, and thoracic and abdominal viscera. He uses the term "aspiration biopsy" to describe the insertion of a needle into the tumour and the withdrawal of neoplastic material by syringe suction. "Drill biopsy" is an elaboration of the method, a cannula being driven into the tumour by the rotation of a dentist's drill. This affords more delicate control than does manual puncture.

Precise histological diagnosis is necessary before starting the treatment, and particularly the non-operative treatment, of malignant disease, and there need no longer be any fear that, in general, biopsy of a tumour hastens its spread.[12-14] The melanoma and the neurofibroma are perhaps the only tumours which have been clearly shown to become more malignant after partial surgical removal; to these may perhaps be added the mixed tumour of the parotid, which at least grows more rapidly, if it does not undergo malignant change, after incomplete ablation. While the dangers of biopsy have been exaggerated in the past, there are certain disadvantages which are probably greater with aspiration than with open operation. Aspiration does not threaten the health or life of the patient (Ellis reports only four serious complications in his series), but inadequacy of material or the failure to obtain representative material may lead to faulty histological diagnosis. This is particularly true of bone sarcoma, whose variegated histology may include within a single tumour a range of mesoblastic tissue from virtually normal bone to highly anaplastic sarcoma; even open biopsy may secure from an undoubtedly malignant tumour only benign tissue.

The clinician's duty to the pathologist is to obtain at biopsy the largest possible amount of representative tissue, and this duty cannot always be discharged by an aspiration technique. It is seldom that open biopsy cannot be undertaken safely. Possibly the only clear indication for "aspiration biopsy" is in the case of a tumour so superficial, especially in the neck, that an open wound would offer a prospect of external fungation.

1 Martin, H., and Ellis, E. B., *Amer. J. Surg.*, 1930, **13**, 169.
2 —— —— *Surg. Gynec. Obstet.*, 1934, **59**, 578.
3 —— —— *Treatment of Cancer and Allied Diseases*, 1940, **1**, 72.
4 Ferguson, R. S., *Amer. J. Surg.*, 1930, **12**, 507.
5 Coley, B. L., Sharp, G. S., and Ellis, E. B., ibid., 1930, **13**, 215.
6 Stewart, F. W., *Amer. J. Path.*, 1933, **9**, 801.
7 Binkley, J. S., *Amer. J. Cancer*, 1939, **36**, 193.
8 Sayago, C., *Amer. J. Roentgen.*, 1942, **48**, 78.
9 Iversen, P., and Roholm, K., *Acta med. scand.*, 1939, **102**, 1
10 Ottolenghi, C. E., *Radiologia*, 1943, **6**, 288.
11 Ellis, F., *Brit. J. Surg.*, 1947, **34**, 240.
12 Marzloff, K. H., *Johns Hopk. Hosp. Bull.*, 1923, **34**, 141.
13 Haagensen, C. C., and Stout, A. D., *Ann. Surg.*, 1942, **116**, 801.
14 Paterson, R., and Nuttall, J., *Ann. J. Cancer*, 1939, **37**, 64.

AMNIOTIC GRAFTS FOR BURNS OF THE EYE

Sorsby and others[1] recently described the results of treating burns of the eye by the application of amniotic-membrane grafts, and in 1946 Sorsby and Symons[2] published an account of their technique. The results indicate that it is a valuable method of treatment in suitable cases. Sterile, fat-free, dry amniotic membrane is used. Amnioplastin, as it is called, is supplied by the London Hospital in 1-in. (2.54-cm.) squares consisting of four layers of membrane. This is a convenient size to use if upper and lower parts of the conjunctiva are damaged, while it may be folded to half that size if only the lower part is to be treated. Conjunctival tissue is not removed, and the operation is carried out under local analgesia after preliminary treatment of the eye with penicillin drops. The dry membrane is secured by No. 0 silk sutures—inserted through each corner—and attached to the bulbar conjunctiva so as to separate it from the palpebral conjunctiva. Not more of the cornea should be covered than is necessary, and the graft is trimmed accordingly. Both eyes are bandaged for 48 hours, by which time the graft is clear and hardly visible The sutures are removed on the third or fourth day, when the graft will have disappeared by absorption.

This simple operative procedure has been found of great benefit in limiting the after-effects of burns of the eye, especially if applied the same day as the accident, but it is also of value if used days later. It is indicated particularly in burns of the second degree. Burns of the first degree can be treated satisfactorily in other ways, and burns of the third degree—with necrosis or blackening of the conjunctiva—are better treated by excising necrosed tissue and replacing it by mucous-membrane grafts, as described by Denig and Siegel. In many cases treated by amniotic-membrane grafts the red and roughened conjunctiva became of nearly normal colour and smoothness in 48 hours, without any ulceration, as shown by absence of staining with fluorescein drops, and there was less tendency to complications affecting the cornea. In some instances where in the course of recovery from a burn there was a tendency for adhesions to form between the eye and the eyelid, the application of an amniotic membrane graft eliminated this tendency, and the result was evident in 48 hours.

Details of 30 cases are given and 28 in a previous publication referred to. Lime, sodium hyroxide, ammonia, and acids were among the substances causing the burns, which in a few cases involved the whole eye and in most cases the lower half of the eye. The results show that good vision (6/6 to 6/12) was maintained in nearly all the cases, and the description of individual cases makes it clear that this method of treating second-degree burns of the eye can produce remarkable improvement of the damaged conjunctiva in 48 hours.

1 *Brit. J. Ophthal.*, 1947, **31**, 409.
2 Ibid., 1946, **30**, 337.

THE MINISTER'S REPLY EXAMINED

A POINT-BY-POINT COMMENTARY

The Council of the British Medical Association has examined in detail the Minister of Health's reply to the Negotiating Committee's case. We print its analysis below.

"The task now before the profession is to strip the non-essentials from the essentials, to distinguish between the shadow and substance."—From the Statement by the B.M.A. Council, Dec. 18, 1947.

What does the National Health Service Act of 1946 actually *say*? What is the gloss which the Minister's statement puts upon the Act? The profession is advised to distinguish carefully between the two.

No Compulsion to Join?

The Minister prefaces his reply to the representations of the Negotiating Committee with some general comments couched in persuasive if misleading language and "addressed to the individual doctor," possibly in the hope of separating the individual members of the profession from those who represent them. "Any doctor," he assures the profession, "can participate in the scheme or not, just as he thinks fit. There is no compulsion whatever." Yet, once a free medical service available to the whole community is operating, only by State payment can the great majority of general practitioners hope to live. But there is no compulsion to join. One can stay out—and starve! The Minister adds that the doctor can participate "partly so and partly not," whereas the actual choice before the doctor is to join—and to give up the ownership of his goodwill and take a basic salary—or not to join and to be unable to accept a single public patient.

Will the Doctor be a Civil Servant?

"The word 'service,'" the Minister adds, "is perhaps a misnomer," having himself included the word in the description of his Act. "The doctor is not under orders," he says, though perhaps he should have said "not *yet* under orders." "The doctor is not employed," the Minister continues, whereas the Oxford Dictionary defines "employ" as "to use the service of." "He is not a Civil Servant," the Minister adds. Worse—he will be under the administrative control of the Civil Servant, medical and lay. Nor will he be a whole-time officer; he will be a part-time salaried officer; and the size of the salary element of his remuneration can be changed at any time by the Minister by regulation.

Then the Minister passes, with some alacrity, to the subject of remuneration. If a doctor takes on 4,000 *potential* patients under this scheme his gross income from "public funds," the Minister states, would be £3,300. How many doctors will have 4,000 persons on their lists? Each doctor can answer this for himself by dividing the population of his area by the number of general practitioners practising there. To-day the general maximum for insured persons is 2,500, and the average number on doctors' lists is about 1,000. It may be expected that under the new Service the average number of persons on a doctor's list will be just over 2,000. This average will decrease as the number of general practitioners increases. Remuneration in this case will be about £1,816. This is, perhaps, a better illustration of what the remuneration is likely to be. Deducting only 33⅓% for practice expenses, these figures become £2,200 for a maximum list and about £1,200 for an average list.

How Much Work Will it Mean?

The burden of a full list will be very considerable. The effect of introducing a free-at-the-time service is of course an increase in the number of items of service. National Health Insurance trebled the number of items of service. If the annual rate of items of service per person at risk remains as low as the present figure for insured persons, a list of 4,000 persons will need more than 20,000 items of service a year. This means, allowing a fortnight's holiday, just over 400 items of service a week. At a six-day week this means about 70 items of service a day. Of course these will not be evenly distributed over the year. It will probably mean over 100 items a day for twenty weeks of the year and between 60 and 70 items a day for thirty weeks.

"In addition," the Minister goes on, "he may have private fees from other patients; other public or private paid appointments; additional fees for undertaking maternity work; mileage allowances, allowances for training assistants, and other extras." What he does *not* say is that the post of district medical officer will disappear; the post of public vaccinator will go; and the posts of Post Office medical officer and police surgeon will probably undergo contraction and eventual disappearance. Nor does the Minister mention that mileage allowances are no more than payments for travelling expenses and time spent—the greater the mileage allowance the smaller the doctor's list; that for those who undertake midwifery under the Service it will be well-nigh impossible to take on a full list; that in most areas private practice will be virtually non-existent. Yet the Minister says quite hopefully that in addition to the remuneration for a full list there will be remuneration from those other sources! "'O come into my parlour,' said the spider to the fly!"

In his section on "distribution" the Minister assures the profession that consent will be refused only in those *few* areas where there is clearly no need for additional public practice. If so, why create an administrative mountain to bring forth an obedient mouse? If the areas are so few, then why is he proposing a vast scheme of licensing of all incoming doctors before they can practise in the public service anywhere? "No doctor can be directed," the Minister says. But any doctor can be prevented from entering the public service in any area.

No Attempt to Justify the Basic Salary

A remarkable feature of this preliminary piece of Ministerial "public relations" is that there is not a word in it to justify the decision to make a basic salary an element in the remuneration of every general practitioner. First the basic salary was to be large; then it was to be small; then the Minister said that it was something "he had had in mind," implying that it was no longer "in mind." Now it is clear what he has had "in mind" throughout. Of course, a good case can be made out for a guaranteed minimum for a young practitioner in certain circumstances, as for the payment of additional inducements in specially difficult areas. *But for the universal basic salary no arguments whatever are put forward.* It is not surprising that the profession regards it as the first step to a State salaried service.

Some of these preliminary paragraphs are too good to be true, too rosy to be even plausible. Beneath all the Ministerial varnish the Act still stands, and in proceeding to examine the Minister's memorandum his assurances must be related to the Act as it is now worded. *If there is one thing that is plain it is the Minister's blank refusal to amend the Act in any shape or form.*

THE MINISTER'S STATEMENT AND THE ASSOCIATION'S COMMENTS

Points from the Minister's statement (in italic) are given below with the Association's comments.

The Minister states that he has never excluded—and does not now exclude—the possibility of amending legislation being found desirable. The discussions have not convinced him of any sufficient reason to go to Parliament now (Para. 3).

For nearly a year discussions have been proceeding on principle and detail, yet the Minister remains unconvinced that there is the slightest case for amending the Act in any particular or any detail. What he alleges will be easy for him to do, *once the profession is in the Service,* he cannot or will not do now.

The Minister finds no conflict between the seven general principles of the profession and the Act (Para. 5).

Let us examine the Act in relation to just two of the principles.

Principle 1: The medical profession is, in the public interest, opposed to any form of service which leads

directly or indirectly to the profession as a whole becoming full-time salaried servants of the State or local authorities.

The Minister insists on general practitioners receiving part-time salaries from an agency of the State. He can at any time, by regulation, increase the proportion of remuneration which is salary. He can, by regulation, convert it entirely into salary. Yet he argues there is no conflict.

Principle IV: Doctors should, like other workers, be free to choose the form, place, and type of work they prefer without Governmental or other direction.

In future general practitioners will not be free to choose their place of work. They must first get permission from a Government committee—even sons and daughters who desire to join their fathers in practice!

Distribution

The Minister maintains and seeks to justify the machinery of the Act. He argues that no doctor should have the right to demand publicly remunerated work, implying throughout that a main consideration is one of public finance.

If doctors were remunerated by capitation fee, the individual doctor would be paid only in so far as the people of the area thought he was necessary. His success or failure would be determined by the people. The Government's total commitment would remain the same, and the choice of patients would determine the distribution of the public remuneration.

Earlier the Minister argues that the essence of the difference so far as general practitioners are concerned is just that they will be paid by public funds instead of by private fee. Now he argues that because the doctor is paid by public funds he cannot choose the area of his practice. One begins to see a reason for the universal basic salary. The Minister insists on a basic salary where it is unnecessary and then argues that because he is paying a basic salary to everyone, then everyone should in future obtain permission before entering an area for public practice.

The Minister denies that the Medical Practices Committee will have a bigger burden than it can efficiently discharge, saying that apart from a few areas its consent can usually be given automatically by a committee which will keep itself informed as to the needs for new public practice or replacements.

The Act provides that every general practitioner who seeks to enter the public service in any area must first get permission—that the Medical Practices Committee must in every case satisfy itself that the doctor is needed. The idea that committees in London and Edinburgh can, even with the advice of local executive councils, remain acquainted with the varying conditions of medical practice in every part of the country is a bureaucrat's dream.

The Minister's reference to the chain of circumstances when a doctor dies illustrates his lack of acquaintance with the difficulties. "If a doctor dies," he says, "and his representative wants to appoint a locum . . . this can be authorized." But why should a representative want to appoint a locum? When a doctor dies his widow becomes entitled to a very modest pension. Her interest in the practice and its maintenance ends.

The Minister fails to prove that a system of universal licensing is necessary to deal with what he now admits are a few cases of "underdoctoring."

The method of extra inducement, coupled with the almost unlimited powers of the Minister under Section 43 of the Act to make appropriate arrangements in areas where medical or other services are inadequate, provides the Minister with ample means to fulfil his obligations.

On the subject of limiting a doctor's area of practice, the Minister's reply is that "It will not have the effect of stopping a patient from crossing some imaginary boundary line to consult a doctor (as the Negotiating Committee seem to think) because the Medical Practices Committee will be asked to make any such refusal only a refusal of consent to the carrying on of surgeries or centres in a specified part of the area."

Compare this statement with the Act: "The Medical Practices Committee may refuse any such application on the ground that the number of medical practitioners undertaking to provide general medical services in the area or part of an area concerned is already adequate . . . the Committee may grant an application subject to conditions *excluding the provision of general medical services* by the applicant in such part or parts of the area of the Executive Council as the Committee may specify."

It will be the duty of the Medical Practices Committee to carry out the Act, not the Minister's reply.

Ownership of Goodwill

The Minister has a closed mind on the subject of the purchase by the State of the goodwill of the general practices of those who enter the Service.

Existing Partnership Agreements

Here lies the acid test of the Minister's intentions on the subject of amendment. Under Section 35 (4) of the Act there are described three kinds of transaction which are deemed to involve sale and purchase of goodwill and so to be illegal. The first two refer to circumstances in which something is paid by one partner to another for considerations other than work done; the third where a partner receives more than his services are worth. There then follows a so-called proviso which excludes certain transactions from the definition. The Minister says that this proviso excludes *all* existing partnership agreements so that they remain in full operation after the appointed day. Our legal advisers say that the proviso excludes only *some* partnership agreements—those where a partner is paid more than the value of the services he renders.

Certainly Mr. Key, then Parliamentary Secretary to the Ministry of Health, did not know what the proviso meant, for all he said in moving its addition was as follows: "This Amendment applies to assistant agreements. It is the same principle as that applying to partnerships."

At first sight this might seem to be a mere legal quibble. But our legal advisers regard the matter as one of great importance, and Sir Cyril Radcliffe, K.C., and Mr. J. H. Stamp, having had long experience in the interpreting of legislation, are not men to use words lightly. They write as follows: "If Sections 35 and 36 are allowed to become operative without amendment the profession and the Ministry alike will labour under embarrassing uncertainty on matters of great importance until the debatable matters have been finally adjudicated upon, and in the meantime steps may have been taken on the footing of a construction which is ultimately found erroneous with unfortunate consequences to all concerned. In our opinion it would involve a real hardship to the practitioners concerned if they were required to submit to such uncertainty when it has been clearly foreseen and can be removed by an amending Act."

The Minister makes no attempt to refute the arguments put forward by our legal advisers, merely stating that if he is found to be wrong after the appointed day he will introduce legislation to make his interpretation the right one.

He expects the members of partnerships to decide whether or not to enter the Service without knowing whether in fact the rights and obligations in their partnership deeds are nullified by the Act. He leaves the whole position vague and ambiguous. Soon a dispute will arise and it will be left to individual practitioners to incur the expense of taking the case to the House of Lords. If the Minister's interpretation is found to be wrong and he, or his successor, carries out his promise of introducing amending legislation, the position will be clarified for the future, but nothing can be done to rectify the steps partners have already taken in fulfilment of their agreements.

Such ambiguity having been demonstrated, surely the profession is entitled to have it removed before individuals are called upon to decide whether or not to enter the Service.

The position is even worse, for our legal advisers give as their opinion that *the Minister's own interpretation is inconsistent with the Act.* For example, the Act requires him to pay interest annually on the compensation due to individuals and, for reasons Counsel give in full in their opinion, the Minister will be unable to carry out this requirement. The Minister replies by claiming that his solution is equitable. But the Negotiating Committee raised the point not as one of *equity* but as one of *law.*

Again, the Minister's own interpretation means that where a practitioner in the Service is in partnership with a practitioner

not in the Service the former may be called upon—under the partnership agreement—to purchase a private practice in respect of which no compensation is provided under the Act; the latter may be called upon to buy a public practice the income of which he cannot secure without joining the Service, so sacrificing the capital value of his own share and the one he has had to buy. The compensation which the public practice would otherwise have attracted is forfeited to the Treasury. The Minister's solution is ingenious. To the extent to which the practitioner not in the Service but called upon to buy a public practice is mulcted of money which to him is a complete loss, to that extent there is money left in the compensation "kitty" to pay compensation which is not authorized by the Act. The Minister counts on the proceeds of expropriation to relieve him of the necessity for amending the Act so as to pay compensation not provided for by the Act in its present form.

The Doctor's House

The Minister assures the profession that a doctor's widow who puts up her house for auction, whoever may buy it, is not committing an offence.

His statement needs to be compared with the words of the Act, which defines as an offence, without excluding the procedure of the auction sale, the selling of a house to an incoming practitioner at a price "substantially in excess of the consideration which might reasonably have been expected if the premises had not been used for the purposes of a medical practice" (Section 35 (3)).

When it suits him the Minister argues that the Act is for the Courts and not for him to interpret. But when he is seeking to allay professional fears he does not hesitate to produce an emollient interpretation of the Act even if a simple straightforward reading of the Act proves him to be wrong!

Remuneration

Whatever the form of service, the range of remuneration of general practitioners is governed by the report of the Spens Committee, which the Minister has accepted in principle. For the profession to stand out for amendment of the Act will not affect the range of general practitioner remuneration.

An examination of the Minister's proposals reveals some interesting features:

The central pool will receive 18s. in respect of 95% of the population for two years only. Therefore, remuneration should be examined on the 95% assumption.

The more general practitioners who enter the Service as principals the greater the number of basic salaries to be paid and the less the capitation fee.

Conversely, the smaller the number of general practitioners who join the Service, the larger the capitation fee.

Nothing has been heard of the tapering capitation fee since the publication of the White Paper. It now returns in a new form. The remuneration for the first 1,000 patients works out at a capitation fee of 21s. 2d., the remuneration for every additional person on the list being 15s. 2d. if 17,900 principals join the Service, 15s. 3d. if 17,500 join, 15s. 4d. if 17,000 join, and so on. It will be seen from the figures given in para. 27 of the Minister's reply that the effect of the basic salary is to reduce the average payment per patient from 21s. 2d. for 1,000 patients to 16s. 8d. for a list of 4,000 patients. The basic salary of £300 a year will be paid to every general practitioner entering the Service, "subject to conditions to ensure that some reasonable minimum number of patients is accepted by such doctors within a reasonable period." The basic salary, it seems, is to be paid on the assumption that those who need it should not need it for long. The great majority of practitioners do not need it at all. The only argument ever used by a member of the Government in support of a universal basic salary is the one used by the Lord Chancellor in the House of Lords when he argued that the salary method was needed for the control of certification.

Comparison with Spens

Does the proposed remuneration square with the recommendations of the Spens Committee? That Committee recommended in net figures and in terms of 1939 money values the following spread of professional remuneration:

75% of general practitioners should obtain over £1,000 per annum.
50% of general practitioners should obtain £1,300 per annum or over.
25% of general practitioners should obtain over £1,600 per annum.
Slightly less than 10% of general practitioners should obtain over £2,000 per annum.
A few general practitioners should obtain at least £2,500 per annum.

The betterment factor used by the Minister in the recent increase of the current insurance capitation fee to bring 1939 values up to current values was 30%. If this low figure is applied to the Spens recommendations we get:

75% of general practitioners should obtain over £1,300 per annum.
50% of general practitioners should obtain £1,690 per annum or over.
25% of general practitioners should obtain over £2,080 per annum.
Slightly less than 10% of general practitioners should obtain over £2,600 per annum.
A few general practitioners should obtain at least £3,250 per annum.
(These are *net* figures.)

In order to make these figures comparable with the Minister's present proposals, it is necessary to convert them into figures of gross income. If this is done, on the assumption that expenses amount to one-third of gross practice receipts, the Spens recommendations take the following form:

75% of general practitioners should obtain over £1,950 per annum.
50% of general practitioners should obtain £2,535 per annum or over.
25% of general practitioners should obtain over £3,120 per annum.
Slightly less than 10% of general practitioners should obtain over £3,900 per annum.
A few general practitioners should obtain at least £4,875 per annum.
(These are *gross* figures.)

How do the Minister's proposals compare with the Spens recommendations? The comparison is exceedingly difficult to make, though one or two calculations are suggestive:

According to Spens, 50% of the profession should receive a gross income of £2,535 or more a year.

The average number of insured persons on a doctor's list is at present approximately 1,000.

If 95% of the community use the new Service the average number is likely to be rather more than 2,000.

Thus the average income of insurance practitioners, taking the Minister's figure for a list of 2,000 patients, will be £1,816 gross (or approximately £1,200 net).

The average income for the "middle group," according to Spens, should be £2,535 gross. Although the average income is not necessarily equal to the middle income, the size of the margin between £2,535 and £1,816—£719—suggests that, even allowing for the Government contribution to superannuation, the Minister's proposals do not wholly fulfil the Spens Committee's recommendations in the middle ranges.

Again, slightly less than 10% of the profession should, according to Spens, receive over £3,900; yet the practitioner with the maximum on his list will receive only £3,332. This means that no practitioner in the public service devoting the whole of his time to that Service can possibly achieve the level of remuneration recommended for 10% of the profession. To reach the level of £4,875 recommended for the few is out of the question.

It cannot be pretended that an exact comparison between the Spens recommendations and the Minister's scale is possible at this stage, but it seems possible that the middle and certain that the higher ranges of remuneration recommended by the Spens Committee will not be achieved by the Minister's proposals.

Right of Appeal to the Courts

The Minister rejects the request of the profession.

This is the one point upon which the Minister was defeated in the Committee stage. He states that any other situation would be impossible. So the position remains that medical practice can be made virtually impossible for a medical practitioner whose name appears on the *Medical Register*, without his having the elementary right of appeal to the Courts. In the Northern Ireland Health Service Bill a practitioner aggrieved by any decision of the tribunal is given the right of appeal to the Courts.

Hospital and Specialist Services

The position remains that the Minister is empowered to establish a hospital monopoly. True he states that he would normally exclude nursing-homes "subject to hearing any views of the appropriate Regional Hospital Board"—a qualified promise which may or may not be adhered to by his successors. Further, he promises, "where circumstances make it possible, to allow a proportion of the available private beds to be used without any prescribed maximum charge." He accepts or agrees to consider a number of other points of detail put forward by the Negotiating Committee. But the Act is to stand untouched. His assurances are not binding on his successors. If the Minister does not intend to take over private nursing-homes, or private hospitals, why does he insist on retaining the power to do so in the Act?

To the extent to which Section 4 accommodation is developed, it will be possible for the Minister or his successors to make private practice impossible. In short, while the Act remains as it is the Minister's assurances can be reversed at any time in the future. The danger of a State monopoly of hospitals still remains.

LOCAL HEALTH AUTHORITY SERVICES

Health Committees

The Minister states that he has no powers of compulsion—and would not wish to seek such powers—to ensure that local health authorities co-opt to health committees members of the medical profession.

The Act requires local health authorities to appoint statutory health committees and to refer to them all matters relating to the discharge of their functions under the Act. The new committees are comparable in many ways to the statutory Education Committees, which are required to co-opt persons experienced in education. But the Minister refuses to ensure that Health Committees shall co-opt persons experienced in health.

Decentralization of Local Health Authority Services

The Minister was asked to provide compensation for county district medical officers of health who lose a major part of their present work and status as a result of schemes for the decentralization within a county of local health services. This applies particularly to the medical officers of those areas which are losing maternity and child-welfare functions. The Minister, in his reply, has ignored the effects of the Act on the position of these officers.

GENERAL

The Minister recognizes in his closing paragraphs that the "medical profession is actuated in the ultimate resort solely by its professional concern in the welfare of the men, women, and children whose care it undertakes. . . ." Part of this professional concern in the public interest is to ensure that the medical profession retains its independence, for it knows that it cannot give of its best work to the public if its members, losing their independence, become salaried officers of the State. The Minister insists that general practitioners shall no longer own the goodwill of their practices; that they shall become recipients of basic salary paid by the State; that they shall set up in public practice in an area only with the permission of a committee established by the State; that the Minister shall retain the power to create a hospital monopoly and to render independent specialist practice difficult or impossible.

In the view of the medical profession these developments are plainly intended as a first step towards the goal which the Minister has publicly espoused—that of a whole-time salaried service for the medical profession. To use his own words, he will pluck us for his purpose when we are ripe. We owe it to the public, to our traditions, and to the medicine of the future to resist this grave threat. The medical profession of this country is ready and willing enthusiastically to co-operate in a comprehensive medical service which will secure for every member of the community the best that medicine can offer. But it would be betraying the public interest tamely to submit to changes which, unnecessary to the main objective, would deprive the public of the services of a profession which is responsible not to the State but to the public itself.

In the long run the independence of medicine is no less important to the country than the independence of the judiciary. What the Act of Settlement secured for the judges is being swept away two centuries later for medicine, under the influence of a contemporary political fashion.

THE PLEBISCITE

There will be issued to every member of the profession on Jan. 31, 1948, a plebiscite form. If a sufficient majority of the profession confirms the view which is here expressed and vote accordingly, the medical profession will be advised not to accept service under the Act in its present form. The profession will be asked to accept the verdict of the majority if that majority is of sufficient size. Whatever the result, no doctor will be advised not to render service to his patients or not to continue with his professional work. The position is well summed up in the statement which the Council of the Association has already issued:

"If the profession decides against service consultants and specialists will be advised to continue with their hospital work, meanwhile refraining from entering into contract with regional hospital boards; general practitioners will be advised to continue with their practices but without entering into contract with local executive councils; public health officers will be advised to continue with their work under local authorities. Parliament has given to every doctor the right freely to enter or not to enter the Service. Indeed the Minister, in his reply, draws attention to this right. The medical profession, while never willing to withdraw its services from the public, is fully entitled to say that the State Service offered is, in its considered view, opposed to the best interests of the public and the profession.

"The task now before the profession is to strip the non-essentials from the essentials, to distinguish between the shadow and the substance. Despite the Minister's promise that if convinced he would seek amendment of the Act, he has remained unconvinced and impervious to argument, and thus for nearly a year we have worked at the conference table to no purpose.

"There remains one final question and one central issue. Does the Service as described by the Minister conflict with the traditions and standards of a great profession? There is only one answer the Council of the Association can give to this question. It does so conflict."

Conclusion

Parliament has given every doctor the right to decide whether to enter the Service or not to enter it. The Minister of Health has agreed that the profession is entitled to decide the question collectively as well as individually. Indeed, it is obvious that in such a matter, which is of the highest professional and national concern, doctors, like other workers, are entitled to look to their leaders for guidance.

The British Medical Association now offers such guidance. It does so neither lightly nor recklessly but after prolonged study of all the issues.

Firmly believing that the National Health Service as at present constituted will undermine the independence which in all ages medicine has needed for its work, and that it is therefore contrary to the interests of both patients and doctors alike, the British Medical Association recommends the medical profession to give expression to this view in its votes in the forthcoming plebiscite.

RESOLUTION BY REPRESENTATIVE MEETING

The following resolution was carried by the Special Representative Meeting on Jan. 8:

The elected Representatives of the medical profession in Great Britain and Northern Ireland, meeting in London this 8th day of January, 1948, solemnly declare that in their considered opinion the National Health Service Act, 1946, in its present form is so grossly at variance with the essential principles of our profession that it should be rejected absolutely by all practitioners.

PHYSICAL EDUCATION IN THE NATIONAL HEALTH SCHEME

A five-day conference on remedial gymnastics was held under the auspices of the Ling Physical Education Association in London in the first week of the New Year. An intensive programme of lectures, demonstrations, and visits was carried through. The opening address was given by Dr. Harold Balme, medical officer in charge of rehabilitation, Ministry of Health, whose subject was the place of remedial gymnastics in the National Health Service scheme.

Remedial gymnastics, said Dr. Balme, started in this country as a means of dealing with congenital deformities and postural defects. Its emergence into a wider field was due largely to the report of the B.M.A. Committee on Fractures, which recommended the development of fracture clinics and the use of rehabilitation methods, particularly remedial gymnastics, in dealing with industrial injuries. Similar recommendations were made in 1936 by the departmental committee of inquiry into arrangements for the restoration of the working capacity of persons injured by accidents. During the recent war remedial gymnastics extended into a still wider field, including the treatment not only of orthopaedic disabilities but of any disorder, whether medical or surgical, which might lead to permanent disablement.

In the proposed National Health Service remedial gymnastics had a vital part to play. Any child born with a deformity should receive continuous gymnastic guidance during school life and later. There were now some 300 hospitals in which the general idea of rehabilitation had been accepted to the extent of allocating separate departments for this work and appointing rehabilitation officers, remedial gymnasts, and occupational therapists. In the future the remedial gymnast must work in children's clinics, where he—or more often she—would be able to deal with deformities and postural defects. No remedial gymnast, said Dr. Balme, need fear that under the new scheme she or he would not find an important place.

Postural Defects

The programme of lectures and demonstrations at the conference included a lecture by Prof. A. B. Appleton on feet and posture and several demonstrations on the remedial treatment of postural foot defects in school-children. Dr. F. S. Cooksey, director of the physical treatment department at King's College Hospital, spoke on postural defects of the spine. Severe structural scoliosis was a problem ten years ago, but comparatively few cases were seen to-day. There were, however, a large group of cases of round back or kyphosis. This condition started early in childhood, and if it was to be remedied physical education must begin in the nursery. In modern orthopaedic books there were many pages on scoliosis, but the antero-posterior curvature of the spine was largely disregarded. The condition often arose in debilitated children, and in adolescence was often associated with impaired respiratory function. He thought that this condition of lordosis had frequently been missed in school medical examinations because while the front and back of the child were inspected no regard was paid to the sideways position, in which the abnormal curvature became apparent.

The disorder was a progressive one. He thought that many such cases might be explained by the frequency of cold and feverish conditions in young children. They were kept in bed for a day or two, but as soon as the temperature subsided they were allowed to get up; and then, owing to weak muscles, they tended to adopt the "slump posture," which became habitual. The child with adenoids and persistent toxic absorption from the nose and throat quickly became fatigued. The spine came out still more with the wedging of the vertebrae, and the round shoulders, "slump posture," flat pectorals, and long dorsal kyphosis became permanent. The problem was one of physical education in the widest sense. Any eye trouble should be corrected, for some of the slumping might be attributed to visual difficulty at the desk. Faulty breathing should be corrected. The child's environment should be studied, and he should be examined at work and play, and particularly when he was tired. Adequate rest, not on an arbitrary basis but according to the needs of the individual child, should be enjoined. If a child got to secondary school age with a round back nothing could correct the real evil, namely, the bony change, though it was true that the appearance could be improved by exercises which encouraged proper muscular tone and carriage.

THE CHILD IN INDUSTRY

The Conference of Educational Associations which was held in London at the beginning of January included a discussion arranged by the Medical Officers of Schools Association, when the subject of the transition from school to industry was introduced by Dr. T. Lloyd Davies, an industrial medical officer of Nottingham. Dr. R. E. Smith (Rugby) presided.

Dr. Lloyd Davies said that 280,000 boys and 270,000 girls entered industry (using the word to include all profitable employment) between the ages of 14 and 17 in 1946. In industry, as compared with school life, the young person found the hours longer, with fewer breaks, the work more monotonous, and the supervision less close. The nutrition of the child was apt to suffer with the end of school meals and milk, and there was likely to be an excess of carbohydrates in the diet. By the time the child entered industry he had come to the end of his second big spurt in the rate of growth. At about the age of 14 boys began to be taller and heavier than girls, who up to that age had had the advantage in these respects. The raising of the school age would make a considerable difference to the state of maturity in which the majority of young people entered industry.

Speaking from his own experience as an industrial medical officer, Dr. Lloyd Davies described "the pathetic scraps of humanity" who sometimes presented themselves for employment—undeveloped physically and in every respect. For some rather obscure reason children who applied for work in offices were on the whole graded higher on intelligence tests than those who applied for work in factories. These children were much more sophisticated than the public-school group; they came from a less well protected environment, and sometimes they had questionable values and standards. They were often difficult, being shy and suspicious, but if handled properly their response was whole-hearted. When there were defects in the home it was not uncommon to find these children on the verge of social delinquency. Their reading matter often consisted of journals devoted to love or crime or both, sometimes with advertisements having an unpleasant sex appeal.

If these children were to be asked what they sought in employment it would be found that most of them were out for a safe job. This was a repercussion of parental unemployment in the 'thirties. It created a deep impression in the family when the father was out of work, for if ineffective from the economic point of view he was likely also to be ineffective from the social and disciplinary point of view, and the psychological balance of the family was upset. Some of the children were more concerned about those with whom they would have to work than about the nature of the job itself; with others it was the reverse, and doubtless there were intermediate grades. In repetitive jobs girls were more at home than boys, being more skilful in escapism, usually an escape to love fantasies and the making of a home of their own. Many boys could not stand repetitive jobs, and this dislike might be reflected in high accident rates or in strikes. Dr. Lloyd Davies reminded the meeting that in one year 32 boys and 4 girls under 18 were killed in factories and mills, and 21,000 boys and 7,000 girls injured to such an extent as to necessitate absence from work for more than three days. Of machine accidents, 16% involved the injury of persons under 18.

The fact remained that the vast majority of children in this country must make the transition from school to industry, the period of growth from childhood to adult life being passed partly at school and partly in industry. Educationists began the job of training them for citizenship, and industry had the responsibility of creating the conditions under which development in that direction was completed. He welcomed the Education Act, 1944, in that it made possible a prolongation of school discipline and oversight into a later period, so that the transition at a critical time in the life of the growing child was made less abrupt and involved less peril for the future.

MEDICAL PRACTITIONERS AND PHARMACISTS ACT

REGISTRATION PROCEDURE

The Ministry of Health issued the following statement on Jan. 5:

Medical practitioners in this country possessing only foreign qualifications who were temporarily admitted to the British *Medical Register* under wartime arrangements have for some time past been concerned as to their future after the termination of temporary registration on Dec. 31, 1947. The Medical Practitioners and Pharmacists Act, 1947, which received the Royal Assent on Dec. 18, defines their position after that date. Under this Act the General Medical Council is empowered to grant permanent registration to such practitioners subject to certain conditions, the most important of which are the production of evidence of satisfactory service in a medical capacity while temporarily registered, residence in the United Kingdom otherwise than for a temporary purpose, and the submission of satisfactory evidence of their medical qualifications if they were not required to produce it at the time of temporary registration. Applications for permanent registration are required to be made to the Council within six months of the passing of the Act and during that time temporary registration continues. Doctors temporarily registered under the Polish Resettlement Act, 1947, are also covered by the new measure.

Four Categories

Provision is made in the Act for the medical registration of several categories of medical practitioners qualified abroad and not already temporarily registered who are now resident in this country otherwise than for a temporary purpose. They are:

(1) Practitioners with service overseas in H.M. Forces (including H.M. Dominion Forces, Indian Forces, and Burma Forces); in any voluntary organization operating in connexion with H.M. Forces; or in a civilian medical capacity in territories within the Empire during the carrying on of war operations or enemy occupation or the continuance of circumstances arising therefrom.

(2) Doctors who were permitted to enter or remain in the United Kingdom before Aug. 4, 1947, owing to war circumstances.

(3) Doctors who came (or may subsequently come) to this country under the Polish Resettlement Scheme and have failed to secure registration under the Polish Resettlement Act by the date (Dec. 31, 1947) when registration under that Act was due to expire, though otherwise eligible for registration under the Act.

(4) Graduates of the Polish School of Medicine, Edinburgh.

Registration in the case of (2), (3), and (4) is provisional in the first instance and conditional in the case of (2) and (4) upon the practitioner being selected for employment in a hospital or other institution approved by the Minister of Health or the Secretary of State for Scotland, and in the case of (3) upon the fulfilment of the conditions for registration laid down in the Polish Resettlement Act, i.e., employment for the medical care of the Polish Resettlement Forces or other employment approved by the Minister or Secretary of State.

The time for submission of applications under (1)–(4) is twelve months from the passing of the Act.

Forms of application for registration and full instructions will shortly be obtainable from the Registrar, General Medical Council, 44, Hallam Street, London, W.1, to whom inquiries should be addressed on all matters other than the Departmental approval of hospitals or other institutions for the purpose of the Act or registration under the Polish Resettlement Act. Inquiries on these particular points should be addressed to the Ministry or Department of Health for Scotland.

The opportunity has been taken in the new Act of regularizing, by a permanent provision, the position of doctors qualified abroad who come here for a temporary period—eminent practitioners coming to give demonstrations of their skill in particular branches of medicine (usually at teaching hospitals) or postgraduate students. Registration in these cases will be temporary only, conditional upon employment in a hospital or other institution approved by the General Medical Council and limited to such employment. Inquiries should be addressed to the General Medical Council.

Pharmacists with Foreign Qualifications

Another permanent change in the law effected by the Act enables the Pharmaceutical Society to register pharmacists qualified abroad either without examination and compliance with normal requirements as to training and study, or subject to such modified examination and other conditions as they think proper. This replaces an existing provision limited to holders of "Colonial" Diplomas whom the Society were empowered to register without examination. Pharmacists qualified abroad who are temporarily registered under the Defence Regulations are eligible for consideration. In the meantime, their temporary registration continues for six months from the passing of the Act.

Preparations and Appliances

A SPRAY DEVICE FOR SURFACE ANALGESIA

Dr. A. OWEN-FLOOD, Hornsey, writes: The attainment of effective analgesia of the pharynx and larynx, and especially in the more extensive preparation for bronchoscopy, is seldom easy and, as evidenced by the obvious distress of many patients undergoing the ordeal of this trying examination, not always successful.

Adequate analgesia of the more accessible structures like the mouth, pharynx, and fauces requires no great effort or skill, but the larynx, epiglottis, vocal cords, and trachea, protected as they are by the shelving parts of the tongue base and the powerful reflexes guarding these vital channels, call for a more expert technique.

Two main difficulties are here encountered. The patient, making every effort to resist invasion of the foreign bodies—

the spatula (which is invariably too short) on his tongue and the liquid spray down his throat—renders the view of the larynx imperfect and the saturation of the whole area with the analgesic solution a hit-or-miss affair. The "saying 'Ah!'" technique, by which prolonged exclamation the patient exposes deep structures, is well enough in itself if there is uniformity in its performance by all patients, but experience shows that it can vary from a faint mouse-like squeak to a bull bellow.

I have chosen Macintosh's laryngoscope for the spray attachment illustrated, because it lends itself more readily to this adaptation than the other makes, allowing a full illuminated

view of the epiglottis and vocal cords, at the same time exerting an even pressure on the whole surface of the tongue. It also steadies that organ and holds it firmly out of the line of vision.

The tongue-piece is composed of two thin plates through which is tunnelled a fine-spray nozzle which emerges about an inch (2.5 cm.) from the end of the spatula, at a point where it curves slightly downwards. This position gives a maximum spread to the spray, allowing also a quantity to dribble and desensitize the lingual surface of the epiglottis and the vallecula. At the rear end of the tongue-piece the spray tube joins a small metal cylinder in a gentle curve, to avoid coming into the line of vision, and to render clearing its stuffed lumen by nylon thread a simple operation should it be necessary.

The cylinder is composed of three parts—a lid containing the spray mechanism and inflator apparatus, the body to which it is screwed in an air-tight joint, and its glass-lined container charged with the analgesic solution. Cleansing is facilitated and corrosive action by this agent is thus prevented.

The surface analgesia, thanks to the excellent properties of the laryngoscope, becomes smooth and comfortable for the patient. With a few squirts into the mouth the tongue-piece can be passed without gagging, and an adequate analgesia is obtained with all structures in view. With fair relaxation of the vocal cords some of the agent can be sprayed directly down the trachea, thus avoiding the necessity for the injection of the liquid agent direct into the larynx by piercing the crico-thyroid membrane—an operation distressing to the patient as well as hazardous.

Reports of Societies

MENSTRUAL DISORDERS IN RELATION TO GENERAL MEDICINE

The last Hunterian Society meeting of 1947 was devoted to a discussion of menstrual disorders in relation to general medicine. Mr. ALEX. E. ROCHE presided.

Mr. ALECK W. BOURNE, in opening, excluded from the discussion disorders due to general pelvic conditions. Where there was no local disease he believed that the majority of manifestations of menstrual disorder, whether amenorrhoea or excessive loss or pain, were due to disturbances of function of the anterior pituitary. How the anterior pituitary exercised such a varied function was one of the biggest problems in medicine. In conditions of anxiety, grief, and fear the gland seemed to go wrong, as was shown by its gonadotrophic action on the ovary. Certain cases of amenorrhoea were clearly associated with emotional disturbance. How was it that the anterior lobe could be disturbed in the absence of any ascertainable hormonal influence? He supposed that the effect of emotional distress on the function of the gland must be explained by the influence of nerve fibres coming down the pedicle from the thalamus, but that only put the problem one stage further back. He believed that the function of the lobe was so strongly under the influence of mental and emotional conditions that it was sensitive to all that a woman feared and equally to all that exalted her. He understood, too, that at least fourteen hormones had been found to be derived from the cells in this tiny lobe of the sella turcica.

Dr. EDWARD SHARP described a small series of cases seen in general practice. Eight cases of spasmodic or intrinsic dysmenorrhoea had not responded to hormone treatment, a general tonic, and advice about fresh air and exercise. Then he had a talk with each patient, trying to persuade her that her dysmenorrhoea did not mean that she was abnormal, and that she must not allow it to "get her down." This was more effective: one patient was much improved and apparently cured, and three others were improved to the extent that it was no longer necessary for them to stay away from work at the monthly period; the remainder were no better. His second group consisted of eight cases of amenorrhoea and oligomenorrhoea; some of them improved after treatment with stilboestrol.

His third group consisted of eight cases of metrorrhagia and menorrhagia, and in seven the condition occurred towards the end of reproductive life. Four had volunteered the information that their loss was always very much heavier when they were emotionally upset, and five of them had a very unsatisfactory emotional background.

One of these women had been saddled with an ungrateful and unsatisfactory father-in-law, entailing a great increase in her work and threatening to come between her and her husband. He was eventually disposed of, and her periods returned to normal. Another was a woman who was in continual anxiety, separated from her husband, and engaged in work which she thought beneath her but which was necessary for the support of her family. So far her periods had been unaffected by any sort of treatment. Another was a woman aged 42 whose husband developed tuberculosis of the spine and whose daughter made an unsatisfactory marriage. Her husband was now very much better and she was improving without treatment. Another woman, aged 32, was anxious about her husband, who was a civil air pilot and absent for long periods. She was sterile, and here again treatment had no effect. Another was a woman aged 44 who had been twice married. Her second husband became a chronic invalid almost immediately after marriage, and the wife devoted her life to nursing him. He died after twelve years. During the last five years there had been no sexual intercourse, but the husband's invalidism was not such as to prevent him from taking a mistress, unknown to her, during the last eight years, a fact which the wife did not discover until she was a widow. After she recovered from her distress and anger she herself took a lover, and her periods had been regular ever since.

These cases illustrated the futility of treating metrorrhagia and menorrhagia as anything more than symptoms. It was significant that in five of these eight cases the husband loomed large in the picture, either owing to his absence or his actions. Happiness in marriage was closely related to normal menstrual function.

Mr. JOHN HOWKINS spoke of girls in the Services during the war who came up for treatment owing to menstrual disorders. He believed that the mothers of these young women had a good deal to do with their condition. They were apt to relate with sadistic delight what had happened to them, and a number of the girls were "auto-suggested" into dysmenorrhoea. He expressed some scepticism about the claims made for drugs in the treatment of these conditions. One disease which was of some interest in this connexion was tuberculosis of the genital tract. Attention had been drawn to the number of cases of sterility in which on diagnostic endometrial biopsy giant cells had been discovered. This question of tuberculosis of the endometrium was a very important one. It used to be said that when a woman who had pulmonary tuberculosis developed amenorrhoea or menorrhagia it was a sign that she had genital tuberculosis. It was worth while to draw attention to the possibility of tuberculosis of the genital tract.

Mr. V. B. GREEN-ARMYTAGE quoted some Biblical and Shakespearean references to menstrual trouble, notably the case of the woman with the issue of blood as described in St. Mark's gospel and certain passages in *Romeo and Juliet* and *The Winter's Tale*.

After some further discussion Mr. ALECK BOURNE, in reply, suggested that the completely happy individual, perfectly adjusted to environment, and exalted, could never be ill. Their trouble as physicians was that they could not prescribe the initial therapy—happiness—for all functional diseases. With regard to tuberculous salpingitis, a recent writer on the subject, in examining the biopsies of women who suffered from sterility, found that 4% showed giant cell systems. It might not be the true deduction that a giant cell in the endometrium necessarily meant tubercle; but it was the fact that tuberculous endometritis was much commoner than many thought.

The first ordinary meeting of the newly formed Medical Subsection of the Library Association was held at the National Institute for Medical Research on Jan. 2. Welcoming the seventy or more members and guests, Dr. C. R. Harington, the director of the Institute, spoke of the increasingly important part played by library services in the modern world and of the invaluable aid that specially trained librarians could give to those engaged in medical practice and research. Dr. G. Popjak gave an illuminating talk on recent developments in nuclear physics and their medical applications, and Miss Ethel Wigmore described the work of the library. A conducted tour followed, and the visitors displayed a special interest in the system of indexing current periodical literature and reprints.

Correspondence

National Health Service

SIR,—At Wimbledon on Jan. 4 Dr. Guy Dain spoke of the impossibility of making the plebiscite legally binding.

May I presume to put forward a proposal that will achieve the desired effect which, if we vote against the N.H.S., is of tremendous importance in dispelling the fear of being in the minority?

When we receive our Ministerial agreement we sign it but leave blank the decision. These papers are then collected by group representatives (if necessary by personal application) and a note also made of papers not collected. The B.M.A. Council would then hold all papers collected, and if our majority were sufficient would stamp them as not entering the scheme and deliver them *direct* to Mr. Bevan. If our majority is not sufficient the papers are to be returned to their owners.

This would prevent all fear of revoking between our plebiscite and the official Bevan ballot, and if made known early enough would bring more votes of "no" into the plebiscite figures, since it is applicable to specialists and G.P.s alike.—I am, etc.,

Haslemere, Surrey. R. MILTON.

SIR,—If the majority of us G.P.s are opposed to the National Health Service Act and if we refuse to join the Service, surely the Act cannot be worked and an amendment will be forced. Assuming a majority against the Act, our weakness lies in our lack of team spirit. We are not sure of the strength of will of our colleagues in other parts of the country. We fear that a trickle into the Service may increase to a rapid flow, followed in the end by a landslide.

I suggest that as a part of the questionary the profession be asked: "If you are opposed to the Service as it stands, and if X% (say 60) are of the same opinion, will you *bind* yourself to refuse to join the Service until acceptable terms are agreed by the Negotiating Committee?" If 60% bound themselves thus, our minds would be greatly relieved, and the arm of the Negotiating Committee would be immensely strengthened.—I am, etc.,

Sidmouth, Devon. G. H. GIBBENS.

SIR,—A year ago the last B.M.A. plebiscite made it clear that the profession held a majority opinion against this Act as it stood, but on the intervention of the three Presidents the profession agreed to set aside the effects of that plebiscite, to induce the Minister of Health to lay more of his cards on the table, and to get the Act amended. After a year's delay there has been no amendment of the Act. Surely, therefore, the verdict of the last plebiscite still holds? And if we must have another, why must we be rushed into it within a month? As the Minister has kept us guessing for a year why should we not keep him guessing for six months and hold our plebiscite in June?

We have had issued to us a manifesto by the Minister himself "addressed to the individual doctor"—suggesting an attempt to drive a wedge between the general practitioner and the B.M.A.—which paints a superficially alluring picture of the new Service. But of what use is it our considering the allurements if, by accepting service under the Act and thus rendering our position irrevocable, we confer upon the Minister the power of absolute dictatorship from which there is no right of appeal ("It must be left to him in the last resort to decide . . . ."—para. 28; and, "it would be impossible to combine this responsibility with *any lack of ultimate jurisdiction* . . ." (my italics)—para. 70)? This would enable the Minister or his successor(s) to rescind any or all the terms of service once his power was established, and we should have no redress whatsoever.

Until and unless the Act is so amended that an appeal can be made to the High Courts of Justice against any decision of the Minister, discussion of details of the Act is surely not only utterly futile but highly dangerous.—I am, etc.,

St. Germans, Cornwall. W. H. SPOOR.

SIR,—The Minister of Health has now clearly revealed his intentions, and it is up to the profession to act decisively. Our only weapon is a majority decision to refuse to enter the new Service, but individual doctors cannot be expected to do this without complete confidence that the majority of their colleagues are doing likewise. In order to ensure this confidence I propose that the Secretary of the B.M.A. should send to every member of the profession the following two documents. The first should be addressed to the Minister of Health and should be signed by all doctors agreeing to the scheme and should be undated, and then returned to the Secretary of the B.M.A. Subject to revision by legal experts it should read somewhat as follows:

"I (Dr. X), being in active practice as a general practitioner, or consultant, or employed by a hospital or local authority in a full-time capacity, or being retired, do hereby inform the Minister of Health that I refuse to accept service under the National Health Service Act, 1946.

"This document must be taken as cancelling any previous application to serve under the Act that I may have signed.

"Signed, Dr. X."

The second document should be addressed to the individual doctor concerned and should be signed by the Secretary of the B.M.A. and should give him a solemn promise that the preceding document, if signed by him and returned to the Secretary of the B.M.A., would not be used unless at least 50% of the entire profession were to sign and return similar forms before the closing date. It should also be required that at least 60% of the general practitioners should sign such forms, and that the forms signed by members of the special groups such as consultants (except those retired) should not be used unless at least 40% of the doctors in the same group had signed and returned similar forms. It should also be made clear that a doctor who had signed such a form would still be free in the meantime provisionally to accept service under the Act, but that such acceptance would automatically be cancelled if the above document were to be used, in the manner to be described, by the Secretary of the B.M.A.

Assuming that the above conditions were fulfilled, they should be retained by the Secretary of the B.M.A. until the closing date for applications, though the existence of the forms and their numbers could be made public. If the Minister remained impassive they would then be dated and delivered to the Minister on the closing date, and each doctor concerned would be individually informed of the fact by the next morning's post.—I am, etc.,

Newport, Mon. G. W. HOARE.

SIR,—Many like myself must have a profound feeling of dissatisfaction at the results of the negotiations between the Minister of Health and the B.M.A.—dissatisfaction both with the results, which amount to *nil*, and with the fact that these negotiations were allowed to drag on for so many months while the profession was kept in complete ignorance of what was happening behind the "iron curtain." The impressions formed are that the Minister of Health was gaining time on his side and that the B.M.A. was at fault in submitting to such a prolonged period of negotiation when it was obvious, as the results prove, that no headway was being made. These results now circulated to the profession could surely have been arrived at in as many weeks as it has taken months. Can there be any reasonable explanation for this delay?

I am sure there is a growing feeling of dissatisfaction against the "kid-glove" methods of approach to the Minister of Health by the B.M.A.

Many of Mr. Bevan's statements are very misleading, especially to the general public. One such statement, that doctors are entirely free to join the Service or remain out of it, is very misleading. The "pistol" is at our heads and we are asked to "sign on the dotted line" and give up our freedom, or not to sign and give up our possibilities of making a living.

If we are compelled to accept service under the Act as it now stands in order to make a living, probably the greater percentage of doctors will enter the Service under protest and with a disgruntled feeling. It seems a pity that Mr. Bevan has shown so little consideration for the principles which the profession has aimed at maintaining, not with any ulterior motives,

and that he has missed the opportunity of appeasing our modest desires, which he could very easily have done and so ensured a Service with a satisfied and contented profession. My only conclusion is that statesmanship and understanding have been overruled by party political considerations by which we will be for ever controlled if we accept service under the Act.

One wonders if wholesale resignations from our present N.H.I. contracts might influence Mr. Bevan to change his mind as the threat of such resignations did on a previous occasion. There is little time left for such action, and it would require to be done without delay.—I am, etc.,

Newport, Fife. A. B. TAYLOR.

SIR,—The only reason for a plebiscite now is to confirm the previous decision. This can be done emphatically if :

(*a*) Non-members of the B.M.A. and members who do not read their *Journal* are reached by clear brief leaflets stating our aims and our objections to the Act, as it exists ; publishing the original Government policy—i.e., a full-time salaried Service, which obviously is still the Minister's ultimate aim ; and pointing out that he has the power to attain this with his dictatorial powers under the Act, and that there is no appeal against his decision.

(*b*) Doctors who find it difficult to decide, owing to financial reasons, are given details of the Fighting Fund, its source, and an idea of how it will be used.

(*c*) An answer is given to the many who say, "I would vote against it if I knew what my neighbours are doing."

(*d*) There is a guarantee that no agency or group will be allowed to trail another red-herring after the plebiscite, no matter how good their intentions.

(*e*) It is pointed out how a handsome capitation was offered to get doctors into N.H.I. in 1912 and how it was "adjusted" to less than 50% of that sum in due course. This bait is offered again with the significant sentence. "But in two years' time that position will be reviewed."

(*f*) It is pointed out that the silky "General comments of the Minister addressed to the individual doctor" were obviously not written by Mr. Bevan's pen. They remind one of Hitler's non-aggression pacts before invading a small neighbour. Neither was para. 71 of the Minister's report, which might have been written by a Florence Nightingale. It even promises amending Acts !

(*g*) Finally, the actual plebiscite paper is made simple and clear. (It is generally agreed the last one was misleading to many.)—I am., etc.,

Moseley. THOMAS J. CRONIN.

SIR,—Dr. E. Billing (Jan. 3, p. 25) writes, "The decision should be taken on the vote of private practitioners only (consultant and general), whose future is at stake," and gives a list of various publicly paid doctors whose "votes should not influence the issue." May I, a *retired* G.P., go further and say that the votes of retired men should for obvious reasons (political or family) be entirely left out of the count, as our future is not at stake and we can, so far as is possible, leave the future and the reputation of the profession in the hands of its acting members.—I am, etc.,

Crediton, Devon. E. PROTHEROE SMITH.

SIR,—The preamble to the circulated pamphlets of the Negotiating Committee's case and the Minister's reply asks the profession to study these preparatory to a plebiscite being taken. For this purpose preliminary and divisional meetings are being held for exposition and discussion. I think a serious error is being committed in not also circulating to the profession the exact terms on which a plebiscite will be taken.

The *terms* for the plebiscite are *all-important* ; they should be the subject of careful discussion by the profession and should be agreed by the profession before being sent out for voting. For instance, it may be impossible for a man to give an honest "yes" or "no" vote on whether he will serve under the Act as it now is. He could only do so if assured that action will only follow a unanimous decision. It is quite clear that there will not be a unanimous decision, and in this case a man standing to his vote of refusal to serve might well find himself faced with economic ruin. Such a strain on him would be intolerable and should not be required. It would be better for the plebiscite terms to be much weaker but capable of being carried out, otherwise an honourable man must abstain from voting. I would suggest that the plebiscite should include a vote that he would serve, but with disapproval of the offending clauses and intent to work for their amendment. The exact wording should be the subject of careful discussion. Such voting would have great weight because of its obvious integrity and as indicating that service would be given under durance.—I am, etc.,

Worthing W. O. PITT.

SIR,—The Minister's reply may be summarized as soft soap and personal promises. I do not believe he personally wrote the former ; the phraseology simply is not his ; and the promises are useless, for apart from any question of good faith he may be dead or dismissed to-morrow. The only thing that counts is the Act. The Act *in its present form* is anathema to us. The trap is wide open. Once we are in we are finished ; this is our last chance. Sell your practice (note the blackmail : no compensation if not in by July 5) and accept a basic salary (stated categorically by the Lord Chancellor as designed to control our certification), and you are a slave.

Certification ? What a thought ! What a weapon ! If we stop issuing certificates the whole machinery of the top-heavy bureaucratic mass stops dead as completely as the kingdom in the fairy story. "No amending Act : no certificates." Not a bad slogan, my brothers and sisters.—I am, etc.,

Devon. W. F. BENSTED-SMITH.

SIR,—Time is getting short. Overmuch has been said about some aspects of the National Health Service and insufficient about others. We still have no idea of what our income will be for the following reasons: (1) The rate of remuneration depends upon the percentage of population insured ; (2) the greater the percentage insured the less will be the number of private patients who can afford to pay us.

We still know nothing definite about compensation. Is it to be twice average gross of the last three years ? If it is for any earlier period then it amounts to capital appropriation, because no allowance is made for practice growth in recently acquired practices. For example, a panel practice is bought in 1945 and a private practice is built up in addition subsequently. Is the compensation only to be for the panel value in 1939 with no allowance for existing private income ?

The majority of practitioners in N.H.I. work must feel how much more satisfactory it is to treat private patients, because private practice is recompensed in proportion to output whereas N.H.I. work, hedged about as it is with irksome restrictions, leaves one with the feeling that one is constantly being imposed upon by the irresponsibles and neurotics.

I see that the Minister intends to arbitrarily decide what certificates must be issued free. I should hate to be dependent on his decision when I think of the numerous reasons for certificates arising out of rationing and control.

The present N.H. system, in which the doctor is under contract with the societies instead of dealing direct with the public as regards payment, is unsatisfactory enough. Why not seize the present opportunity to start afresh ? Follow the example of the medical profession in the Department of Var, S. France, where the doctor is paid direct by the patient, who is thus made to realize that service costs money and is not to be dissipated on aspirins and bromides. The patient then collects what he can from his society, which in turn learns to recognize the bad sheep in its fold and deals with them accordingly.

Substitute the Government for the society in this proposal and let matters take their course. The net effect of the compulsory levy of 6s. 2d. weekly, which all self-employed men, including myself, will have to pay, and the resulting experience of the scheme by the public will no doubt cause many second thoughts and result in an electoral kick in the pants for this or any Government which persists in it.

Are we going to be such fools as to voluntarily relinquish our present degree of freedom, and income of known dimensions, for more restrictions and absolute doubt about our future ?—I am, etc.,

Bournemouth A. R. THATCHER.

SIR,—A leading article in *The Times* on the new National Health Service discusses "a crisis in confidence" and suggests that the attitudes of both parties to the dispute are determined more by emotion than reason. Having carefully read the B.M.A.'s circular, Mr. Bevan's reply, your leading article in the issue of Dec. 20, 1947, and the letters in your issue of Jan. 3 I am forced to agree with *The Times*. For what are we asked by our leaders to do battle with Mr. Bevan and Parliament, risking each individual's financial future and the profession's reputation? What major issue are we asked to fight for? Your correspondents say that our freedom is in jeopardy, but not one of them faces squarely the fact that increasing organization can only take place at the expense of the individual's right to do what he likes. Surely the whole evolutionary process is in the direction of increasing organization. Are we to refuse to recognize this because we dislike the inevitable restrictions this process entails? Would it not be more dignified to take our part in the very difficult problem of organizing without destroying individual liberty and initiative?

Your leading article asks us to refuse co-operation on the grounds that Mr. Bevan is playing a confidence trick on us. In a few years' time we shall be forced to accept a full-time salaried service, we are told. Surely if any Minister were foolish enough to attempt this we should then have a major issue with the weapon of the strike in our hands. Should such a conflict ever arise we should have the public behind us, provided always that they have received a satisfactory service from us in the meantime.

Mr. Bevan appears to have gone out of his way to put our backs up. Many speakers on the B.M.A. platform have taken an unreal and intransigent line. We have heard appeals for a crusade against bureaucracy. This emotional conflict of personalities will get us nowhere and commands little support in the country. Recent by-elections have disposed of any illusions that the country can be roused against the present Government on a cry of "freedom *versus* bureaucracy." The average man sees that the two must somehow be combined. Let us make an important contribution to the solution of this problem.

If the profession persists in the policy advocated by the Negotiating Committee I foresee an ignominious repetition of the events of 1912.—I am, etc.,

Chipping Ongar, Essex. F. E. S. HATFIELD.

SIR,—While fully in agreement with Dr. L. P. Gray (Dec. 20, 1947, p. 1007) that direction of any labour is wrong, if as a profession we take industrial action to further political views, as distinct from sectional defence, as he appears to advocate in his recent letter to you, then, I submit, we should be ethically wrong and should be setting a very dangerous precedent.

Within our consulting-rooms there should be no politics. Outside our professional work let us be as forceful as we can in political activity. As doctors we have every right to sabotage the wishes of the majority, actual or alleged, when as competent and expert judges we consider those wishes bad for patients and for the profession, both of which we have the right to protect against all comers. Outside our special province we have no right to use the weapon of the sabot.—I am, etc.,

London, S.W.8. T. J. TAUNTON.

SIR,—I share with Dr. E. W. Vincent (*Supplement*, Dec. 27, 1947, p. 171) the concern he expresses about the inadequacy of the compensation provision. Even if the £66,000,000 was considered adequate at the time it was computed, it can hardly be so now, as the pound has fallen in value since then and it is impossible to foretell what it will be worth when compensation falls to be paid "on retirement or death."

Should this depreciation continue, a practice would normally fetch a higher price and make up for it; whereas compensation calculated as at the appointed day will remain fixed. This question is of vital importance to the G.P., who must be satisfied that he will not run the risk of losing his hard-earned capital if he enters the Service. We should insist that the Government pays when it buys us out. If it is contended that the country cannot afford to spend so much money at this time, it is further proof that this is not the moment to introduce such a costly service, the success of which is by no means certain.—I am, etc.,

Musselburgh, Midlothian. JAMES SHARP.

SIR,—In the *Supplement* of Nov. 1, 1947 (p. 100), a report of the Ophthalmic Group Committee appears in which it is stated that in the view of the Ministry of Health there was no case for the compensation of specialists for their practices for the reason that, "in so far as consultant and specialist practices might continue to be bought and sold, the National Health Service Act would not prevent the continuance of this custom." If this refers to "State" practices, it is, to say the least, a very curious anomaly. If on the other hand it refers only to private practices, the fallacy in the argument is obvious.

On receiving the report of the Negotiating Committee I naturally expected to find some clarification of this position. It appears, however, that this cynical disregard of the elementary principles of equity is not considered of sufficient importance to be worth a mention. Nor is the matter mentioned in the Minister's statement, from which one would gather that all doctors who elect to join the Service on the appointed day will receive compensation.

The report of the Negotiating Committee is stated to give all the information at present available. It is only to be assumed, therefore, that this matter, in common with most of the regulations, etc., concerned with the specialist services under the Act, is still under discussion. If this be the case, it is surely premature to hold a plebiscite before every member of the profession has had an opportunity of studying the complete regulations of the Act in their final form.—I am, etc.,

Plymouth. P. R. GREEVES.

SIR,—In the *Journal* of Sept. 7, 1946 (p. 342), you were good enough to publish a letter in which I tried to show that the essential difference between the Minister of Health and ourselves was one of policy rather than of principle. No one attempted to refute my argument at the time, and I refer to it because your able leader (Dec. 27, 1947, p. 1037), together with the Council's statement (p. 1046), appear to confirm my contention, for it is because the National Health Service Act is regarded as "the first and irrevocable step towards a whole-time State service" that we are invited to refuse service under the Act.

Socialist policy has always included a whole-time State service, and in 1945, when the present Government was elected on a clearly defined Socialist programme, many of us expected, and feared, that the new National Health Service would be according to plan and were astonished and relieved when Mr. Bevan's Bill proved to be merely a pale pink edition of the measures introduced by his predecessor, which, be it remembered, was an essential part of the Beveridge Plan accepted by all parties.

I am not a Socialist, and I loathe the idea of a whole-time State service, but it is advisable not to allow the violence of our emotions to interfere with the clarity of our thought. It is unfortunate that so few people recognize the fact that we are living in a period of revolution, as real as those of France or Russia, happily unaccompanied by the bloodshed and expropriation which disgraced them, but every whit as real. The party which now rules us has not lost a by-election, has nationalized the banks, the mines, and the railways in spite of all opposition, yet we are invited by our leaders to oppose a Government which has triumphed thus far because it has taken "the first step" towards nationalizing our profession. Has the B.M.A. Council forgotten King Canute and Mrs. Partington?

The Minister has promised that he will amend such portions of the Act as are found to be unworkable and asks us to co-operate with him in working it on those terms. As an alternative to the recommendations of the Council, with all respect, I venture to suggest that we take him at his word. The Defence Fund has ample funds to pay the expense of taking a test case to the House of Lords, and if one may judge from letters in the *B.M.J.* there should be fierce competition among the fire-eaters for the honour of being the principal figure in the case.

Section 36 (2) suggests that the Minister estimates that about 18,000 practitioners will be necessary to work the Act. Assuming that he has obtained that number of signatures on the appointed day, he will find himself in the position of being legally liable to

provide free medical attendance on about 45 million people and dependent on those signatories to enable him to fulfil his contract. If we co-operate with him, within a year or two we shall be in a very powerful position, for even a Socialist Minister of Health cannot suddenly create several thousand medical practitioners to enable him to meet his obligations. Panel practitioners have proved at least twice that it is possible to combine and force a Minister to listen to reason, and the power of the profession in the N.H.S. will be far greater than in National Health Insurance.

Few appear to remember 1911 and 1912. Everything that has been said against the N.H.S. Act was said then against the N.H.I. Act—everything. And in those far-off days of freedom Lloyd George's Act seemed even more revolutionary than Bevan's does to-day. The B.M.A. put up a great fight and won five rounds out of six, and 27,000 men signed pledges not to take service "except on terms in accordance with the Association's policy." The Council then, as now, thought that the profession could successfully oppose an Act of Parliament and held out hoping to win the sixth round—and there was a general breakaway. Then we had a powerful Press and a large section of public backing us ; to-day we have neither.

It is absurd to suppose that the profession is as united now as it was in 1912: the last plebiscite is evidence of that. In the questionary of 1944, 24,538 men and women took the trouble to answer forty questions, some of which are the crucial points to-day. More than one-third were in favour of payment by basic salary plus capitation fees. More than one-half expressed their opinion that the measure of "direction" proposed was reasonable and that the sale and purchase of practices should be abandoned. Is it likely that all these people have changed their minds ? Nothing new has been said by anybody to induce them to do so.

Let us face facts. The Minister has at his disposal the sum of £66,000,000 with which to compensate for the loss of the sale of the goodwill of their practices those men and women whose names are on the lists of Executive Councils on the appointed day, and those only. How many of us can afford to take the risk of losing his or her share of this ? We know that few of us can do so, and, however fine it may be to reflect on and talk about the "traditions and standards of our great profession," most of us have to earn our living in order to practise it, and that stark fact is the basic reason why we cannot refuse to serve.

None of the disasters predicted in 1912 materialized, and we made the National Health Insurance Act a success, a benefit to the public and to the profession, and it is because of my long experience in that service that I am convinced that we shall be able to serve in the National Health Service without sacrificing any of our standards or being false to our traditions.—I am, etc..

Buckfastleigh, S. Devon. SYDNEY R. WILLIAMS.

SIR,—The most obvious way to defeat the machinations of the Minister of Health is to reduce as soon as possible the number of practitioners who have no vested interests. I would suggest that all present practitioners and firms in partnership who are anxious to maintain the *status quo ante* do their utmost to take a partner and make him or her a "Have" instead of a "Have-not." Mr. Bevan is relying on the latter in the main to implement the Act. It is worth while making some pecuniary sacrifice to deprive him of his recruits and safeguard the future of the general practitioner and the public.—I am, etc.,

Great Yarmouth. LEONARD LEY.

SIR,—After a careful study of the Negotiating Committee's statement and the Minister of Health's reply, together with the Press (medical and lay) reactions over the week-end, one is still left in a somewhat perplexed state of mind. The *Lancet* comes out with the advice, "Trust the Minister," and makes the plain statement that because in the past we have sponsored the cause of medical reform the possibility that the profession will in the end refuse to take part in the N.H.S. is virtually buried, though concessions may be necessary before it commits itself. How these are to be secured from a Minister who has proved himself so stubborn in the past and believes he is going to be victorious ultimately is not stated.

The *British Medical Journal* on the other hand, having led us to believe (Panel Conferences, reports, etc.) that the Negotiating Committee had presented an unanswerable case, feels slightly hurt that the Minister made no conciliatory gesture by offering to make the smallest amendment of the Act. Much was made of Sections 35 and 36, but what does it all amount to when the Minister makes it clear that if at a practitioner's expense a costly court case proves his interpretation of the sections wrong he would "take steps to introduce legislation to restore his original intentions"?

Two points occur here. The first is that no suggestion is given that the B.M.A. would or could bring a test case to relieve some practitioner of colossal expense ; and the second, did the Negotiating Committee beg the Minister to omit *pro tem.* contentious clauses so that the Act could be operated in a "favourable atmosphere" and be made "the success which both they and he want it to be" ? What we have in these documents is the presentation of two answers to the same problem—viz., can the N.H.S. be made to work well ? The Minister says there are no difficulties about it given good will. The B.M.A. says no, it cannot, since the sacred principles are still violated.

As the *Daily Telegraph* said, the position is one of stalemate. Is it surprising that the practitioner is puzzled when one paper proclaims that this Act will make the medical profession the best paid in the country, while yet another informs us that to take in 4,000 units the doctor would have to be an athlete, a road hog, and as expeditious as lightning. One feels therefore that the Council of the B.M.A. should give us the inside facts to help us make up our minds. Surely the least we could expect is the immediate printing in the *Journal* of the verbatim account of the final discussions with the Minister. Did he present the velvet glove discernible in the Memorandum, or was the iron hand employed ? Frankly, much of the difficulty arises because no one completely trusts Mr. Bevan—his intransigent attitude, his great powers under the Act, and his ability as a side-stepper are too well known. On the other hand, we should like to judge whether the Negotiating Committee properly presented their cast-iron case. Only the fullest and early publication of what was said can enable the rank and file to instruct their Representatives at the S.R.M. on Jan. 8.

On closer examination of the documents no light is shed on (*a*) hours of work, (*b*) holidays, (*c*) provision of locums during unavoidable absence—e.g., sickness—(*d*) formation of a liaison body like the I.A.C. unless such is adumbrated by 26 (8). All these points are of importance before deciding what the remuneration amounts to.

Compensation.—Surely it is not the normal procedure in business when one party's interest in a business is acquired by another to defer payment till retirement or death. Did the Negotiating Committee press for a speedy payment of capital values so that the doctors could invest at better rates than 2½% if they so wished or could buy their own annuity or at least make it negotiable ? What, for instance, would be the position of a doctor who is dismissed from a 95% service ? Would his compensation and superannuation be paid or would they be forfeit ? If the latter, the effect would be to make practitioners more subservient to an all-powerful Minister. On this matter of expulsion the *Lancet* naively suggests that we should be "satisfied" with the Minister's proposal to set up an advisory committee instead of the right of appeal to the courts, "but only if members of the Service remain perpetually alert in the cause of professional freedom and ready to defend it at all levels. As with so much in this Service, the remedy here lies with ourselves." Is this a polite suggestion that, like the proletariat, we might stage a lightning strike occasionally ? If doctors are not prepared *now* to insist on what the Panel Conference has already declared advisable, what possible chance is there of Ministerial puppets doing anything drastic ?

Remuneration.—We should like to know how the figure of £300 basic salary was arrived at. With the sliding scales proposed it is very difficult to calculate what one's income would be. The unknown factors are (*a*) what proportion of the population would elect for panel doctoring, (*b*) the number of doctors who would either willingly or unwillingly take part. The figures (17,900) are misleading, as my information is that there are 21,000 general practitioners available plus 2,000 aliens who could come on the *Register*. If all these take part the capitation fee will fall badly. Here again one wonders if any attempt was made by the Negotiating Committee to get a fast rate fixed so that reasonable calculation could be made of one's expected income and help decide whether the N.H.S offer was an economic proposition in each case.

Working things out on the figures given, this is what one urban practitioner's income might be, assuming a 95% service and a panel of 2,500. *Gross income :* £300+£1,895=£2,195. *Expenses* (approximate figures): Superannuation, £125; car (12 h.p., 12,000 miles yearly at 6d. per mile), £300; rental of surgeries, etc., £200; income tax on, say, £1,400 at average 8s. per £1. £560; rates on house, etc., £80. Total unavoidable practice expenses: £1,265. Net balance: £930.

With two children at school the position is not easy. If one child should wish to go to a medical school at, say, £360 per annum, it is quite impossible for another child to take up medicine as well It would be a salutary measure if every medical practitioner would similarly work out his financial position from known expenses as for inland revenue returns.

Midwifery.—The position of the G.P. who sits in judgment on his colleagues' obstetrical ability is indeed an unenviable one. Why treat N. Ireland and Scotland differently from England and Wales in midwifery regulations ?

Does all this correspondence mean that we have unequivocal grounds for giving a dogmatic "No" to the Minister? I doubt it. The Minister states he is not prepared to alter the Act before the new Service has been tested in actual operation and found to need amendment. Very well, let him try it out in, say, N. Ireland for a year or so. If it works there, well, we can all join in cheerfully.—I am, etc.,

Swansea. WILLIAM PARKER.

SIR,—At a meeting of doctors practising in Fleet and the surrounding districts to discuss the National Health Service Act it was unanimously decided that the Act should be rejected for the following reasons:

(1) The Act is unworkable because of the greatly increased demand on the practitioner by the minor sick and by certification, leaving him insufficient time for adequate treatment of the really ill.

(2) The Act deprives the doctor of his rights as a citizen by removing his right of appeal and his right to own and sell his practice. The direction of labour in any form should be regarded as a purely wartime measure and in peacetime constitutes an infringement of civil rights.

In view of the above facts it is suggested that, to avoid ambiguity, the wording of the plebiscite should be (*a*) Do you agree that the National Health Service Act should be accepted as it stands? Yes or No. (*b*) In the event of a majority answer to question (*a*) being "No," would you be willing to refuse to take service under the Act? Yes or No.

Unless we are prepared to fight this Act *now* and do more than grumble about its injustices, we shall find it thrust upon us and it will then be too late.—We are, etc.,

A. W. HARRINGTON. R. W. M. MORRISON.
R. L. HARWARD. R. H. SCOTT.
T. C. JAMESON EVANS. J. A. SHARKEY.
J. G. MATHEWSON. C. R. TILLY.

Fleet, Hants.

SIR,—It appears from your correspondence that all the virtues belong to the opponents of the Health Act, all the evils to its supporters. Whatever else the Act does it at least ensures that every newly qualified doctor may ultimately in his own right serve the community and practise without becoming involved in the complicated and pernicious system of borrowing large sums of money in order that he may so practise. Surely many who have had to purchase practices with borrowed money have felt anything but free to practise entirely according to the principles on which they were nurtured. The medical schools, to which we look for so much inspiration, have had little to say on the commercial aspect of medicine, which is curious indeed if it be such a cardinal point of ethical practice.—I am, etc.,

Luton, Beds. P. H. WOODCOCK.

SIR,—Negotiations of recent date, I feel, have proved farcical. One cannot make progress with a non-negotiating Minister. Certain features of the Act—too familiar now to bear repetition—are directly opposed to the profession's principles. What is to follow? Local meetings, study groups, and a plebiscite—and to what avail?

It seems apparent that meetings and the like will occupy us during the few months that remain before the appointed day. The ultimate plebiscite, then, may well show a high proportion of doctors opting out. And what will follow this? The Minister, like ourselves, is a realist and knows that, as the appointed day nears, few, opting out, will be able to ignore the forms inviting them to join the Service—and for simple reasons:

(1) The younger practitioners, with their heavy financial commitment of purchasing a practice and often a house, would be throwing away their panel lists and the compensation value of their goodwill; they would become bankrupt overnight.

(2) The middle-aged and established practitioner would too lose the value of his goodwill, the fruits of his labours for many years. He too may well have heavy financial burdens—a growing family and a mode of life commensurate with his status.

(3) The elderly practitioner: can he afford, near his retirement, to lose the value of his practice, to which he has devoted many years of his life?

It appears to me that all the courage and loyalty of a free profession cannot battle against these financial considerations, and many, opting out, will "sign on" to protect their family's well-being and their own livelihood. I consider that Mr. Bevan's ideas run on these lines. He once said in the House that doctors could remain outside his scheme (and with a laugh) if they can make a living! I do not think these views are defeatist that enable us to see the probable course of events—a complete loss of face, as we loathfully sign away our birthright of freedom to enable us to live, after vociferously denouncing the Service—a united and honourable profession laid low by one obstinate man, who then dictates, within his powers, to us all!

Our plan must be carried out now: we must carry the war to the enemy so that no longer do we find time is against us. Two alternatives come to my mind: (1) A large-scale resignation of panel doctors, pending true and real and earnest negotiation; (2) an ethical "strike" of panel doctors, during which time medical care and treatment continue as normally, but no incapacity insurance certificates and no death certificates are signed. This latter plan may well seem at first to "hit" the insured person if it continued for more than a week. Better by far, I say, hit and even hurt these people for a short while—and it would be a short while—than sentence the whole populace to be doctored by an unsatisfied, disgruntled, and fettered profession—for who knows how long.

The Minister would have to listen to our views again and this time perhaps with open ears and even an understanding mind. Perhaps to many this may all sound youthful, fanatical, and aggressive—indeed, it is—but its aim is not revolutionary or damaging: its aim is to show that at least one body of our people is prepared to fight for its rights and is not fooled by a seductive introduction to a scheme in a pamphlet. To have any chance of success we must act now, or I feel we will have failed miserably to adhere to our own professional code.—I am, etc.,

Birmingham. V. B. GOLDMAN.

SIR,—When the Negotiating Committee sat down with the representatives of the Ministry of Health to discuss the National Health Service Act we understood that they were to discuss both regulations and the possibility of an amending Act. We now have the reports of both parties before us, and, although they consider at great length the pros and cons of an amending Act, of the regulations, apart from the question of remuneration, they say practically nothing at all. There must be many like myself who voted "Yes" at the last plebiscite because we were not impressed by arguments about "principles" and wanted to see exactly where we should stand before we decided whether to join the Service or not.

As things stand we are being asked to make this decision without any idea of what it will involve. As far as one can see all that will happen on the appointed day will be that all our patients who wish to do so will become insurance patients. In consequence there is bound to be an enormous and even overwhelming increase in work. Many of our private patients who are now satisfied to come once every month or two will be attending weekly for certificates and repeat prescriptions. Mothers will bring their babies to us for their minor complaints instead of going to the welfare clinics, and the menopausal and neurotic will flock to our surgeries. All these will be perfectly within their rights and only demanding that to which they are reasonably entitled. Yet unless there are definite regulations to allow certification for longer periods than one week, to allow prescriptions that may be repeated at intervals, to arrange for free clerical assistance, to organize rotas for night work, week-ends, and holidays, and so forth, it will not be long before even the least work-shy among us will be breaking under the strain. What is more, those of our patients who are suffering from serious disorders will suffer from our being unable to give sufficient time to their care.

There are ways and means whereby this extra flow of work can be offset by better organization of medical practice. Health centres cannot be built overnight, but schemes for group practice could be an integral part of the regulations, and there must be many other ways in which your readers could suggest easing the burden. Meanwhile, I feel that no sane member of the profession engaged in general practice can vote for entering a service of this sort until he has some idea of what he will be called upon to do in it.—I am, etc.,

Margate. M. CURWEN.

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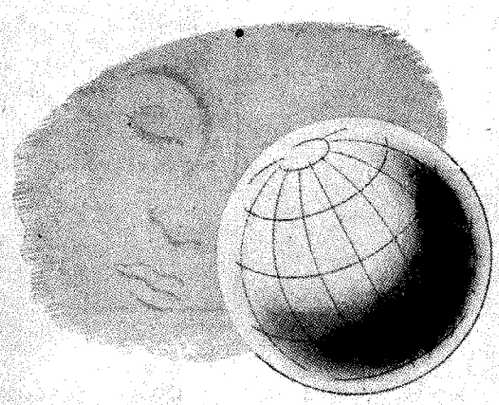

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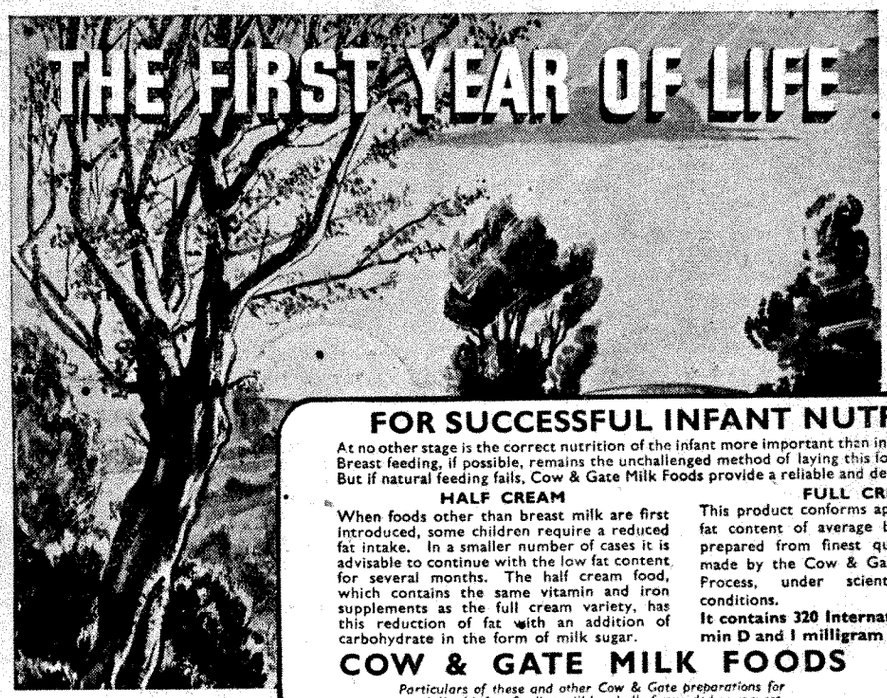

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SIR,—We are not told how our contract, under which we are responsible for the treatment of patients on our panel list, is to be discharged when the State Medical Service comes into force. Under normal circumstances, a panel doctor remains responsible for the care of his patients until the expiration of three months' notice given at the beginning of a quarter. The doctor is legally bound otherwise, unless he arranges an approved deputy or transfer.

Does the National Health Service Act discharge the present contract by operation of law? It would be well to get this clear. Unless this is so, a panel doctor will, on July 1, 1948, be legally bound to attend, for a further three months, all patients then on his list, unless he has given notice of resignation to the Insurance Committee not later than April 1, 1948. To give such notice on April 1, 1948, would be to deprive himself of the right to compensation in respect of his panel practice: he won't have a panel practice when the Act comes into force.

If the doctor did not give notice of resignation, and did not elect to practise under the Act, would it result, if an insufficient number of doctors joined the Service, in the panel doctor being compelled to attend to all or some of the patients then on his panel list, but being precluded from receiving remuneration out of public funds unless he enters into a new contract with the Minister?

As to the Act itself. May I take the opportunity of saying that, though not all doctors are in favour of the Act (and some of us are very much against the upheaval in the practice of medicine as we received it and have always known and regarded it), we must accept the fact that centralization and control are the ways of the world to-day. The Act is on the Statute Book. It would have needed a 100% outcry against the Bill when it was going through Parliament to have defeated the only thing in it which really matters—that medical practices are to be taken over by the State after a given date. We were not sufficiently unanimous as a profession to oppose it. Time may prove that opposition was wrong. It may be that the relief from financial burdens and obligations that most G.P.s saddled themselves with will enable the young practitioner to keep his mind on his job and give him a longer and happier life.—I am, etc.,

Hull. M. G. LUCAS.

SIR,—The Minister of Health's refusal to meet the profession in amending Sections 35 and 36 of the Act, despite the strong protest of the Negotiating Committee backed by prominent legal advice, is surely a very definite indication to the profession that there is a determination to enforce the Act as it stands ruthlessly, without any attempt to "meet any views of the profession which do not conflict with the principles of the Act." The unnecessary hardship likely to be inflicted—particularly on younger men in partnership with one of more advanced years where compulsory purchase of the retiring or deceased partner's share is a condition of the partnership agreement—is likely to impose a financial load of some considerable moment. The Minister's failure to concede what to him must be a minor point must cause much misgiving when we realize the powers he is determined to assume in other directions over the life and soul of the profession from "the appointed day."

The suggestion is made that the continuance of partnerships or group practice is desirable, and most of us will agree with this; but once again one of the main safeguards of the patient of such a partnership has been that the choice of a new partner has been made by the partnership. Under the new Act no mention is made of any participation in the selection of the new partner by the existing partners, unless they happen to be members of the Medical Practices Committee; and I am convinced that, unless this is remedied, group practice such as we understand it at present will be eliminated through natural causes in course of time, as no one would be such a fool as to risk the choice of an independent body without accurate knowledge of the personalities in existing partnerships.

The basic salary might well be confined to that offered by the Executive Council through the Medical Practices Committee to the nominee to a vacancy in a partnership practice during a, say, six- or twelve-months preliminary assistantship such as is undertaken at present, to determine (1) whether the partners approve, and—Mr. Bevan please note—(2) whether the *patients* can cope with the incomer. At the end of that time the new partner would be sufficiently well known to create his own practice and income, whether by purchase and share in the general income or by gradual acquisition of overflow from the existing practitioners.

Most of us accept without hesitation the idea of a "General Medical Service for the Nation," but, quite apart from personal or, shall I say, selfish grounds, we are in a prime position to anticipate the effect on the patient of the implementation of the National Health Service Act as it stands. It is a great pity that we are not doing more to make the general public realize the inevitable deterioration which must ensue in the type of service which must be the outcome of Mr. Bevan's obstinate determination to drive us into a full-time State salaried service, where our allegiance would be to our new employer—the State—and not to our present employer—the patient.—I am, etc.,

Bishop's Stortford, Herts. R. P. GAMMIE.

SIR,—In the last ballot I answered "Yes." Had the issue been explained in more definite and concise language I should have answered "No." The official communications—(1) the Negotiating Committee's case, (2) the Minister's reply—published in the *Journal* of Dec. 20 (pp. 141 and 154) are again not sufficiently clear and may lead to confusion in the forthcoming ballot. I feel sure that a concise and simple summary of the whole position such as appeared in the *Daily Telegraph* of Dec. 22 by Mr. Derek Walker-Smith, M.P., is required.

It is certain that medical dictatorship will gradually replace medical democracy if we accept the Act in its present form. I therefore consider it essential that (1) a more detailed plan than has already been done be published for the guidance of all doctors who decide to stay outside the scheme—i.e., collection of fees, etc.; (2) the date of the ballot be postponed several weeks until the whole profession is properly organized to give battle should such be necessary.

The new National Health Service should not be accepted until the Act has been changed to recognize the following *five* main points:

(1) The right of appeal to the courts against dismissal by the Minister.

(2) Payment by capitation fee only. The basic salary should not be accepted, as it is only the thin end of the wedge towards a full-time salaried State service.

(3) Freedom of any doctor to practise anywhere. The amount of practice available by means of the capitation fee will act as a self-limiting factor, as under the present system. The stimulus to practise in unattractive areas should be by means of an increased capitation fee only.

(4) A clear definition of what constitutes a nursing-home. Anything that falls under this category should not be taken over by the State. Unless this is guaranteed the so-called freedom to remain outside the Service becomes a joke. Unless assured of the existence of private nursing-homes general practitioners and specialists who remain outside the Service are likely to find themselves without any facilities to treat patients suffering from anything other than minor ailments.

(5) Freedom of all doctors in any State service including the fighting Services (in peacetime) to publish anything they wish in any of the recognized medical journals without permission of their respective Service and without censorship other than that of the particular medical journal in question.—I am, etc.,

SERVICE PRACTITIONER.

SIR,—There is one point in the Minister's reply which I have not yet seen mentioned, but which is of great importance to the majority of general practitioners.

The Minister says: "There is no suggestion, of course, that any qualified medical practitioner should be in any way debarred from practising midwifery." Then later he says: "This committee will decide on the list of local practitioners suitable for answering calls from midwives and at the same time taking part in the maternity services provided by the new Act. Others, not included in the list, will need further obstetrical experience first, and the list will be periodically reviewed." How in the name of reason can these statements be reconciled?

If I am one of the "others" will I, or will I not, be debarred from practising midwifery in the Service? Or, to be even more specific, if I am in the Service but not elected to the midwifery list will I be able to take medical charge and responsibility for the prenatal and post-natal care and the confinement of my insured patients, and be paid for these services by

the State, or will I have to send my patients to a midwife and another doctor on the "list"? Can the Minister or anyone interested in seeing this part of the Act implemented as it stands to-day tell us the answer to these questions?

The matter seems to me to strike at the very root of our acknowledged principle of being free to exercise the are and science of medicine.

If the "others" are debarred from practising midwifery in the Service, then the first sentence quoted can, at best, only be called a terminological inexactitude. The "others" have been passed as competent by their university or college professors or they would not be qualified, and in the absence of proved incompetence or negligence after qualification I can see no justification whatever for preventing them working in the Service. General practitioners might next be prevented from treating pneumonia as this would be the province of "physicians," from treating a whitlow as this would be the province of a "surgeon," from giving an anaesthetic as this would be the province of an "anaesthetist."

We are qualified practitioners. It has been and should continue to be our right to decide when we shall refer our patients to another practitioner. And that should be only when we feel in need of his help or advice—and not when we are instructed to do so from "higher authority."

My fears are not fancies. Many of us experienced interference in our professional freedom during the war, but that is not necessary now. Let us see that it shall not be so by our united voice. In this as in the other vital issues raised with the Minister it is only by unity that we can ensure that the best possible service is evolved for our patients and ourselves.—I am, etc.,

Harrogate. D. C. WILLIAMS.

SIR,—A crucial question at this time which I think is being forgotten is, Do the public gain in health through the introduction of the Service at this stage?

The answer is obviously "No." The Service will call for more work among doctors owing to more visits by patients and the inevitable form-filling which is the necessary evil of any co-ordinated service. If we look upon the patients as the material with which we work, and whose medical well-being is our "finished job," then I'm afraid we're being forced on them at a time when workmen and material are of poor quality. We should have workshops (hospital beds)—the present numbers are inadequate; also assistants (nurses)—whose number is also inadequate.

A little variation in available foods may brighten a few, in mind if not in body. Tuberculous-infected milk can still take its toll of children, and tuberculous patients still linger at home waiting for hospital beds. However bad these are, and however good are the excuses for not remedying them now, the introduction of a health service, which to the patient promises improvement in medical care, can do nothing—in fact, we could be made the scapegoat for its failure.

Let us acept the role of heaven-sent advisers to Aneurin Bevan and tell him gently "No," or at least "Not yet."—I am, etc.,

Newport, Mon. H. J. HOUGHTON.

SIR,—I have never seen or heard discussed the obvious solution to the *aim* of the National Health Service—the desire of the public for the avoidance of doctors' bills. All patients desire private (in every sense) service, and pay for such when possible. Why not have universal private practice, raising panel patients to the private level, and let the £66 millions, plus insurance, pay the doctors' bills?—I am, etc.,

Farningham, Kent. H. M. DENHOLM-YOUNG.

SIR,—In all the letters which you publish in your issue of Jan. 3 I have not observed any mention of the one solid ground upon which we may rightly take our stand with the solid psychological backing of the general public, a prerequisite to any success—i.e., the absence of the right of appeal to the High Court. No amount of "haggling" over fees or the precise method of remuneration would cut much ice with the public, enlist their sympathy, or enhance our prestige. But to refuse us a right of appeal is a refusal of bare justice and reason, weakens the Minister's case, and is clearly illogical. *The Times* leader complained that the dispute was passing from the logical into the emotional. No emotion is involved in the right of appeal. I am heartily in favour of a basic salary.—I am, etc.,

Hassocks, Sussex. CHARLES FRANKLYN.

SIR,—One hears the question asked, "What can we do if the Minister brings the Act into operation in spite of us?" with dark hints as to the penalties for strikes by bodies other than trade unions. Surely there can be no question of a strike against a non-existent employer? Again, is there anything to prevent the individual general practitioner from saying to a patient on and after July 5, "I am not in the Service. I am perfectly willing to treat you, but in case the Minister gets up to any hanky-panky about the recovery of medical fees I must ask you to pay me each time I see you, and I am sorry, but I cannot let you have any certificate for anything." Perhaps some of your readers learned in the law will let us have their views on our powers and limitations.—I am, etc.,

Launceston, Cornwall. DONALD M. O'CONNOR.

The Treatment of Myasthenia Gravis

SIR,—Your interesting annotation on this subject (Dec. 13, 1947, p. 966) did not mention the recent work of Torda and Wolff (*Arch. intern. Med.*, 1947, **80**, 68) on the effect of intravenous administration of an enzymic hydrolysate of casein ("amigen") to five cases of myasthenia gravis. The concept that much of the symptomatology of myasthenia gravis could be explained by decreased synthesis of acetylcholine, and the demonstration that this synthesis could be increased *in vitro* by amino-acids and proteins, provided the rationale for their procedure. Muscle action potential records were made in patients with myasthenia gravis and in healthy subjects. Full details are given of one patient in whom the known decline of the amplitude of muscle action potential after prolonged indirect stimulation was prevented by amigen; this patient was even able to postpone the taking of "neostigmine bromide." The remaining cases were less severe, but responded similarly. There was an improvement in muscle function signified by increased performance of work and a reduction in the daily requirement of neostigmine bromide during the period of amigen administration. Obviously this effect of amino-acids in myasthenia gravis may implicate many processes; and examples of these are discussed. Admittedly Torda and Wolff stated that "no therapeutic implications are justifiable from these preliminary experiments," but their apparently favourable results would seem to deserve notice.—I am, etc.,

Rowett Research Institute, Aberdeen. L. R. C. AGNEW.

Penile Carcinoma

SIR,—I am bound to meet the friendly challenge of Mr. D. M. O'Connor (Dec. 20, 1947, p. 1010) for evidence of my belief that the mixed bacterial flora rampant beneath the phimotic prepuce may be transferred to the vagina and may there set up cervical carcinoma. The admitted relative freedom of Jewish women from the disease already raises a presumption in favour of this explanation.

For many years I sought to find a specific peculiarity in the tissues of precancerous areas. Such areas have usually been the sites of chronic local infection, especially by the staphylococcus, the treponema, the tubercle bacillus, or by a virus, or have been subjected to the action of tar or other chemicals, or have been unduly exposed to solar or *x*-ray radiation. Anatomically, on skin surfaces the cancer is preceded by papillary hypertrophy, on mucous surfaces by the formation of adenomata. I have demonstrated that a lymphatic capillary is the central structure of each papilla of the skin, and that in a papilloma this central lymphatic is blocked by previous infective lymphangitis. This observation, simple as it is, is in my opinion the key to the origin of cancer. A rise in intercellular pressure necessarily follows, the papilla swells up, and all its tissues are nourished at high pressure by stagnant but over-rich tissue fluid, largely deprived of its hormones and probably poor in oxygen. At this stage the bacteria have done

their work, and they usually disappear, but the nutritional upset persists, and under the influence of lymph stasis the papilloma may ultimately in the course of years evolve into carcinoma without the intervention of any new factor.

In lupus cancer, *x*-ray cancer, and tongue cancer I have traced every stage of this process, and Mr. O'Connor will find the evidence fully stated in my book *The Genesis of Cancer* (Kegan Paul, London, 1931). I have not had the material for extending my observations to cancer of the penis and of the cervix, but it seems most unlikely that these forms of cancer are exceptions to a rule which appears to be general. The papilla is a little physiological engine. It must be supplied with not too rich a mixture at the right pressure, and must have a free exhaust. Lymph stasis following local bacterial infection violates all these conditions, and cancer is the ultimate consequence.

Temporary lymph stasis is seen in every focus of acute inflammation as Nature's method of inducing proliferation and repair. The enormous legs of elephantiasis show how intense is the proliferative impulse imparted to a tissue if the lymph stasis is permanent. It was from a case of elephantiasis which presented about fifteen separate epitheliomata on the affected limb that my researches started.—I am, etc.,

London, W.1. W. SAMPSON HANDLEY.

A Method of Abdominal Palpation

SIR,—Dr. E. W. Price (Nov. 1, 1947, p. 703) argues in favour of abdominal palpation when the patient is sitting upright or leaning forward. I have been convinced for a long time that the abdominal palpation used on patients supine is frequently insufficient, and so I complete this first examination, when necessary, by the following methods:

(1) *Genu-cubital Position.*—This throws forward the deeper organs and enables one to distinguish some pains, especially those issuing from the right iliac fossa.

(2) *Orthostatic Position.*—When the patient leans forward, or is sitting, his legs are drawn up against his abdomen. Therefore I usually ask the patient to *lean backwards* and relax as much as he can. In order to make this possible he must be supported at the back. The physician behind the patient could support him, but this situation might prove awkward in some instances.

In order to avoid this difficulty I have had a "palpation board" constructed. It is 14 in. (35.6 cm.) wide and 6 ft. (1.83 m.) high. The top part of the board is attached to the wall at a distance of 17 in. (43.2 cm.), while the base of it is 24 in. (61 cm.) away; this inclines the board at an angle of 8–10 degrees.

To use the vertical palpation, one stands behind the board, between it and the wall. The patient is standing against the board in a leaning position and completely relaxed. The top part of the board is adapted with a groove; this enables it, when not in use, to be slid back against the wall so as not to take up too much room.—I am, etc.,

Geneva. M. J. DEMOLE.

General Anaesthesia and Surgical Shock

SIR,—In a recent article (1947) I cited evidence to prove that fainting and shock are identical in origin, and that both are due to overstimulation of the sympathetic nervous system, a prominent cause of which in civilized man is pain. Opponents of the theory of the sympathetic origin of shock have pointed out that shock fails to develop in conditions such as biliary and renal colic, in which pain is intense and prolonged (Moon, 1938). Painful (sensory) impulses, however, are not the only shock-producing impulses arising in damaged tissues (Moon, 1944).

That pain is capable of causing shock is clearly demonstrated by the effect, in pre-antiseptic days, of the introduction of general anaesthesia on the mortality from surgical operations (amputations). It is to be remembered that general anaesthesia, though effectively cutting off all painful impulses from the vasomotor centre via the sensorium, does not prevent the reception by that centre of non-sensory shock-producing impulses from the traumatized area via the spinal cord. To prevent the reception of such impulses spinal anaesthesia is required (Tomb, 1937).

In an address to the Hunterian Society in 1848 "On the Advantages of Ether and Chloroform in Operative Surgery" Dr. T. B. Curling quoted statistics showing that the death rate from surgical operations in the London hospitals during the year 1847–8 fell by 50% consequent upon the introduction of general anaesthesia—a result which must be attributed to the diminution of shock from the prevention of pain and the sympathetic overstimulation arising therefrom.—I am, etc.,

Sydney. J. WALKER TOMB.

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Thiouracil in Toxic Goitre

SIR,—In his letter (Dec. 6, 1947, p. 927) in connexion with our paper on "Thiouracil in Toxic Goitre" (Nov. 15, p. 759) Mr. Henri Roualle mentions experiments in which thyroid tumours have been produced in rats treated with thiourea. Although these and previous experiments on the same lines are remote from the clinical use of thiouracil, a watch must be kept for neoplasm developing in the thyroid in patients taking thiouracil. After four years' experience we have not yet seen such a development nor has it been reported as far as we know. In the animal experiments the thyroid enlarges, whereas in our experience thiouracil often leads to a reduction in the size of the goitre.

Mr. Geoffrey Keynes and Dr. J. W. Linnell (Dec. 13, p. 971) think that the ten deaths in our 95 patients are to be attributed to thiouracil or perhaps failure to employ some other form of treatment. In nine of the ten this was not so, as shown by the details we gave. Three cases were too near death on arrival for any treatment to be effective; they had thiouracil for a few days to a few weeks before death. Six patients died from cardiovascular disease not immediately due to toxic goitre. The average age of these nine patients who died was 70 years.

As to the potency of thiouracil in restoring normal rhythm in goitrous fibrillation, our figure of 50% restored understated the case. This was because we included in the failures two patients who died shortly after coming under observation and before there was time for thiouracil to exert its effect, and also one, possibly two, patients who also had mitral stenosis. No quinidine was used for any patient. It therefore seems that thiouracil is almost the equal of thyroidectomy in converting goitrous fibrillation to normal rhythm. Lastly, as to the cases in which thiouracil is to be preferred to surgery in toxic goitre, we think that this applies to the elderly, thiouracil being the safer, particularly in those with evidence of degenerative or hypertensive cardiovascular disease. Again, in younger patients with smooth goitres of moderate or small size our results showed good control with thiouracil and a high proportion of remissions.—We are, etc.,

HAROLD COOKSON.
Bournemouth. F. H. STAINES.

Tetraethylammonium Bromide

SIR,—In the annotation (Dec. 27, 1947, p. 1041) attention is drawn to the great possibilities of the drug tetraethylammonium bromide (T.E.A.B.). Stimulated by the early American publications, we obtained supplies of this drug early this year for clinical trial through the kindness of Dr. W. R. Thrower and Messrs. May and Baker. A short paper is being prepared giving the results of this trial, but it is not out of place to remark here that we have in general failed to produce the very favourable results reported by Coller *et al.* last June (*Annals of Surgery*, 1947, **125**, 729).

Our main use of the drug was to attempt to reduce those symptoms most troublesome to hypertensives attending the medical out-patient department—i.e., headaches and giddiness—by weekly or fortnightly administration of T.E.A.B. intravenously or intramuscularly. We found that some patients obtained dramatic benefit, headaches disappearing for days or even weeks and vision clearing appreciably, so that the smaller newsprint previously unreadable could be read with comparative ease. This last statement was made quite independently by three separate out-patients who had never seen each other and to whom no suggestion had been made that improvement

in visual acuity would result. The easing or abolition of headache for as long as several days surprised us, as the effect of the drug on the blood pressure is short-lived, lasting from a few minutes to at most an hour or two. We therefore substituted control injections of saline, elaborate and lengthy readings of blood pressure being taken as before, retinae and pupils being examined every few minutes. Equally satisfactory results in improvement in vision and lessening of headache were reported by the patients after such "dummy" injections.

Apart from this small group where improvement was effected by suggestion no really satisfactory results were obtained with the drug, and the high hopes we held for its being useful in treatment of hypertensive patients unsuitable for sympathectomy have not been fulfilled. We have found the effect of the drug on skin temperature of the extremities variable and erratic and less satisfactory than simpler methods. In some cases little or no drop in blood pressure resulted, though most patients had some depression of systolic and diastolic pressure for 3 to 30 minutes after intravenous injection of 100–600 mg. of the drug. The rate of the injection appeared to play a part as well as the dosage given, the more rapid the administration of the drug the more the effect on the blood pressure.

As stated in your annotation, T.E.A.B. is an impracticable therapeutic agent, but it may prove of use to the research worker. We have not found it a useful drug either in testing rises in peripheral skin temperature or in lessening symptoms in hypertensive subjects. In the last group of cases the psychogenic element features largely in so many cases, and it is easy to produce symptomatic relief by suggestion backed by elaborate investigation. Nevertheless it is possible that new uses may yet be found for this drug, and our trial is still in progress. —I am, etc.,

London, S.W.1. F. DUDLEY HART.

Acute Non-specific Gastro-enteritis

SIR,—We note with interest the letter from Dr. William Forster (Dec. 13, 1947, p. 971) describing an outbreak of acute non-specific gastro-enteritis in a mental hospital, and we would like to comment on a few of the points made in it.

Treatment and Prophylaxis with Sulphonamide Drugs.—In our experience of a number of outbreaks, some in mental hospitals, treatment of established cases of gastro-enteritis of this type with sulphaguanidine has been without effect on the duration and severity of illness as compared with controls treated symptomatically, a finding in agreement with that obtained by Dr. Forster, using phthalylsulphathiazole. Dr. Forster suggests, however, that "sulphonamides were effective in prophylaxis." Examination of the data given in his letter yields little to support this conclusion, for the drugs were administered when the ward outbreaks had been in progress for some days (9–17 days) and when the attack rates were declining naturally. Again, at least four patients commenced the disease while they were actually receiving prophylactic sulphonamide.

In our experience the duration of outbreaks in mental-hospital wards where no prophylaxis had been undertaken was relatively short, due possibly to the rapid spread of the disease through an unchanging population. Thus in a Leicester mental-hospital outbreak[1] the duration of ward outbreaks on the male side of the hospital ranged from 7 to 14 days (mean 9.8 days) and on the female side from 12 to 22 days (mean 18.4 days). There was therefore considerable variation between wards, but the figures are of the same order as those (12, 15, and 20 days) occurring in Dr. Forster's wards in which prophylaxis was undertaken. The variability between untreated wards makes deductions concerning the value of prophylactic treatment extremely hazardous.

Variation in Attack Rates in Wards with Different Populations.—It was very interesting to note the uniform gradation of the size of attack rate in different wards as given in the table of Dr. Forster's letter. Thus, wards having overcrowded low-grade mental patients tended to have higher attack rates than the wards which were less crowded and had patients of a higher mental grade. We have observed a similar gradation in two mental-hospital outbreaks.[1,2] This may be partly a reflection of the degree of day-time dispersion in different ward populations, but investigation of these differences and their relation to the mode of spread of the disease might be illuminating. The problem might be approached by comparing the attack rates in "non-specific gastro-enteritis" in these varying ward populations with the rates observed on the one hand in diseases whose method of spread is intestinal–oral, such as bacillary dysentery, or on the other hand "airborne," such as influenza.

Mode of Spread of the Disease.—In the mental-hospital outbreaks that we have investigated, as in that investigated by Dr. Forster, case-to-case infection rather than water or massive food-borne infection has been the pattern of spread. Dr. Forster states, however, that the infection was "probably airborne" in his outbreak. It would be interesting to know the facts which led Dr. Forster to this conclusion. It is a commonly held belief that the disease is spread by the "airborne" route, but we are in ignorance of the epidemiological method which enables a distinction to be made between "airborne" and case-to-case contact spread of infection. The mere fact that the disease is very infectious, has high attack rates and a particular seasonal incidence, is not by itself sufficient evidence for a respiratory mode of spread.

The findings of Reimann *et al.*,[3] who transmitted a similar gastro-enteritis to student volunteers when they inhaled nebulized filtrates of throat washings or stool but failed to infect volunteers by feeding stool filtrate, have influenced the interpretation of outbreaks in this country. Reimann was, however, the first to point out that his experiments were undertaken under difficult circumstances in that the volunteers could not be isolated from the rest of the student body which was experiencing natural attacks of the disease. Further, examination of his figures reveals that the incubation period was between 9 and 21 days in 42% of the volunteers having gastro-enteritis, and as the natural incubation period is 3–5 days it is questionable whether these later cases were in fact due to inoculation. The volunteers were inoculated in batches on six different days using, from (presumably) different donors, material which consequently may have been of different activity. The results obtained by Reimann should, therefore, be applied with caution until they have been confirmed.

Recently a well-planned and controlled experiment has been undertaken in New York by Gordon and colleagues.[4] These investigators, using known susceptible and carefully isolated volunteers, have shown that a clinically similar gastro-enteritis of the type under discussion can be transmitted by *ingestion* of filtered stool or unfiltered throat washings but not by the *inhalation* of nebulized throat washings known to be infective by ingestion. It remains to be proved, of course, that the disease described by Reimann, the New York workers, and various investigators in this country is in fact the same regardless of the similarity of clinical picture, but enough has been said to illustrate the need for caution in labelling the disease an "airborne" infection.—We are, etc.,

B. P. MARMION.
G. T. COOK.

[1, 2] These data are quoted with the kind permission of Dr. K. K. Drury, Carlton Hayes Mental Hospital, Narborough, and Dr. T. W. Davidson, City Mental Hospital, Humberstone, Leicester.
[3] *Proc. Soc. exp. Biol.*, N.Y., 1945, **59**, 8.
[4] *J. exp. Med.*, 1947, **86**, 409

Penicillin in Otitis Media

SIR,—With reference to the report of the meeting of the Section of Otology of the Royal Society of Medicine (Dec. 27, 1947, p. 1049) may I be permitted to give a general practitioner's experience in the treatment of otitis media with systemic penicillin, both in acute and chronic cases?

I use the oil–wax suspension of 1,250,000 units in 10 ml., giving a single injection of 200,000 to 300,000 units daily. I had eleven cases of acute otitis media with otorrhoea in children between the ages of 2 and 14, and, with the exception of one, there were no recurrences from two to eight months after injection. The discharge ceased on the second or third day and hearing became normal within fourteen days. I gave another course of penicillin to the recurrent case, and the patient has been free from discharge for the last four months. I have also dealt with six cases of otorrhoea due to chronic otitis media, out of which three recurred, the other three having now been free from discharge from eight to thirteen months. One of the recurrent cases had another course of penicillin injections and has now been free from discharge for the last four months.

I give herewith a short history of a case of chronic otitis media:

A man aged 44 developed a right otitis media with otorrhoea 36 years ago. He had been attending hospital ever since and was treated with peroxide ear drops. He was never free from aural discharge for more than two months. His hearing was becoming impaired and he felt dizzy on bending down his head. In November, 1946, I gave him one injection daily of 250,000 units of penicillin calcium in oil–wax suspension for five days. The discharge ceased on the third

day, his dizziness disappeared in a week, and after more than thirteen months the discharge has not recurred, his hearing is greatly improved, and his dizziness has ceased.

I write in order to refute the claim that four-hourly injections are necessary, as stated by Mr. I. Simson Hall (Dec. 27, 1947, p. 1050), and also to make a strong appeal to other doctors to try treating the chronic cases of otitis media with large doses of penicillin, as suggested above, since the number of cases of otitis media in the country must be enormous, and apart from the inconvenience of discharging ears and deafness there is always a danger of more serious complications. Operation, apart from its risk, is not always effective, and patients are usually reluctant to submit to it.—I am, etc.,

Sheffield, 5. I. GOTTLIEB.

Dicoumarol

SIR,—From the vast literature on the pharmacological action and therapeutic use of dicoumarol there appear several findings which are of importance in the control of dicoumarol therapy: (*a*) It is not advisable to reduce the prothrombin to such a degree that the ordinary blood-clotting time becomes prolonged.[1] (*b*) Very low prothrombin concentrations must be attained before the clotting time is significantly altered.[2] (*c*) Intravascular thrombosis rarely occurs in patients on dicoumarol if the prothrombin is kept below 30%, while haemorrhagic complications are rare if the prothrombin is kept above 10%.[3] (*d*) In the Quick method of prothrombin estimation the source of thromboplastin is acetone-dried rabbit brain.[4 5]

The clotting time (Lee and White method), which Dr. M. J. Pivawer (Dec. 6, 1947, p. 928) recommends as a means of controlling the dosage of dicoumarol, has very little experimental evidence to support it. From my own experience the clotting time does not appear to give sufficient warning of the approach of, nor in some cases the arrival at, the danger level of 10% prothrombin. This is illustrated in the following case.

Case 1.—A post-operative patient received 650 mg. dicoumarol over a period of three days. On the fourth day the prothrombin concentration was found to be less than 10% by the Quick method and 35% by the Fullerton modification[6] of the Quick method. The patient developed a haematoma at the site of operation. At this stage the clotting time (Lee and White method) was normal and no different from the clotting time estimated before the administration of dicoumarol.

Full details of Quick's method are to be found in his excellent monograph. I have found acetone-dried *human* brain to give as satisfactory results as acetone-dried rabbit brain. For every batch of dried brain which one obtains a graph must be plotted correlating prothrombin times with prothrombin concentrations. In the Fullerton modification[6] of the Quick method Russell-viper venom is the source of thromboplastin. The results are often misleading and may cause an overdosage with dicoumarol. This is illustrated by the following case.

Case 2.—A post-operative case which developed a thrombophlebitis received 1,700 mg. of dicoumarol over a period of eight days. Prothrombin estimations were carried out daily by the Fullerton modification. At no time during the eight days was the prothrombin found to be below 25%, which, in view of the large amount of drug administered, was rather curious. On the eighth day I estimated the prothrombin by both methods. The prothrombin was well below 10% by Quick's method and about 25% by the Fullerton modification. Treatment with dicoumarol was immediately stopped, but the prothrombin concentration continued to fall. Six days later the patient had a severe epistaxis, and it was noticed that his operation scar was not healing. At this stage the prothrombin was less than 5% (Quick method) and about 20% (Fullerton modification). Fortunately in this case the prothrombin began to increase the next day and bleeding stopped. About six days elapsed before the prothrombin was over 30%.

Dr. Frank Marsh (Dec. 20, 1947, p. 1009) advocates a method in which "perfectly fresh viper venom of (if possible) guaranteed potency" is required. This method, in which "it may be necessary to do twelve tests on one specimen of plasma," seems to me to be complicating the issue. With the Quick method the results are so concordant that it is rarely necessary to use more than three tubes per specimen of plasma.

My conclusions are, therefore, that the most reliable method at present for the control of dicoumarol therapy is the daily estimation of prothrombin concentration (sometimes called prothrombin activity) by means of Quick's method, in which the source of thromboplastin is acetone-dried brain. Using this method I find that 24 hours after the administration of 300 mg. dicoumarol the majority of cases show a prothrombin concentration of 50% or lower. It is these latter figures which determine the dose to be given on the second day. Most workers will agree with your correspondents that heparin is most valuable, in certain cases, during the period when dicoumarol has not yet lowered the prothrombin concentration to the optimum range of 10 to 30%.—I am, etc.,

Manchester. H. LEMPERT.

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SIR,—We have been interested in the increasing correspondence regarding the administration of dicoumarol and feel that the letter of Dr. M. J. Pivawer (Dec. 6, 1947, p. 928) calls for critical comment. First, in our experience Quick's method of prothrombin-time estimation has given satisfactory results. There are one or two practical points which are of importance. The blood required for the test should be withdrawn at the same time each day, preferably before a meal, and the time and timing of each stage of the technique should be consistent throughout. It is imperative that clean and smooth test-tubes be used for the test. We have found that the "stypven" solution (thrombokinase) requires renewal every third day, and if a new solution is made up from the same batch and overlapped with the old solution errors from this source are eliminated. We have found the first appearance of granularity to be a reliable end-point of the reaction. We have investigated the usefulness of the lecithin-accelerated method of Witts and Hobson, and, although impressed at first by the sharpness of the end-point, we now believe that this advantage is offset by the shortness of the actual time measured and the possible disadvantage of introducing one more variable reagent.

Unexpected minor variations of prothrombin time do sometimes occur during dicoumarol administration, but we have found that by graphing the daily results and by intelligent anticipation it is possible to maintain a patient in the therapeutic range with safety. The dosage we have employed has been 300 mg. of dicoumarol on the first day, and 200 mg. on the next two days, followed by 100 mg. daily as indicated by prothrombin time. We aim to keep the prothrombin time between two and two and a half times the result determined before therapy is begun.

Secondly, we would strongly deprecate attempts to treat patients in any circumstances which do not permit of accurate daily prothrombin-time estimation. It is generally agreed that the effect of dicoumarol on the coagulation time is less consistent than the effect on the prothrombin time. Indeed, lengthening of the coagulation time is usually not seen until quite marked increase in the prothrombin time has occurred.

Thirdly, the object of dicoumarol therapy is to prevent intravascular clotting, and if therapy is to be fully effective the coagulability of the blood must not be allowed to return to normal during the treatment.—We are, etc.,

London, E.C.1. G. CANTI.
D. J. ROBERTSON.

German Tropical Medicine

SIR,—I want to make a comment to the leading article, "German Tropical Medicine," in the *Journal* of Nov. 1, 1947 (p. 697). You write: "Bacillary dysentery caused much trouble, particularly in Poland in 1939 and in North Africa. Treatment by sulphonamides, especially sulphapyridine, was eventually introduced, although much later than in the Allied forces."

If there is the implication that Austrian and German literature, as we are using the same language, are taken together, this statement is not correct. In fact I used "prontosil" for the treatment of bacillary dysentery much earlier than the Allied forces (see Gorlitzer, V., *Schweiz. med. Wschr.*, 1940, **70**, 281; Gorlitzer, V., *Klin. Med., Wien*, 1947, **2**, 862).—I am, etc.,

New Delhi. V. GORLITZER.

H.T.S.T. Pasteurization

SIR,—In your leading article of Dec. 6, 1947 (p. 914), "High-temperature Short-time Pasteurization," the efficacy of sterilization is very clearly set forth. No reference, however, is made to the effect upon vitamins. Presumably this has been estimated and been found to be no more harmful than that of the "holder process." It would be gratifying if some assurance could be given on this point.—I am, etc.,

London, W.1. HUMPHREY NEAME.

"Unjustified" Use of d-Tubocurarine Chloride

SIR,—Many of your readers will be well aware that the advancement and perfection of obstetric anaesthesia is a cause very near to my heart, and that in these very columns I have had to defend at least one new method against the attacks of the sceptical. It was with exceptional interest, therefore, that I studied the recent replies to my letter (Nov. 22, 1947, p. 840) from Dr. H. Vincent Corbett (Dec. 13, p. 976) and Mr. Percy Malpas (Dec. 20, p. 1009). After such impressive testimony it is obvious that I overstated my case and I unreservedly withdraw the word "unjustified" (even when garnished with inverted commas to make it less unpalatable) and hasten to effect a remorseful retreat from the ranks of the reactionaries, where I appear temporarily to have strayed. Having met my Liverpool friends more than half-way, however, I would like to add a few comments and qualify my repentance.

Of recent years, when giving general anaesthetics for caesarean section, I have been in the habit of utilizing a very light plane of cyclopropane anaesthesia, with similar results to those described by Dr. T. Cecil Gray (April 5, p. 444), with the exception that our mothers did not recover consciousness "as the last stitch was tied." They did, however, make a reasonably rapid recovery—in all senses of the word—unless they happened to be in poor shape prior to operation. I cannot see that there is any virtue *per se* in awaking while in the operating theatre so long as the patient does recover uneventfully.

As is evident from this correspondence, obstetric opinion is still divided as to the necessity for abdominal relaxation during caesarean section. My remarks on the subject were of course a quotation—as will be seen from my letter—but on thinking things over I realize that I was quoting an opinion prevalent during the height of the ethereal era, when patients were very much more upset by general anaesthetics than is now the case, and also when even a small increase in anaesthetic depth might make all the difference between a lively or a lethargic infant. Under such circumstances abdominal relaxation could only be secured at the risk of a higher rate of foetal mortality and was in consequence severely discouraged.

With regard to my theory of the stimulating action of *light* levels of cyclopropane anaesthesia and of thiobarbiturates upon the uterus, I feel sure that Dr. Vincent Corbett cannot seriously believe that we were naive enough to base our opinion solely upon the incident—however forcefully it brought itself to our notice—of the "eyeful of liquor." In the case of thiopentone we found it next to useless for external version, owing, as far as we could judge, to tenseness of the uterus—a condition which appeared evident also during caesarean section under the same anaesthetic. If pushed to deep planes cyclopropane *could* be used for external version, but in the light planes employed for obstetric anaesthesia we noted the following: a tense uterus during caesarean section (the mother not being in labour) which retracted eagerly after delivery of the foetus and placenta; fairly frequent and forceful contractions during forceps delivery; and, after delivery per vias naturales, the placenta was rapidly extruded (often within a matter of minutes) and the uterus retracted to a "hard ball," rarely required the administration of pituitrin or ergometrine, and permitted of but a very small blood loss. All this naturally makes me somewhat sceptical as to the role which curare might be thought to play when thiobarbiturates, light cyclopropane, and *d*-tubocurarine chloride act upon the uterus in synergistic trinity.

Before the advent of curare there is little doubt that the administration of thiopentone for caesarean section reduced the whole performance to a surgical sleight of hand. Owing to the effect of the anaesthetic upon the foetus only rapid surgeons could operate successfully, and at least one obstetrician (not at King's), with a reputation for speed, is reputed to have incised skin, linea alba, peritoneum, uterine wall, and the baby's back in one heroic sweep—a "classical" operation in every sense of the word! Dr. Gray's introduction of *d*-tubocurarine chloride into this type of surgery, with its known property of reducing the quantity of anaesthetic otherwise necessary, appears to single out the blessings of thiobarbiturates without their obstetric disadvantages, and I am now quite converted to the idea. If anybody is still on speaking terms with me in Liverpool I would very much like to visit them and see this anaesthetic at work.—I am, etc.,

Epsom, Surrey. A. H. GALLEY.

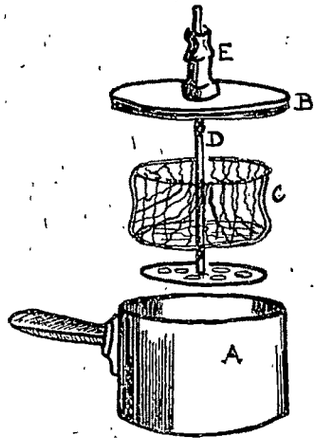
Oxygen Unit for Newborn Infants

SIR,—I was interested in Dr. P. C. D. MacClancy's account (Dec. 13, 1947, p. 970) of an oxygen unit for newborn infants. We have had in use since June, 1947, at the City Lodge Hospital, Cardiff, a unit very similar to the one described, the only important difference being that the sides are made of separate pieces of 1/4 in. or 3/16 in. (0.6 or 0.45 cm.) "perspex" cemented together, and thus can be made reasonably easily by the hospital staff. We have also a larger unit which will completely cover the whole of the normal maternity cot as used at City Lodge Hospital. Both types have a detachable airtight lid allowing free access to the infant undergoing oxygen therapy without necessitating the removal of the whole unit. These units, which were designed and made by the hospital occupational therapist with the help and advice of the medical and nursing staff, have done excellent work in the hospital premature nursery.—I am, etc.,

Cardiff. J. GREENWOOD WILSON.

Improvised Sterilizer

SIR,—The sketch illustrates an aluminium saucepan (A) with lid (B) : also a "chip-basket" (C), from which the long handle has been removed, and a copper (or other rustless metal) rod (D), with a perforated-disk base. This rod pierces a hole through a metal sleeve (E) in the centre of the lid, from which the knob has been removed. The instruments to be sterilized by boiling are placed in the basket and immersed in water in the pan. The whole is boiled over a gas-ring, or, if preferred, an electric saucepan can be used. After boiling, the rod is used to lift the lid and basket from the pan. The water is poured away and the lid and basket replaced. The pan can be then gently heated to dry the instruments.



The advantages are: (1) The instruments are lifted out of the water and can be dried and cooled without contamination. Sterile forceps are ready for assembling syringes, etc., without handling the latter with fingers. (2) The whole outfit can be bought at any hardware stores and the alterations made by any tinsmith. (3) It is cheap : this cost altogether 16s. 3d.—I am, etc.,

Keighley, Yorks. WRIGHT LAMBERT.

Natives of the Tropics

SIR,—During my stay in this country I have been attending various hospitals both in London and in Edinburgh. In all these places I have often heard the senior as well as junior doctors use the word "native" when referring to Indians, Africans, or people of any other tropical country. To give an example : "The natives suffer from beriberi more often than the Englishmen." The word "native," a reference to any dictionary will reveal, applies to the indigenous race of a country. When an Englishman therefore uses the word "natives" he should by rights refer to the natives of England. But this is not the case. The word is used by him as a contemptuous reference to the tropical races.

My coloured fellow-students who hail from China, Malaya, Burma, and India and I have often discussed this matter in the institute where I am studying. It has on quite a number of occasions caused us annoyance. We would rather be called Indian, Chinese, or Malayan than just a "native." I shall of course have no objection to being called a native of India, just

as a Frenchman should have no objection to being called a native of France, an American a native of America, or an Englishman a native of England. The word "native" used by itself when referring to the tropical races rouses in the minds of the coloured people a spirit of hatred, for it naturally reveals an arrogance on the part of the individual who uses it. I am writing this letter as a plea to the European doctors here to at least respect the feelings of the "natives" who study with them.—I am, etc.,

London, W.C.1. M. V. CHARI.

Measles Prophylactic

SIR,—Dr. Harwood Stevenson (Dec. 6, 1947, p. 928) and Dr. A. H. Morley (Dec. 27, p. 1054) have advocated the intramuscular injection in children of parental whole blood as a routine procedure in cases of measles contacts. May I suggest that a very strong warning is needed against the indiscriminate use of such a procedure, especially in girls, because of the danger of Rh sensitization? Such sensitization, produced by the injection of Rh-positive blood rather than by pregnancy, is liable to produce a severe form of congenital haemolytic disease and, what is worse, to produce it in the first infant. The general practitioner should therefore in each individual case of contact, especially if this is a girl, balance the advantage of attenuating an attack of measles against the danger of ruining for ever this girl's chances of giving birth to normal or even live infants.

That this possibility although admittedly rare is nevertheless real and not of theoretical interest only is well demonstrated in the following case taken from Wiener's paper on the "Pathogenesis of Erythroblastosis Fetalis" (*Amer. J. Dis. Child.*, 1946, **71**, 25).

Case 2.—A young woman's first pregnancy resulted in an unexplained stillbirth. She was referred to us by her physician to find out whether the Rh factor had any bearing on this problem. Results of blood tests were as follows:

Blood	Group and Subgroup	MN Type	Rh Type
Husband	0	MN	Rh 1
Patient (wife)	0	M	Negative

The patient's serum did not contain any anti-Rh agglutinins, but it did contain Rh-blocking antibodies of a titre of 10. This explained the stillbirth, but it was not clear how the patient had become sensitized to the Rh factor, as she had never received a blood transfusion. On being questioned further, she recalled that ten to twelve years previously she had been exposed to measles and was given an intramuscular injection of her mother's blood, the then current method of prophylaxis. The supposition that this was the source of the sensitization was confirmed when tests of the mother showed her to be Rh-positive (group O, type Rh 2). Ironically, the patient and her mother recalled that one of us (W.) had given the injection at their paediatrician's request.

If the general practitioner has strong reasons to desire the prevention or attenuation of an attack of measles he should ask for a determination of the Rh type of the donor and the recipient. With the increasing facilities for Rh-typing, the delay involved could be made quite short, perhaps a few hours only, and in view of the grave consequences this delay and the additional labour are fully justified.—I am, etc.,

Newcastle-upon-Tyne. S. A. DOXIADIS.

Two Mongol Children in a Family

SIR,—I was very interested in Dr. G. H. Auden's memorandum (Nov. 19, 1947, p. 869), and in view of his opinion that any such cases should be put on record because of the rarity of the occurrence, I am reporting an instance I encountered recently.

As in Dr. Auden's case, both parents were young healthy country folk, both aged 29 when the first child, a girl, was born on April 10, 1936. The second child, a boy, was born on April 23, 1942. Physically they are typical cases—brachycephalic, with short buccal cavities, short terminal phalanges, slight crooking of the little fingers, and hypotonia. There is no nystagmus, but the girl has defective vision. General development is poor, and both are imbecile. Temperamentally, they differ. The girl is rather obstinate, but on the whole happy and contented. The boy is fretful and irritable. Both are fond of music.—I am, etc.,

West Herts. HELEN M. KEITH.

POINTS FROM LETTERS

A Sign of Appendicitis

Dr. ADALBERT DESSEWFFY (Budapest) writes: In cases of chronic appendicitis, and less frequently in subacute ones in which there are, in spite of the intraperitoneal position of the appendix, but few decided intraperitoneal symptoms, we can prove the disease of the appendix under circumstances by extraperitoneal symptoms. The technique of the examination is as follows: The patient, who is lying horizontally on his back, must be called upon to lift his upper body somewhat from the base without the help of his arms, merely by his trunk muscles, and to turn in the meantime his upper body at first entirely to the right and then entirely to the left, in order to make not only a rotating movement but also a torsion of the lumbar spinal column. In order to facilitate his making these movements we must fix his pelvis by pressure against the base. Particularly the ileo-psoas, as well as the quadratus lumborum supported by the deep back muscles, are contracted in these movements. In turning the lumbar spinal column in the opposite direction—that is, to the left—it will be the psoas, and in turning it laterally—that is, to the right—it will be the quadratus, which is more contracted. A pain in the appendix region . . . after turning the lumbar spinal column to the opposite side—that is, to the left—is characteristic of illness of the appendix. . . . Sign "D" must not be overestimated; it must only be valued as part of the entire diagnosis. It must occur only unilaterally on the right side. At repeated examinations the pain will appear always at the same place—that is, in the appendix region. In gynaecological diseases "D" sign will always be negative. A pain appearing on turning the lumbar spinal column laterally to the right is mostly situated somewhat above the appendix and will rather indicate a lumbago. A rather rare pain may occur in association with sign "D" in the appendix region during active movements of the right thigh bent or much adducted or turned outwards at the hip joint when we oppose these movements.

Penile Carcinoma

Mr. DAVID M. SERR (Leeds) writes: In the discussion on the relative immunity of Jewesses to carcinoma of the uterus your correspondent states (Dec. 20, 1947, p. 1010) that this immunity is almost certainly due to the circumcision of the male. This being an unsupported statement, it would be as wise, I think, to stress what may be even more important a contributory factor—namely, the Jewish laws of separation, forbidding coitus during and for seven days after menstruation. Weinberg and Rubin, when discussing the significance of the statistical figures they had collected on this subject, suggest that the immunity is due to something in the mode and habit of life of married Jewish women. Dr. Sourasky, in a paper read at the International Cancer Conference (London, July, 1928), suggests the view that the observance of the Mosaic ritual laws by the mass of Jewish women contributed to the low incidence of cancer of the uterus. While it may be fairly logical to attribute to circumcision the immunity from cancer of the penis in Jewish males, I think it is more reasonable to stress the separation laws as being the more important contributory factor in the immunity of Jewish females from uterine carcinoma. In view of Mr. Sampson Handley's observations among the Fijians it would be interesting to know if there is in their mode of life anything comparable to this to account for their immunity from the disease. . . .

Belladonna Poisoning

Mr. I. ISAACS (Merthyr Tydfil) writes: With reference to "Per Ardua ad Asylum's" remarks on belladonna poisoning (Dec. 27, 1947, p. 1056), he surely has given concrete examples of the dangers that exist under the present Army method of allowing dispensing to be carried out by orderlies. The obvious and vital necessity of all dispensing to be done only by qualified pharmacists is striking if we are to remove the great risk to human lives that must exist under the present system. . . .

Plebiscite

Dr. M. DOWNEY (Leicester) writes: May I, as a general practitioner, suggest that the next plebiscite paper have only *one* question for answering—viz., Do you agree to enter the National Health Service in its present form? Yes or No to this one question will decide whether the profession wants to become a State-salaried service or not.

Coupons for Colostomy Belt

Dr. CHARLES J. SWANSON (Aberfeldy, Perthshire) writes: It has recently been brought to my notice that the Board of Trade demand from the sufferer from colostomy three clothing coupons before he can be supplied with the belt which makes life bearable for him. This apparently trifling exaction surely displays a callous indifference to human suffering and is one of these insulting pin-pricks which display a grossly inhuman injustice. . . .

Obituary

D. P. FITZGERALD, B.A., M.D.

Prof. D. P. Fitzgerald, emeritus professor of anatomy at University College, Cork, died in Cork on Jan. 2, aged 76.

Denis Patrick Fitzgerald was born and educated in Cork, and in 1870 he received the degree of B.A. from the Royal University of Ireland. He began his medical studies at Queen's College, Cork, in the following year, obtaining many scholarships, exhibitions, and prizes as a medical student. He graduated M.B., B.Ch., B.A.O. in 1896. In the next year he became house-surgeon to the Cork Eye, Ear, and Throat Hospital and was made demonstrator of anatomy at Cork. This was the beginning of a long academic career. In 1907 he became lecturer in osteology, and from that time onward acted as deputy to Bertram Windle, then professor of anatomy; in the same year he was appointed lecturer in anatomy at the Cork Municipal School of Art. In 1909, on the resignation of Prof. Windle from the chair, Fitzgerald was appointed professor of anatomy at Queen's College, later known as University College. He acted as a member of the Senate of the National University, and served also on its Board of Studies. He was an examiner in anatomy at the Royal College of Surgeons in Ireland for many years. In 1940 the Senate of the University recognized his long service by conferring upon him the degree of M.D. In this year also the Faculty of Medicine at Cork made him its dean, an office which he held until his retirement from the chair in 1942, when he became professor emeritus.

"D. P.," as he was affectionately termed not only by his own students but also by many in the sister colleges, will be long remembered for his quiet and gentle manners. He was essentially a dissecting-room anatomist, one of the group which laid the topographical foundation from which the first adventures in aseptic surgery were launched. His published papers were osteological, except for an account of certain abnormal ocular muscles published in the *Journal* in 1898. His interests extended beyond the walls of his department. Like most Irishmen he had a strong sense of history, and was a recognized authority on the history of his native city and county, a topic on which he wrote much. He is survived by his widow and eight children, two of whom are members of the medical profession.—R. O. R.

JOSEPH NICHOLAS SANKEY, M.B., F.R.C.S.

Surgery in the Midlands and the Birmingham Medical School in particular have suffered a severe loss in the sudden and untimely death of Joseph Sankey, whose death on Dec. 30, 1947, at the age of 47, was due to a coronary thrombosis. His busy consulting practice, which was based on the support of a wide circle of professional friends, and his hospital appointments on the staff of the Queen Elizabeth Hospital, Birmingham, and the Guest Hospital, Dudley, occupied him so completely that he was left with little time for writing or leisure, and for months before his death he was worn down by overwork. During the period of the war especially he was taxed to the limit by his preoccupation with the Facio-Maxillary Unit at Barnesley Hall, the heavy work of which he shared with Mr. Harold Round. His special interest in plastic and facio-maxillary surgery slowly emerged some years ago out of a broad basic training in general surgery, and latterly he was seeking to shed some of his general surgical work and concentrate more and more on his specialty. However, he never took a clear-cut step to achieve this. Loyalty to old practitioner friends, and a sincere attachment to the wider aspects of surgery, delayed his decision, and his professional life was over full largely because of this double burden.

Joseph Nicholas Sankey was a student at Birmingham and at the Middlesex and London Hospitals. He graduated M.B., Ch.B. in 1923, and took the F.R.C.S. in 1926. He held resident appointments at the General Hospital, Birmingham, and in London at the Samaritan Hospital and Queen Charlotte's, where he was R.M.O. After his appointment in 1932 as assistant surgeon to the Queen's Hospital, Birmingham, he went to America for a period of study leave which he spent mainly at the Mayo Clinic, where the inspiration and example of William and Charles Mayo exercised a permanent influence on his surgical education and gave him a scientific outlook on surgery so valuable to one about to take up his duties in a medical school. Later, under the influence of Kilner, he became interested in plastic surgery, and with the impact of war he transferred his interest more and more to this aspect of his work. In his specialty he was deft and ingenious and had that touch of artistry which is essential to success in this branch of surgery; furthermore, his friendly and sympathetic approach secured the confidence and co-operation of his patients in their tedious and prolonged reconstruction operations.

Sankey had a great capacity for friendship. To run across him was always a pleasure, and though his days were full he gave the idea that he had not a care in the world and found nothing but pleasure in your company and happiness in the chance encounter. He faced life with great courage. He never intruded his troubles upon his friends and he appeared to be wholly at the disposal of any patient or friend with whom he came in contact. Many of his qualities arose out of his somewhat unusual background. Born in a Herefordshire village home, his family migrated to Canada in his childhood, and his boyhood was spent on a Canadian farm, whence, just before the 1914 war, his parents brought him on holiday to this country. Caught by the war, they had great difficulty in returning home, but eventually managed to do so, leaving the boy behind at the age of 16 at the Newport Grammar School. From this time onwards he maintained himself through his school and university days until he qualified. His experiences during this period gave him his broad outlook on life and made him very tolerant and happy in association with all classes in the community. His varied experiences during this uphill period, as a violinist in a band, as a factory worker, or as a farmhand, remained all his life as a not unhappy memory, about which he could occasionally be persuaded to speak with a whimsical humour which was a part of his charm.

The very large attendance at the Memorial Service in St. George's Church, Edgbaston, afforded a striking testimony to the widespread respect in which he was held in the community in which he worked. Sankey was unmarried, and most of his relatives are in Canada, and it was fortunate that last autumn he found it possible to visit his father in the course of a flying visit to Vancouver which gave him great pleasure and some relief from the strain of practice.—S. G. B.

Dr. H. S. Littlepage writes: "Joe" Sankey's academic career and ability as a surgeon were brilliant. His kindness to the sick and his loyalty to general practitioners were among many outstanding qualities which he possessed, and many of us will always remember him as the "G.P.'s" friend. A call for his help at any hour of the day or night, to the rich or to the poor, was always answered in the same cheery way: "Sure. I'll be along." He had an amazing insight into a patient's character, and any fear of the operation or the anaesthetic seemed to fade away at his reassuring smile and sincere understanding. Young residents will also miss him greatly. So will his nurses. And anaesthetists will always remember his kindness, his patience, and his understanding when they were in difficulty.

C. A. MITCHELL, M.A., D.Sc.

Dr. C. A. Mitchell, at one time editor of the *Analyst* and a former president of the Medico-Legal Society, died on Jan. 5 at the age of 80.

Charles Ainsworth Mitchell, the third son of Dr. T. R. Mitchell, was born at Thetford, Norfolk, and was educated at King William's College in the Isle of Man, and at Exeter College, Oxford. He became a Fellow of the Royal Institute of Chemistry in 1897, two years after graduating, and his early interest in chemistry led him to an unusual but useful study—that of the history and analysis of inks. His book on the subject, which is already in its fourth edition, has become a standard reference work and is consulted when questions of the authenticity of legal documents of whatever age arise. For many years he contributed articles on scientific subjects, often of legal interest, to *Chambers's Journal* and to *Discovery* and other periodicals. He was president of the Medico-Legal Society from 1935 to 1937, honorary vice-president of the Medico-Legal Society of France, and vice-president of the Royal Institute of

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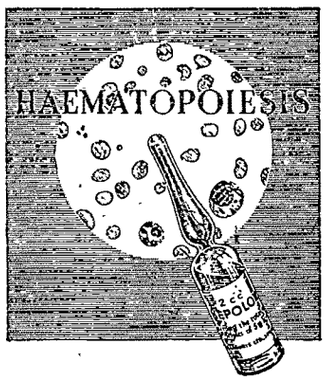

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British Medical Journal, June 30th, 1945, p. 926.

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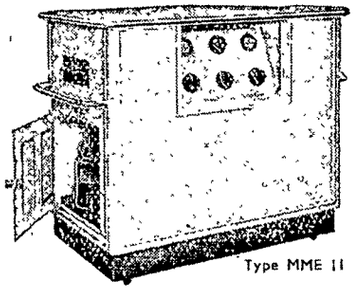

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Chemistry from 1937 to 1940. Among his other publications were *Science and the Criminal* in 1911; *The Evidence of the Casket Letters* in 1929; and *The Scientific Detective and the Expert Witness,* which appeared in 1931.

Dr. HENRY MARTIN MOGRIDGE WOODWARD, who died on Jan. 2 at his residence at Blackheath, was the son of the late Dr. Martin Woodward, of Pershore, Worcestershire. He was educated at St. Edward's School and Keble College, Oxford, and later at Guy's Hospital. In his younger days and until illness overtook him he was a keen athlete and rowed for his college. For a time he was on the stage, playing chiefly Shakespearean roles, but later he took up medicine and qualified in 1904. Soon after qualification he became house-surgeon to St. John's Hospital, Lewisham, and he devoted the rest of his life to the interests of that hospital. He was bacteriologist to the hospital for over thirty years, and although he had reached the age for retirement when the recent war broke out he continued his devoted services, attending the hospital daily, including Sundays, without any holiday. This undoubtedly had a serious effect on his health. He was not robust and had had several severe illnesses. At St. John's Hospital Dr. Woodward met and married Miss Elizabeth Thompson, and their partnership was an ideally happy one. He was consulting bacteriologist to several hospitals in South-east London and Kent, but his chief interest always remained St. John's Hospital, to the exclusion of private practice. At the time of his death he had been a governor of the hospital for more than twenty-five years and gave of his utmost in the interests not only of the patients but also his medical colleagues. On his retirement from active service with St. John's in 1946 he was elected to the consulting staff and also continued as a governor, maintaining his close interest in the hospital's affairs. He attended a board meeting a few weeks before his sudden death. Dr. Woodward was a very scholarly man and retained his interest in the classics until the end. He was a keen supporter of the Medico-Legal Society and was interested in and worked for several charities. He was indeed one of the most charitable of men and never spared himself whenever he saw an opportunity to be of help. Our deepest sympathy goes out to Mrs. Woodward, who nursed him so devotedly through several serious illnesses.—P. F. A.

Dr. ARTHUR CHARLES INGRAM died on Dec. 20, 1947, at Bournemouth. He was educated at Felsted School, Cambridge University, and Charing Cross Hospital. He qualified in 1900 and graduated in 1901, subsequently proceeding M.D. and taking the M.R.C.P. He held the Cambridge D.P.H., and he entered the Indian Medical Service in 1904, taking the gold medal for military medicine at Netley. He was at one time professor of pathology in the University of Madras. He left the Service in 1921 with the rank of major and was appointed bacteriologist to the Borough of Bournemouth in 1922, holding this appointment up to the time of his death. His sudden death came as a shock to his friends and colleagues in Bournemouth.

Dr. ELIZABETH COURTAULD, who died on Dec. 26, 1947, had been living in retirement very much crippled for some years. She started medical work at the Royal Free Hospital rather later than usual, as she had taken nursing training earlier. She was in residence at College Hall through all her medical course. After qualifying L.S.A. in 1901 she took the M.D. of Brussels in 1903, and went into general practice for a short time. She then did medical mission work in India, principally at the Church of England Zenana Mission Hospital at Bangalore. In the 1914–18 war she was attached for some time to the Scottish Women's Hospital at Abboye de Royaumont, in France. Although frail physically, she was always at work and took practically no time off—she did not object to the other medical officers taking time off but was merely mildly surprised that they should want to do so. Her bent was medical, but she collaborated with Miss Ivens in any surgical or anaesthetic or other work that wanted doing. She had been in retirement near Halstead for some years enjoying the quiet and the opportunity to keep in touch with her family in that neighbourhood.—L. M. P.

Dr. JOHN HEWETSON WHITESIDE died at Hadlow, Tonbridge, on Dec. 31 at the age of 84. The third son of the Rev. Stephen Whiteside, he was educated at Appleby Grammar School and Edinburgh University, and graduated M.B., C.M. in 1886. He was in general practice in recent years at Armitage, near Rugeley, Staffordshire, and he was medical officer of the Rugeley Cottage Hospital, medical officer and public vaccinator for the Rugeley District, police surgeon, and divisional surgeon to the Rugeley Ambulance Brigade. He had served as a captain in the R.A.M.C. in the 1914–18 war. He was always actively interested in the work of the St. John Ambulance Brigade and he was an expert amateur carpenter. Among other things he made an altar, which is still in use at Armitage Church.

Dr. FRANK HARRIS WHITE died in London on Jan. 2 at the age of 75. A student of the London Hospital, he took the L.S.A. in 1893, the conjoint diploma two years later, and the D.P.H. in 1900. He was at one time aural assistant to the London Hospital, and he was in general practice in the East End of London, first in Bow and later in Poplar, until 1930. He served in the R.A.M.C. in the 1914–18 war and was regimental medical officer to the 17th London Regiment, leaving the service with the rank of major. He was appointed medical officer to the Port of London Authority in 1930, which post he held until the time of his death. He leaves a widow, two sons, and two daughters.

Dr. ANNA POLLOCK MARTIN died in Southampton Hospital on Jan. 5. A daughter of the late Rev. William Martin, who was a missionary in Rajputana, she was born there and educated at the Park School, Glasgow, and at Glasgow University, where she graduated in 1903, proceeding M.D. in 1906. She was in private practice in Ayr for some time before being appointed in 1920 as a Church of Scotland missionary to the Mure Memorial Hospital, Nagpur. This is a large, well-equipped women's hospital which serves a large section of the Central Provinces. In the course of her work there Dr. Martin took a prominent part in the medical and welfare work of the community. In 1942 she was awarded the Kaisar-i-Hind medal for her services in this connexion.

Universities and Colleges

UNIVERSITY OF LONDON

Dr. E. Ashworth Underwood, Director of the Wellcome Historical Medical Museum, will deliver a course of six public lectures on "The Heritage of Medicine" in the Department of Physiology, University College, Gower Street, W.C., on Fridays, at 5 p.m., from Jan. 23 to Feb. 27.

A course of four public lectures on "Some Aspects of General Physiology" will be given by L. E. Bayliss, Ph.D., Reader in Physiology in the University, in the Department of Physiology, University College, on Tuesdays, March 2, 9, 16, and 23, at 5 p.m.

A course of five public lectures on "Some Aspects of Pharmacological Chemistry" will be delivered by F. Bergel, Ph.D., in the Physiology Theatre, Gower Street, W.C., on Tuesdays, at 5.15 p.m., from Jan. 20 to Feb. 17.

Admission to the lectures is free, without ticket. Students and others interested are invited to attend.

Prof. Osten Holsti, professor of general medicine in the University of Helsinki, has come to work at the Postgraduate Medical School of London in the Department of Medicine for three months as a visiting professor. Prof. Holsti has just been honoured on his sixtieth birthday by the issue of a congratulatory number of the *Annales Medicinae Internae Fenniae,* written and dedicated by his pupils. He is one of the leaders of clinical medicine in Finland and has done distinguished work on arthritis, diabetes, and haematology. While he is in London he will take part in teaching and research in the Department of Medicine at the Postgraduate Medical School.

The following candidates have been approved at the examinations indicated:

M.D.—BRANCH I (*Medicine*): D. W. R. Ashby, W. J. Atkinson, T. P. Blanshard, F. E. de W. Cayley, A. H. C. Couch, H. D. Crosswell, E. M. C Dunlop, C. G. Fagg, J. H. Friend, T. Hanley, S. W. Hinds, E. A. Hunter, S. L. Kaye (*Gold Medal*), P. M. McAllen, Catherine A. Neill, T. Partington, C. E. Quin, H. W. Salmon, G. Shneerson, Esther E. Simpson, Jean V. Simpson, W F. T. Tatlow, J. W. Thompson, P. A. Thorn, A. S. Watts, D. Weitzman, P. E. D. S. Wilkinson, Judith C. M. Yuill. BRANCH II (*Pathology*): D. B. Brewer, G. Discombe, B. P. Marmion, H. C. Moore, K. B. Rogers. BRANCH IV (*Midwifery and Diseases of Women*): S. F. Hans. BRANCH V (*Hygiene*): J. J. A Blakely, W. C. D. Lovett, C. D. L. Lycett, C. Seeley. BRANCH VI (*Tropical Medicine*): K. P. Hare (*Gold Medal*), V. G. Patel, A. J. Walker.

UNIVERSITY OF BRISTOL

George Lionel Alexander, F.R.C.S., has been appointed Director of the Neuro-Surgical Unit in the University.

The following candidates have been approved at the examinations indicated:

M.D.—D. N. Walder.

FINAL M.B., CH.B.—Margaret J. Andrews, D. H. Bowden, D. McL. Cunningham, Eudora M. R. Davies, N. M. Gibbs, Pamela H L. Hamilton, S. F. Iles, Jean E. Morrell, Josephine C. Mulcahy, J. P. Norris, P. W Seargeant. *In Group I, completing the examination:* Catherine M Hoyle. *In Group II completing the examination:* C. E Halliday, Kathleen C. Iles.

DIPLOMA IN PSYCHOLOGICAL MEDICINE.—*Part II:* L. B. Thomas

No. 52

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Dec. 27.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1947					1946 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)*	(e)
Cerebrospinal fever	26	4	16	1	—	38	3	23	2	1
Deaths		1	1				1	—		
Diphtheria	157	18	65	8	5	180	10	71	56	10
Deaths	6	—	—	—	—	5	1	1	—	—
Dysentery	53	6	27	—	—	55	4	12	2	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	—	—	—	—	—	—	—	—	—	—
Deaths		1					1			
Erysipelas			33	6	1			38	19	3
Deaths		—					—			
Infective enteritis or diarrhoea under 2 years				13					46	
Deaths	52	5	6	1	1	104	15	15	3	3
Measles*	2,583	115	278	93	7	7,068	229	224	67	325
Deaths	2	—	2	1	—	5	—	2	—	1
Ophthalmia neonatorum	30	2	13	—	1	41	2	11	—	—
Deaths										
Paratyphoid fever	22	1	1(A)	—	—	6	2	—	—	—
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenza	690	38	13	3	14	760	41	16	10	6
Deaths (from influenza)†	20	4	—	—	—	33	5	6	1	—
Pneumonia, primary			372	11				389	51	
Deaths		37		8	4		63			10
Polio-encephalitis, acute	4	—				—	—			
Deaths		—					—			
Poliomyelitis, acute	44	2	3	1	2	1	—	—	18	—
Deaths		—					—			
Puerperal fever		—	7		—		1	10		—
Deaths										
Puerperal pyrexia‡	68	6	10	—	—	90	4	7	—	—
Deaths		—					—			
Relapsing fever	—	—			—	—	—			—
Deaths										
Scarlet fever	1,469	104	297	18	21	943	67	299	44	33
Deaths	3	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	2	—	2	1	1	3	—	—	10	2
Deaths	—	—	1	—	—	1	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	1,141	67	14	27	5	1,149	82	146	80	36
Deaths	5	1	—	—	—	4	—	—	1	1
Deaths (0–1 year)	336	38	77	15	12	590	78	83	23	11
Infant mortality rate (per 1,000 live births)										
Deaths (excluding still-births)	4,577	706	650	150	111	6,260	1031	758	202	166
Annual death rate (per 1,000 persons living)			13·5	9·5				16·7		
Live births	5,351	751	880	156	184	7,548	1018	1127	207	191
Annual rate per 1,000 persons living			17·7	9·8				22·7		
Stillbirths	145	18	26			220	22	38		
Rate per 1,000 total births (including stillborn)			29					33		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

‡ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Paratyphoid at Ipswich

Since Dec. 20, 1947, there have been 22 cases of paratyphoid B notified in Ipswich, with one death, and 8 carriers have been isolated among the contacts. In the county of Suffolk within a radius of a few miles 26 cases have appeared, and there have been 3 cases in Essex.

Dec. 4 and 6 were outstanding dates of presumptive infection in the Ipswich cases up to Jan. 6. The three cases in Essex are not yet linked up with the Ipswich outbreak. Organisms cultured from 35 infections in this outbreak are reported to belong to phage type I.

Investigation of the cases suggested confectionery as the vehicle of infection, the most common reference being to cream-filled buns or cakes. Within a few days an infected person was found who had been handling such foodstuffs for the first three weeks of December. It has not, however, been possible to isolate the organism from samples of such food taken after Dec. 20.

Poliomyelitis in Scotland

The number of suspected and confirmed cases intimated by medical officers of health to the Department of Health for Scotland between June 1, 1947, and the end of the year was approximately 1,675—the highest number ever recorded in Scotland. In June and July together, about 100 cases were notified. Approximately 520 cases were reported in August, and 590 in September. Thereafter the numbers fell to 325 in October, 100 in November, and 43 in December. Suspected cases were reported in every county except Orkney and Ross and Cromarty and in every large burgh except Inverness.

The greatest number of cases reported in any one area was 483 in Glasgow; 138 cases were reported in Edinburgh, 51 in Aberdeen, and 39 in Dundee. In the county areas the greatest number of reported cases was in Ayrshire, with 108 cases. Lanarkshire had 105 cases, and Morayshire and Fife 56 each. No other county or large burgh had more than 50 cases.

The deaths from poliomyelitis usually amount to about 5 to 10% of the cases, and in the 1947 epidemic the total number of deaths recorded in the 16 principal towns in Scotland between June 1 and the end of the year was 69 out of 865 cases.

Poliomyelitis in England and Wales

Notifications of poliomyelitis 59 (44) for the week ended Jan. 3 showed a slight rise on those of the previous week, and those of polio-encephalitis are the same 4 (4). Figures for the previous week are shown in parentheses. It is possible that the Christmas holiday may have led to some delay in notification and that the slight rise may be more apparent than real.

Discussion of Table

In *England and Wales* a large decrease was recorded in the notifications of all infectious diseases except paratyphoid fever, which increased by 16. There were falls in the incidence of measles 626, whooping-cough 558, scarlet fever 594, acute pneumonia 151, and dysentery 30.

The largest falls in the notifications of measles were Lancashire 111, Nottinghamshire 81, Derbyshire 75, Northamptonshire 47. For scarlet fever the most marked declines in incidence were Staffordshire 70 and London 55 and for whooping-cough Lancashire 71 and Middlesex 61.

The fall in the incidence of acute pneumonia was confined to the southern and midland counties. The chief features of the returns for diphtheria were decreases in Lancashire 18 and Essex 15.

Of the 22 notifications of paratyphoid fever 17 were recorded in five administrative areas of Suffolk. In Surrey, Epsom and Ewell M.B., 8 further cases of dysentery were notified, and the only other large return was Lancashire 21. The largest returns of poliomyelitis were Cheshire 4 and Lancashire 4.

In *Scotland* a decreased incidence was recorded for every infectious disease except diphtheria, which increased by 8. There were falls in the incidence of measles 223, acute primary pneumonia 32, whooping-cough 18, and acute poliomyelitis 10. The increase in the incidence of diphtheria was mainly in the western area, where the notifications rose from 40 to 51. Only 3 cases of poliomyelitis were notified, 2 in Glasgow and 1 in the county of East Lothian.

In *Eire* a decreased incidence of infectious diseases was also recorded. The notifications declined for measles 46, scarlet fever 26, and diarrhoea and enteritis 17.

In *Northern Ireland* the chief features of the returns were falls in the notifications of scarlet fever 35, measles 12, and diphtheria 8.

Week Ending January 3

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,786, whooping-cough 1,891, diphtheria 225, measles 4,490, acute pneumonia 1,098, cerebrospinal fever 55, acute poliomyelitis 59, dysentery 86, paratyphoid 39, and typhoid 5.

Medical News

More Beds for Streptomycin Treatment

The total number of beds available at hospitals in the United Kingdom for the treatment of patients with streptomycin has been increased from 150 to about 200, and the following additional hospitals are now able to provide treatment:

University College Hospital, London.
Addenbrooke's Hospital, Cambridge.
Radcliffe Infirmary, Oxford.
King's Cross Hospital, Dundee.

All the hospitals concerned have been asked to continue restricting treatment with the drug to cases of tuberculous meningitis and miliary tuberculosis. Medical practitioners who have such cases should get into touch with the nearest convenient hospital with beds reserved for streptomycin treatment, or, in the case of hospitals in the London area, with the Emergency Bed Service (telephone, Monarch 3000). Other hospitals at which this treatment is available were listed in our issues of Sept. 6, 1947 (p. 399), and Oct. 4, 1947 (p. 555). The Ministry of Health emphasizes that despite these additional beds it is unlikely that all cases of these two types of disease can be accommodated at present.

Dr. Voeller and Parkinson's Disease

The Information Services Directorate of the Foreign Office (German Section) issued the following statement on Jan. 7: "Some publicity has recently been given to reported cures of Parkinson's disease (paralysis agitans) effected by a Dr. Voeller, of Kassel (U.S. Zone of Germany). The story originated from a recommendation alleged to have been made by the notorious Dr. Karl Brandt to a British soldier. Dr. Voeller once owned a private nursing-home in Kassel where he specialized in the treatment of this disease, and where, with close attention to the well-being of his patients, he appeared to obtain some good results. According to Public Health Branch of the Control Commission for Germany (B.E.), there is no truth in the report that Dr. Voeller has discovered a specific cure for Parkinson's disease. It is emphasized that periods of apparent improvement are a characteristic of the development of the disease. Dr. Karl Brandt, Reich Commissioner for Health under Hitler, was sentenced to death by hanging on Aug. 20, 1947, by a United States Military Court at Nuremberg after being found guilty of crimes against humanity and sadistic experiments on human beings in German concentration camps."

M.R.C. Dental Research Committee

The Medical Research Council have recently reconstituted the Dental Research Committee. The secretary of this committee is Prof. M. A. Rushton, Department of Dental Medicine, Guy's Hospital.

Irish Postgraduate School

The Eire Minister for Health has appointed a committee to examine the facilities at St. Kevin's Hospital, Dublin, and to make recommendations about measures needed to establish there a postgraduate medical school for medical officers employed by local authorities.

Psychiatric Committee

The Representative Psychiatric Committee of the North-east Metropolitan Area consists of elected representatives of the medical staffs of the mental hospitals, the mental deficiency institutions, and the psychiatric departments of the teaching and non-teaching general hospitals in the area. It has been in existence since June, 1947, and has as its terms of reference: "To consider and to concern itself with every aspect of the psychiatric services in the region." The committee is under the chairmanship of Dr. Henry Wilson.

Illustrating Pathology

A number of students have been trained at the St. Martin's School of Art in the technique of drawing pathological and surgical specimens. Part of their experience has been gained in operating theatres in London hospitals. Their services are now available for employment by surgeons or hospitals. Inquirers should write to the principal of the school, 109, Charing Cross Road, W.C.2.

Scabies Order

Under the Emergency Laws (Transitional Provisions) Act, 1946, and the Emergency Laws (Miscellaneous Provisions) Act, 1947, Regulation 33A of the Defence (General) Regulations, 1939, expired on Dec. 31, 1947, and the Scabies Order, 1941, which was made under that Regulation, accordingly ceased to be operative after that date. The Regulation and the Scabies Order were introduced as an emergency wartime measure to combat an exceptional increase of scabies. The time has now come, in the view of the Minister of Health, to revert to reliance on normal statutory powers, as contained in the Public Health Acts, for dealing with verminous conditions.

Demand for Blood Increases

During the June quarter 27,546 new donors joined the National Blood Transfusion Service, reports the Ministry of Health. This is about twice as many as in the first quarter. Blood was given by 66,557 donors. The estimated donor panel strength is now about 350,000. To provide for further increases in the demands for blood and plasma, and to ensure that donors are not asked to give blood more often than once every six months, some 168,000 new volunteers are required in England and Wales.

Prof. G. Grey Turner

George Grey Turner, M.S., F.R.C.S., Emeritus Professor of Surgery in the University of London, has been elected an Honorary Member of the Greek Surgical Society and a Corresponding Member of the Royal Academy of Medicine of Belgium.

Freedom of Kirkcudbright

John MacMyn, M.D.Ed., has been given the freedom of the Royal Burgh of Kirkcudbright.

Appointments for War Service

William Archibald Balhetchet, L.M.S., Medical Officer, Malayan Medical Service, has been appointed O.B.E. (Civil Division), and Yeoh Bok Choon, L.M.S., Tutor in Surgery, College of Medicine, Singapore, has been appointed M.B.E. (Civil Division), for services at the Tan Tock Seng Hospital, Singapore, during the enemy occupation.

Wills

Mr. Louis Carnac Rivett, the well-known obstetrician and gynaecologist, who died on Sept. 5, 1947, left £17,793. Dr. Isabella Macdonald Macdonald, formerly consulting physician to the Elizabeth Garrett Anderson Hospital, left £17,590. Dr. Herbert William Allan, late M.O.H. for Wells, left £1,333. Dr. Sidney Herbert Daukes, formerly curator of the Wellcome Museum, who wrote novels under the pseudonym of Sidney Fairway, left £6,490.

COMING EVENTS

Ophthalmological Society of the United Kingdom

The annual congress of the Ophthalmological Society of the United Kingdom will be held at the Royal Society of Medicine, 1, Wimpole Street, London, W., on Thursday, Friday, and Saturday, April 8, 9, and 10, when the subject for discussion will be "Subjective Disorders of Vision (excluding those due to local ocular disease)," to be opened by Dr. Macdonald Critchley, Prof. Henry Cohen, and Mr. J. H. Doggart. The Bowman Lecture will be delivered by Prof. Marc Amsler (Zurich). Members who wish to read papers are asked to send the titles to Mr. T. Keith Lyle, F.R.C.S. (honorary secretary for congress business), 42, Charles Street, Berkeley Square, London, W.1, as soon as possible. Abstracts of papers, which will be circulated at the congress and subsequently to the leading ophthalmological journals abroad, should be submitted by Jan. 31. On Friday afternoon (April 9) there will be a joint clinical meeting with the Ophthalmological Section of the Royal Society of Medicine at the Ophthalmic Institute, Central London Ophthalmic Hospital, Judd Street, London, W.C. Those who wish to show cases are asked to communicate with the registrar-tutor, Mr. H. Ryan, at the hospital. The annual dinner will be held at the Royal College of Surgeons of England (Lincoln's Inn Fields, London, W.C.) on Thursday, April 8. Owing to official restrictions the numbers on this occasion will be limited to 100, and it is regretted that it will not be possible to allow members to bring guests.

Association of Clinical Pathologists

The 39th scientific meeting of the Association of Clinical Pathologists will be held at St. Mary's Hospital, London, W., on Friday and Saturday, Jan. 30 and 31. The programme is as follows: Jan. 30, 9.30 a.m., Prof. R. J. V. Pulvertaft, Stabilization of penicillin solutions by phosphates; 9.45 a.m., Dr. J. Ungar, Comparison of penicillin blood levels after aqueous solutions and oily suspensions of penicillin; 10.5 a.m., Dr. M. Daniels, The value of streptomycin; 10.35 a.m., Dr. Tullio de Sanctis Monaldi, Modification du liquide céphalorachidien dans la méningite tuberculeuse, traitée par la streptomycine; 11.25 a.m., Dr. G. B. Forbes, Relative merits of laryngeal

swabs and fasting stomach contents in the detection of tubercle bacilli; 11.50 a.m., Dr. A. F. S. Sladden, A convenient technique for the Aschheim-Zondek Test; 12.15 p.m., Mr. R. E. Glover, Supply of laboratory animals; 12.35 p.m., Dr. Georgiana M. Bonser, Pigmented tumours of the skin; 4.30 p.m., Presidential address by Dr. C. E. Dukes, Human relationships in clinical pathology; 5.10 p.m., presentation to Dr. S. C. Dyke (Founder of the Association); 5.15 p.m., Reply by Dr. Dyke with an address entitled "Genesis." Jan. 31, 9.30 a.m., Dr. K. S. Thompson, Evolution of an antiseptic lubricant; 9.55 a.m., Dr. R. M. Haines, Observation on the histology of tuberculous endometritis; 10.15 a.m., Mr. J. T. Duncan, Histoplasmosis; 10.40 a.m., Dr. J. R. O'Brien, Significance of the bleeding time; 11.30 a.m., Dr. J. V. Joossens, Reticulocyte counts by fluorescence microscopy; 11.50 a.m., Dr. G. Discombe and Mr. H. Meyer, Capillary method of rhesus grouping; 12.10 p.m., Dr. J. Harkness, Significance in clinical pathology of the variations in the hypothetical equilibrium of the plasma proteins; Dr. W. W. Payne, Biochemical aspects of gastro-enteritis; 2.30 p.m., Dr. J. C. Colbeck, Air embolism and the method of post-mortem diagnosis; 2.55 p.m., Dr. C. J. Lind, Blood alcohol, its determination and interpretation; 3.15 p.m., Dr. F. E. Camps, Medico-legal problems of the newborn child; 3.40 p.m., Mr. H. S. Holden, Laboratory aspects of drowning. Demonstrations will be given from 2 p.m. on Jan. 30 to 12 noon on Jan. 31. The honorary secretary of the association is: Dr. W. H. McMenemey, Royal Infirmary, Worcester.

Services Hygiene Officers' Dinner

A reunion dinner of the Navy, Army, and Air Force Hygiene Group of the Society of Medical Officers of Health will be held at Stewart's Quadrant Restaurant, 74, Regent Street, London, W., on Friday, Jan. 30, at 6.45 for 7.15 p.m. Any serving or former hygiene officers in any of the Services will be welcome. Early applications for tickets should be made to the honorary secretary, Dr. H. D. Chalke, O.B.E., Public Health Department, 33–5, Lancaster Grove, London, N.W.3, enclosing remittance for 16s. 6d. (which includes coffee and tips but not wines or spirits). The chair at the dinner will be taken by the Group's president, Brigadier A. E. Richmond, C.B.E., Director of Hygiene, A.M.S., who at 5.30 p.m. the same day will deliver his presidential address on "The Army's Health in 1947" at B.M.A. House, Tavistock Square, London, W.C.

American Group Therapy Association

The annual meeting of the American Group Therapy Association will be held at Hotel Commodore, New York City, on Sunday, April 11, 1948. The programme will include case presentation and discussion and an evening session devoted to reports and evaluation of current practices and trends in group therapy. A copy of the preliminary programme and further information may be obtained from the association at 228, East 19th Street, New York 3, N.Y., U.S.A.

SOCIETIES AND LECTURES

Monday

HUNTERIAN SOCIETY.—At the Mansion House, London, E.C., Jan. 19, 8.30 p.m. *"Recent Improvements in the Diagnosis and Treatment of Vascular Obstruction."* Hunterian Lecture by Prof. J. Cid Dos Santos (Lisbon).

Tuesday

EUGENICS SOCIETY.—At Royal Society's rooms, Burlington House, Piccadilly, London, W., Jan. 20, 5.30 p.m. *"Sex Limitation in Human Genetics."* Dr. H. Harris.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C., Jan. 20, 5 p.m. *Pathological Demonstrations.* Dr. I. Muende.

SOCIETY FOR THE STUDY OF ADDICTION.—At Medical Society of London, 11, Chandos Street, W., Jan. 20, 4 p.m. *"Economic Aspects of Tobacco Addiction."* Mr. V. Zachary Cope. Followed by discussion.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHARMACOLOGY.—Jan. 20, 5.15 p.m. *"Introduction: Pharmacology and the Chemical Sciences."* Mr. F. Bergel.

Wednesday

ROYAL MICROSCOPICAL SOCIETY.—At B.M.A. House, Tavistock Square, London, W.C., Jan. 21, 5 p.m. for 5.30 p.m. *"Relation between Cellular Structure and Functional Activity."* Presidential Address by R. J. Ludford, Ph.D., D.Sc.

ROYAL SANITARY INSTITUTE.—At Town Hall, Colchester, Jan. 21, 2 p.m. *"The Implementation of the National Health Service Act in County Districts."* Dr. J. D. Kershaw.

Thursday

MEDICO-LEGAL SOCIETY.—At 26, Portland Place, London, Jan. 22, 8.15 p.m. *"The Office and Duties of the Director of Public Prosecutions."* Sir Theobald Mathew, Director of Public Prosecutions.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, London, S.W.—Jan. 22, 4.30 p.m. *Neurological lecture-demonstration.* Dr. A. Feiling.

Friday

ROYAL COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS, 58, Queen Anne Street, W.—Jan. 23, 5 p.m. *"Primary Carcinoma of the Vagina."* William Blair-Bell Memorial Lecture by Dr. Stanley A. Way.

LONDON CHEST HOSPITAL, Victoria Park, E.—Jan. 23, 5 p.m. *"Radiological Diagnosis in Trauma of the Lungs."* Dr. C. J. Hodson.

MIDDLESEX COUNTY MEDICAL SOCIETY.—At Hillingdon County Hospital, near Uxbridge, Jan. 23, 3 p.m. Agenda: Demonstration of clinical cases and pathological material, including cases of congenital disease of lungs, heart, and aortic arches. The Department of Physical Medicine is open and there will be demonstrations of cases and treatment. *"Physical Methods in Rehabilitation."* Short paper by Dr. Talbot; *"Value of Radiology in Diagnosis of Acute Abdomen."* Short paper by Dr. Maddocks.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—Jan. 23, 8 p.m. *"Body and Mind."* Address by Mr. K. M. Walker.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—At South Kensington Hotel, 41, Queen's Gate, S.W., Jan. 23, 8.30 p.m. *"Modern Surgical Treatment of Chronic Peptic Ulcer."* Opening speakers, Dr. A. Morton Gill and Mr. I. M. Orr. Discussion.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY.—Jan. 23, 5 p.m. *"The Fabric of the Human Body."* Dr. E. A. Underwood.

Saturday

BIOCHEMICAL SOCIETY.—At British Postgraduate Medical School, Ducane Road, Hammersmith, London, W., Jan. 24, 11 a.m. 263rd meeting.

BRITISH ASSOCIATION OF ALLERGISTS.—At Wright-Fleming Institute of Microbiology, St. Mary's Hospital, Paddington, London, W., Jan. 24, 2.30 p.m. First general meeting. *"Forty Years of Allergy."* Dr. John Freeman; *"Advancing to the Future in Allergy—A Brief Survey."* Mr. Frank Coke.

MEDICAL SOCIETY FOR THE STUDY OF VENEREAL DISEASES.—At 11, Chandos Street, London, W., Jan. 24, 2.30 p.m. *"Treatment of Neurosyphilis with Penicillin."* Dr. J. Purdon Martin. Discussion.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Anscombe.—On Dec. 28, 1947, at Crumpsall Hospital, Manchester, to Maureen (*née* Macandrew, M.B., Ch.B.), wife of Dr. A. R. Anscombe, a son.

Aspin.—On Jan. 5, 1948, at The Willows Nursing Home, Bramley, Leeds, to Alice and Dr. John Aspin, a daughter.

Gifford.—On Jan. 3, 1948, at Mill Road Hospital, Liverpool, to Gwen (*née* Hayes), wife of Dr. J. Hamilton Gifford, a daughter—Valerie.

Hay.—On Dec. 15, 1947, at Sunderland, to Vera (*née* Brown), and Dr. Arthur W. Hay, a daughter—Vivienne Margaret.

Maughan.—On Jan. 10, 1948, at Newcastle-upon-Tyne, to Rebe Monica (*née* Hastings), M.A., D.Th.P.T., wife of John H. Maughan, M.B., B.S., C.P.H., a son.

Pickard.—On Dec. 15, 1947, at West Kent General Hospital, Maidstone, to Joan and Brian Pickard, of Priory Tower, Priory Park, Blackheath, a second daughter—Celia Jane.

DEATHS

André.—On Jan. 5, 1948, James Edward Felix André, M.R.C.S., L.R.C.P., of Highleigh, Sidlesham, Chichester, aged 83.

Chandler.—On Jan. 7, 1948, at a nursing home in Sidmouth, Francis William Chandler, M.B., B.S., late of Woodseats, Sheffield, aged 79.

Eales.—On Jan. 5, 1948, at St. Andrews, Bronshill Road, Torquay, George Young Eales, M.R.C.S., L.R.C.P., aged 88.

Firth.—On Jan. 9, 1948, Arthur Charles Douglas Firth, M.D., F.R.C.P., of 236, Hills Road, Cambridge.

Gleeson.—On Jan. 7, 1948, Olaf Gleeson, M.R.C.S., L.R.C.P., of 10, Harley Street, London, W.

Hulbert.—On Jan. 4, 1948, at Hartley Witney, Joseph George Hulbert, M.B., B.Ch., Lieutenant-Colonel, late I.M.S., aged 80.

Jenner.—On Jan. 7, 1948, at 20, Birchwood Road, Petts Wood, Kent, Wesley John Jenner, M.D., F.R.C.S.Ed., aged 77.

Jones.—On Jan. 9, 1948, at Monkreddan House, Prestwick, Ayrshire, Arnold Ernest Jones, M.B., Ch.B.

Martin.—On Jan. 5, 1948, at Southampton, Anna Pollock Martin, M.D., M.R.C.O.G., late of Nagpur, India.

Popert.—On Jan. 5, 1948, at 11, Albert Road, Southport, Adolphe Joseph Popert, M.R.C.S., aged 93.

Reade.—At "Riversley," Banbridge, Northern Ireland, Thomas Edwards Reade, M.B., B.Ch.

Selkirk.—On Jan. 5, 1948, at a nursing home, Edinburgh, Elizabeth Thompson Selkirk, M.B., Ch.B.

Stich.—On Jan. 6, 1948, at Kent County Hospital, Pembury, Alexander Benham Stich, M.B., Ch.B., aged 58.

Swan.—On Jan. 7, 1948, at Highgate Hospital, James Herbert Swan, L.R.C.P.I.&L.M., D.P.H., of 22, Dartmouth Park Hill, London, N.W.

Wigmore.—On Jan. 3, 1948, at Hereford, Alfred James Wigmore, M.R.C.S., L.R.C.P., aged 71.

Woodman.—On Dec. 29, 1947, at The Cottage, Avonmouth, Mandeville, Jamaica, B.W.I., William James Woodman, M.R.C.S., L.R.C.P., Colonial Medical Service, retired, aged 75.

Woodward.—On Dec. 29, 1947, at 35, Roker Park Road, Sunderland, Alexander Taylor Woodward, M.B., Ch.B., aged 52.

Woodward.—On Jan. 2, 1948, Henry Martin Mogridge Woodward, M.R.C.S., L.R.C.P.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Treatment of Warts

Q.—*What treatment is suggested for warts on the fingers? Silver nitrate and podophyllin have been unsuccessful.*

A.—Treatment may be radical, by curettage. Many warts are radio-sensitive and clear up with a fractional dose of *x* rays. Other measures commonly employed may be effective by suggestion. Podophyllin is not helpful in this type of wart.

Hyperplasia of Tonsil

Q.—*What are the pathogenesis, nature, significance, and treatment of the fluid, or cheesy material, often offensive, frequently found in the crypts of the tonsils? There does not seem to be any evidence of inflammation in these cases, but a history of tonsillitis is often elicited. Do such tonsils have a toxic influence? Massage, syringing, and suction of the tonsils do not seem to cure, but a diet poor in starch is helpful. Is there any other treatment short of removal of the tonsils, which the patient wishes to avoid?*

A.—The cause of this condition is hyperplasia of the tonsil, leading to the formation of deep crypts, the orifices of which are narrow or actually occluded. The material which accumulates in these crypts consists chiefly of shed epithelial cells, together with a variety of bacteria, the growth of which causes decomposition of the material. Such bacteria are not necessarily pathogenic, but carriers harbour haemolytic streptococci and diphtheria bacilli in the same inaccessible situation, which accounts for the difficulty of abolishing the carrier state by any means short of tonsillectomy. It seems improbable that the absorption of the contents of such crypts could cause toxic effects; in so far as these are observed they are more likely to result from actual infection of the substance of the tonsil, with or without the acute exacerbations to which these patients are subject.

Tonsils exuding thin pus containing pathogenic organisms may be considered a source of toxaemia; those exuding cheesy material are probably not, in spite of the unpleasant symptoms they produce. In both cases the only effective treatment to secure a permanent cure is tonsillectomy.

Drug Addiction

Q.—(*a*) *What procedure—therapeutic and/or statutory—should a general practitioner follow when confronted with a case of addiction to a scheduled drug? Can any compulsion be brought to bear on patient or relatives to secure either treatment or responsible supervision?*

(*b*) *A woman aged 30, with three children, has become addicted to pethidine since having injections for attacks of trigeminal neuralgia a year ago. What treatment would you suggest?*

A.—(*a*) Addiction to drugs usually implies a morbid craving for one of the opium alkaloids or similar synthetic preparations, or for cocaine or one of its derivatives. This seldom occurs except in persons of abnormal mentality, so that treatment usually requires the services of an expert psychiatrist. It is almost always impossible to treat the patient satisfactorily except in an institution with special arrangements for strict control, to prevent surreptitious supplies of the drug continuing to reach the addict. The general practitioner is seldom called upon to do more than persuade the patient to enter a suitable institution for detoxication and the first steps towards mental and physical rehabilitation. After these steps have been taken a great deal remains to be done to prevent relapse, and here a wise family physician with a strong, sympathetic personality can do more than any specialist. The details of the treatment in the early stages must be adapted to the individual case, and cannot easily be summarized in a short article—the subject is well dealt with in standard books of reference.

If the patient proves completely uncooperative it may be necessary to invoke the aid of the law to apply compulsion. Since most of the drugs concerned are included in the scope of the Dangerous Drugs Acts, 1920–5, it is often possible to prove an offence against these Acts for which the patient may be summoned before a magistrate. If this be done, and the facts proved, it is open to the Court to bind the defendant over on condition that he enters a suitable institution and follows a prescribed course of treatment, failing which he becomes liable to the heavy penalties, including fine or imprisonment, provided under these Acts.

(*b*) As in every case of drug addiction, the patient must be admitted to a hospital or nursing-home for the treatment. Withdrawal symptoms of pethidine are, so far as is known, slight and harmless compared with those of morphine. The drug should be reduced by 20% of the addiction dose daily, so that at the end of five days it is discontinued. This should be followed by remedial exercises aiming at producing bodily fatigue. A psychiatrist should be asked to deal with his side of the problem. Return home should not be before three months. Pethidine is now subject to the Dangerous Drugs Acts.

Fat Atrophy due to Insulin Injections

Q.—*In a diabetic woman who has been having 20 units of protamine insulin a day for the past year, all the usual sites for injection have become impossible owing to absorption of subcutaneous fat. Has this condition been recognized before, how is it brought about, and what can be done to prevent it?*

A.—The condition was recognized soon after the use of insulin began. The only way of preventing it is to change the type of insulin as soon as the fat atrophy appears and choose the one which causes least damage. The site of injection should always be varied as much as possible, even though the patient is not sensitive to the insulin. Even after fat atrophy has occurred the insulin seems to be well absorbed.

Treatment of Alopecia

Q.—*Is p-aminobenzoic acid effective in the treatment of alopecia? What is the accepted modern treatment?*

A.—There are almost certainly many causes of alopecia, and one may be a deficiency of *p*-aminobenzoic acid. But there is no indication that *p*-aminobenzoic acid has any effect on growth of hair, and the evidence that it affects the colour of the hair is contradictory. Alopecia areata is an individual or sometimes a family pattern of reaction to disturbances of health or tone, and treatment turns upon the restoration of health and readjustment. Any general medical treatment is symptomatic, and local treatment is essentially directed towards stimulation of regrowth by counter-irritation, which can be effected by a variety of local applications as detailed in textbooks.

Vitamin B Content of Yeast

Q.—(*a*) *Does yeast contain all the vitamin B requisites for the body?* (*b*) *What quantities should a 10-stone (63.5-kg.) man take daily?* (*c*) *Is autolysed yeast better than yeast not so treated? Can I autolyse it myself?* (*d*) *Is yeast bought at the local baker's as good as that prepared by adding a pinch of hops and a dessertspoonful of flour to half a pint (284 ml.) of water, sealing, and leaving in a warm place for three days?* (*e*) *Should the taking of yeast have any relation to meal-times?*

A.—(*a*) The only vitamins of the B complex that are known to be essential for man are thiamine, nicotinic acid, and riboflavin. Others may be necessary, but there is no clinical evidence of this at present. Yeast contains thiamine, nicotinic acid, and riboflavin. (*b*) It is impossible to say what dose a 10-stone male should take. The vitamin potency of yeast is extremely variable, depending on the source, the strain of the yeast, the medium in which it grows, and its age. The writer has noted only one type of commercially available yeast of declared potency, and this contains approximately 25 mg. aneurin, 7 to 9 mg. nicotinic acid, and 1.4 mg. of riboflavin per ounce (28 g.). Thus 1 ounce daily with the food would provide enough of all the B vitamins, and actually ten times

as much aneurin as is needed. Such yeast can also be obtained in tablet form. (*c*) Autolysed yeast is best, because only about 20% of the vitamins are available in live yeast. The best plan is to pour boiling water on the yeast to kill the cells before it is eaten. (*d*) Yeast bought at the local baker's is unsatisfactory as a source of B vitamins, as it is of unknown potency. Thus the aneurin content may vary from 0.03 to 2 mg. per ounce. For the same reason home-made yeast is unsatisfactory. Incidentally yeast cannot be prepared by the method described, which would encourage the growth of many moulds and organisms. (*e*) From the point of view of absorption of the vitamins, it does not matter whether yeast is taken with meals or not.

Removal of Naevus

Q.—*My daughter, aged 11 months, has a naevus about the size of a sixpence on her forehead at the junction of hair and skin. It is slightly raised and rather disfiguring. What is the best treatment?*

A.—The naevus would appear to be a superficial cavernous angioma, a strawberry mark, and is likely to disappear spontaneously in the course of a few years. It should readily clear if frozen with a pencil of carbon-dioxide snow for twenty seconds. Unfiltered *x* rays, 600 r units (60 kV, 4 mA), would also favour gradual resolution, and neither treatment should produce scarring to interfere with hair growth.

Irregular Menstruation

Q.—*Is it possible to use stilboestrol in the case of a woman nearing the menopause whose periods are becoming irregular? If so, what is the optimum dosage, and would prolonged administration be dangerous? Is there any risk if the delay is due to pregnancy?*

A.—If the only "menopausal" symptom is irregularity of menstruation, treatment with stilboestrol or other oestrogens is rarely, if ever, indicated. If the irregularity takes the form of periods of amenorrhoea, no attempt should be made to re-establish menstruation; whereas if it is characterized by prolonged or heavy bleeding, diagnostic curettage should be carried out. The only possible indication is in those cases where prolonged bleeding has been shown (by histological examination of the endometrium) to be of the "threshold" type. The indiscriminate and prolonged use of stilboestrol at the menopause has real disadvantages. Unless the dose is controlled very carefully it is likely to cause endometrial hyperplasia and heavy bleeding, and in theory at any rate might cause carcinoma of the uterus. Moreover, if such treatment is suspended suddenly, flushes and other manifestations of the menopause may be precipitated. Stilboestrol even in large doses will not disturb a normal pregnancy.

Mixed Diphtheria Toxoid and Pertussis Vaccine

Q.—*In inoculation with mixed diphtheria A.P.T. and pertussis vaccine (alum-precipitated) it is recommended that three injections be given at intervals of four weeks. When the patient is not brought up to time, should one anticipate any severe reaction, and is protection adequate with a longer interval between the first and second injections? If a fresh course should be started, what interval should elapse between the first injection of the new course and the first injection of the abandoned course?*

A.—It has been well established experimentally that in immunization against diphtheria with A.P.T. the second injection, even if it is given six to twelve months after the first injection, will still elicit a good antibody reaction provided the first dose has been adequate to sensitize or prepare the tissues for response to the secondary stimulus. The risk of any severe reaction is not increased by a long interval between first and second doses, but of course if the second injection is delayed unduly the child in the meantime cannot be regarded as having been effectively immunized against diphtheria. The same principles presumably apply to the use of a mixed antigen of diphtheria toxoid and pertussis vaccine; there is no objection to combining these two antigens, provided each has been shown to be effective separately.

NOTES AND COMMENTS

Enuresis in Young Adults.—Mr. H. P. WINSBURY-WHITE (London, W.) writes: In the *Journal* of Dec. 20, 1947 (p. 1016), a question is asked in these words: "Can anything be done to benefit chronic enuresis in young adults? In the case I have in mind full neurological and urological examinations have proved negative." The points of fundamental importance in this matter are that what is called a full urological examination commonly omits a urethroscopy, and that young adults with enuresis frequently have a lesion in the urethra, and the appropriate treatment of such a lesion generally results in a marked improvement or a cure of the enuresis. Let me recount the facts of a recent case, a male of 19 years.

At the age of 14 he started bed-wetting two or three times a week, and had one-hourly frequency during the day. At the age of 16 a full urological examination, which included urethroscopy, had been carried out, when the only abnormalities to be found were granulomatous changes on the verumontanum and in the prostatic sinuses, and there was slight narrowing of the whole urethra. As a result of a single urethral dilatation the patient had only two wet beds in the course of the first three months after this treatment. Then he went for the next twelve months without a single wet bed; no further treatment was given during that time. He then began to relapse slowly and further urethral dilatations did not help him. Urethroscopy at the age of 19 showed granulomata still present as before. These I fulgurated two months ago, with immediate benefit, the frequency being reduced from one to three hours, and the enuresis to no more than three occasions in five weeks; whereas previous to operation he had been having one or two wet beds every week.

The benefit to the patient's mental state from the improvement he again experienced was certainly a gratifying and interesting feature of the case. This patient will certainly need further supervision and probably more treatment, in which circumstances I consider the prospects good.

Corrections

In our report (Dec. 27, p. 1049) of a meeting of the Section of Otology of the Royal Society of Medicine, the statement "Mr. Gavin Young said that formerly cases of acute mastoiditis were met with once or twice a year," should have read "cases of *latent* acute mastoiditis."

In reporting a meeting of the Section of Psychiatry of the Royal Society of Medicine (Dec. 27, p. 1048) some remarks made by the previous speaker were erroneously attributed to Dr. Melanie Klein. What Dr. Klein actually said was: "In considering the importance of aggression in the emotional life of the infant, we have to give full weight to the fact that aggression, since it is primarily directed against loved people—first of all the mother—gives rise to feelings of guilt and to the drive to make reparation. The tendency to make reparation enters into all sublimations and influences feelings of love and the relation to people. In these ways aggression forms a bridge between hatred and love. Freud pointed out many years ago the importance of the sublimation of aggression and the social effects of these processes. Further work, particularly carried out in the British Psycho-Analytical Society over the last twenty years and based on the psycho-analysis of children, has led to the recognition of the importance of the tendency to make reparation for aggressive impulses and phantasies."

In our obituary notice of the late Mr. G. F. Stebbing (Jan. 3, p. 28) it was stated that he had been "a member and honorary secretary of the Radium Commission from its formation in 1929." We are now informed that this was not the case. Prof. Sidney Russ was Scientific Secretary of the National Radium Commission from 1929 until 1935.

Dr. R. T. BRAIN points out that in his note on "Ringworm of Scalp" (Jan. 10, p. 86) thorium X was written in error for thallium acetate.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated.

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SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY JANUARY 17 1948

British Medical Association

SPECIAL REPRESENTATIVE MEETING

A LEAD TO THE PROFESSION

THE IMPENDING PLEBISCITE

On the requisition of the Council a Special Representative Meeting was held in the Great Hall of B.M.A. House on Thursday, Jan. 8. It was attended by 337 representatives of all Divisions and Branches in Great Britain and Northern Ireland, and by some 30 members of Council who were not representatives.

The principal purpose of the meeting was to decide the form of the forthcoming plebiscite, and the greater part of the day was taken up with "procedure" discussions concerning the phrasing of the instructions on the plebiscite form, the shape of the questions, and the size of the majority which should be taken as determining the issue. At the same time, a strong lead was given to the profession in the shape of a "solemn declaration," passed without a dissentient voice, that the Act in its present form "is so grossly at variance with the essential principles of our profession that it should be rejected absolutely by all practitioners."

The documents before the meeting were the Negotiating Committee's statement and the Minister's reply, published in the *Supplement* of Dec. 20, and the Council's statement in rejoinder, published in the *Journal* of Dec. 27.

The Form of the Plebiscite

The Chairman of Council (Dr. Dain) moved that, prior to the issue of the plebiscite, the Representative Body should indicate to the profession the minimum size of majority which would justify the Association in recommending the profession not to accept service under the Act in its present form. He said that it was desired to avoid argument afterwards as to whether the majority obtained justified the taking of action. If it was known beforehand that a substantial majority was required—a majority of a stated size—each member of the profession would have more certainty in casting his vote. An amendment was moved by North-east Essex that no plebiscite should be taken until the terms of service were fully known. The chief reason behind the amendment was that consultants as yet did not know on what basis they would be expected to work; general practitioners, too, desired more knowledge.

Many representatives spoke in opposition to the amendment, and when it was put to the meeting scarcely a vote was given in its favour. The Council's recommendation was carried. The meeting then turned to the discussion of the effective majority. The Council's recommendation was as follows:

> That it be made clear on the plebiscite form: (1) That if in the aggregate of the votes of consultants and specialists (not holding whole-time salaried posts) and general practitioners there is a majority against accepting service under the Act, and this majority includes approximately 13,000 general practitioners (this represents 63% of all general practitioners), the Association will advise the profession not to enter into any contract under the Act in its present form, but to continue their services to patients or other professional work. (2) That, if these majorities are not achieved, practitioners who undertake not to enter the Service will be released from such undertaking.

The Chairman of Council said that this had been considered at great length by the Council. The votes of those directly implicated—chiefly the clinical people, namely, consultants and specialists and general practitioners—would be counted separately, and a majority would be required in the aggregate of those groups. Further, before action was taken a certain specified majority of general practitioners would be required. The Minister could not possibly set up a service for the whole country with fewer than 8,000 practitioners, and it was felt that if a minimum of 13,000 general practitioners voted against service the majority should be considered sufficient.

A long discussion then ensued on the question of the different categories in the profession who might be requested in the plebiscite to say, not only whether they approved or disapproved of the Act in its present form—a question which every member of the profession is expected to answer—but also whether they were or were not in favour of accepting service and whether they agreed or did not agree to abide by the decision of the majority not to undertake service if the requisite majority was obtained and if so advised by the B.M.A. It was pressed by Marylebone that in addition to general practitioners and consultants and specialists who did not hold whole-time salaried posts, a number of whole-time people should be included in the aggregate.

The Secretary (Dr. Hill) pointed out that the important thing was to know the proportions of those in the various branches of the profession who would be confronted with the personal issue of joining the Service. Apart from consultants and specialists in private practice and general practitioners, the most important group seemed to him to be the voluntary hospital residents, and the case for including them seemed to be fully established.

After further debate it was agreed that those who should be requested to answer the second and third questions in the plebiscite relating to acceptance of service, and whose votes would count in the aggregate mentioned in the motion, should be extended to include consultants and specialists holding whole-time salaried posts and the holders of whole-time appointments in voluntary hospitals.

The Effective Majority

Several proposals were on the paper to increase the percentage majority required to justify advising the profession not to enter into any contract under the Act in its present form. It was pointed out that the higher the percentage aimed at the more likely was it to be achieved. The Isle of Wight representative (Dr. Howie Wood) said that the first reaction of the four study groups in his Division was that 63% was too low a figure, but later they began to feel that the Council, with all the information at its disposal, would not have chosen a figure without a good basis for it, and that 63% must have been selected with a full understanding of many factors of which nothing was known at the periphery.

The Chairman of Council hoped that the meeting would not be led into altering the figure the Council recommended, but

it must not be assumed that the Council wanted only 13,000 general practitioner votes; it wanted 20,500. The figure 13,000 was a minimum, the result of taking all the circumstances into consideration. It represented roughly 63% of the whole field, and if there was an 80% vote—he hoped for a much higher vote—the 13,000 would represent 80% of the vote. He went on to remind the meeting that action did not begin or end with the signing of a plebiscite form. He had had a number of letters suggesting that there be embodied in the form a legally binding document pledging the signatory not to accept service in certain eventualities. This, however, could not be done consistently with the undertaking that the individual vote would not be divulged. But when the figures were known it would be for the doctors themselves to make agreements, not with the B.M.A. or with the profession but with each other in their own neighbourhoods.

The Council's figure of 13,000 general practitioners was agreed to, but it was agreed also to delete any reference to a percentage, which might confuse the minds of some people, from the plebiscite form, and to relate the figure of 13,000 to the present total general practitioner strength of 20,500.

The effect of these modifications of the Council's recommendation is that it will be made clear on the plebiscite form

(1) that if in the aggregate the votes of consultants and specialists, general practitioners, and whole-time voluntary hospital staffs show a majority against accepting service under the Act and this majority includes approximately 13,000 general practitioners (out of a present total general practitioner strength of 20,500), the Association will advise the profession not to enter into any contract under the Act in its present form, but to continue their services to patients or other professional work;

(2) that if these majorities are not achieved, practitioners who undertake not to enter the Service will be released from such undertakings.

The Vote of the Consultants

An amendment from Sunderland was proposed, the effect of which would have been to make action on the plebiscite dependent on the votes of general practitioners alone, leaving out consultants and specialists. The mover (Dr. D. R. Cramb) said that, in the northern area at any rate, consultants and specialists were rather unhappy because they did not know where they stood. To ensure a good plebiscite return the danger of leaving any section of the profession in a state of uncertainty must be avoided. Until consultants and specialists were in a position to make a firm decision they should not be asked to vote—certainly not to vote alongside general practitioners, who had so much more material for arriving at a decision.

In reply it was pointed out that the mandate to the Council from the Representative Body was to take a plebiscite of the whole profession; that this amendment, if accepted, would weaken the resistance of consultants and specialists, and one speaker described it as a "tinker's cuss" amendment, which said in effect that they should concentrate on general practitioners and not care "two hoots" about the rest. Two representatives from Marylebone spoke emphatically against it. Mr. Lawrence Abel: "If the consultants cannot stick by their general practitioner colleagues and realize the implications of this Act, then their blood be upon their own heads." Mr. Dickson Wright: "To leave out the consultants and split the profession into two groups would make it all the easier for the Minister and all the harder for the profession." The amendment was withdrawn.

Certain variations in the proposed wording of the instructions and questions on the plebiscite were put forward with a view to obtaining greater clarity; some were rejected, and others referred to the Council for consideration. Some representatives wanted such advice included as "Attend a meeting in your Division before voting," or "Consult your colleague before voting," but these were turned down. It was felt that the instructions should be as formal as possible. It was mentioned that there would be sent out to members of the profession, separately from the forms, a statement containing full information on the position, and also another document setting out the points in disagreement and the arguments concerning them.

A Solemn Declaration

The procedural business having been disposed of, the following resolution was proposed by Dr. A. C. E. Breach (Bromley) and accepted by the Chairman of Council:

The elected representatives of the medical profession in Great Britain and Northern Ireland meeting in London this eighth day of January, 1948, solemnly declare that in their considered opinion the National Health Service Act, 1946, in its present form is so grossly at variance with the essential principles of our profession that it should be rejected absolutely by all practitioners.

This was carried immediately and without discussion, and no hand was raised against it. It was understood that this declaration would appear on the documents, other than the plebiscite form itself, sent out to the profession.

The passing of this declaration made unnecessary a motion by Marylebone calling for the strongest possible lead to the profession not to accept service under the Act, but the motion was briefly discussed.

Continuance of Medical Services

The Gateshead Division asked that immediate consideration be given to the steps to be taken to continue medical services should service under the Act be refused on July 4. The mover, Dr. J. C. Arthur, said that in his Division there would be no difficulty because they had a large and efficient Public Medical Service, but all areas were not so fortunate. The Chairman of Council said that this problem had given the Council serious thought. Where there was a public medical service it should be offered, though, of course, there could be no compulsion on patients. It was well to remember that the crisis was not likely to be long drawn out, and he could not foresee any great difficulty in the way of most practitioners carrying on their practice as they did to-day. He thought there was no alternative except to go on doing what they were doing: as the preamble on the plebiscite form said, they would "continue their services to patients or other professional work."

The Gateshead motion was carried. In reply to the representative of North Staffordshire, the Chairman of Council said that if and when they came to an agreement with the Government they would, of course, insist that there must be no victimization. In reply to the representative of Darlington he said that the Executive Committee was meeting before the end of the month to decide on forms and methods whereby a practitioner might refuse service and remain confident that he would not be "let down" by other practitioners.

The meeting concluded with enthusiastic votes of thanks to the Chairman of Council and to the Chairman of the Representative Body (Dr. J. B. Miller), who had presided with his customary skill and humour throughout the day.

NORTHERN IRELAND HEALTH BILL

The Minister of Health and Local Government in Northern Ireland, Mr. William Grant, M.P., gave a Press conference this week during his short stay in London, where he has been visiting Mr. Bevan and other Ministers. Mr. Grant said that it was the declared policy of his Unionist Government to maintain the social services of the country on the same level as that obtaining for the rest of the United Kingdom. In pursuance of that policy a Bill was now passing through Parliament to provide a comprehensive health service available for all sections of the community. When the proposals came into operation—which he hoped would be on July 5—the people of Northern Ireland would be entitled to the same health service benefits as those provided in Great Britain under the recent Act. The Bill had passed through all its stages in the House of Commons and would be before the Senate this week. Notwithstanding 500 amendments on the paper a fairly good agreement had been reached between the different parties.

Asked whether the Bill had the support of the medical profession in Northern Ireland Mr. Grant said he would not claim that it had their entire support, but they were friendly with his Ministry, and he thought, by and large, that the Bill had their general approval. The hospital position, too, with the

proposed co-ordination of voluntary and local authority hospitals, was satisfactory, and the Cabinet had even received a letter of thanks from the representatives of the hospitals. In reply to a question as to how the Bill compared with the Act already passed by the British Parliament, Mr. Grant said: "We are not going up the same street, but we shall arrive at the same place, I hope, in the end."

Freedom of Doctors

In the arrangements with practitioners no basic salary was proposed, except in rural districts where the numbers on a doctor's list might not afford him a reasonable income. The capitation method of remuneration was the Government's policy, but of course rates of payment had not yet been discussed. There was no direction of doctors. "We fought for liberty, and we maintain it." The Bill provided for appeal to the courts against dismissal from the Service. "As Minister I do not want any trouble I can avoid." He added that there was provision in the Bill for health centres, but this was a question of obtaining building material, which is scarce in Northern Ireland even for ordinary houses.

Mr. Grant said that his country suffered from a nursing shortage; it had not been necessary to close down any hospital wards for lack of nurses, but the opening of extensions had been held up. The Rushcliffe scale had been adopted. He spoke with pride of the creation in 1946 of the Northern Ireland Tuberculosis Authority, which replaced the former eight county committees. The authority consisted of thirteen representatives of local authorities and four nominees of the Minister, and had power to co-opt. Its duties covered the whole field of tuberculosis from prevention to after-care. The Act under which the authority operates is regarded in some quarters as the foremost piece of legislation on tuberculosis in the United Kingdom. Maternity and child welfare, blood transfusion service, and health education are in the Ministry's general programme of reorganization and improvement.

FEES FOR LIFE ASSURANCE MEDICAL EXAMINATIONS

The attention of members is drawn to the terms of the new agreement in regard to fees for life assurance medical examinations which has been reached as the result of discussions with the Life Offices' Association, the Associated Scottish Life Offices, and the Industrial Life Offices' Association.

A. Forms Used for Medical Examination

There will be two types of form, as follows, both of which will bear a note of the appropriate fee payable.

1. *An Office's Ordinary Form.*—This will be used in all cases where the amount of the proposed sum assured exceeds £300, and may be used for smaller cases if the Office so desires. The fee for the examination and report on this form will be £1 11s. 6d.

2. *A Short Form.*—This may be used in all cases where the amount of the proposed sum assured does not exceed £300, as stated on the form. The fee for the examination and report on this form will be 10s. 6d. This special short form has been standardized and, apart from the questions answered by the Proposed in the Doctor's presence, will contain the following questions:

(*a*) Does the Proposed appear in good health? Is his/her appearance consistent with the age stated?
(*b*) Is there any reason to suspect irregular or intemperate habits?
(*c*) Are there any abnormalities of the heart or lungs or pulse?
(*d*) Are there signs or symptoms of kidney disease? Result of urine examination. Albumin..... Sugar.....
(*e*) Height of the Proposed. Weight of the Proposed. (If possible the Proposed should be weighed and measured by the Examiner.)
(*f*) Are there any other circumstances not covered by the questions with which the Company should be acquainted? (e.g.: In female cases, is she in an obvious state of pregnancy?)
(*g*) In which of the following classes would you place the risk—First, Second, or Third?*

Domiciliary Examinations.—The more usual practice is for examinations to be made at the surgery, but circumstances arise where this is not convenient to the proposer and certain procedure has been suggested which it is thought will materially reduce the number of such examinations and to that extent relieve the doctor of the necessity for visiting the proposer.

This procedure, which has been accepted for a trial period of twelve months, and which will take effect as from Jan. 1, 1948, is as follows:

(i) That it shall be an instruction to Agents and District Managers of the Industrial Assurance Offices that, whenever possible, arrangements shall be made for the examination to take place at the practitioner's surgery.
(ii) That, where this is impracticable, authority for the practitioner to be requested to make a domiciliary examination must be obtained from the Head Office or Regional Office of the Company or Society.
(iii) Where such authority is obtained, mileage shall be paid at the rate of 1s. per mile or part of a mile, each way, beyond a radius of two miles from the practitioner's surgery.

B. Commencement

The terms of the new Agreement supersede those of the Agreement of 1920.

* Classification: First Class, lives acceptable on ordinary terms; Second Class, assurable, but only on special terms; Third Class, unassurable.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

County Borough Councils.—Gateshead.

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Leyton, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

HEARD AT HEADQUARTERS

The Octopus

The Public Relations Department of the Association has got out a most effective folder, the principal feature of which is a pictorial design illustrating the arrangements under the new Act. The picture, which is in colours, admirably done by F. K. Henrion, the distinguished poster artist, well conveys the strong jaws and unattractive countenance (officially, of course, not personally) of the Minister of Health, while his sucker-bearing arms hold all the things which he can determine—by regulation, appointment, provision, control, approval, whatever it is—in relation to hospitals, general practice, and local authority services. For example, in general practice it is shown that he controls entry into the public medical service through the Medical Practices Committee; that he regulates the Executive Council, which consults the Local Medical Committee, and contracts with the general practitioner; also that he appoints the Central Health Services Council and controls dismissal from public medical practice through a tribunal. There is more in the design than meets the eye—and the eye has quite a lot to meet it: It is said that on occasion the octopus will devour its own arms, which may, for anything we know, be the fate of these appointed or approved bodies. The folder, which includes a number of other facts tersely set out, is being sent to every member of the profession, and in a larger size it is available on application for exhibition at divisional or other meetings.

First Shots

Dangerous as it is to infer too much from mass meetings, no one could have gone away from the first such meeting in London or the one held a day or two later for Surrey practitioners at Wimbledon without feeling strongly that the profession was of one mind. The Great Hall of B.M.A. House, had it been twice as large, would still have been comfortably filled. The meeting was with the speaker, the Secretary of

the Association, and advanced with him from point to point in his devastating analysis of the Minister's reply. Perhaps it was a pity that it was a case of preaching to the converted (no sign of dissent was perceptible, except perhaps in the tenor of one question), but the converted were sufficient in number to do some useful converting on their own account if such is needed. The unanimity of feeling was impressive. Perhaps this time the oratorical advantages are with the profession; last time, with Lloyd George as spellbinder, they were on the other side.

Misleading Parallels

Reference to Lloyd George reminds one who in a very humble capacity went through all that controversy thirty-five years ago that history, when all is said and done, never repeats itself. There are points of coincidence, but when the pattern is examined the points of difference far exceed them. Take, for example, the voting of the profession in 1912 on the question of accepting service under National Health Insurance (it was not called a plebiscite in those days). In 1911 there were 27,400 signatories to the B.M.A. pledge, but when, in December, 1912, another vote was taken, although there was an overwhelming majority against acceptance of service—something like 11,200 to 2,400—only half the previous signatories voted at all. And why? Simply because in the meantime the Chancellor had threatened that if the profession refused service he would institute a whole-time salaried State medical service. This time no practitioner will withhold his vote because of that fear. A whole-time State medical service is not threatened, it is at the very door, and the only thing that can avert it is a vote in the plebiscite.

Principles Not Conceded

The circumstances of 1912 are very different from those of 1948 in other respects. For one thing, the agitation against National Health Insurance was supported by noisy and often ill-advised demonstrations by other sections of the community. Servant girls twice packed the Albert Hall to protest against their mistresses being compelled to lick stamps. Farmers and dockers were aroused. It was made a party political matter. The Government suffered at by-elections. The popular press, for various reasons, ranged itself against the measure. The doctors, in spite of their good case, found themselves in some rather unusual company. This time, while it is believed that the profession can count on the sympathy of the public, it is the profession's fight, and that is all to the good. Most important of all, last time, when it came to the point, the profession had already gained its principles, and practically the only matter that remained was a quarrel over the size of the capitation fee. Free choice of doctor and other things had been conceded. Perhaps that also helped to swell the 50% of non-voters. This time no one will withhold his vote on the ground that anything has been conceded. There may be a certain amount of argument about the adequacy of remuneration, but the real fight is on principles not one of which, in spite of months of patient argument, has been conceded. Indeed, events are not running parallel with 1912; they are running in the opposite direction.

Quieter Problems

While the energies of the Association are occupied with medico-political questions other work continues. Two committees in particular have been busy as the New Year opens. One is the newly appointed committee on nutrition, which has a bulk of literature in front of it enough to occupy it for a month, and has split up into subcommittees to study the material. The other is the committee on nursing, which at its second meeting received a report from its subcommittee on the training of nurses. The subcommittee, which like the main committee has as its chairman Dr. Mary Esslemont, of Aberdeen, has brought forward a training scheme which will go as a recommendation to Council. The scheme would require all candidates for nursing training to complete a preclinical course before undertaking hospital training. The two periods—the preclinical and the basic hospital training of a practical character—would together cover a period of two years. For students proceeding beyond the basic hospital training there would be a third year's course leading to a qualifying examination for State registration. Students who complete the basic training but do not undertake the third year's course would, after a practical examination, be given a status with some such name as "auxiliary nurse." The term "assistant nurse," because of its present connotations, will be avoided.

Correspondence

Medical Records

SIR,—I note in the report of the meeting of the Insurance Acts Committee (Dec. 27, 1947, p. 168) that the Ministry of Health is seeking to destroy the medical records of all who have ceased to be entitled to N.H.I. medical benefit. Presumably one can expect no better from such an organization and must conclude that housewives and those whose income has been raised above N.H.I. limits are among those who do not matter "a tinker's cuss" to His Majesty's Government. I had, however, expected better of the Insurance Acts Committee and was horrified to read that "several members of the committee expressed the view that an effort should be made to prevent the destruction of these records, but eventually it was decided to ask that current records should not be withdrawn from doctors, the Ministry being left to make the decision regarding old records."

May I point out to the majority of the Insurance Acts Committee responsible for this decision that whatever may be their own practice it is the custom of some doctors to keep full and accurate clinical records. If they are sent for pulping *en masse* it will be an act of the grossest negligence by those who have assumed responsibility for the health of the nation, and we shall have acquiesced in it. It is essential for the efficient running of the new Service that the records in question should remain available, and I submit that this is a point of far more importance than many on which the B.M.A. is ready to take issue with the Minister. In this connexion it would be interesting to know what is the policy of the Ministry of Health with regard to its own records. I think it will be found that the Ministry regards its most trivial administrative communications as more important than the entire medical history of any patient.

Since the I.A.C. have failed us I must ask the profession as a whole to take some notice of the danger which threatens. The matter must be put most forcibly to the Minister, and if no satisfactory reply is received the profession itself must arrange to care for the records. Micro-filming is a possibility which would at least avoid permanent loss, but far better would be the retention of the actual record until it could be incorporated in the N.H.S. record.

It seems that the B.M.A. as a whole might undertake a service of this nature, and that it should not be restricted to N.H.I. notes but should extend to any medical records which are presenting a problem in storage to their present custodians—e.g., the private records of deceased or retired doctors, mass radiography films, completed school medical records, etc. The filing service would issue any record to the practitioner in charge of the patient on condition that it was not destroyed by him and that it was returned to the filing service or made available to any succeeding doctor when no longer required. With certain safeguards they could also be made available to research workers.

All this would cost money and take up office space and clerical labour, but not nearly as much as is used for many much more trivial purposes. And it would be well worth doing if it could answer such questions as, "Was the tumour removed ten years ago proved histologically to be malignant?"

—I am, etc.,

Silver End, Essex. J. W. NICHOLAS.

Joint Tuberculosis Council

SIR,—Few will be likely to disagree with the views expressed by Drs. D. P. Sutherland and N. J. England in their letter (Dec. 27, 1947, p. 171) concerning the necessity for clinical teams and for a regional administrative tuberculosis officer to co-ordinate the services provided. Many will welcome the

recommendations (Nov. 1, 1947, p. 100) that tuberculous patients should be looked after by specialists (physicians) in charge of clinical teams and sanatorium physicians of a "status identical with that of other consultants." But a point not explained is how such specialists will in fact be of the status described and yet subordinate to a regional tuberculosis physician—a higher *specialist* officer—unless of course the Joint Tuberculosis Council considers that all consultants will be expected to work under the regional consultant officer of their specialty. It may all depend on what is meant by "identical status," but surely these words have a very definite meaning.—I am, etc.,

Kenton, Middlesex. H. J. TRENCHARD.

Working Conditions for the General Practitioner

SIR,—May I as a very junior G.P. be allowed to support Dr. W. E. R. Branch's very apt remarks (Dec. 27, 1947, p. 171)? I took over this single-handed practice of medium size 12 months ago, and if I was not deeply committed I would gladly forsake it as soon as possible. It has been 12 months of near slavery for both my wife and myself, and no matter how difficult things were 30 years ago the previous generation of G.P.s had few of our present difficulties to face.

There are in this small town some 10 medical practices—all well established and all, bar two or three, have partners or assistants, mine being the only practice where there is no arrangement for off-duty, not even one day per month. My opposite number has both a partner and an assistant, but I can come to no definite agreement with him. You may say that this is due to lack of personality on my part, but even if this is so it is the patient who suffers if the doctor is tired and has no opportunity for relaxation.

I feel as Dr. Branch does that the fear of competition prevents co-operation. Any health service that is truly nationalized must prevent such an anomaly. If all the doctors in this area had an equal number of patients and received an adequate basic salary plus extra for age and experience, then the problem would be near solution. If one's professional career is to be based on the number of patients one can cram into the day, then the outlook is pretty dull.—I am, etc.,

WORKMAN.

Regional Hospital Association

SIR,—At a meeting held in Liverpool on Dec. 21, 1947, which was attended by 64 doctors from all parts of the region that is to be covered by the Liverpool Regional Hospital Board, it was decided to form a Liverpool Regional Hospitals Medical Association.

The objects of this newly formed body are: (1) The establishment and maintenance of high standards of efficiency in the hospitals of the Region. (2) The promotion of the professional interests of the members.

The members shall be registered medical practitioners who hold, or have held, positions above the rank of house officer in hospitals and whose main professional interest is centred in hospitals to be administered by the Regional Hospital Board.

The following committee was elected: Chairman, Dr. H. H. MacWilliam; Vice-chairman, Dr. D. W. C. Tough; Secretary, Dr. V. Cotton-Cornwall; Treasurer, Dr. O. F. Thomas. Committee: Drs. R. L. D. S. Derham, R. J. Keating, D. Osborne Hughes, G. Williamson, H. Alstead, R. E. Kemp, T. Stanley Rogers, W. N. Chisholm, L. Findlay, D. Shute, C. M. Vaillant. Messrs. J. A. Martinez, H. L. Davies, L. J. Temple, P. N. Simons.

The Secretary was instructed to inform the B.M.A. and other medical societies concerned, and also the medical press, of the formation of this association. The subscription is 10s. per annum. It is hoped that all who are eligible and were unable to attend will join at once, and that other Regions will organize along similar lines.—I am, etc.,

Liverpool. V. COTTON-CORNWALL. Hon. Secretary

Mrs. H. Evans, J.P., member of Cardiff City Council, has been appointed to the Welsh Regional Hospital Board to fill the vacancy caused by the resignation of Alderman T. J. Kerrigan owing to ill-health.

B.M.A. LIBRARY

The following books have been added to the Library:

Abderhalden, E.: Spuren von Stoffen entscheiden über unser Schicksal. Zweite Aufl. 1946.
—— Die Grundlagen unserer Ernährung und unseres Stoffwechsels. Fünfte Aufl. 1946.
Baldwin, E.: Dynamic Aspects of Biochemistry. 1947.
Bankoff, G.: The Conquest of the Unknown. 1947.
Beaumont, G. E., and Dodds, E. C.: Recent Advances in Medicine. Twelfth edition. 1947.
Brun, R.: Allgemeine Neurosenlehre. 1946.
Cantor, A. J.: Ambulatory Proctology. 1946.
Capuani, G.: Allergia e Malattie Allergiche. 1945.
Clay, H. H.: The Sanitary Inspector's Handbook. Sixth edition. 1947.
Delmas, J., and Delmas, A.: Voies et Centres Nerveux. 1946.
Fearon, R. W.: An Introduction to Biochemistry. Third edition. 1947.
Fiessinger, N.: Clinique et Investigations. 1946.
Fleisch, A.: Ernährungsprobleme in Mangelzeiten. 1947.
Goldberg, B. (Editor): Clinical Tuberculosis. Fifth edition, two vols. 1947.
Granit, R.: Sensory Mechanisms of the Retina. 1947.
Hadfield, G., and Garrod, L. P.: Recent Advances in Pathology. Fifth edition. 1947.
Hill, H., and Dodsworth, E.: Food Inspection Notes. 1947.
Houghton, M.: Aids to Practical Nursing. Fifth edition. 1947.
Houliston, M.: The Practice of Mental Nursing. 1947.
Jamieson, E. B.: Illustrations of Regional Anatomy. Seventh edition. 1947.
Jorpes, J. C.: Heparin in the Treatment of Thrombosis. Second edition. 1946.
King, A. C.: Principles of Gaseous Anaesthetic Apparatus. Second edition. 1946.
Ludwig, H. (Editor): Repertorium pharmazeutischer Spezialpräparate, Sera und Impstoffe, 1 Ausgabe. 1946.
McCrea, L. E.: Clinical Cystoscopy. Two vols. 1946.
McGrath, B. J.: Nursing in Commerce and Industry. 1946.
Roger, H.: Eléments de Psycho-physiologie. 1946.
Samuels, J.: Endogenous Endocrinotherapy. 1947.
Spain, Ministerio de Trabajo: Legislacion sobre Seguridad e Higiene del Trabajo. 1946.
Spivack, J. L.: The Surgical Technic of Abdominal Operations. Fourth edition. 1946.
Thompson, C. J. S.: Magic and Healing. 1947.
Treves, Sir F.: Surgical Applied Anatomy. Eleventh edition revised by Lambert Rogers. 1947.
Trueta, J.: Studies of the Renal Circulation. 1947.
Warkentin, J., and Lange, J. D.: Physician's Handbook. Fourth edition. 1946.
Williamson, B.: Handbook on Diseases of Children. Fifth edition. 1947.

H.M. Forces Appointments

ROYAL NAVY

Surgeon Rear-Admiral A. E. Malone, C.B., K.H.P., has been placed on the Retired List.

Surgeon Captain A. W. North, O.B.E., has been placed on the Retired List.

Surgeon Commanders S. G. Weldon, E. B. Pollard, and R. G. Anthony to be Surgeon Captains.

Surgeon Lieutenant-Commander S. D. Mosse (R.N.V.R.) has been transferred to the Royal Navy in the rank of Surgeon Lieutenant.

Temporary Surgeon Lieutenant T. A. O'Halloran (R.N.V.R.) has been transferred to the Royal Navy.

ROYAL NAVAL VOLUNTEER RESERVE

Surgeon Commander G. McCoull, O.B.E., V.R.D., to be Surgeon Captain.

Surgeon Lieutenant-Commander P. G. C. Martin, V.R.D., to be Surgeon Commander.

T. S. Eimerl, D.S.C., to be Surgeon Lieutenant-Commander.

Temporary Surgeon Lieutenant J. M. Lees, has been transferred to List I of the permanent R.N.V.R.

Temporary Acting Surgeon Lieutenants J. D. Wallace, J. L. Pring, R. M. L. Weir, R. D. Price, P. I. Rutherford, H. F. Hills, R. M. Dooley, J. E. Pitts, J. M. Cliff, C. M. Flood, C. F. G. Prideaux, T. A. O'Halloran, A. A. R. Meek, A. J. Ogg, D. A. N. Drury, K. A. Newton, T. D. Hanratty, P. H. Hewitt, P. K. A. Andrews, and H. M. Rodger to be Surgeon Lieutenants.

Temporary Acting Surgeon Lieutenant P. T. Clover to be Temporary Surgeon Lieutenant.

Probationary Temporary Acting Surgeon Lieutenants D. J. Rodger, D. A. Arthur, J. L. F. Wyllie, G. A. Carnachan, J. Watt, R. N. Andrew, R. H. Etherington, J. M. Wilks, T. Straton, M. K. Quinn, W. R. R. Thursfield, R. H. B. Mills, J. M. O'Brien, P. D. A. Durham, W. A. Heaton Ward, and D. G. Dalgliesh to be Surgeon Lieutenants.

ARMY

Colonel (Acting Major-General) (now Major-General) W. E. Tyndall, C.B., C.B.E., M.C., late R.A.M.C., to be Temporary Major-General.

Colonel (Temporary Major-General) J. R. N. Warburton, M.C., late R.A.M.C., having reached the age for retirement is retained on the Active List supernumerary to Establishment.

Colonel R. F. Walker, C.B.E., M.C., late R.A.M.C., has retired on retired pay and has been granted the honorary rank of Brigadier.

Colonel F. C. Chandler, M.C., late R.A.M.C., having attained the age for retirement is retained on the Active List supernumerary to Establishment.

Colonel C. Popham, O.B.E., late R.A.M.C., has retired on retired pay.

Lieutenant-Colonel V. J. Bonavia, late R.A.M.C., to be Colonel.

Lieutenant-Colonel W. C. Mackinnon, R.A.M.C., to be Colonel.

Lieutenant-Colonel J. C. Collins, O.B.E., from R.A.M.C., to be Colonel.

ROYAL ARMY MEDICAL CORPS

Lieutenant-Colonel G. G. Drummond has retired on retired pay and has been granted the honorary rank of Colonel.

Lieutenant-Colonel T. E. B. Beatty has retired on retired pay on account of disability.

Lieutenant-Colonel H. P. Rudolf, M.C., has retired on retired pay.

Major (War Substantive Lieutenant-Colonel) C. W. Crimmin, O.B.E., to be Lieutenant-Colonel.

Majors R. St. J. Lyburn, J. W. A. McIver, and R. T. Shipman to be Lieutenant-Colonels.

Major J. L. O'Neill, from I.M.S./I.A.M.C., to be Major.

Major C. E. L. Harding, retired and re-employed, has been restored to the rank of Lieutenant-Colonel, on ceasing to be re-employed.

Captains D. J. R. McConvell, W. M. McCutcheon, and J. P. Baird to be Majors.

Short Service Commission.—Lieutenant J. Batchelor to be Captain.

TERRITORIAL ARMY

ROYAL ARMY MEDICAL CORPS

Colonel R. I. Poston, T.D., to be Honorary Colonel No. 7 (Western) General Hospital.

Captain (War Substantive Major) A. M. Robertson, O.B.E., to be Major.

St. Andrew's University Contingent, Medical Unit.—Second-Lieutenant J. J. A. Reid, from Senior Training Corps, Infantry Unit, to be Lieutenant (supernumerary).

TERRITORIAL ARMY RESERVE OF OFFICERS: ROYAL ARMY MEDICAL CORPS

Majors A. M. Robertson, O.B.E., and W. E. Orchard, T.D., from Active List, to be Majors, retaining their present seniority, and have been granted the honorary rank of Lieutenant-Colonel.

Major A. C. M. Savage has relinquished his commission on account of disability.

Captain O. C. Wilkinson, from Active List, to be Captain, retaining his present seniority, and has been granted the honorary rank of Major.

LAND FORCES: EMERGENCY COMMISSIONS

ROYAL ARMY MEDICAL CORPS

War Substantive Captains J. E. Lovelock, H. R. Heldt, A. Lederman, D. Jerome-Newman, and D. M. Thomson have relinquished their commissions and have been granted the honorary rank of Major.

War Substantive Captain M. G. Sanyal has relinquished his commission on appointment to a permanent commission in the I.A.M.C.

War Substantive Captains A. F. Shpetner, F. M. Liebmann, E. Rosenbaum and M. H. Kerby have relinquished their commissions and have been granted the honorary rank of Captain.

Short Service Commission, Specialist.—War Substantive Captain A. A. Shein has relinquished his commission and has been granted the honorary rank of Major.

Lieutenant J. Corbett to be Captain.

War Substantive Captains B. B. Jacobs and S. A. Hossain have relinquished their commissions on account of disability and have been granted the honorary rank of Captain.

Lieutenants A. G. Leatham, M. A. Caldwell-Nichols, W. Stevenson, D. Rivers, K. M. Chalmers, W. Frain-Bell, A. C. Connell, R. P. Bradshaw, P. G. S. Beckett, K. F. Barrett, J. H. Bruce, A. V. G. Bibby, D. J. Doorly, H. W. Donaldson, W. M. Foreman, E. A. Fairburn, J. Flinter, J. G. Gould, I. W. Kerr, P. Jewsbury, T. Menzies, D. B. Price, A. E. P. Swinson, J. W. Stewart, P. H. Tribe, G. J. E. Wood, E. C. J. Millar, J. I. Wand-Tetley, A. Feldman, A. Ansell, T. P. Burton, C. Brown, E. Burman, A. R. Cini, J. Cran, R. A. Denham, B. V. I. Greenish, L. S. Goodhardt, J. G. P. Hutchison, E. H. Heilpern, J. H. Johnston, D'A. Kok, D. Lawrence, W. Niman, E. T. O'Dwyer, W. R. Probert, W. L. G. Quinlivian, L. L. Ralph, G. Robins, E. W. N. Trounson, M. P. Winstanley, W. Whitaker, J. P. Smith, A. D. Bangham, J. R. G. Bastable, K. R. Brookes, K. B. Chambers, J. I. Cohen, D. J. Crockett, P. L. H. Davey, P. J. Dwyer, J. B. Eades, D. J. Gardner, J. P. Graham, K. C. R. Halliday, R. H. Hansell, R. E. A. Hansen, J. M. Holmes, D. A. L. Jones, O. G. Jones, D. W. W. Jones, H. Keidan, I. A. Kellock, R. J. Kleinglass, A. H. Levy, F. D. Lumb, H. Mackenzie, A. Maclennan, P. M. C. Mark, D. G. Maurice, K. R. Ogilvie, H. Rezler, A. R. Somner, W. A. L. Thompson, J. C. Whitlam, R. Wolfson, and D. L. Woolf to be Captains.

Lieutenant R. F. C. Van Cauwenberghe has relinquished his commission.

To be Lieutenants: J. K. Baird, H. Baker, E. Barnett, F. A. Beale, T. L. Begg, J. Black, P. S. Brown, G. O. Clark, B. O. Clements, D. C. Cockburn, J. T. Crean, R. R. De-Mowbray, J. H. Fox, E. J. Gow, P. Hampson, D. G. Hardy, G. Hird, J. B. Howard, D. A. Jack, E. Jones, S. Kalinsky, J. L. Kilgour, J. B. Lawson, C. Levin, J. M. Loughran, G. I. Lumsden, D. H. McMillan, A. W. Morrow, C. D. R. Pengelly, R. L. Richards, J. B. Ritchie, M. J. Roper-Hall, B. Ruebner, I. W. Sinclair, C. R. B. Stewart, R. G. Stewart, T. Symington, B. Towers, J. K. B. Waddington, R. J. S. Weir, H. M. White, and E. E. Vella.

Association Notices

Branch and Division Meetings to be Held

DERBY DIVISION.—At Derbyshire Royal Infirmary, Tuesday, Jan. 20, 8.15 p.m. Mr. R. L. Flett: Ear, Nose, and Throat Cancer; Mr. F. G. Hollands: Genito-urinary Cancer.

GREENWICH AND DEPTFORD DIVISION.—At Miller Hospital, Greenwich Road, S.E., Wednesday, Jan. 21, 9 p.m. Discussion on the Plebiscite.

HYDE DIVISION.—At Dukinfield Town Hall, Wednesday, Jan. 21, 8.30 p.m. Dr. J. S. Parkinson: Recent Advances in Neurology.

WESTMINSTER AND HOLBORN DIVISION.—At City Hall, Charing Cross Road, London, W.C., Thursday, Jan. 22, 8 p.m. Mr. P. H. Mitchiner: Recent Advances in Surgery.

WINCHESTER DIVISION.—Sunday, Jan. 25, 11 a.m. General meeting. Dr. D. P. Stevenson (Assistant Secretary, B.M.A.) will speak. All medical practitioners in the area of the Division are invited.

WORCESTER AND BROMSGROVE DIVISION.—At Worcester Shirehall, Sunday, Feb. 1, 2.30 p.m. Address by Dr. H. Guy Dain: The Plebiscite. Open to all members of the medical profession.

Meetings of Branches and Divisions

DUMFRIES AND GALLOWAY DIVISION

At a meeting held in Dumfries on Dec. 21, 1947, Dr. Robert McWhirter, Director of the Radiotherapy Department of the Royal Infirmary, Edinburgh, gave an address on "The Scope of Radiotherapy in Malignant Disease." He pointed out that the use of radiotherapy in the treatment of malignant disease had been greatly extended in recent years. If only cases in which cure was attempted were considered, radiotherapy either alone or in combination with surgery was used in approximately 85% of cases. The incidence of malignant disease was 2,000 new cases per annum per million of the population, and of this number approximately 1,700 died from malignant disease. Differential diagnosis, while easy in the late stages, was often impossible in the early stages unless special methods of examination (histological, radiographic, biochemical, etc.) were employed. The appropriate special method of examination could often be selected only by the specialist. Closer liaison between the specialist and the general practitioner was essential, and it was to be hoped that in establishing regional medical services provision would be made for this.

KENT BRANCH

The Branch Council met at Maidstone on Jan. 2.

A full and useful discussion on the proposals under the National Health Service Act, the B.M.A. statement, and the Minister's reply took place. The circumstances and action to be taken in relation to the approaching plebiscite were given detailed consideration. Reference was made to the fact that many alien doctors (of whom it was understood there were some 3,000) might apply to enter the Service, but there was the possibility that the majority would decide to accept the final decision of the B.M.A.

MORPETH DIVISION

A meeting of the Morpeth Division was held on Dec. 12, 1947. The Secretary reported that the Branch Council had approached the National Coal Board in connexion with the question of insurance certificates, and a courteous reply had been received, but the decision of the Board had not yet been made known to the Council.

Prof. F. H. Bentley then addressed the meeting on "Changing Trends in Modern Surgery." His talk, which was particularly interesting and informative, was illustrated with lantern slides and a gramophone record. Dr. Stephenson proposed the vote of thanks to Prof. Bentley, and this was most heartily given.

WEST BROMWICH AND SMETHWICK DIVISION

A meeting of this Division, to which all practitioners in the area were invited as well as members of the Dudley Division and the Walsall Division, was held on Jan. 4. General practitioners, public health officers, members of hospital staffs, consultants, and others were present. Dr. A. Ward addressed the meeting, and there was a prolonged discussion. Member after member severely criticized Mr. Bevan's scheme, and at last Dr. Ward asked if any member would speak in its favour. No one did so. It had not been intended to take a vote, but someone suggested it and the meeting desired one. There were 91 practitioners present, and everyone voted against entering the National Health Service as it now stands.

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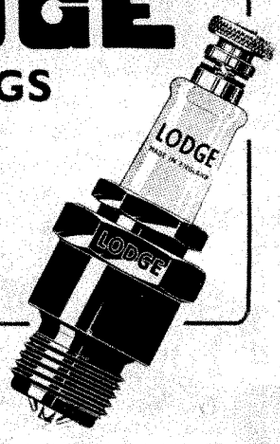

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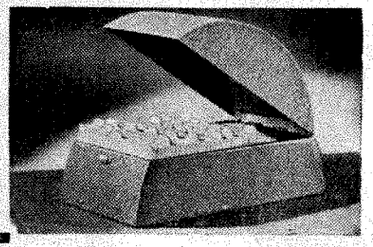

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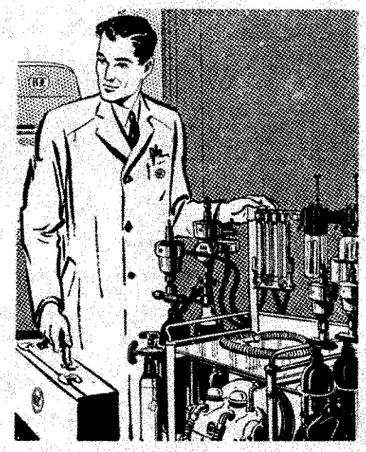

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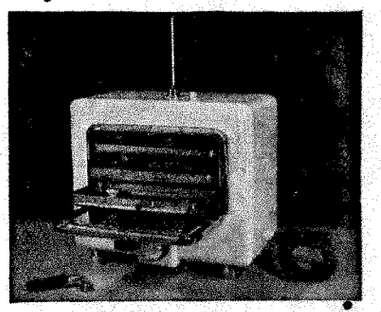

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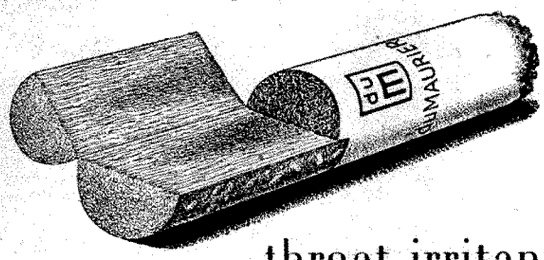

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Five protective layers go to make up the filter tip of every du Maurier cigarette. Three layers of white vegetable tissue with alternate layers of fine cellulose protect the membranes from the irritant action of pyridine bases and other non-volatile bodies. Although no shred of tobacco can pass the lips and no unfiltered smoke can impinge on the tongue, the du Maurier tip allows the full flavour and fragrance of finely selected tobacco to pass unimpaired

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THE COMPLETE ANTISEPTIC

A SUMMARY OF THE ADVANTAGES OF STREPH

(1) Non-selective.
(2) Activity is maintained in the presence of proteins.
(3) Non-necrotic, non-toxic, non-staining.
(4) Clear solutions with water, normal saline, and alcohol.
(5) Powerful deodorant.
(6) Almost odourless.
(7) Powerful detergent and compatible with soap.
(8) STREPH is approximately three times as effective as Liq. Chloroxylenolis or lysol.

For these reasons STREPH is the ideal antiseptic for medical, surgical and obstetrical use.

Literature and sample on application to

JEYES' LABORATORIES LIMITED,
LONDON, E.13.

Applicants should, except where otherwise specified, state name, address, age, nationality, qualifications, and enclose copies of 3 recent testimonials★ with short statement of experience and appointments held. Unless closing date is stated applications should be sent at once.

★ *SERVICE MEMBERS may have difficulty in supplying recent testimonials, but this should not deter them from applying.*

A—Whole-time resident house appointments open to practitioners without previous experience.
B1—Whole-time appointments, usually resident within the senior establishment—e.g., Registrar, R.S.O., etc.
B2—Whole-time house appointments not within the senior establishment, usually resident, and usually held by practitioners with six months' experience.
R—Male, liable to military service under the National Service Acts.
W—Women practitioners.

APPOINTMENTS

HIS MAJESTY'S COLONIAL SERVICE COLONIAL MEDICAL SERVICE

The Colonial Medical Service offers an interesting career and provides unique opportunities for applying medical science in territories which are undergoing rapid development. There are immediate openings in many parts of the Colonial Empire and applications are invited from both men and women doctors who are British subjects and possess qualifications registrable in the United Kingdom. Medical Officers are usually appointed in the first instance for general duties. This implies all-round ability with a balanced outlook upon both preventive and curative medicine. Officers are also required for public health duties, in which case the D.P.H. or some experience of health work is necessary. Ample opportunities exist for field investigation, while officers with special aptitude are encouraged to obtain such higher qualifications as will enhance their value to the Service. Officers are from time to time seconded or appointed to medical laboratories in the larger territories. In the West African territories improved salary scales and conditions of service have recently been introduced. In most of the other territories the terms of service are being actively reviewed, and meanwhile temporary cost-of-living allowances are being paid over and above the existing salaries. At present initial *basic* salaries, i.e. irrespective of any cost-of-living allowance and of any credit that may be allowable for war service or professional experience, vary between £600 and £925 according to locality. There are, in addition, numbers of super-scale posts in the administrative and specialist grades which are normally filled by promotion within the Service. Free passages for an officer and wife are generally provided both on first appointment and when travelling on leave of absence. Where Government quarters are provided a small rent is usually payable. Good leave conditions and an adequate pension scheme are in force. The Colonial Medical Service is a unified service and members are eligible for transfer from one territory to another, either with or without promotion. Selected candidates may be required to take a course in tropical medicine either before proceeding overseas (in which case they would receive an allowance) or on first leave. Candidates for permanent service must have been born on or after January 1, 1907. Contract appointments are also available in certain territories for doctors born before this date. Further particulars may be obtained from, and applications should be addressed to, the Director of Recruitment (Colonial Service), Colonial Office, 15, Victoria Street, London, S.W.1.

AUSTIN HOSPITAL FOR CANCER AND CHRONIC DISEASES
Heidelberg, Victoria, Australia
PATHOLOGIST-IN-CHARGE OF LABORATORY SERVICES

Applications are invited from qualified medical practitioners of the British Empire of at least seven years standing, for the position of Pathologist-in-Charge of Laboratory Services. A higher medical qualification is desirable and applicant should have wide experience in all branches of Pathology and be capable of initiating and undertaking research projects, preferably in cancer and pulmonary tuberculosis. The appointee will be required to devote half time to routine work, organization, etc., and the remainder to research for which facilities can be made available at the Pathological Department of the University of Melbourne pending the establishment of a complete pathological department at the hospital. Information concerning existing laboratory facilities and prospective plans may be obtained on application. The appointment is for a term of three years at a salary of £1,500 per annum, non-residential. Applications stating age, qualifications (with dates) and nationality, accompanied by names of referees, to be in the hands of the undersigned by April 1, 1948. The successful applicant will be required to take up duty not later than January 3, 1949.—A. F. Cameron, Manager and Secretary.

THE ROYAL NEW ZEALAND SOCIETY FOR THE HEALTH OF WOMEN AND CHILDREN (INC.) (PLUNKET SOCIETY) ASSISTANT MEDICAL ADVISER TO THE COUNCIL

Applications for the above position are invited from duly registered medical practitioners under thirty-five years of age, with experience in Paediatrics and Child Health. Duties will commence on August 1, 1948. The commencing salary will be £1,000 per annum (New Zealand currency). Conditions of appointment and duties may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London, W.C.2, with whom applications close on February 16, 1948.

AUCKLAND HOSPITAL BOARD, New Zealand DIRECTOR OF RADIOLOGY

Applications are invited from qualified medical practitioners of the British Empire of at least seven years' standing for the position of Director of Radiology, Auckland Hospital Board's Institutions. Applicants must possess D.M.R.E. or equivalent degree and the appointee shall be registered in New Zealand before taking up duty. The salary, living-out, shall be at the commencing rate of £N.Z.1,400 per annum, rising by one annual increment of £N.Z.100 to £N.Z.1,500 per annum. Any further increments will necessarily be in accordance with the salary scale to be approved by the Director of Stabilization on the advice of the Advisory Committee to the Hon. the Minister of Health. Conditions of appointment and form of application may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London. Applications, addressed to the undersigned, will close at the Office of the Board, Kitchener Street, Auckland, New Zealand, at noon on Monday, February 23, 1948.—R. F. Galbraith, Secretary.

BRITISH RED CROSS COMMISSION
CIVILIAN RELIEF, British Zone, Germany
BRITISH RED CROSS HOSPITAL FOR DISPLACED PERSONS MEDICAL OFFICER IN CHARGE

Applications are desired from registered male practitioners of British nationality for the above post. Candidates should have tubercular and some administrative experience. Salary from £600 according to qualifications. All living expenses provided. Free uniform. The hospital has 400 beds, mainly for T.B. cases with a small general block. The staff consists of two British M.O.s., British S.R.N.s and Auxiliary Nurses, all forming a British personnel of twenty. D.P. M.Os., Nurses and Administrative staff in addition. The officer in charge is responsible for the administration and medical work of the hospital which is operated by the B.R.C. Commission. The B.R.C. Commission offers a six months' contract with option to renew if the hospital is still required. Applications, stating age, qualifications and experience, with dates of service with the Forces (if any), should be sent to the Medical Adviser, Sir Harold Whittingham, British Red Cross Society, 14, Grosvenor Crescent, London, S.W.1.

MAKERERE COLLEGE, Uganda LECTURER IN PHARMACOLOGY

Applications are invited for the post of Lecturer in Pharmacology at Makerere College, which is being developed into the University College of East Africa. The appointment will be either on the scale £700 to £850 per annum or on the scale £550 to £700 per annum, according to qualifications. Point of entry to the scale will also be determined according to qualifications and experience. First two years are probationary at a fixed salary, with annual increments of £25 thereafter. Partly furnished house or accommodation provided free. Free passages. The College will consider applications from members of University staffs for arrangements for temporary secondment. Applications (six copies), giving full particulars of qualifications and the names of three persons to whom further reference may be made, should be addressed before March 25, 1948, to the Secretary, Inter-University Council for Higher Education in the Colonies, 8, Park Street, London, W.1, from whom further particulars can be obtained.

UNIVERSITY OF SYDNEY SENIOR LECTURER IN GENERAL BACTERIOLOGY

Applications are invited for the position of Senior Lecturer in General Bacteriology. Preference will be given to candidates with experience and training in non-pathogenic Bacteriology and with some biochemical background. Duties: To conduct an elementary course in General Bacteriology for third-year students and an advanced course for fourth-year (Honours) students in the Faculty of Science. Adequate opportunities for research work. The salary falls within the scale £750 (Australian) ranging to £1,000 per annum (Australian) by annual increments of £50; the commencing salary will be fixed according to qualifications and experience. The salary is subject to deductions under the State Superannuation Act. Travelling expenses will be paid as arranged at time of appointment. Generally speaking, they will cover first-class steamer fare in the case of a successful applicant coming from abroad. Further particulars may be obtained from the Secretary, Universities Bureau of the British Empire, 8, Park Street, London, W.1. Applications, giving the names of three referees, should reach the undersigned not later than May 1, 1948.—G. Dale, Registrar, University, Sydney.

UNIVERSITY OF CAPE TOWN CHAIR OF PATHOLOGY

Applications are invited for the Chair of Pathology which will be vacant from February 1, 1948. The salary is £1,300 per annum, plus a temporary cost-of-living allowance (at present £84 per annum). Applications, with copies of testimonials, must be submitted in triplicate and must give age, qualifications and experience and the names of two or three referees to whom the University may refer. Two copies of the application must reach the Secretary of the Universities Bureau of the British Empire, 8, Park Street, London, W.1, by February 21, 1948, and the other copy should be sent direct to the Registrar, University of Cape Town, Private Bag, Rondebosch, South Africa. A memorandum on the Department of Pathology, and a memorandum giving the general conditions of appointment are obtainable from the Secretary, Universities Bureau.

QUEEN VICTORIA MEMORIAL HOSPITAL
172, Lonsdale Street, Melbourne, Australia
MEDICAL SUPERINTENDENT

Applications are invited from fully qualified medical women for the position of Medical Superintendent (210 bed hospital for women and children—obstetric, surgical and medical beds). Salary at the rate of £500 per annum, plus board and residence. Applications, stating age and experience, and enclosing copies of testimonials, should reach the Manager not later than February 15, 1948.—Maeion Mossman, Manager and Secretary.

BRITISH RED CROSS SOCIETY HOSPITAL IN PAKISTAN

Applications are invited for the following posts for a period of six to twelve months

(a) SURGEON
(b) PHYSICIAN
(c) CLINICAL PATHOLOGIST

Salary at the rate of £1,300 per annum. Preference will be given to those who have knowledge of tropical medicine and have served in India.

Applications to be addressed to the Medical Adviser, British Red Cross Society, 14, Grosvenor Crescent, London, S.W.1.

MINISTRY OF PENSIONS
CHAPEL ALLERTON HOSPITAL, Leeds
SURGICAL OFFICER (B1)

A vacancy exists at the above-named hospital for a Surgical Officer (B1). Applications are invited from registered medical practitioners (male) who have held house appointments and have had surgical experience. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary is at the rate of £350 to £550 per annum according to experience, plus appropriate consolidation addition and free board and lodging, or an allowance of £100 per annum if permission is given to live out.

SURGICAL OFFICER (B2)

A vacancy also exists for a Surgical Officer (B2) at the above hospital and applications are invited from registered medical practitioners (male), including R practitioners who already hold A posts. The appointment offers opportunities for experience in general and orthopaedic surgery. If an R practitioner is appointed, the appointment will be limited to six months. Salary £300 per annum, plus consolidation addition and free board and lodging, or an allowance of £100 per annum if permission is given to live out.

Applications for each post, stating age, qualifications (with dates) and nationality, accompanied by copies of two recent testimonials, should be addressed to the Secretary, Ministry of Pensions, Medical Services Division, Norcross, Blackpool, Lancashire.

SHEFFIELD REGIONAL HOSPITAL BOARD REGIONAL PSYCHIATRIST

Applications are invited from registered medical practitioners for the post of Regional Psychiatrist on the staff of the Board. Candidates should have wide clinical experience of mental disorders and of the administration of mental hospitals and out-patient clinics. The duties of the post will be largely administrative, and as such will be subject to the general supervision of the Senior Administrative Medical Officer of the Board. Duties of a clinical nature may also be required. The salary is at the rate of £1,900 per annum and the appointment is subject to superannuation. Applications, together with the names of three referees, should be sent to the Chairman, Sheffield Regional Hospital Board, Fulwood House, Old Fulwood Road, Sheffield, 10, not later than February 2, 1948.

LEEDS REGIONAL HOSPITAL BOARD (REGION 2)
REGIONAL PSYCHIATRIST

Applications are invited for the whole-time appointment of Regional Psychiatrist to the Leeds Regional Hospital Board at an inclusive salary of £1,900 per annum, subject to deduction of six per cent. for superannuation purposes. Applicants should have wide experience of general psychiatry, including administrative experience of both in-patient and out-patient work. The officer appointed will, subject to the general direction of the Senior Administrative Medical Officer, be responsible for the surveying of, and for making recommendations regarding, the Mental Health Services in the Region, in conjunction with the Mental Health Committee and the Regional Technical Advisory Sub-Committee. He will be given opportunities for clinical work and for research. Applications, giving particulars of qualifications and experience, together with the names of three referees, should be addressed to the Chairman, Leeds Regional Hospital Board, Bradford Royal Infirmary, Bradford, to reach him not later than January 31, 1948. Canvassing in any form will disqualify. Further particulars will be supplied on application.

OXFORD REGIONAL HOSPITAL BOARD
ASSISTANT SENIOR MEDICAL OFFICER

Applications are invited for the post of Assistant Senior Medical Officer at an inclusive salary of £1,450, rising by annual increments of £50 to £1,650, subject to a deduction of 6 per cent for superannuation purposes. Candidates must have had experience in hospital administration (general, special or mental). Applications, endorsed Assistant Senior Medical Officer, together with the names of three referees, should reach the Secretary, The Oxford Regional Hospital Board, 16, King Edward Street, Oxford, not later than January 31, 1948.

ADMINISTRATIVE COUNTY OF NORFOLK
Combined appointment of
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH
for the
ERPINGHAM RURAL DISTRICT
CROMER URBAN DISTRICT
NORTH WALSHAM URBAN DISTRICT
SHERINGHAM URBAN DISTRICT and
MEDICAL OFFICER
to the EAST NORFOLK JOINT ISOLATION HOSPITAL AT ROUGHTON

The Norfolk County Council and the District Councils concerned invite applications from medical practitioners (including those at present serving in H.M. Forces) qualified to hold such an office by reason of the terms of the Sanitary Officers (outside London) Regulations, 1935, for the combined whole-time appointment of Assistant County Medical Officer and Medical Officer of Health for the above-mentioned Districts. Population of the combined area is now about 29,615. The salary for the combined appointment will be £960 per annum, plus bonus (at present £59 16s. per annum) with travelling expenses in accordance with the County Council's scale. The post will be designated under the Local Government Superannuation Act, 1937, and the salary will be subject to the statutory deductions for this purpose. The successful applicant will be required to pass a medical examination.

The officer will act under the direction of the County Medical Officer as Assistant School Medical Officer and Medical Officer to Infant Welfare Centres, and will also be required to perform such other duties as may be assigned to him by the County Council. As regards his duties as Medical Officer of Health, he will be subject to the control of the District Councils concerned, and will be required to live at an approved centre within the area. Resignation of the appointment will be subject to three months' notice to be received by the Clerk of the County Council. Applications must be made on the prescribed form, which can be obtained from the County Medical Officer, Public Health Department, 29, Thorpe Road, Norwich, to whom they should be returned, accompanied by copies of not more than three recent testimonials, not later than January 22, 1948. Canvassing in any form will be a disqualification.—H. Oswald Brown, Clerk of the County Council.

NEWCASTLE-UPON-TYNE EDUCATION COMMITTEE
ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from qualified medical practitioners for the post of Assistant School Medical Officer, man or woman. Salary £650 per annum, rising by annual increments of £25 to a maximum of £850, plus bonus in accordance with the Corporation scale. The candidate appointed will be required to contribute under the Local Government Superanuation Act, 1937, and to pass a medical examination. The School Medical Service works in close conjunction with the hospital and consultant services of the City and clinical opportunities are made available to members of the staff. Further particulars and forms of application may be obtained from the undersigned. Completed applications should be returned not later than February 29, 1948. Canvassing, directly or indirectly, will be deemed a disqualification.—Thos. Walling, Director of Education, City Education Office, Northumberland Road, Newcastle-upon-Tyne, 1.

EAST ANGLIAN REGIONAL HOSPITAL BOARD
ASSISTANT SENIOR MEDICAL OFFICER

Applications are invited for the post of Assistant Senior Medical Officer at a salary of £1,450 by £50 to £1,650 per annum, subject to a deduction of 6% for Superannuation purposes. Candidates must have had experience in the administration of Health and Hospital Services. Applications with full particulars of the candidate's qualifications and experience, together with the names of three referees, should be forwarded to the undersigned so as to arrive not later than February 9, 1948. Further particulars regarding the terms and conditions of the appointment may be had on application to K. V. F. Morton, Secretary to the Board, 117, Chesterton Road, Cambridge.

JOYCE GREEN HOSPITAL, Dartford
E.M.S. Neuro-Surgical Unit
FIRST ASSISTANT
Neuro-Surgical Unit

Applications are invited from medical practitioners for the post of a full-time First Assistant in the Neuro-Surgical Unit at Joyce Green Hospital. Candidates should preferably hold a qualification of F.R.C.S.(Eng.) and experience of both general and neuro-surgery is desirable. The post is in the E.M.S. in the Ministry of Health and is on a salary range of £1,000 to £1,400 per annum, payable by the Minister. This salary is assessed at a non-resident basis and will be at the rate of £100 per annum less if full board and lodging are provided at the expense of the hospital. The appointment is terminable by one month's notice on either side. Applications, stating age, qualifications with dates, present appointment, if any, previous experience and three recent testimonials should be addressed to the Director of Establishments, Ministry of Health, Whitehall, S.W.1, not later than January 25, 1948.

MINISTRY OF PENSIONS
CHAPEL ALLERTON HOSPITAL, Leeds
MEDICAL OFFICER (B1)

A vacancy exists at the above-named hospital for a Medical Officer (B1). Applications are invited from registered medical practitioners, male, who have held house appointments and have had medical experience. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary is at the rate of £350 to £550 per annum according to experience, plus appropriate consolidation addition and free board and lodging or an allowance of £100 per annum if permission is given to live out.

RONKSWOOD HOSPITAL, Worcester
SURGICAL OFFICER (B1)

A vacancy exists in the Neuro-Surgical Unit of the above-named hospital for a Surgical Officer (B1) with neurological experience. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary at the rate of £350 to £550 per annum according to experience, plus appropriate consolidation addition and free board and lodging, or an allowance of £100 per annum if permission is given to live out.

QUEEN ALEXANDRA HOSPITAL
Cosham, Portsmouth
SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male, including R practitioners who already hold A posts, for appointment as Surgical Officer (B2) at the above-named hospital. The appointment offers opportunities for experience in general and orthopaedic surgery. If an R practitioner is appointed the appointment will be limited to six months. Salary £300 per annum, plus consolidation addition and free board and lodging, or an allowance of £100 per annum if permission is given to live out.

Applications for each post, stating age, qualifications (with dates) accompanied by copies of two recent testimonials should be addressed to the Secretary, Ministry of Pensions, Medical Services Division, Norcross, Blackpool, Lancs.

BOROUGH OF SWINDON
ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners for the whole-time permanent appointment of an Assistant Medical Officer of Health and Assistant School Medical Officer at a salary of £650 per annum rising by annual increments of £25 to £850 per annum. In addition, the person appointed will receive such cost-of-living bonus as may from time to time be paid by the Corporation (at present £59 16s. per annum). Applicants must possess the Diploma in Public Health or an equivalent qualification. The appointment, which will be subject to the provisions of the Local Government Superannuation Act, 1937, and, if necessary, to the passing of a medical examination, is terminable by three months' notice on either side. A form of application and conditions of appointment may be obtained from the undersigned and applications endorsed "Assistant Medical Officer of Health," together with the names of three persons to whom reference may be made, must be delivered to me not later than January 31, 1948.—D. Murray John, Town Clerk, Civic Offices, Swindon.

BOROUGH OF EALING
MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners who are also holders of a degree or diploma in Sanitary Science, Public Health or State Medicine. The appointment is subject to approval by the Ministry of Health and the provisions of Section 110 of the local Government Act, 1933, and the Sanitary Officers' (Outside London) Regulations, 1935. The person appointed will be required to devote his whole time to the duties of the office, not to accept any other office without the previous consent of the Council or take any private practice, but to be in the exclusive employment of the Council. He will be required to act as Medical Superintendent at the Clayponds Isolation Hospital and the Perivale Maternity Hospital as and when directed to do so by the Council. The salary will be at the rate of £1,320, rising to £1,600 by yearly increments of £50, plus National Whitely Council cost-of-living bonus. (This salary will be reconsidered if an amendment to the Asquith Memorandum is received. The population of Ealing is 185,000.) A car allowance at the rate of £125 per annum is payable to the Medical Officer of Health to cover all expenses in maintaining a car for the purpose of his duties. Canvassing, either directly or indirectly is strictly prohibited and will be deemed to be a disqualification. Copies of the application form and terms of appointment can be obtained from the undersigned, to whom applications, accompanied by copies of testimonials, must be delivered not later than January, 28, 1948.—E. J. Cope-Brown, Town Clerk, Town Hall, Ealing, W.5

BOROUGH OF TWICKENHAM
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of Deputy Medical Officer of Health. Applicants must be registered medical practitioners holding the D.P.H. or equivalent. The Borough has a population of about 106,000 and is an Excepted District under the Education Act, 1944. The duties will be partly administrative and partly clinical in the Public Health, Maternity and Child Welfare and School Health Services or such other work as the Corporation or the Medical Officer of Health may require to be undertaken. The commencing salary will be £950 per annum rising by annual increments of £30 to a maximum of £1,100 per annum, plus bonus at present £59 16s. per annum, and a car allowance ranging from £84 to £108 per annum, plus from 1½d. to 2d. per mile depending upon the horse power of the car. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate selected for the appointment will be required to pass a medical examination. Applications together with the names of two persons to whom reference can be made should be sent to the Medical Officer of Health, Public Health Department, Elmfield House, High Street, Teddington, Middlesex, not later than January 31, 1948. Canvassing, directly or indirectly, will disqualify.—W. H. Jones, Town Clerk, Municipal Offices, Twickenham.

BEDFORDSHIRE COUNTY COUNCIL
ST. PETER'S HOSPITAL, Bedford
Assistant RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, including R practitioners who now hold A posts, for the appointment of Assistant Resident Medical Officer (B2). Salary will be at the rate of £250 per annum, together with cost-of-living bonus (at present £59 16s.). If non-resident, an allowance of £100 per annum will be made in lieu of board and lodging. If held by an R practitioner, the appointment will be limited to six months. In the event of a demobilized medical officer being appointed, application will be made for upgrading under the scheme. Applications should be addressed to the County Medical Officer, Shire Hall, Bedford from whom further particulars may be obtained.—J. B. Graham, Clerk of the County Council, Shire Hall, Bedford.

CITY OF PLYMOUTH
CITY GENERAL HOSPITAL (450 beds)
JUNIOR ASSISTANT MEDICAL OFFICER (A)

Applications are invited from duly qualified and registered medical practitioners, male and female, including practitioners within three months of qualification, who are liable under the National Service Acts, for the appointment of Junior Assistant Medical Officer (A) at the City General Hospital, Plymouth. The appointment will be for a period of six months and terminable by one month's notice on either side at any time. Salary will be at the rate of £250 per annum, plus full residential emoluments and war bonus. All fees other than this received by the officer must be refunded to the Council. The duties of the post will be chiefly on the surgical side of the hospital. Further information may be obtained from the Medical Superintendent. Applications should be sent to the undersigned as soon as possible.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

Have you read the notice at top of page 12 ?

Have you read the notice at top of page 12 ?

CITY OF MANCHESTER EDUCATION COMMITTEE
ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from registered medical practitioners for appointment as Assistant School Medical Officer. Applicants must have been qualified for at least three years and will be required to devote their whole time to the duties of the office. Preference will be given to those who have had special experience in diseases of children and refraction work. The present salary offered is £675 per annum, rising by annual increments of £25 to £750, then by £30 to a maximum of £850. There is also a cost-of-living allowance. The Committee may take experience into account when determining the commencing salary. Essential travelling expenses are defrayed. Forms of application and conditions of appointment may be obtained, on receipt of a stamped foolscap envelope, from the Chief Education Officer, Education Offices, Deansgate, Manchester, 3, and completed applications should be returned not later than February 14, 1948, to the Town Clerk, Town Hall, Manchester, 2, in envelopes endorsed "Assistant School Medical Officer." Applications should not be sent to any member of the Council. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

CORPORATION OF DUNDEE
DUNDEE MENTAL HOSPITAL
Public Health Department
SENIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Assistant Medical Officer (B1). Salary is at the rate of £500 per annum with war bonus of £75, and full residential emoluments. Suitably qualified R practitioners holding B2 appointments and those holding B1 appointments (if ineligible for H.M. Forces) are invited to apply. Applications should be sent to the Medical Superintendent, Mental Hospital, Westgreen, Dundee. No married quarters are available

CITY OF COVENTRY
ASSISTANT SCHOOL MEDICAL OFFICER AND ASSISTANT MEDICAL OFFICER OF HEALTH (Male)

The Coventry Education Committee invite applications for the above post from registered medical practitioners, preferably under 40 years of age. The possession of a Diploma in Public Health will be an advantage. The duties are mainly in connexion with the medical inspection and clinical treatment of school children. The salary payable will be £650, rising by annual increments of £25 to a maximum of £850 per annum, plus bonus, at present £59 19s. 3d. In deciding the commencing salary, account will be taken of previous experience and qualifications. The successful candidate will be required to pass a medical examination as to fitness and to contribute under the Local Government and Other Officers' Superannuation Act, 1937, as amended by the Coventry Corporation Act, 1936, in regard to annuities to Widows, and to the Coventry Municipal Officers' Widows' and Orphans' Pensions Fund. Applications (no forms provided), enclosing copies of two recent testimonials, should reach the undersigned within ten days of the last appearance of this advertisement.—Charles Barratt, Town Clerk, The Council House, Coventry.

CITY OF CARLISLE
FUSEHILL EMERGENCY HOSPITAL
RESIDENT MEDICAL OFFICER (B2) or (A)

Applications are invited from duly qualified medical practitioners for the above post at a salary of £200 per annum, plus residential emoluments. Practitioners within three months of qualification who are liable under the National Service Acts may apply for an A post, and R practitioners holding A posts may apply for a B2 post. The appointment is for six months in the first instance and (except in the case of R practitioners) may be renewed. The duties will include work in Medical, Surgical, Gynaecological, E.N.T. Wards and in a Tuberculosis Pavilion. Applications, stating age, nationality, medical school, date of qualification and experience, together with copies of testimonials, should be submitted to the Medical Officer of Health, 22, Fisher Street, Carlisle, as soon as possible.—H. D. A. Robertson, Town Clerk.

COUNTY BOROUGH OF WOLVERHAMPTON
NEW CROSS HOSPITAL
ASSISTANT MEDICAL OFFICER (A)

Applications are invited from male registered medical practitioners for the appointment in February, 1948, of an Assistant Medical Officer (A), for a period not exceeding twelve months, with salary at the rate of £230 per annum (inclusive of cost-of-living bonus), plus full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, in which case the appointment will be limited to a period of six months, otherwise it may be extended to twelve months. Applications should be addressed to the Medical Superintendent of the hospital.—J. Brock Allon, Town Clerk, Town Hall, Wolverhampton.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners holding a Diploma in Public Health, for the appointment of Deputy Medical Officer of Health to the City and County Borough. Salary £1,200 per annum, plus cost-of-living bonus, £59 16s. per annum. The post is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The duties will be concerned mainly with administration and candidates should have had good experience of public health work and preventive medicine. Applications, endorsed "Deputy Medical Officer of Health," stating age, qualifications, together with full details of the officer's training and experience and particulars of present and past appointments, should be accompanied by two recent testimonials and the names of three persons to whom reference can be made as to character and ability, and addressed to the Medical Officer of Health, Health Department, Town Hall, Newcastle-upon-Tyne, 1, to reach him not later than January 24, 1948. Canvassing, either directly or indirectly, will be considered a disqualification.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
NEWCASTLE GENERAL HOSPITAL
JUNIOR RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners, male and female, for the post of Resident Anaesthetist (B1), which will become vacant on February 1, 1948. Applicants must have had previous experience, and will be required to carry out the major portion of the emergency anaesthetist work. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The appointment is tenable for a period of twelve months and the salary is at the rate of £350 per annum, plus cost-of-living bonus and the usual residential emoluments. Applications should be forwarded immediately to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
SHOTLEY BRIDGE HOSPITAL
TWO HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners, male and female, for two House Surgeons (A) posts, which will become vacant in February, 1948. The appointments will be for a period of six months. Salary is at the rate of £200 per annum, with residential emoluments and cost-of-living bonus. Practitioners within three months of qualification and liable under the National Service Acts, may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.—J. Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

CITY AND COUNTY OF NEWCASTLY-UPON-TYNE
NEWCASTLE GENERAL HOSPITAL

Applications are invited from registered medical practitioners for the following posts, tenable for six months and vacant on February 1, 1948:

FOUR HOUSE SURGEONS (A). Salary at the rate of £150 per annum, together with cost-of-living bonus and residential emoluments. For these posts, practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1, immediately.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

CITY OF BIRMINGHAM
City Bacteriological Department
(a) DIRECTOR, AND (b) DEPUTY DIRECTOR

The Health Committee invite applications from medical men for the above-named posts, vacant by reason respectively of normal retirement and of death. The laboratory deals with the bacteriological and serological work of the public health services of the City and is associated with the National Public Health Laboratory Service. Applicants for either post should have had experience in laboratory work of this character, and preference will be given to those who have also had experience of laboratory administration and staff control. The present salary scales are respectively as follows: (a) Director, £1,000 per annum, rising by £50 annually to £1,600 per annum, inclusive. (b) Deputy Director, £900 per annum, rising by £50 annually to £1,200 per annum, inclusive. In both appointments the initial salary up to the maximum of the scale is determined by the candidate's experience. The appointments will be subject to the Local Government Superannuation Act, 1937, to the Birmingham Municipal Officers Widows' and Orphans' Pension Scheme (if applicable), to the candidate passing a medical examination, and, in the case of the Director three months', and in that of the Deputy Director, one month's notice on either side. Applications, and statement as to the post for which application is made, should be forwarded to the Medical Officer of Health, Council House, Birmingham, 3, not later than Saturday, January 31, 1948.

CITY OF BIRMINGHAM
CANWELL BABIES' HOSPITAL, Sutton Coldfield
HOUSE PHYSICIAN (A)

Applications, including those from practitioners within three months of qualification who are liable to service under the National Service Acts, are invited for the appointment of House Physician (A) at the above Hospital. The appointment will become vacant on March 1, 1948, and will be held for six months. For the first three months, the successful applicant will be appointed to the A post at a salary of £200 per annum, plus full residential emoluments. Thereafter, subject to satisfactory service, the successful applicant will be appointed to the B2 post for a period of three months, at a salary of £250 per annum, plus full residential emoluments. Forms of application may be obtained from the Medical Officer of Health, Council House, Birmingham, 3, and should be returned, together with three testimonials, not later than January 31, 1948.

CITY OF BIRMINGHAM
Public Health Department
TWO HOUSE SURGEONS (A)

Applications, including those from practitioners within three months of qualification who are liable to service under the National Service Acts, are invited for the appointment of House Surgeon (A) (two vacancies) appointments, in the City Maternity Hospitals. The salary will be at the rate of £200 per annum, plus full residential emoluments, for the first three months. Thereafter, subject to satisfactory service, the successful applicants will be appointed to the B2 appointments at a salary of £250 per annum, plus full residential emoluments, for a further period of six months, making a total of nine months in all. The appointments fall vacant on March 1, 1948. The hospitals are recognized for the D.R.C.O.G. Forms of application may be obtained from the Medical Officer of Health, Council House, Birmingham, 3, and should be returned, together with copies of three testimonials, not later than January 31, 1948.

CITY OF YORK
CHEST REGISTRAR
at the Fairfield Sanatorium and the City General Hospital

Applications are invited from medical practitioners who are members of the Royal College of Physicians or hold a higher medical qualification, for the post of Chest Registrar to Fairfield Sanatorium and the City General Hospital. Experience in the prevention, diagnosis and treatment of pulmonary tuberculosis is essential. Commencing salary £900 rising by bi-annual increments of £50 to £1,087 10s. plus war bonus at present fixed at £59 16s. per annum. Applications accompanied by two recent testimonials and the names of two persons to whom reference may be made should be submitted to the undersigned not later than Saturday, January 31, 1948.—C. B. Crane, M.B., B.S., D.P.H., Medical Officer of Health, Health Department, 50, Bootham, York.

CITY OF BRADFORD
MUNICIPAL GENERAL HOSPITAL—St. Luke's

Applications are invited from registered medical practitioners for the following appointments:—

HOUSE SURGEONS (A and B2) (General Surgery)

Salary for A appointment £120 per annum, and for B2 appointment, £200 per annum, plus full residential emoluments in each case. Practitioners within three months of qualification may apply for A post, when the appointment will be for a period of six months. Practitioners who now hold A posts may apply for the B2 post, when the appointment will be limited to six months.

RESIDENT ANAESTHETIST (B1)

Salary £350 per annum, plus full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also holding B1 and ineligible for H.M. Forces, may apply. This appointment is limited to one year.—W. H. Leathem, Town Clerk, Town Hall, Bradford.

CITY OF BRADFORD
MUNICIPAL GENERAL HOSPITAL, St. Luke's
HOUSE SURGEON (B2)
to the Obstetric Unit

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2) to the Obstetric Unit. Salary £200 per annum, plus full residential emoluments. R practitioners who now hold A appointments may apply, when the appointment will be limited to six months. Applications should be forwarded to the Medical Officer of Health, Town Hall, Bradford, as soon as possible.—W. H. Leathem, Town Clerk, Town Hall, Bradford.

LONDON COUNTY COUNCIL
PSYCHIATRIST

The London County Council invites applications from suitably qualified medical practitioners for the position of Psychiatrist (part-time) at its remand homes. The salary will be £1,000 by £50 to £1,200 a year. There are no emoluments or additional allowances. The appointment will be deemed to be two-thirds of full time, and the person appointed will be required to visit a remand home or a magistrate's court every week day. Further details, duties, etc., are set out on the application form, obtainable from the School Medical Officer (S.D.5), the County Hall, Westminster Bridge, S.E.1, which should be returned by February 7, 1948. Canvassing disqualifies. (2A).

CORNWALL COUNTY COUNCIL
GERIATRICIAN

Applications are invited from registered medical practitioners for the whole-time appointment of Geriatrician to the Cornwall County Council. The person appointed will be required to work under the general direction of the County Medical Officer. The commencing salary will be at the rate of £1,000 a year, rising by one biennial increment of £50 and one of £37 10s. to £1,087 10s., together with cost-of-living bonus. A car is essential, and there will be a travelling allowance in accordance with the County Scale. The appointment is non-resident. The duties will include assistance and advice regarding the establishment of a Rehabilitation Centre for the treatment of the chronic sick; the clinical care of patients admitted to the Centre; the regular visiting of Public Assistance Institutions in the County to select patients suitable for transfer to the Centre; and the general supervision of the Council's arrangements for the treatment of the chronic sick. Applications should reach the County Medical Officer, County Hall, Truro, not later than February 4, 1948. The post is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The Regional Hospital Board has been consulted and approves of this appointment.—E. T. Verger, Clerk of the County Council, County Hall, Truro.

CUMBERLAND COUNTY COUNCIL
PSYCHIATRIST

The Cumberland County Council invite applications for the appointment of a whole-time Psychiatrist. Applicants must be registered medical practitioners, holding a Diploma in Psychological Medicine, and a certificate of recognized training in Child Psychiatry. The salary will be within the range £1,000 to £1,250 per annum, according to qualifications and experience, and if commencing below £1,250, will rise to that maximum by annual increments of £50; plus cost-of-living bonus. The person appointed will be required to contribute to the appropriate superannuation scheme, and to pass a medical examination. Travelling and subsistence allowances will be provided on the County scale for the time being in force, the person appointed providing his own motor car. Forms of application, with terms of the appointment, may be obtained from the County Medical Officer, County Health Department, 11, Portland Square, Carlisle, and completed applications must be received by him not later than February 29, 1948. Canvassing, directly or indirectly, will disqualify.—G. N. C. Swift, Clerk of the County Council.

CUMBERLAND COUNTY COUNCIL
DEPUTY COUNTY MEDICAL OFFICER AND DIVISIONAL MEDICAL OFFICER
East Cumberland

The Cumberland County Council invite applications for the above appointment. Applicants must be registered medical practitioners holding a Diploma in Public Health or corresponding qualification. The salary will be at the rate of £1,150 per annum, plus cost-of-living bonus. The person appointed will be required to contribute to the appropriate superannuation scheme, and to pass a medical examination. Travelling and subsistence allowances will be provided on the County scale for the time being in force, the person appointed providing his own car. Experience in Public Health administration, the School Health Service and Tuberculosis will be a recommendation. Forms of application, with terms of the appointment, may be obtained from the County Medical Officer, County Health Department, 11, Portland Square, Carlisle, and completed applications must be received by him not later than February 12, 1948. Canvassing, directly or indirectly, will disqualify.—G. N. C. Swift, Clerk of the County Council.

CUMBERLAND COUNTY COUNCIL
DIVISIONAL MEDICAL OFFICER
West Cumberland

The Cumberland County Council invite applications for the above appointment. Applicants must be registered medical practitioners holding a Diploma in Public Health, or corresponding qualification. The salary will be within the range of £950 to £1,050 per annum, according to qualifications and experience, plus cost-of-living bonus. The person appointed will be required to contribute to the appropriate superannuation scheme, and to pass a medical examination. Travelling and subsistence allowances will be provided on the County scale for the time being in force, the person appointed providing his own motor car. Forms of application, with terms of the appointment, may be obtained from the County Medical Officer, County Health Department, 11, Portland Square, Carlisle, and completed applications must be received by him not later than February 12, 1948. Canvassing, directly or indirectly, will disqualify.—G. N. C. Swift, Clerk of the County Council.

COUNTY BOROUGH OF DERBY
PART-TIME PSYCHIATRIST

Part-time Psychiatrist required two sessions a week for Derby County Borough. Applicants should be registered medical practitioners of consultant status with special experience in child psychiatry. Fee of £4 4s. per session and mileage allowance in accordance with agreement between B.M.A. and Local Authority Associations. Applications (no form issued) to Director of Education, Council House, Corporation Street, Derby.

COUNTY COUNCIL OF THE COUNTY OF STIRLING
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of an Assistant Medical Officer of Health. Applicants must be registered medical practitioners and also hold a Diploma in Public Health. Salary £650, rising by annual increments of £25 to £900 per annum, with placing on the scale according to experience, with in addition a temporary cost-of-living bonus which is at present £59 16s. per annum. The successful applicant will require to undertake child welfare work, school medical service and such other duties as may be directed from time to time by the County Medical Officer. The applicant will also be required to pass a medical examination and the salary will be subject to deduction of superannuation contributions. A form of application may be obtained from the undernoted, with whom applications and copies of three recent testimonials should be lodged on or before January 31, 1948.—George J. Sherriff, County Clerk, County Offices, Viewforth, Stirling.

COUNTY BOROUGH OF OLDHAM
ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from registered medical practitioners for the following appointments:—

ASSISTANT MEDICAL OFFICER OF HEALTH. Duties are mainly concerned with Maternity and Child Welfare, but may include other duties in the Public Health Department.

ASSISTANT MEDICAL OFFICER OF HEALTH and ASSISTANT SCHOOL MEDICAL OFFICER. Duties include responsibilities in the School Health Service and the Public Health Department, including infectious diseases.

Preference will be given to candidates possessing the D.P.H. or D.C.H. qualification. Salary in accordance with qualification and experience within the scale £650 by £25 to £850 per annum, plus cost-of-living bonus. The appointments are superannuable and subject to medical examination.

Forms of application and conditions of service may be obtained from the Medical Officer of Health, Public Health Department, Town Hall, Oldham, to whom they should be returned endorsed "Assistant Medical Officer," together with copies of not more than three testimonials.—Edward Haines, Town Clerk, Town Hall, Oldham.

COUNTY BOROUGH OF NEWPORT
ST. CADOC'S HOSPITAL
(for Mental and Nervous Diseases)
Caerleon, Newport, Mon.

Applications are invited for the appointments of:

SENIOR ASSISTANT MEDICAL OFFICER (B1)

Salary £600 per annum, rising by annual increments of £25 to £700 per annum, plus cost-of-living bonus (at present £59 16s. per annum), together with emoluments valued for the purpose of the Asylum Officers' Superannuation Act, 1909, at £150 per annum. A further £50 per annum is payable to holders of the D.P.M. Previous mental hospital experience desirable.

ASSISTANT MEDICAL OFFICER (B1)

Salary £455 per annum, rising by annual increments of £25 to £555 per annum, plus cost-of-living bonus (at present £59 16s. per annum), together with emoluments valued for the purpose of the Asylum Officers' Superannuation Act, 1909, at £150 per annum. A further £50 per annum is payable to holders of the D.P.M.

In either case registered practitioners holding B2 appointments and those holding B1 posts and ineligible for H.M. Forces may apply. Applications to be addressed to the Medical Superintendent, St. Cadoc's Hospital, Caerleon, Newport, Mon., to arrive not later than January 24, 1948.—T. Mervyn Jones, Town Clerk and Clerk to the Visiting Committee.

COUNTY BOROUGH OF SOUTHEND-ON-SEA
TUBERCULOSIS OFFICER AND CONSULTANT PHYSICIAN FOR TUBERCULOSIS

The Council invite applications for the appointment of Tuberculosis Officer and Consultant Physician for Tuberculosis to the Southend Municipal Hospital. Salary £1,000 by £50 to £1,250 per annum, together with appropriate cost-of-living bonus. In fixing the commencing salary regard will be had to previous specialist experience. The person appointed will have clinical charge of beds for tuberculosis in the Southend Municipal Hospital (where a new block of 60 beds was opened in 1947), and the Borough Sanatorium for Infectious Disease. A car allowance (at present £80 per annum) will be paid, or alternatively a motor car will be provided. The Local Government Superannuation Act, 1937, will apply, and the appointment is subject to medical examination. Application, with names of three referees, to be sent to the Medical Officer of Health, Municipal Health Centre, Southend-on-Sea, from whom full particulars can be obtained.—Archibald Glen, Town Clerk, Town Clerk's Office, Southend-on-Sea.

GLASGOW EYE INFIRMARY
RESIDENT HOUSE SURGEON (A)

Applications are invited for the post of Resident House Surgeon (A) for a period of six months, commencing February 26, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. Salary £150. Applications to be sent to the Secretary, 174, Berkeley Street, Glasgow, C.3.

COUNTY BOROUGH OF WARRINGTON
Health Department
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners for the appointment of Assistant Medical Officer of Health. The duties of the appointment will offer experience in all branches of Public Health work, including Maternity and Child Welfare, Venereal Diseases, Nurseries, and the School Health Service. Preference will be given to candidates possessing the D.P.H. or D.C.H. Salary £650 per annum, rising by annual increments of £25 to a maximum of £850, plus appropriate cost-of-living bonus, and car allowance of £50 per annum. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the passing of a medical examination. The appointment is a whole-time one, terminable by three months' notice on either side, and the successful candidate will not be permitted to engage in private practice. Applications should be sent to the undersigned by January 24, 1948.—Stuart F. Allison, Medical Officer of Health, Health Department, Sankey Street, Warrington.

COUNTY BOROUGH OF MIDDLESBROUGH
MIDDLESBROUGH GENERAL HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Physician (A). The salary is at the rate of £200 per annum, together with full residential emoluments. The General Hospital contains 355 beds and is an Acute General Hospital. The successful candidate will be required to pass a medical examination. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be limited to a period of six months, otherwise the appointment will be for twelve months. Applications should be sent not later than Wednesday, January 21, 1948, to the Medical Superintendent, Mr. E. W. Grahame, M.D., Ch.M., F.R.C.S.(E.), F.R.C.S. (Eng.), General Hospital, Ayresome Green Lane, Middlesbrough, from whom further information may be obtained.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough.

COUNTY BOROUGH OF DERBY
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners possessing the D.P.H. for the above permanent whole-time appointment. The salary will be in accordance with the Askwith Memorandum, i.e., £650 by £25 per annum to £850, plus cost-of-living bonus, at present £59 16s. per annum. The duties include work in connexion with Public Health, Infectious Disease, Maternity and Child Welfare, and School Medical work. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment will be determinable by one month's notice on either side. Applications should be sent to the Acting Medical Officer of Health, The Council House, Corporation Street, Derby, to arrive not later than Saturday, January 24, 1948.—C. Ashton, Town Clerk.

COUNTY BOROUGH OF SWANSEA
Public Health Department
HILL HOUSE ISOLATION HOSPITAL
RESIDENT MEDICAL OFFICER (A)
(Male or Female)

Applications are invited from registered medical practitioners of either sex for the post of Resident Medical Officer (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner so liable, appointment will be for a period of six months, otherwise it will be for a period of twelve months. The appointment will not be renewable, and will be terminable at any time by one month's notice on either side. Salary £350 per annum, with board, residence, and laundry, plus an emergency cost-of-living bonus, at the discretion of the Council. Applications must be sent to the Medical Officer of Health, The Guildhall, Swansea, not later than February 2, 1948.—T. E. Bowen, Town Clerk, The Guildhall, Swansea.

COUNTY BOROUGH OF WEST HAM
CENTRAL HOME, Leytonstone, London, E.11
(800 beds, Chronic Sick)
SECOND ASSISTANT RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Second Assistant Resident Medical Officer (B1). Suitably qualified R practitioners holding B2 appointments may apply. R practitioners holding B1 appointments cannot apply unless they have been rejected by the R.A.M.C. Salary £455 per annum by annual increments of £25 to £555 per annum, plus temporary cost-of-living bonus, together with full residential emoluments valued at £150 per annum. Further particulars and application forms from Medical Officer of Health, 225, Romford Road, West Ham, London E.7, to be returned to him by January 31, 1948.—E. E. King, Town Clerk, West Ham Town Hall, Stratford, London, E.15.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE
Public Health Department
PSYCHIATRIST

Applications are invited from suitably qualified men or women for the post of Psychiatrist for Child Guidance work in the County Council's scheme for maladjusted children, at a commencing salary of £1,000 per annum rising by four annual increments to £1,210 per annum plus cost of living bonus on the County Council's scale, at present amounting to £59 16s. per annum. Applicants must be registered medical practitioners with special training and experience in child guidance and psychotherapy and the possession of a Diploma in Psychological Medicine is essential. It is proposed to establish four Child Guidance Clinics with a staff of one Psychologist and four Psychiatric Social Workers and the selected Psychiatrist will be in charge of these clinics and will be expected to develop the County Scheme. The successful applicant will be required to devote the whole of his time to the service of the County Council and will not be permitted to engage in private practice. The appointment will be subject to a satisfactory medical examination and to the provisions of the Local Government Superannuation Act, 1937. Applications should be sent to the undersigned not later than February 14, 1948.—Fraser Brockington, County Medical Officer, County Hall, Wakefield.

DERBYSHIRE COUNTY COUNCIL
Public Health Department
ASSISTANT MATERNITY AND CHILD WELFARE MEDICAL OFFICER

The Derbyshire County Council require the services of a fully qualified woman Assistant Maternity and Child Welfare Medical Officer, experienced in ante-natal work, midwifery, and children's diseases, to hold consultations at the Maternity and Child Welfare Clinics and Centres of the Derbyshire County Council and to perform such other duties as appertain to the office. The officer appointed will not be allowed to engage in private practice, but will be required to devote her whole time to the duties of the office and will act under the direction of the County Medical Officer. The salary will be £650 per annum rising by annual increments of £25 to £850 per annum plus a cost-of-living bonus which at present is £48 2s., with a travelling allowance in accordance with the County Council's scale, which at present is as follows: Cars up to and including 8 h.p., £70 per annum, plus 2d. per mile. Cars of 9 h.p. and over, £75 per annum plus 2½d. per mile. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment will be terminable by three months' notice on either side. Forms of application can be obtained from the undersigned to whom they must be returned, together with copies of not more than three recent testimonials, not later than January 26, 1948.— J. B. S. Morgan, County Medical Officer, County Offices, St. Mary's Gate, Derby.

ESSEX COUNTY COUNCIL HOSPITAL
Black Notley, near Braintree
TWO SENIOR MEDICAL OFFICERS (B1)

The Essex County Council invite applications from registered medical practitioners, including those now serving in H.M. Forces, for the above established posts. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applicants should have had considerable experience in either general surgery or orthopaedics and preference will be given to candidates holding higher qualifications. The salary, which is inclusive of residential emoluments or cash in lieu, attaching to each post will be at a rate to be determined by the qualifications and experience of the candidate selected, on the scale £700 a year rising, subject to satisfactory service, by annual increments of £25 to £1,000 a year, together with such war bonus as may be decided by the Council from time to time. The successful candidates must pass a medical examination and contribute to the Council's Superannuation Fund and may be required to be resident or non-resident; if non-resident they will be expected to reside within a reasonable distance of the Hospital. Applications, on forms which may be obtained from me, accompanied by copies of not more than three recent testimonials (which will not be returned), should be delivered to me not later than February 6, 1948.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

ESSEX COUNTY COUNCIL
Social Welfare Department
LODGE HOSPITAL, Orsett, near Grays
RADIOGRAPHER

Radiographer (single-handed), resident or non-resident. Applicants should have had not less than three years' experience after qualification and registration with the Society of Radiographers. Salary £360 by £15 to £435 per annum, non-resident. Applications in writing to the Acting Chief Social Welfare Officer, Waterloo Lane, Chelmsford, Essex.

ESSEX COUNTY COUNCIL
SENIOR MEDICAL AND SURGICAL OFFICERS

The County Council invite applications from registered medical practitioners, including those now serving in H.M. Forces, for the following established posts at St. John's Hospital, Chelmsford:

SENIOR MEDICAL OFFICER (B1)
SENIOR SURGICAL OFFICER (B1)

Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applicants should have had either considerable experience in general medicine and paediatrics or in general surgery and preference will be given to candidates holding higher qualifications. The salary attaching to each post, which is inclusive of residential emoluments or cash in lieu, will be at the rate of £700 a year rising, subject to satisfactory service, by annual increments of £25 to £1,000 a year, together with such war bonus as may be decided by the Council from time to time. The commencing salary will be fixed according to the qualifications and experience of the successful candidates. The successful candidates must pass a medical examination and contribute to the Council's Superannuation Fund. The successful candidates may be required to be resident or non-resident and if non-resident will be expected to reside within a reasonable distance of the hospital. Applications, on forms which may be obtained from me, accompanied by copies of not more than three recent testimonials (which will not be returned) should be delivered to me not later than February 5, 1948.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

ESSEX COUNTY COUNCIL HOSPITAL
Black Notley, Near Braintree
RESIDENT MEDICAL OFFICER (B1)

The County Council invite applications from registered medical practitioners, including those now serving in H.M. Forces, for the whole-time appointment of Resident Medical Officer on the staff of the above hospital, which is a sanatorium for the treatment of cases of pulmonary and non-pulmonary tuberculosis. The person appointed would be required to devote most of his time to patients suffering from pulmonary tuberculosis. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment will be limited to a period of not exceeding twelve months. Remuneration will be within the scale £450 by £25 to £650 a year, plus bonus, and plus residential emoluments valued at £160 a year. The successful candidate must pass a medical examination and may be required to contribute to the Council's Superannuation Fund. Applications, stating applicant's position in relation to military service, should be addressed to me as soon as possible. Canvassing, directly or indirectly, will disqualify.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

ESSEX COUNTY COUNCIL
ST. MARGARET'S HOSPITAL, Epping
HOUSE SURGEON (B2)

The Essex County Council invite applications from registered medical practitioners, male and female, including those now serving in H.M. Forces and R practitioners holding A appointments, for the post of House Surgeon (B2) at St. Margaret's Hospital, Epping. If held by an R practitioner, the appointment will be limited to six months. Salary £260 per annum, plus residential emoluments and such bonus as may be decided by the County Council from time to time. Applications, indicating position in relation to military service, to be sent to the County Medical Officer, County Hall, Chelmsford, within seven days from the appearance of this advertisement.

FALKIRK AND DISTRICT ROYAL INFIRMARY
MEDICAL SUPERINTENDENT

The Managers invite applications for the post of Medical Superintendent at the above Infirmary. This appointment may be held up to the age of 65 (with a possible extension of twelve months longer in special circumstances). Salary to be not less than £1,000 per annum, with residential emoluments not exceeding £250 in lieu of free house, coal and light, until a house becomes available. Particulars relating to the duties may be obtained from the Hon. Secretary, with whom six copies of letter of application, stating age and previous experience, together with recent testimonials (not exceeding six in number), must be lodged not later than Friday, January 30, 1948. Canvassing in any form by applicants will disqualify them.—M. D. Kennedy, Solicitor, Hon. Secretary, 14, Princes Street, Falkirk.

HERTFORDSHIRE COUNTY COUNCIL
LISTER EMERGENCY HOSPITAL (350 beds)

Applications are invited from registered practitioners for the following appointments:—

HOUSE PHYSICIAN (A), vacant now. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months.

HOUSE PHYSICIAN (B2), vacant February 1, 1948. Salary £240 per annum, with full residential emoluments. Registered practitioners holding A posts may apply. The appointment will be for a period of six months.

Applications should be sent immediately to Dr. P. J. W. Mills, Medical Superintendent.

EAST SUSSEX COUNTY COUNCIL
SOUTHLANDS HOSPITAL, Shoreham-by-Sea
RESIDENT HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for appointment as Resident House Physician (B2) (male). The holder of the post, in addition to assisting on medical wards, will be expected to do receiving ward duties. The appointment is for a period not exceeding one year and will be limited to six months if an R practitioner is appointed. Salary £250 per annum. A cost-of-living bonus will be payable in addition to the salary, in accordance with the scale approved by the County Council from time to time, the present rate being 11s. 6d. per week. Full residential emoluments will be provided. A candidate to be successful must pass a medical examination. The appointment will be full-time and subject to (a) one month's notice on either side and (b) such conditions of service as may from time to time be approved on behalf of the County Council. Application forms should be obtained from and returned to the Medical Superintendent, Southlands Hospital, Shoreham-by-Sea, by January 23, 1948.—H. S. Martin, Clerk of the County Council, County Hall, Lewes.

GLAMORGAN COUNTY COUNCIL
Hospital Pathological Service

Applications are invited for the undermentioned vacancies at Glamorgan County Council Hospitals:

(i) **EAST GLAMORGAN COUNTY HOSPITAL**
Church Village, near Pontypridd
CHIEF LABORATORY TECHNICIAN

Applicants, who should be fully qualified, must have had extensive experience in all branches of laboratory technology and administrative experience in hospital laboratories and have attained the standard of the Fellowship of the Institute of Medical Laboratory Technology or its equivalent. Salary £420 rising by annual increments of £15 to £465 per annum, plus prevailing cost-of-living bonus.

(ii) **WEST GLAMORGAN COUNTY HOSPITAL**
Neath
LABORATORY TECHNICIAN GRADE B

Applicants must be qualified and experienced Technicians and have attained the standard of the Final Examination of the Institute of Medical Laboratory Technology or its equivalent. Salary £330 rising by annual increments of £15 to £375 per annum, plus prevailing cost-of-living bonus.

Applicants must be under 45 years of age unless they are already employed by a Local Authority and are considered to be specially suitable for appointment. In the case of ex-Servicemen, the age limit will be raised by the number of years served in H.M. Forces during the late War. The appointments are superannuable and subject to the Regulations of the County Council. Forms of application can be obtained from the County Medical Officer, Glamorgan County Hall, Cardiff, by whom applications on the appropriate forms, accompanied by copies of three recent testimonials, should be received within fourteen days of the publication of this advertisement.—D. J. Parry, Clerk of the County Council, Glamorgan County Hall, Cardiff.

KINGSTON-UPON-HULL CORPORATION
HEALTH DEPARTMENT
BEVERLEY ROAD HOSPITAL (432 beds)

Applications are invited for the undermentioned appointments from registered medical practitioners of either sex, including those now serving in H.M. Forces:—

SENIOR HOUSE POST (SURGICAL) (B1), tenable for three years. Salary £455 per annum, plus cost-of-living bonus, rising to £555 per annum by annual increments of £25, plus full residential emoluments. Applications from R practitioners holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C.

JUNIOR HOUSE POST (SURGICAL) (A), tenable for one year. Salary £250 per annum, plus cost-of-living bonus and plus full residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months.

Forms of application, conditions of appointment, etc., may be obtained from, and the form should be returned duly completed to, the Medical Officer of Health, Guildhall, Kingston-upon-Hull, not later than 10 a.m. on Monday, February 9, 1948.

KINGSTON-UPON-HULL CORPORATION
HEALTH DEPARTMENT
ASSISTANT MEDICAL OFFICER OF HEALTH with duties mainly in the Port Health Service

Applications are invited from duly qualified medical officers for the above appointment. Practitioners serving in H.M. Forces are invited to apply. Candidates must hold a registered degree or diploma in State Medicine or Public Health. Experience in Port Health work and infectious Diseases will be considered additional qualifications. The salary scale is £750 per annum, rising by annual increments of £25 to £850 per annum, plus cost-of-living bonus. The commencing salary may be fixed at a rate higher than £750, plus bonus, in the case of candidates who have had previous experience in Port Health work. Application forms, conditions of appointment, etc., may be obtained from the Medical Officer of Health, Guildhall, Kingston-upon-Hull, to whom the completed form should be returned not later than 10 a.m. on Monday, February 9, 1948.

KINGSTON-UPON-HULL CORPORATION
Health Department
MUNICIPAL MATERNITY HOME (68 beds)
SENIOR RESIDENT MEDICAL OFFICER (B1)
(Woman)

Applications are invited from unmarried or widowed registered medical practitioners, under the age of 40 years, for the appointment of Senior Resident Medical Officer (B1) (Woman) at the Municipal Maternity Home, Hedon Road, Kingston-upon-Hull. Salary £455 per annum, rising by annual increments of £25 to £555 per annum, plus cost-of-living bonus, together with board, washing and residence at the Maternity Home. Candidates must have had at least six months' resident post-graduate experience in obstetrics, experience in the care of normal and premature infants and in venereal diseases in women. The duties of the appointment will also include attendance at ante-natal, post-natal, and other clinics. Forms of application, etc., may be obtained from, and the form should be returned duly completed to, the Medical Officer of Health, Guildhall, Kingston-upon-Hull, not later than 10 a.m. on Monday, February 2, 1948.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
RESIDENT ANAESTHETIST (B1)

Applications for the above appointment are invited from medical practitioners who have had a wide experience in the administration of anaesthetics. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The appointment will be tenable for a period of one year and the successful applicant will be required to work under the supervision of the Visiting Anaesthetists. The hospital is approved for the Diploma of Anaesthetics. Salary £400 per annum, plus residential emoluments and cost-of-living bonus. If the successful applicant possesses the Diploma of Anaesthetics, an additional £50 per annum will be paid. Form of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom all applications must be forwarded not later than Monday, January 26, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
WRIGHTINGTON HOSPITAL
Appley Bridge, near Wigan
JUNIOR MEDICAL OFFICER (B2)

Applications are invited for Junior Medical Officer (B2) at the Wrightington Hospital, containing 370 beds (280 beds for non-pulmonary tuberculosis—adults and children—20 beds for "combined" pulmonary and non-pulmonary cases and 70 beds for pulmonary cases). The medical staff consists of medical superintendent, three assistants, two consultant orthopaedic surgeons, other visiting surgeons and visiting physician. Unit for major thoracic surgery. Good facilities for reading for M.D. Salary £300 per annum, plus bonus, together with board, single quarters and laundry, valued at £146. R practitioners who now hold A posts may apply, when appointment will be limited to six months, otherwise one year. Forms of application and conditions of appointment from Central Consultant T.O., County Offices, Preston. Mark letters "Wrightington M.O."

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE PHYSICIAN (B2)

Applications are invited for the above appointment from registered medical practitioners, male and female, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to a period of six months, otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, January 26, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL
Edgware, Middlesex
CHIEF ASSISTANT PATHOLOGIST

Chief Assistant Pathologist, non-resident; medical men or women with experience in and good general knowledge of pathology; and especially morbid anatomy. General scope of duties arranged by Medical Director, may include teaching. Whole-time appointment, one year in first instance, may be extended but not beyond five years, save in exceptional circumstances. Subject to medical examination. Inclusive salary £750 by £50 to £950 per annum, plus any temporary bonus (now £60 per annum). Applications to undersigned by January 24, 1948 (quoting D.399, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL
Edgware, Middlesex

(1) **CASUALTY OFFICER (B1) (Resident).** Considerable all round experience. R practitioners holding B2 posts eligible, those holding B1 posts ineligible unless rejected by H. M. Forces. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash). Post vacant immediately.

(2) **JUNIOR ASSISTANT MEDICAL OFFICER (B2) (Resident)** for Anaesthetic duties. R practitioners holding A posts eligible. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry.

(3) **SENIOR HOUSE SURGEON (B2) (Resident, Male).**

(4) **TWO SENIOR HOUSE PHYSICIANS (B2) (Resident, Men).**

(3) and (4) Registered medical practitioners who now hold A posts, including R practitioners. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry.

(2) (3) and (4) Whole-time duties such as Council may require under supervision of Medical Director. Posts vacant March 1, 1948.

All six months' appointments, subject to medical examination. Applications to Medical Director of Hospital by January 24, 1948. No forms (quoting D.336, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth
(approx. 1,400 beds, with many specialized departments; wide range of radiological diagnosis, plastic surgery, fracture units)

(a) **RADIOLOGIST.** Men and women of high professional qualifications, with wide experience in their specialty. Inclusive salary £1,100 (plus any temporary bonus, now £60 per annum) by £100 to £1,700 per annum; on proof of outstanding achievement further increments of £50 up to £2,000 per annum may be granted. Practitioners serving in H.M. Forces may apply.

(b) **SENIOR ANAESTHETIST** experienced in modern methods of anaesthesia. Inclusive salary £1,000 (plus any temporary bonus, now £60 per annum) by £100 to £1,600 per annum; on proof of outstanding achievement further increments of £50 up to £1,800 per annum may be granted.

(a) and (b). General scope of duties arranged by Medical Director, may include teaching. Whole-time, established, pensionable, subject to medical examination. Non-resident but required to live near hospital, and to act as Deputy Medical Director for a period if called upon. Applications to undersigned by January 31, 1948 (quoting D.401, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
SPRINGFIELD MENTAL HOSPITAL
Wandsworth, S.W.17
(Large hospital with every modern method of treatment)
SENIOR PHYSICIAN (B1)

Required with D.P.M., and preferably mental hospital experience. Salary £600 by £25 to £700 per annum, plus £50 per annum, for D.P.M., plus any temporary bonus (now £60 per annum). Unfurnished flat in hospital grounds available for married man at appropriate rental. No emoluments. R practitioners holding B1 appointments and ineligible for H.M. Forces may apply. Established and pensionable, subject to medical examination. Applications, with copies of two testimonials, to Medical Superintendent of Hospital (quoting D.337, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
HILLINGDON COUNTY HOSPITAL
Uxbridge, Middlesex
CHIEF ASSISTANT to Thoracic Surgeon

Higher surgery qualification essential with experience in thoracic surgery and ability to undertake general emergency surgery. The post provides good experience in thoracic surgery. General scope of duties arranged by Medical Director may include teaching. Appointment, subject to medical examination, one to three years, exceptional circumstances five years. Inclusive salary (non-resident) £750 by £50 to £950 per annum, plus any temporary bonus (now £60 per annum). Non-resident post (except when on duty), but required to live near hospital. Applications to undersigned by January 24, 1948 (quoting D.334, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1

MIDDLESEX COUNTY COUNCIL
SPRINGFIELD MENTAL HOSPITAL
Wandsworth, S.W.17
(Large hospital with every modern method of treatment)
CHIEF PHYSICIAN

Chief Physician required (not post of Deputy Medical Superintendent). D.P.M. and should have higher medical qualifications and considerable experience in mental hospital and clinic work. Salary £1,000 per annum by £40 to £1,200 plus any temporary bonus (now £60 per annum). Established and pensionable, subject to medical examination. Unfurnished accommodation provided rent free. No other emoluments. Application forms from Medical Superintendent of Hospital (quoting D.243, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CENTRAL MIDDLESEX COUNTY HOSPITAL
Park Royal, N.W.10
SURGICAL OFFICER (B1) (Resident)

Surgical Officer (B1) (Resident) required at Central Middlesex County Hospital, Park Royal, N.W.10, for Aural Department, to act as first assistant. Registered medical practitioners who have held posts as House Surgeons with experience in E.N.T. work. Post approved for D.L.O. examination. Salary £400 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry. Appointment, one year, subject to medical examination. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Whole-time duties such as Council may require under supervision of Medical Director and Visiting E.N.T. Consultant. Application to Medical Director of Hospital by January 24, 1948 (quoting D.335, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL, Enfield, Middlesex
SENIOR Resident HOUSE PHYSICIAN (B2)

Registered medical practitioners, including R practitioners now holding A posts. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging and laundry. Six months' appointment. Whole time general medical duties, under supervision of Medical Director. Post vacant January 24, 1948. Application to Medical Director of Hospital immediately (quoting D.331, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1

MIDDLESEX COUNTY COUNCIL
LOCUM RESIDENT ANAESTHETIST

Locum Resident Anaesthetist required at Chase Farm Hospital, Enfield, Middlesex, from February 4 to 17, inclusive. Salary 10 guineas per week, plus £30 per annum cash bonus, plus board, lodging and laundry. Application stating age, qualifications, experience to Medical Director of Hospital, immediately (quoting D.400, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MANCHESTER CORPORATION

Consultant appointments at municipal hospitals:

(a) **VISITING PHYSICIAN (part-time)**
(b) **RADIOLOGIST (whole-time)**

The Health Committee invites applications for the following consultant appointments:—

(a) **Visiting Physician,** for four sessions weekly, to Crumpsall Hospital (adult general, 1,400 beds), Manchester, 8. This appointment is part-time and does not carry with it the right of entry into the Corporation Superannuation Fund. Remuneration will be on a sessional fee basis at the rate of £4 4s. per session of normally 1½ to 2½ hours' duration, plus mileage allowances as necessary.

(b) **Radiologist,** whole-time, mainly for duty at Crumpsall Hospital (as above) and Booth Hall Hospital (children's general, 650 beds), Blackley, Manchester, 9, and elsewhere as required by the Committee. Candidates must have had considerable experience in diagnostic radiography. Salary £1,500 per annum, plus a temporary bonus.

Both appointments are subject to the Manchester Corporation conditions of service.

Forms of application and copies of a memorandum on the terms and conditions of service of each appointment may be obtained from the Medical Officer of Health, Health Department, Hospitals Administration Section, P.O. Box 399, Town Hall, Manchester, 2 (endorse communication with the title of the appointment sought).

Applications are to be addressed to the Town Clerk, Town Hall, Manchester, 2, and not to any member of the Council and must be received not later than February 4, 1948. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

BRACEBRIDGE HEATH MENTAL HOSPITAL, near Lincoln
DEPUTY MEDICAL SUPERINTENDENT

The Visiting Committee of the above hospital invite applications for the whole-time post of Deputy Medical Superintendent. Applicants must have had previous Mental Hospital experience and be fully conversant with modern methods of treatment in psychiatry, including psychotherapy, and with out-patient work. Their age must not exceed 45 years. A D.P.M. is essential and a higher medical qualification desirable. Commencing salary £1,000 per annum plus emoluments valued at £200 per annum, consisting of a modern unfurnished house, rates, gas, electricity, water, coal in accordance with the National scale, laundry, vegetables for day-to-day requirements and cleaning materials. The successful applicant will be required to devote whole time to the service of the hospital, accounting for all fees received in respect of all work outside the hospital to the Clerk of the Hospital. Deductions will be made under the Asylums Officers' Superannuation Act, 1909. The appointment is subject to satisfactory medical examination and will be terminable by two months' notice on either side. Applications, accompanied by the names of three referees, to be sent to the Medical Superintendent not later than January 31, 1948.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

NORTHUMBERLAND COUNTY COUNCIL
Health Department
ASSISTANT TUBERCULOSIS OFFICER
(whole-time)

Applications are invited from registered medical practitioners for the appointment of Assistant Tuberculosis Officer. Candidates should possess special knowledge and have experience of the modern methods of diagnosis and treatment of tuberculosis, including the ability to interpret chest x-ray films and also be able to undertake A.P. refills. The successful candidate will work under the general administrative control of the County Medical Officer and the clinical control of the Senior Tuberculosis Officer. The salary will be in accordance with the recommendations of interim revision of the Askwith memorandum for Medical Officers employed in departments, namely £650 per annum, rising by annual increments of £25 to a maximum of £850 per annum, plus cost-of-living bonus. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment is terminable by three months' notice on either side. Applications, giving full details of age, qualifications, experience and liability for military service, together with copies of three recent testimonials, should reach the County Medical Officer, County Hall, Newcastle-upon-Tyne, 1, not later than Saturday, January 24, 1948.—J. B. Tilley, County Medical Officer.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM EMERGENCY HOSPITAL
(Regional Orthopaedic Centre—440 beds)
HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeons (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months, otherwise it will be for a period of twelve months. Salary is at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the undersigned by January 24, 1948.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM EMERGENCY HOSPITAL
(Regional Orthopaedic Centre—440 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Anaesthetist (B2) which becomes vacant on February 1, 1948. R practitioners who now hold A posts may apply, when appointment will be limited to six months, otherwise it will be for a period of one year. The salary is at the rate of £200 per annum, with full residential emoluments. In addition to the orthopaedic work, a large amount of general surgery is carried out. Applications should be sent to the undersigned by January 24.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

SURREY COUNTY COUNCIL
ST. HELIER COUNTY HOSPITAL
Carshalton (862 beds)
(a) REGISTRAR (B1)
for the Department of Physical Medicine
(b) ASSISTANT MEDICAL OFFICER (B1)
for Paediatric Department

Applications, including those from suitably qualified practitioners serving with H.M. Forces, are invited for the above appointments. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have completed a period of service with H.M. Forces or have been rejected for such service.

(a) Registrar for Department of Physical Medicine. Candidates fust have had experience in house appointments and should have had special experience and interest in Physical Medicine. The commencing salary will be fixed according to qualifications and experience on the scale £550 by £50 to £700 per annum inclusive, plus payment in cash of £150 per annum in lieu of residential emoluments. The tenure of the appointment is limited to a maximum of four years.

(b) Assistant Medical Officer for Paediatric Department. Candidates must have had previous experience in house appointments. The duties will be mainly in the Paediatric Department but may also include general duties as required by the Medical Superintendent. Salary £250, £350, £400 or £450 per annum, according to qualifications and experience, plus full residential emoluments and bonus. The appointment will be for six months, renewable for a further period of six months.

Information concerning the appointments may be obtained from the Medical Superintendent of the hospital, to whom applications, by letter, should be sent by January 28, 1948.

SURREY COUNTY COUNCIL
EPSOM COUNTY HOSPITAL
Dorking Road, Epsom (450 beds)
Resident ASSISTANT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those serving in H.M. Forces, for the above appointment. The duties will be mainly in the Surgical Unit but will also include relief anaesthetic and general duties as required by the Medical Superintendent. Candidates must have had previous experience in a house appointment. Salary £250, £350, £400 or £450 per annum, according to qualifications and experience. The appointment is for six months, renewable for a further six months. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have already completed a period of service with H.M. Forces, or have been rejected for such service. Enquiries relating to the appointment should be made to the Medical Superintendent of the Hospital, to whom applications by letter, stating present appointment, should be sent by January 21, 1948.

SOMERSET COUNTY COUNCIL
MUSGROVE PARK HOSPITAL
Taunton, Somerset (Over 300 beds)
RESIDENT HOUSE SURGEON (B2)
(male or female)

Salary is at the rate of £350 per annum, with full residential emoluments. R practitioners holding A posts may apply. The appointment will be for a period of six months and will be limited to six months if an R practitioner is appointed. The work will consist primarily of the care of a Children's Unit under the direction of a consultant paediatrician and a Maternity Unit under a consultant obstetric surgeon, but there are opportunities for some general orthopaedic surgical and rehabilitation work. The hospital is under the joint control of the Somerset County Council and the Ministry of Pensions. Forms of application are available on request and should be forwarded to the County Medical Officer of Health, County Hall, Taunton, not later than Saturday, January 31, 1948.

WORCESTERSHIRE COUNTY COUNCIL
MALVERN URBAN DISTRICT COUNCIL
UPTON-ON-SEVERN RURAL DISTRICT COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH AND MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners (with the D.P.H.) for the combined appointment of Assistant County Medical Officer of Health and Medical Officer of Health for the above mentioned districts. The appointment will be terminable on three months' notice. The person appointed will be required to reside in a suitable centre within the districts and to devote full time to the duties of the combined appointments and will be restricted from engaging in private practice. It will be a condition that the officer on vacating one appointment shall relinquish all of them. The appointment will be superannuable and the officer will have to undergo a medical examination. The combined salary will be £1,040 per annum, rising to £1,140 (with cost-of-living bonus, at present £59 16s. per annum), and £140 per annum for travelling expenses. Unfurnished house available at Upton-on-Severn for successful candidate. Applications, on forms to be obtained from the County Medical Officer, County Buildings, Worcester, to be addressed to the Clerk of the County Council Shirehall, Worcester, not later than January 31, 1948.—W. R. Scurfield, Clerk to the County Council J. Bulman, Clerk to the Malvern Urban District Council. H. H. Foster, Clerk to the Upton-on-Severn Rural District Council. (P120).

WEST RIDING COUNTY COUNCIL
Public Health Department
CHILD HEALTH OFFICER

The West Riding County Council invite applications for the appointment of a Child Health Officer. This will be a senior clinical post in the School Health and Child Welfare Services, and will include also the charge of children's beds in one or more hospitals. There are three such posts, two of which have been filled, and the remaining post is in the North Western area of the County. Applicants must have a wide experience and specialist knowledge of paediatrics and be a member of the Royal College of Physicians of London. The successful candidate should be willing to undertake additional duties if required in the department of the Professor of Child Health of a University. The salary range will be £1,300 to £1,450 per annum, plus cost-of-living bonus at present valued at £59 16s. per annum. Experience will be taken into account when determining the commencing salary. Travelling and subsistence allowance will be paid in accordance with the County scale. The appointment will be subject to the Local Government Superannuation Act, and the successful candidate will be required to pass a medical examination. Forms of application can be obtained from the undersigned and should be returned, together with the names of three persons to whom reference can be made, not later than January 31, 1948.—Fraser Brockington, County Medical Officer, County Hall, Wakefield.

ACTON HOSPITAL
Gunnersbury Lane, Acton, W.3
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable under the National Service Acts, for the appointment of Casualty Officer (A) from February 1. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £150 per annum, with full residential emoluments. Applications, with copies of two testimonials, to be sent to the undersigned by January 26.—Donald C. D. Sword, House Governor.

BURY INFIRMARY, Lancashire (161 beds)
(With post-operative unit to be opened during the next few months—190 approx.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from suitably qualified male practitioners for the above post which becomes vacant at the end of February. Possession of the Fellowship of one of the Royal Colleges will be an advantage, but applications from others (including those studying for this qualification) will be considered. The post is particularly suitable for those who are intending to take the F.R.C.S. examinations in due course, and its tenure is for one year in the beginning with the possibility of an extension for a further year. Applicants should have held a house appointment and R practitioners holding B2 posts are invited to apply. Applications from practitioners holding B1 posts can only be considered where the applicant is ineligible for H.M. Forces. Salary will not be less than £400 per annum to commence, and with full residential emoluments. Applications, stating whether married or single, to the undersigned not later than February 7.—H. Wilkinson, Superintendent.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also Incorporating the Queen's Hospital, 1840-1941)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following A posts for six months from February 1 :—

ONE HOUSE SURGEON to the Professorial Unit.
ONE HOUSE SURGEON to the Neuro-Surgical Department.
THREE HOUSE SURGEONS to the Ear, Nose, and Throat Department.
FOUR GENERAL HOUSE SURGEONS.
ONE HOUSE PHYSICIAN for duty at the Midland Nerve Hospital.

Salary in each case at the rate of £70 per annum, with full residential emoluments.

Applications should be sent to the undersigned at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also Incorporating the Queen's Hospital, 1840-1941)
RESIDENT ANAESTHETISTS (B2)

Applications are invited from registered medical practitioners, male and female, for the appointments of Resident Anaesthetist (B2), including R practitioners who now hold A posts. The appointments are for six months and are recognized Resident Anaesthetist posts for the purpose of taking the Diploma in Anaesthetics. Salary £100 to £120 per annum, according to experience, with full residential emoluments. Applications should be sent to the undersigned at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BEXHILL HOSPITAL, Bexhill-on-Sea (62 beds)
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of a Resident Medical Officer (A), vacant February 1, 1948, including practitioners within three months of qualification and liable under the National Service Acts, 1939-41, when appointment will be for a period of six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications to be addressed to the Secretary.

BATTERSEA GENERAL HOSPITAL
Battersea Park, S.W.11
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable for service under the National Service Acts for the above appointment. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications, accompanied by two recent testimonials, should be sent to the Secretary of the Hospital.

BRITISH HOSPITAL FOR MOTHERS AND BABIES
Samuel Street, Woolwich, S.E.18
HOUSE SURGEON (A)

Required on February 1, House Surgeon (A), male or female. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. If held by an R practitioner the appointment will be limited to six months. Hospital approved for the M.R.C.O.G. Salary £150 per annum. Apply to the Secretary.

BOOTLE GENERAL HOSPITAL, Liverpool, 20
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Salary £350 per annum, with full residential emoluments. There are three other resident officers. Preference will be given to actual or intending Fellows of the Royal College of Surgeons. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and ineligible for H.M. Forces, may apply. Applications should be sent to the Superintendent at the above address as soon as possible after the appearance of this advertisement.

BOOTLE GENERAL HOSPITAL, Liverpool, 20
HONORARY ASSISTANT SURGEON
to the Ear, Nose and Throat Department

Applications are invited for the above position. Candidates must be Fellows of one of the Royal Colleges of Surgeons of the United Kingdom, and should hold the Diploma of Laryngo-Otology. Applications, giving full details of age, training and experience, and names and addresses of three referees should be sent to the undersigned by Tuesday, January 27, 1948.—A. J. Cooper, Superintendent.

BOOTLE GENERAL HOSPITAL, Liverpool, 20
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, men and women, for the above appointment, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment is for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent as soon as possible to the Superintendent.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Resident Surgical Officer (B1), vacant on February 1, 1948 (including R practitioners who now hold B2 posts). Applications from R practitioners who hold B1 posts cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £300 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (B1) vacant now. Applicants should have held house appointments and had surgical experience. Capability to perform emergency operations a recommendation. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, are invited to apply. Salary £350 per annum with full residential emoluments. Applications should be sent to the undersigned.—Arthur L. Bourne, Secretary-Superintendent.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male, for the post of House Physician (B2), including R practitioners who hold B1 appointments. Salary £225 per annum, with full residential emoluments. To R practitioners appointment is for six months. Applications should be sent immediately to A. L Bourne, Secretary-Superintendent.

BRISTOL MATERNITY HOSPITAL
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A) to the Bristol Maternity Hospital, for a period of six months commencing on March 1, 1948, at a salary of £150 per annum. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. The appointment is recognized by the R.C.O.G. Applications on forms to be obtained from the undersigned should be returned not later than January 21, 1948.—A. B. Scott, Royal Infirmary Branch, Bristol Royal Hospital, Bristol, 2.

BRITISH LEGION VILLAGE
Preston Hall, Maidstone, Kent
RESIDENT ASSISTANT MEDICAL OFFICER

Candidates must have some experience in treatment of pulmonary tuberculosis. Preference given to those who have served in H.M. Forces. Post in E.M.S. under Ministry of Health. Salary £550 per annum, plus consolidation addition and allowance £100 per annum if board and lodging not supplied. Salary, addition, and allowance paid by Ministry of Health. Appointment terminable by a month's notice on either side. Applications to Secretary by January 31, 1948.

COUNTY INFIRMARY, Carmarthen
(102 beds, including Maternity Unit)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male or female, for the post of House Physician (A), including practitioners within three months of qualification who are liable under the National Service Acts. The appointment is for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent to the undersigned.—A. W. Youngs, Chief Administrative Officer.

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
PAEDIATRIC SURGEON

Applications are invited for the post of Paediatric Surgeon. Applicants will be required to devote their entire time to paediatric surgery and associated teaching and research. The remuneration for a full-time appointment would be £2,000 per annum, but consideration might be given to a part-time appointment at £1,500 per annum, allowing of private practice in paediatric surgery. Applicants must be Fellows of the Royal College of Surgeons and have had experience in the surgery of childhood. Applications with the names of three referees should be submitted to the Superintendent and Secretary, The Children's Hospital, Western Bank, Sheffield, 10, not later than January 19, 1948.

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant now. Salary at the rate of £100 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent to the undersigned immediately. The successful applicant must be a member of a Medical Defence Society.—T. H. G. Gartland, Superintendent and Secretary.

COLDEAST COLONY, Sarisbury Green, and Tatchbury Mount, Totton, near Southampton
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male and female, for the appointment of Assistant Medical Officer (B1) at the above Mental Deficiency Institution. Salary £455, rising by £32 10s. to £585, plus £50 per annum for possession of D.P.M., with cost-of-living bonus and the usual residential emoluments. Suitably qualified R practitioners holding B2 appointments and also those in B1 posts and ineligible for H.M. Forces are invited to apply. Applications to be sent by first post on January 26, 1948, to A. Wilson, Medical Superintendent, Coldeast Colony, Sarisbury Green, Hants.

CHARING CROSS HOSPITAL
FULL-TIME SURGICAL SPECIALIST

Applications are invited from suitably qualified practitioners for the appointment of full-time Surgical Specialist at the Hospital's Annexe located at the Mount Vernon Hospital, Northwood, Middlesex. Salary at the rate of £1,000 per annum. The appointment is to be made in accordance with the provisions of Ministry of Health Circular 202/46 relating to ex-Service Specialists, and in the first instance will be from February 1, 1948, until the appointed day. Applications should be addressed to the House Governor, Charing Cross Hospital, Agar Street, Strand, W.C.2, to arrive not later than first post January 28, 1948.

CHARING CROSS HOSPITAL
CLINICAL ASSISTANT (Male)
to the Obstetric Department

The Council invite applications for the post of Clinical Assistant (male) to the Obstetric Department. Honorarium £50 per annum. Applications should be sent to the undersigned not later than first post January 26, 1948.—George J Jones, House Governor, Charing Cross Hospital, W.C.2.

CARDIFF ROYAL INFIRMARY
(Teaching hospital of the Welsh National School of Medicine)
HONORARY PLASTIC SURGEON

Applications are invited for the appointment of Honorary Plastic Surgeon. The regulations provide that: "Each Honorary Surgeon and Honorary Assistant Surgeon shall be a Master of Surgery of a University of the United Kingdom or a Fellow of one of the Royal Colleges of Surgeons in the United Kingdom and he shall confine himself in his practice to his specialty." Applications should be sent to the undersigned not later than January 31, 1948. Candidates are required to submit fifty copies of their applications and testimonials.—Arnold Tunstall, House Governor.

COVENTRY AND WARWICKSHIRE HOSPITAL
RESIDENT REGISTRAR-ANAESTHETIST (B1)

Applications are invited from medical practitioners suitably qualified and experienced for the post of Resident Registrar-Anaesthetist (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £500 per annum with full residential emoluments. The appointment is for twelve months in the first instance. Applications to be addressed to the House Governor and Secretary, Coventry and Warwickshire Hospital, Coventry.

COVENTRY AND WARWICKSHIRE HOSPITAL
HOUSE SURGEON (A)

House Surgeon (A) for Fracture and Accident Wards now about to be re-opened. Salary at the rate of £200 per annum with full residential emoluments. Appointment is for six months in the first instance. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications with full details to the House Governor, Coventry and Warwickshire Hospital, Coventry.

CARDIFF CITY MENTAL HOSPITAL
Whitchurch, Cardiff
HOUSE PHYSICIAN (A)

Applications, including applications from practitioners within three months of qualification who are liable under the National Service Acts, are invited for the post of House Physician (A). Salary £300 per annum, with full residential emoluments. R practitioner appointment limited to six months, otherwise, in certain circumstances, may be renewable for a further six months. The successful applicant will have an opportunity of acquiring knowledge in every branch of psychiatry including psychosis, neuroses (in-patient and out-patient), child psychiatry and neuro-psychiatric research. Forms of application from the Physician Superintendent.

COUNTY MENTAL HOSPITAL, Gloucester
Resident ASSISTANT MEDICAL OFFICER (B1)

Resident Assistant Medical Officer (B1) required. Salary (inclusive of bonus) £640 per annum, with additional £50 for possession of D.P.M., plus emoluments consisting of board, residence, and laundry, valued at £104 per annum for superannuation purposes. (Married quarters are not available.) The appointment will be a permanent one and 3 per cent deduction will be made under the Asylums Officers' Superannuation Act, 1909. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should be sent to the Medical Superintendent as soon as possible.

COUNTY MENTAL HOSPITAL
Rainhill, near Liverpool
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the appointment of Assistant Medical Officer (B1). Salary £465 by £30 to £555, plus residential emoluments valued at £200 per annum, together with cost-of-living bonus at present £59 16s. per annum. An additional £50 per annum paid to holders of the D.P.M. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces are invited to apply. Applications, accompanied by copies of two recent testimonials to be forwarded immediately to the Medical Superintendent.

COVENTRY AND WARWICKSHIRE HOSPITAL
Coventry
HOUSE SURGEON (A)
to the General Surgical Department, combining E.N.T. Duties

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) to the General Surgical Department, combining Ear, Nose and Throat duties, including R practitioners within three months of qualification. The appointment, which is for six months, is vacant February 6, 1948. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL, Coventry
ASSISTANT CLINICAL PATHOLOGIST

Applications are invited for the post of Assistant Clinical Pathologist at Coventry Joint Laboratory. The Laboratory, situated at the Coventry and Warwickshire Hospital, is administered by a Committee representing the Hospital and the City Council of Coventry and undertakes the whole of the pathological and bacteriological work for the Health Committee and for the Hospitals (voluntary and municipal). The appointment is full-time and non-resident. Salary at the rate of £1,000 per annum. Applications should be addressed to the Secretary, Coventry Joint Laboratory Committee, Coventry and Warwickshire Hospital, Coventry.

COUNTY MENTAL HOSPITAL
Winwick, Warrington
JUNIOR ASSISTANT MEDICAL OFFICER

Applications are invited from suitably qualified R practitioners holding B1 appointments for the post of Junior Assistant Medical Officer. Salary at present £755 per annum (of which £200 are in the form of emoluments if resident or £60 if occupying a house on the Hospital Estate) together with £50 for possession of the D.P.M., and cost-of-living bonus (half bonus only in cash if resident). Applications addressed to the Medical Superintendent to be received not later than 9 a.m. on Saturday, January 31, 1948.

CHESTER ROYAL INFIRMARY (225 beds)
CASUALTY HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of Casualty House Surgeon (A) to take up duty as soon as possible. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the General Superintendent and Secretary.

Have you read the notice at top of page 12 ?

Have you read the notice at top of page 12 ?

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(Beds, Hospital 287, Annexe 33)
SECOND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Second Casualty Officer (A). Salary £225 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications to be sent as soon as possible to M. H. Boone, House Governor and Secretary.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth, Cornwall
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant immediately. Salary at the rate of £200 per annum, with the usual residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications to be addressed to J. C. Field, Secretary-Superintendent.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL (215 beds)

Applications are invited from registered medical practitioners (male) for the following appointments:
HOUSE PHYSICIAN (A)
HOUSE SURGEON (A)

Practitioners within three months of qualification and liable for service under the National Service Acts may apply, when the appointment will be for six months, otherwise renewable. Salary £175 per annum, with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE, Manchester, 20
Assistant RESIDENT SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B2), duties to commence February 1, 1948. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £200 per annum. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications, accompanied by the names of two referees, should be sent at once to the Superintendent.

CONNAUGHT HOSPITAL, E.17
(Voluntary Hospital, 120 beds)
HOUSE SURGEON (B2)

Applications are invited from registered practitioners (male) for the appointment of House Surgeon (B2), vacant now. Practitioners who now hold A posts may apply. Salary will be at the rate of £200 per annum, with board residence. Applications should be sent immediately to R. Halton Harrison, General Secretary.

CHORLEY AND DISTRICT HOSPITAL
Lancashire
HOUSE SURGEON (B2)

House Surgeon (B2) required. Position vacant February 11. Salary £300 per annum, with full residential emoluments. Practitioners who hold A posts are invited to apply. The appointment will be for six months. Applications to be sent to the undersigned.—H. Hill, Secretary-Superintendent.

DISTRICT INFIRMARY, Ashton-under-Lyne
(Normal capacity, 200 beds)

Applications are invited for the following positions, viz.:—

RESIDENT ANAESTHETIST AND HOUSE SURGEON (B2), including R practitioners who hold A posts. Salary £250, plus certain fees. The hospital is recognized for the D.A. diploma in anaesthetics.

CASUALTY OFFICER (B2), including R practitioners who hold A posts. Salary £200.

HOUSE PHYSICIAN (A), with some surgical duties, including practitioners within three months of qualification who are liable under the National Service Acts. Salary £200.

Full residential emoluments in each case. If held by R practitioners, appointments will be limited to six months. Apply at once to Frank Oliver, General Superintendent.

DEVON MENTAL HOSPITAL
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) (male), who must be legally qualified and registered and under 35 years of age. Salary £455 per annum, rising by £25 per annum to £555, with cost-of-living bonus at present £59 16s. An additional £50 per annum will be paid when the D.P.M. is obtained. Board, apartments, laundry and attendance in addition valued at £150 per annum. The appointment is subject to the provisions of the Asylums Officers Superannuation Act, 1909. Suitably qualified practitioners holding B2 posts, also those holding B1 posts and ineligible for H.M. Forces may apply. Applications should be addressed to the Medical Superintendent, Devon Mental Hospital, Exminster, near Exeter, Devon.

DERBYSHIRE ROYAL INFIRMARY, Derby
SURGICAL REGISTRAR (B1)
E.N.T. and NEURO-SURGICAL HOUSE SURGEON (A)

Surgical Registrar (B1), vacant January 20, 1948, six months' appointment. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £350 per annum, with full residential emoluments.

E.N.T. and Neuro-Surgical House Surgeon (A), vacant February 1, 1948, six months' appointment. Practitioners within three months' of qualification who are liable under the National Service Acts are invited to apply. Salary £200 per annum, with full residential emoluments.

Applications to be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the above appointment from medical practitioners, including R practitioners, who hold B2 appointments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The post, vacant January 26, is for six months (with the option of a further six months), and will carry a salary of £300 per annum, rising to £350, after six months, with full residential emoluments. Applications should be sent at once to the undersigned.—G. W. Beckwith, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, for the above appointment, vacant January 21, 1948. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DONCASTER ROYAL INFIRMARY (330 beds)
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners (male) for the appointment of Casualty Officer (B2). Salary £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. This large industrial area offers excellent opportunities for gaining experience. Applications should be sent immediately to A. Jones, Secretary-Superintendent.

DREADNOUGHT SEAMEN'S HOSPITAL
Greenwich, S.E.10
HOUSE SURGEON (B2)

As from February 1, 1948, there will be a vacancy for House Surgeon (B2). Applications are invited from registered British medical practitioners, male, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications to be sent to the undersigned on or before January 21, 1948.—F. A. Lyon, Administrator and Secretary.

DREADNOUGHT SEAMEN'S HOSPITAL
Greenwich, S.E.10
CASUALTY OFFICER (B2)

As from February 1, 1948, there will be a vacancy for Casualty Officer (B2). Applications are invited from registered British medical practitioners, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £200 (if resident) or £300 (if non-resident). Applications to be sent to the undersigned on or before January 21, 1948.—F. A. Lyon, Administrator and Secretary

EAST SUFFOLK AND IPSWICH HOSPITAL
Ipswich

Applications are invited from registered medical practitioners for the following posts which are now vacant:—

1. **RESIDENT MEDICAL OFFICER (B1).** Salary £650, with house, fuel and lighting.
2. **RESIDENT SURGICAL OFFICER (B1)** who is also Deputy R.M.O. Salary £500, with full residential emoluments.

Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Preference given to M.D. or M.R.C.P. for the R.M.O. and M.S. or Fellowship for the R.S.O. Applications to be sent to Arthur Griffiths, Secretary, The Hospital, Ipswich.

EAST SUFFOLK AND IPSWICH HOSPITAL
Ipswich (389 beds)
HOUSE SURGEON (B2)
to the Orthopaedic and Fracture Department

Applications are invited from registered medical practitioners, including R practitioners now holding A posts, for the appointment of House Surgeon (B2) to the Orthopaedic and Fracture Department, now vacant. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments.—Arthur Griffiths, Secretary, The Hospital, Ipswich.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, London, E.7
HONORARY ASSISTANT ORTHOPAEDIC SURGEON

The Board of Governors invites applications for the post of Honorary Assistant Orthopaedic Surgeon. Candidates must hold the diploma of Fellowship of the Royal College of Surgeons of England or Edinburgh and had experience in Orthopaedic Surgery. Candidates will be expected to send a copy of their application, and to call upon 15 members of the Honorary Staff. Applications, including the names of three referees, or accompanied by copies of three recent testimonials, should be forwarded to the undersigned as soon as possible.—Reginald Perry, Secretary-Superintendent.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, London, E.7
ORTHOPAEDIC REGISTRAR

Applications are invited for the post of Orthopaedic Registrar. The successful candidate will be expected to attend the hospital two sessions per week, and will receive an honorarium of 2½ guineas per session. Preference will be given to candidates holding the Diploma of F.R.C.S. Applications should be forwarded to the undersigned as soon as possible.—Reginald Perry, Secretary-Superintendent.

ELIZABETH GARRETT ANDERSON HOSPITAL
Euston Road, N.W.1
HOUSE PHYSICIAN

Applications are invited from registered women medical practitioners for the post of House Physician to become vacant on March 1, 1948. Appointment for six months. Salary at the rate of £100 per annum, with full residential emoluments.

HOUSE SURGEON

Applications are invited from registered women medical practitioners for the post of House Surgeon to become vacant on March 1, 1948. Appointment for six months. Salary at the rate of £100 per annum, with full residential emoluments.

Applications should be sent to the Secretary by January 30.

EBBW VALE HOSPITAL
Ebbw Vale, Mon.
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2), including R practitioners who hold A posts. The appointment will be for a period of six months. The work is predominantly surgical, and there is a full-time Resident Surgeon. Salary at the rate of £300 per annum, with full residential emoluments. Applications to the Resident Surgeon.

FINCHLEY MEMORIAL HOSPITAL
Granville Road, London, N.12 (84 beds)
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of Resident Medical Officer (A), vacant March 1, 1948. If held by an R practitioner the appointment will be limited to six months. Salary £200 per annum, with full residential emoluments. Applications should reach the undersigned not later than January 24, 1948.—T. E. Jarvis, House Governor and Secretary.

GATESHEAD MENTAL HOSPITAL
Stannington, near Morpeth, Northumberland
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1), male or female. Salary £455 per annum, annual increments £25 to £555 per annum, with an additional £50 to the holder of the D.P.M., and emoluments (board, apartments, washing and attendance) valued at £150 per annum. Variable cost-of-living bonus payable in addition, half of which is paid in cash, the other half added to the value of the emoluments. The appointment will be subject to the provisions of the Asylum Officers' Superannuation Act, 1909, and conditional on the candidate passing a medical examination, and will be terminable by one month's notice on either side. There will be an opportunity for gaining psychiatric experience in out-patient work, including Child Guidance. A small furnished flat is available. R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications, together with the names of three referees, should be sent to the Medical Superintendent as soon as possible.—J. W. Porter, Clerk to the Visiting Committee.

GENERAL HOSPITAL, Nottingham (589 beds)
SENIOR CASUALTY OFFICER (B2)
JUNIOR CASUALTY OFFICER (A)

Applications are invited for (a) Senior Casualty Officer (B2), including R practitioners who hold A posts, (b) Junior Casualty Officer (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Candidates for the senior position must have had previous experience. Salary £400 per annum. The salary for the junior position is £300 per annum. Both appointments are, in the first instance, for a period of six months. It is a large and busy Casualty Department. Applications should be sent to the undersigned as soon as possible.—Henry M. Stanley, House Governor and Secretary.

GENERAL INFIRMARY AT LEEDS
Castleford, Normanton and District Branch Hospital
(40 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the appointment of Resident Surgical Officer (B1). (There is no other resident.) Salary £175 per annum, board, residence, laundry, etc. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Applications should reach the undersigned not later than January 31.—S. Clayton Fryers, House Governor and Secretary.

GENERAL INFIRMARY AT LEEDS
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the appointment of Resident Medical Officer (B1). Candidates must have held house appointments. Salary £250 per annum, rising to £300 per annum, if reappointed after twelve months. Board, residence, laundry, etc. in addition. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and rejected by the R.A.M.C., may apply. Applications to reach the House Governor and Secretary not later than January 31, 1948.

GENERAL HOSPITAL, Nottingham
(589 beds, including "The Cedars" Branch Hospital)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners, male and female, for the appointment of a Resident Anaesthetist (B1). Applications from male R practitioners who hold B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. If held by a practitioner who is liable under the National Service Acts, the appointment will be for a period of twelve months. The salary is at the rate of £400 per annum, with full residential emoluments, and duties will commence immediately. Applications should be sent to Henry M. Stanley, House Governor and Secretary.

GENERAL LYING-IN HOSPITAL
York Road, Lambeth, S.E.1
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the post of Junior Resident Medical Officer (B2) for three months commencing March 1 next, to be followed—subject to satisfactory service—by a further three months as Senior Resident Medical Officer. R practitioners who hold A posts are invited to apply. Salary at the rate of £200 per annum with full residential emoluments. Appointment recognized by R.C.O.G. for Membership and Diploma in Obstetrics. Applications to be sent to the Secretary not later than January 31, 1948.

GUY'S HOSPITAL, S.E.1
ASSISTANT PHYSICIAN

Applications are invited from Service candidates and others for the appointment of Assistant Physician to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent, to whom letters of application (20 copies), together with names of three referees, should be submitted not later than January 31, 1948, and from whom any further information desired can be obtained.

GUY'S HOSPITAL, S.E.1
ASSISTANT OBSTETRIC SURGEON

Applications are invited from Service candidates and others for the appointment of Assistant Obstetric Surgeon to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent, to whom letters of application (20 copies), together with the names of three referees, should be submitted not later than January 31, 1948, and from whom any further information desired can be obtained.

GROSVENOR SANATORIUM, Ashford, Kent
SECOND ASSISTANT MEDICAL OFFICER (B2)

Second Assistant Medical Officer (B2) required at a salary of £400 per annum with full residential emoluments. R practitioners who now hold A posts may apply when appointment will be limited to six months. Post will become vacant on February 9. Tuberculosis experience desirable. Applications should be sent to B. Roberts, Medical Superintendent, Grosvenor Sanatorium, Ashford, Kent.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HOLLOWAY SANATORIUM
Virginia Water, Surrey
Private Registered Mental Hospital
RESIDENT HOUSE PHYSICIAN (A)

Required, six months' appointment. Practitioners within three months of qualification and liable to service under the National Service Acts may apply. Salary £350 per annum, plus full residential emoluments. All modern methods of treatment are carried out at the hospital. Applications, with names of two referees, to be sent to the Medical Superintendent not later than first post Saturday, January 24, 1948.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
HONORARY RADIOLOGIST

The Council of Management invites applications for the office of Honorary Radiologist consequent upon the appointment of Dr. E. Rohan Williams, the present holder of the office, as Director of the Radiological Department, St. Mary's Hospital, W.2. Candidates are required to be medical practitioners engaged solely in consulting practice in this specialty and to possess a higher diploma in medical radiology. It is a condition of the appointment that attendance shall be made on at least five full half days weekly. Private practice in the department which is substantial is permitted, in accordance with regulations laid down by the Council. Applications, giving full details, with the names of three referees, must reach the undersigned not later than February 2, 1948, from whom full particulars should be obtained in the first instance.—By order of the Council of Management, Kenneth A. F. Miles, House Governor.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
CASUALTY SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who hold A posts, for the resident post of Casualty Surgical Officer (B2) at the Out-patient Department, Bayham Street, N.W.1, vacant February 1, 1948, tenable for six months. Salary £200 per annum, with board, lodging and laundry. Applications on the prescribed form, with copies of three recent testimonials, to be returned to the undersigned forthwith.—Kenneth A. F. Miles, House Governor.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
CASUALTY MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, for the resident post of Casualty Medical Officer (B2) at the Out-patient Department, Bayham Street, N.W.1, vacant March 1 1948, tenable for six months. Salary £200 per annum with board, lodging and laundry. R practitioners holding A posts are invited to apply. Applications on the prescribed form with copies of three recent testimonials, to be returned to the undersigned by February 5.—Kenneth A. F. Miles, House Governor.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)

Applications are invited from registered medical practitioners for the following posts:

RESIDENT MEDICAL OFFICER (B2) vacant March 1, 1948. This appointment is for six months at a salary of £225 per annum with full residential emoluments. R practitioners holding A posts may apply.

HOUSE SURGEON (A) vacant March 1, 1948. Salary £175 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications to E. Barber, Secretary.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts:—

RESIDENT SURGICAL OFFICER (B1). Previous surgical experience essential. R practitioners holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary £250 per annum.

RESIDENT JUNIOR HOUSE SURGEON (A). In charge of Casualty, Ear, Nose, and Throat, and Fracture Departments. Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. Salary £200 per annum.

The appointments are for twelve and six months respectively. Applications should be sent to T. W. Upton, Secretary.

HERTFORD COUNTY HOSPITAL
(173 beds, plus E.M.S. beds)

Applications for the following appointments are invited from registered medical practitioners (male), including R practitioners who hold A posts. If held by an R practitioner the appointment will be for a period of six months.

HOUSE SURGEON (B2). Salary £200 per annum, with full residential emoluments.

Applications to be forwarded to P. G. Brooks, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
ANAESTHETIST

There is a vacancy on the visiting medical staff for an Anaesthetist. Applicants must be registered medical practitioners, practising solely as Anaesthetists, and must hold the Diploma in Anaesthetics; those holding appointments as First Assistant Anaesthetists at this hospital will be permitted to apply. Applicants will be required to call upon members of the visiting medical staff and to furnish them with copies of their applications, supported by three testimonials given specially for the purpose. Further particulars and form of application, which must be returned not later than February 2, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HARLOW WOOD ORTHOPAEDIC HOSPITAL
near Mansfield, Notts (355 beds)
E.M.S. and Civilian. Regional Orthopaedic Centre
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2) including R practitioners who now hold A posts. Appointment will be for a period of six months. Salary with full residential emoluments at the rate of £200 per annum. The hospital is recognized under the Government's Scheme for the Postgraduate Education of Medical Officers released from the Forces and falling within Classes I and III. Applications to be sent to the undersigned.—D. Roberts, Secretary-Superintendent.

HARTLEPOOLS HOSPITAL
Hartlepool, Co. Durham (126 beds, including Maternity Unit)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners to the above, including practitioners within three months of qualification and who are liable under the National Service Acts. The Visiting Consultant Staff includes Aural, Gynaecological, Ophthalmic, Orthopaedic and Urological Surgeons. The establishment also includes a House Physician and an Orthopaedic-Surgical Registrar. The appointment is for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent as soon as possible to the Superintendent.

HARTLEPOOLS HOSPITAL
Hartlepool, Co. Durham (126 beds)
NON-RESIDENT ORTHOPAEDIC SURGICAL REGISTRAR (B1)

Applications are invited from registered medical practitioners for the above post. Applications from R practitioners now holding B1 posts cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for six months in the first instance. Salary at the rate of £750 per annum. Apply at once to the Superintendent.

HULL ROYAL INFIRMARY
FIRST AND SECOND HOUSE SURGEONS (B2)

Applications are invited for the posts of First and Second House Surgeons (B2) (2 posts) vacant January. Suitably qualified R practitioners who now hold A posts may apply. Salary £200 per annum, with full residential emoluments. The appointments will be for six months in the first instance, but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required to commence immediately. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £200, with full residential emoluments. Applications to be sent to the undersigned.—H. J. Johnson, General Superintendent and Secretary.

INGHAM INFIRMARY, South Shields
HOUSE SURGEON (A)
CASUALTY OFFICER AND "SPECIALS" HOUSE SURGEON (A)

Applications are invited from medical practitioners for the posts of House Surgeon (A) (vacant mid-January) and Casualty Officer and "Specials" House Surgeon (A) (vacant February 1, 1948). Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. The appointment is for a period of six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned.—R. Hood Coulthard, Jr., House Governor and Secretary.

KING EDWARD VII WELSH NATIONAL MEMORIAL ASSOCIATION
NORTH WALES SANATORIUM, near Denbigh
(400 beds, pulmonary and non-pulmonary tuberculosis; X-ray department; major operative thoracic unit, etc.)
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of Junior Resident Medical Officer (B2), including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of one year. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—Norman Tattersall, Principal Medical Officer, Memorial Offices, Cathays Park, Cardiff.

KING'S COLLEGE HOSPITAL
Denmark Hill, S.E.5
ASSISTANT SURGEON
to the Urological Department

The Committee of Management invite applications for the post of Assistant Surgeon to the Urological Department. Twelve copies of applications giving the names of three referees should be sent before January 31, 1948, to the undersigned. Candidates must be Fellows of the Royal College of Surgeons of England.—S. W. Barnes, House Governor.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

KENT AND SUSSEX HOSPITAL,
Tunbridge Wells (350 beds)
RADIOTHERAPIST

Applications are invited from suitably qualified and experienced medical practitioners for the post of Radiotherapist in charge of the Department of Radiotherapy. The post is a full-time one and the salary offered £1,200 per annum. Treatment of private patients referred by members of the Honorary Medical Staff will be permitted. The hospital is fully equipped, has two Deep Therapy Units and its own radium. There is a Physicist (at present part-time only) attached to the Staff. Applications to be sent to the undersigned not later than February 27, 1948.—E. A. Wagstaff, Superintendent-Secretary.

KIDDERMINSTER AND DISTRICT GENERAL HOSPITAL
CASUALTY HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of Casualty House Surgeon (A), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months. Applications should be sent immediately to C. M. Smith, House Governor and Secretary.

KING GEORGE HOSPITAL, Ilford
RESIDENT SURGICAL REGISTRAR (B1)

Applications are invited from medical practitioners for the appointment of Resident Surgical Registrar (B1) to become vacant on February 29. Applicants should have held house appointments and surgical experience. Preference will be given to candidates who have passed the primary examination of the Royal College of Surgeons. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary is at the rate of £350 per annum, with full residential emoluments. Applications, stating present post, should be sent to the undersigned as soon as possible.—T. J. Rose, Deputy Secretary.

KING GEORGE HOSPITAL, Ilford
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of a House Physician (A), to become vacant on February 18, including R practitioners within three months of qualification. Appointment will be for a period of six months. Salary is at the rate of £180 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—T. J. Rose, Deputy Secretary.

LIVERPOOL MATERNITY HOSPITAL
Oxford Street, Liverpool, 7
PRE-MATERNITY REGISTRAR (B1)

Applications are invited for the position of Non-Resident Pre-Maternity Registrar (B1) to take medical charge of certain extern Ante-Natal Clinics under the hospital's administration, duties to commence as from April 1, 1948. The position will be subject to annual appointment with salary at £350 per annum. Candidates must have had a minimum of six months' experience in a maternity hospital, and the successful applicant, if eligible, will qualify for the ex-Services Rehabilitation Grant. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications to be addressed to the Honorary Secretary of the Medical Board at the hospital as above by not later than February 20, 1948.

LONGTON HOSPITAL, Stoke-on-Trent, Staffs
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications to B. Pitt, Secretary.

LEIGH INFIRMARY, Lancs
General Hospital (102 beds)
HOUSE SURGEON CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon Casualty Officer (B2), vacant immediately. Salary £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications to be sent as soon as possible to B. R. Carter, Secretary-Superintendent.

LYMINGTON AND DISTRICT HOSPITAL
Hampshire (107 beds)
HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Appointment for six months. Salary £150 per annum, full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Applications immediately to N. P. Wood, Secretary.

MOORFIELDS WESTMINSTER AND CENTRAL EYE HOSPITAL
(Moorfields Branch), City Road, E.C.1
SIXTH HOUSE SURGEON (B1)

Applications are invited for the post of Sixth House Surgeon (B1) (non-resident), salary at the rate of £250 per annum, plus payment of reasonable living expenses. Suitably qualified R practitioners holding B2 appointments are invited to apply. R practitioners now holding B1 posts cannot be considered unless they are ineligible for H.M. Forces. The appointment is for a period of four months from March 1, 1948, and the holder of the post at the completion of that time will be eligible for appointment as Fifth, Fourth, Third, Second and subsequently as Senior Resident Officer for similar periods, subject to the approval of the Central Medical War Committee. Applications must be received by the undersigned not later than January 28, 1948.—A. J. M. Tarrant, House Governor.

MEMORIAL HOSPITAL
Shooters Hill, London, S.E.18
(General Hospital, 130 beds)

Applications are invited for the following appointments :—

(a) **RESIDENT SURGICAL OFFICER (B1)** for a period of twelve months. Salary £350 per annum. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

(b) **HOUSE SURGEON (B2)** for six months. Salary £250 per annum. Practitioners who hold A posts are invited to apply.

Both appointments will take effect from February 1, 1948. Full residential emoluments included in each case. Closing date for the receipt of applications, January 21. Short-listed candidates will be invited to attend for interview on Friday, January 23. Applications should be sent to the House Governor.

MEMORIAL HOSPITAL
Shooters Hill, London, S.E.18
(General Hospital, 130 beds)
CASUALTY OFFICER (A)

Applications are invited for the post of Casualty Officer (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Salary £175 per annum, with full residential emoluments. Applications should be addressed to the House Governor as soon as possible.

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL (Non-Sectarian—102 beds)
Cheetham, Manchester, 8
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners for the appointment of House Physician (B2), including R practitioners who hold A posts. Salary at the rate of £200 per annum, with full residential emoluments. Appointment will be for a period of six months. Applications to be submitted forthwith to the undersigned. Duties to commence February 1, 1948.—C. D. Drake, General Superintendent.

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL, Cheetham, Manchester, 8
(Non-Sectarian, 102 beds)
CASUALTY OFFICER & HOUSE SURGEON (A)

Applications are invited for the post of Casualty Officer and House Surgeon (A). Salary at the rate of £175 per annum, with full residential emoluments. The appointment will be for a period of six months. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be addressed to the undersigned at the Hospital.—C. D. Drake, General Superintendent.

MANFIELD ORTHOPAEDIC HOSPITAL
Northampton
Assistant RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male and female, for the appointment of Assistant Resident Surgical Officer (B1) now vacant, including R practitioners who now hold B2 posts. Applications from R practitioners who now hold B1 posts cannot be entertained unless they have been rejected by the R.A.M.C. Salary is at the rate of £300 per annum, with full residential emoluments.—H. G. Lewis, Secretary-Superintendent.

MONTAGU HOSPITAL, Mexborough, Yorks
(122 beds) Voluntary, with Visiting Consultant Staff
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male, for the appointment of House Surgeon (B2). Commencing salary £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications to A. R. C. Renner, Secretary-Superintendent.

PRINCESS ELIZABETH ORTHOPAEDIC HOSPITAL
Exeter (150 beds with annexe)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of House Surgeon (B2) which will be vacant on March 1 next, including R practitioners who hold A posts. The appointment is for six months at a salary of £250 per annum, with full residential emoluments. Applications should be sent to the Secretary and Administrator.

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke-on-Trent
ASSISTANT RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Resident Surgical Officer (B1), with which is combined the duties of Casualty Officer. Applicants should have had surgical experience. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Demobilized medical officers are invited to apply. Salary at the rate of £350 per annum, with full residential emoluments. Applications to the House Governor.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of full-time Pathologist at the above hospital. Applicants should be exclusively engaged in the practice of Pathology, with wide training in Clinical Pathology and Morbid Anatomy. The post will be non-resident, with a commencing salary of £1,100, the successful candidate being permitted to engage in private practice, restricted to the private wing of the hospital, at present 23 beds. Applications should reach the Secretary not later than February 28, 1948.

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Gynaecologist, the Aural Surgeon, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
SENIOR HOUSE PHYSICIAN (B1)

Applications are invited from suitably qualified medical practitioners for the post of Senior House Physician (B1) with duties in the medical wards and clinics. Vacant early February. R practitioners holding B2 appointments and those holding B1 appointments who are not liable under the National Service Acts may also apply. Salary at the rate of £350 per annum, with the usual residential emoluments. Six months' appointment, which could be continued afterwards as Registrar. Applications should be sent as soon as possible to the Superintendent, Royal Infirmary, Preston.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
GYNAECOLOGICAL HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Gynaecological House Surgeon, with duties under Specialist Surgeons. Vacant early February. R practitioners within three months of qualification and liable under the National Service Acts may also apply. Six months' appointment. Salary at the rate of £175 per annum, with the usual residential allowances. Applications should be sent to the Superintendent, Royal Infirmary, Preston.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
RESIDENT ANAESTHETIST (B2)

Applications are invited from suitably qualified medical practitioners for the appointment of Resident Anaesthetist (B2). Duties under Specialist Anaesthetist. Post recognized for D.A. examination. R practitioners holding A appointments may apply. Six months' appointment but may be renewed by arrangement. Salary at the rate of £300 per annum, plus usual residential emoluments. Applications should be forwarded to the Superintendent, Royal Infirmary, Preston.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
RESIDENT OBSTETRICAL OFFICER (B1)

Applications are invited for the post of Resident Obstetrical Officer (B1) for the Maternity Hospital (45 beds and Ante-Natal Department), vacant end of January. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Preference will be given to candidates with a postgraduate Diploma in Obstetrics. Salary £300, with the usual residential emoluments. Applications should be forwarded to the Superintendent, Royal Infirmary, Preston.

PRINCE OF WALES'S HOSPITAL, Plymouth
SENIOR HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of Senior House Surgeon (B2) for duty at the Devonport Section, vacant February 1, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
JUNIOR HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of Junior House Physician and Casualty Officer (A). The appointment will be for a period of six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. C. Burdett, Director and House Governor.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of Casualty Officer (A). The appointment will be for a period of six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. C. Burdett, Director and House Governor

ORTHOPAEDIC HOSPITAL
Hartshill, Stoke-on-Trent
(78 beds, Fracture B Hospital, E.M.S.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Suitably qualified R practitioners, preferably with orthopaedic experience, holding B2 posts may apply. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £350 per annum, plus residential emoluments. Applications should be sent to the undersigned immediately.—Victor Johnson, Secretary-Superintendent.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, London, E.2
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male and female, for the above appointment, to become vacant March 1, 1948. Candidates must have had experience in the treatment of sick children. The appointment will be for six months in the first instance, and is renewable for subsequent periods not exceeding two years. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £300 per annum, with full residential emoluments. Application forms may be obtained from the undersigned and should be returned, with not more than three testimonials, not later than January 27, 1948.—Charles H. Bessell, General Secretary.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Glamis Road, London, E.1
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male and female, for the above appointment, to become vacant on March 1, 1948, including practitioners within three months of qualification who are liable under the National Service Acts. Appointment will be for six months. Salary at the rate of £150 per annum, with full residential emoluments. Application forms may be obtained from the undersigned and should be returned, with copies of not more than three testimonials, on or before January 27, 1948.—Charles H. Bessell, General Secretary, Hackney Road, E.2.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL INFIRMARY, Sheffield

Applications are invited from registered medical practitioners, male and female, for the following posts:—

HOUSE SURGEON (A)
to the Ophthalmic Department
HOUSE SURGEON (A)
to the Neurosurgical Department
HOUSE SURGEON (A)
to the Orthopaedic Department

now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner under these Acts, appointment will be for a period of six months. Salary is at the rate of £80 per annum, with full residential emoluments, and a bonus of £20 payable at the expiration of six months' satisfactory service. Applications should be sent forthwith to Joseph Griffith, General Superintendent, The Royal Infirmary, Sheffield, 6.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
January 13, 1948. Secretary.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, London, E.2
HOUSE PHYSICIAN (A)
TWO CASUALTY OFFICERS (B2)

Applications are invited from registered medical practitioners, male and female, for the above appointments to become vacant on March 1, 1948, including practitioners within three months of qualification and R practitioners now holding A posts. Appointment will be for six months in each case. Salary at the rate of £150 per annum, with full residential emoluments. Application forms may be obtained from the undersigned and should be returned, with copies of not more than three testimonials, on or before January 27, 1948.—Charles H. Bessell, General Secretary.

ROYAL DEVON AND EXETER HOSPITAL
Exeter
(324 beds, 7 Resident Medical Staff employed)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Physician (A), vacant on February 14, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications, with copies of two recent testimonials, should reach the undersigned by first post, Saturday, January 24 next.—L. Parkhouse, Secretary and Manager.

ROYAL EAST SUSSEX HOSPITAL, Hastings
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of a House Physician (A), vacant February 23, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to Wilfrid G. Kemsley, Secretary and House Governor.

ROYAL INFIRMARY, Sunderland (312 beds)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification, who are liable to serve under the National Service Acts, for the following resident appointments, which are tenable for a period of six months:—

TWO HOUSE SURGEONS (A), vacant on January 19 and February 1, 1948. This hospital is recognized by the Royal College of Surgeons for the Fellowship. Salary £175 per annum, with full residential emoluments.

Applications are also invited from registered medical practitioners, including R practitioners who now hold A posts, for the following resident appointments which are tenable for six months. Salary £250 per annum, with full residential emoluments:—

EAR, NOSE AND THROAT AND CASUALTY SURGEON (B2), vacant February 6, 1948.
ORTHOPAEDIC HOUSE SURGEON (B2), vacant February 7, 1948.

Applications to be forwarded to the House Governor and Secretary as soon as possible.

ROYAL MANCHESTER CHILDREN'S HOSPITAL, Pendlebury
ASSISTANT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable under the National Service Acts for the post of Assistant Medical Officer (A), non-resident, at the Out-patient's Department, Gartside Street, Manchester. The appointment will be for a period of six months commencing March 1, 1948. Salary is at the rate of £200 per annum. The hours of duty at the Out-patients' Department are from 9 a.m. until 1 p.m. or until the work of the Department is finished. Applications, stating age, qualifications (with dates) and nationality, and accompanied by copies of three recent testimonials, should be sent to the undersigned not later than January 31, 1948. —By Order, H. Heardman, General Superintendent and Secretary.

ROYAL MANCHESTER CHILDREN'S HOSPITAL, Pendlebury
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts for the appointment of House Surgeon (A) to become vacant on March 1, 1948. The appointment is for a period of six months and the salary is at the rate of £175 per annum, with full residential emoluments. Applications, stating age, qualifications (with dates) and nationality, and accompanied by copies of three recent testimonials, to be sent to the undersigned not later than January 31, 1948.—By Order, H. Heardman, General Superintendent and Secretary.

RUNWELL HOSPITAL, near Wickford, Essex (East Ham and Southend-on-Sea Joint Mental Hospital) (1,032 beds)
THREE HOUSE PHYSICIANS (B2)

Applications are invited from registered medical practitioners (male or female) for the posts of House Physician (B2) (three vacancies) to the above hospital. R practitioners holding A appointments may apply. If held by R practitioners the appointments will be limited to six months. There are excellent opportunities for up-to-date psychiatric experience and postgraduate work. Salary at the rate of £300 per annum for the first six months and £350 per annum thereafter (plus cost-of-living bonus) and full residential emoluments. Applications should be sent to the Physician Superintendent as soon as possible.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Brighton (126 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the appointment of House Physician (B2), to commence duties early in February. Salary at the rate of £200 per annum, with full residential emoluments. The hospital is recognized for the D.C.H. Diploma and M.D. Examination, Branch I. Six months' appointment. Applications to be sent to the undersigned.—Percy F. Spooner, Secretary-Superintendent.

(Continued on page 28)

Have you read the notice at top of page 12 ?

Established 1885

THE Medical Defence Union

MUSeum 1337

Annual Subscription £1 **MEMBERSHIP EXCEEDS 31,500** *Assets exceed £170,000*

Protection is essential for every practitioner engaged in any form of practice

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Square, London, W.C. 1

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)

Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

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(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

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(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To **ALL** advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1

Telephone: Euston 2111.

Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 12

PERSONAL

GLOS.—MATRON HAS VACANCIES in her exclusive Nursing Home, central heating, log fires, gardens, own produce, excellent nursing (S.R.N.) and domestic staff; private bathrooms, lounge, dining room. Fees from 10½ guineas.—Upton Grove, Tetbury.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue

PERCALL. The personal, 24-hour Telephone service exclusive to doctors, growing with your support, £5 5s. p.a., G.P.O. licensed.—BAL 3331. 387, London Road, Mitcham.

PRACTITIONER, RESIDENT MIDDLESEX, widely experienced general practice, industrial medicine, administration; seeks industrial, insurance or similar appointment, whole- or part-time. Fuller particulars from Box 6925, B.M.J.

BRITISH RED CROSS SOCIETY'S CLINIC FOR RHEUMATISM, Peto Place, Marylebone Road, London, N.W.1.—On the 18th Anniversary of the opening date, this being the last before the beginning of the National Health Service, the Committee of Management invite past and present members of the staff to a Reunion at the Clinic on Wednesday, March 10, 1948, from 5.30 p.m. to 7 p.m. Will those intending to be present please reply to the Administrator before March 1.

UNIVERSITY OF LONDON. GRANTS FOR RESEARCH. Applications are invited from members* of the University for grants from the Central Research Fund for assisting specific projects of research and for the provision of special materials and apparatus. Applications will be considered three times a year and must be received not later than March 31, July 31, and November 30. Forms of application and further particulars may be obtained from the Academic Registrar, University of London, Senate House, London, W.C.1.

*Members of the University are defined by Statute as the Chancellor, the existing Fellows thereof for their respective lives, the members for the time being of the Court and of the Senate respectively, the Professors and Readers and other Teachers of the University during their tenure of office, the graduates and the students.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

BRITISH POSTGRADUATE MEDICAL FEDERATION, University of London, POSTGRADUATE TRAVELLING FELLOWSHIPS.—The Governing Body of the British Postgraduate Medical Federation invites applications from registered medical practitioners for Travelling Fellowships, to enable graduates who are in the course of training as specialists in one of the pre-clinical or clinical branches of medicine to obtain experience of the methods of practice, education and research at Universities or centres in the United Kingdom and abroad. Candidates must be British subjects who are engaged in postgraduate study at one of the undergraduate or postgraduate Medical Schools of the University of London. The Fellowship will be tenable for one year and the value will normally be not less than £500, depending on the country where it is proposed to study. Travelling expenses will be paid in addition. Applications must be received before February 29, 1948, and application forms and further particulars may be obtained from the Secretary, Central Office, British Postgraduate Medical Federation, 2, Gordon Square, London, W.C.1.

CAMBORNE-REDRUTH MINERS' & GENERAL HOSPITAL, Redruth (60 beds).—Part 1 Midwifery Training School. **STAFF MIDWIVES** required for additional staff, S.R.N., S.C.M., essential. Rushcliffe Scale, F.S.S.N. or Public Authority Superannuation Scheme in force. Apply with full particulars to Matron.

LABORATORY TECHNICIAN WANTED, with experience in biological laboratory work. Some knowledge of the handling of experimental animals and the setting up of apparatus such as would have been acquired in assisting a biological research worker, or in the preparation of experimental practical classes. This experience might have been obtained in Physiological, Pharmacological, or Anatomical Department. Experience in histological technique and the like is not required. Apply in writing to Staff Department, Imperial Chemical Industries, Ltd., Blackley.

UNIVERSITY OF LONDON.—The Senate invites applications for the **READERSHIP IN BACTERIOLOGY** tenable at St. Thomas's Hospital Medical School (salary £900 to £1,300). Applications must be received not later than February 26, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

SLOUGH INDUSTRIAL HEALTH SERVICE.—Applications are invited from registered medical practitioners for the resident post of **CASUALTY OFFICER** to the Service. Candidates for the appointment (which will be for a period of six months renewable for a further six months) should have held hospital house appointments and be interested in industrial medicine. The salary will be at a rate of £400 to £450 per annum, according to qualifications and experience, with full residential emoluments. The successful candidate will be required to take up his duties on March 1, 1948. Applications, together with names of three referees, should be forwarded to the Medical Director, Slough Industrial Health Service, Social Centre, Farnham Road, Slough, on or before January 31, 1948.

UNIVERSITY OF LONDON.—The Senate invites applications for the **READERSHIP IN SURGERY** tenable at St. Thomas's Hospital Medical School (salary £900 to £1,300). Applications must be received not later than February 19, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

MEDICAL MAN with Pharmacist's qualifications is desirous of an appointment with a reputable firm of manufacturing chemists in an **ADVISORY AND ADMINISTRATIVE** capacity. Would accept a salary of £1,000 for year.—Box 6927, B.M.J.

UNIVERSITY OF LONDON, KING'S COLLEGE. LABORATORY TECHNICIAN required in the Anatomy Department, especially for histological work. Salary according to experience. Apply as soon as possible to the Secretary, King's College, Strand, W.C.2.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

COURSE OF INSTRUCTION IN TROPICAL MEDICINE AND HYGIENE.—The next Course will begin on March 1, 1948, and will cover a period of five months. It is primarily designed to prepare students for the examination of the English Conjoint Board for the Diploma in Tropical Medicine and Hygiene, but students not wishing to take the Diploma are accepted for the course which includes theoretical and practical instruction in Protozoology, Helminthology, Bacteriology, Clinical Pathology and Haematology, Tropical Medicine and Surgery, Principles of Nutrition, Medical Entomology, Vital Statistics, Sanitation, and the Principles of Preventive Medicine including the prevention of specific diseases in relation to the tropics. The fee for the course is £40. Cheques should be made payable to the London School of Hygiene and Tropical Medicine. Space permitting, candidates who do not wish to take the whole course may be admitted to certain parts of it separately. The fee for short periods of instruction is £2 2s. per week. Any intending students are advised to apply for registration at once. Further information regarding the course may be obtained from the Registration Office, London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London, W.C.1. Telephone number: Museum 3041.

Balfour Memorial Fund

A small sum is available annually for the payment or partial payment of fees for a student wishing to attend the course but unable to do so for financial reasons. In making allotments from the fund attention will be paid to: (a) proof that the candidate is, or will be, employed in an approved manner in the practice of Tropical Medicine overseas, (b) ability, and (c) financial need. Applications should be forwarded to the Dean.

CRANLEIGH SCHOOL, SURREY. ENTRANCE SCHOLARSHIPS, £120—£30. **INSTRUMENTAL** and **CHORAL,** £50—£30, are offered in March and June. At each examination one close Scholarship of not less than £50 per annum will be awarded to the son of a member of the Medical or Dental profession. Details from Bursar.

COACHING FOR D.C.H. EXAMINATION.—Personal tuition will be given for the March examination in London.—Box 6994, B.M.J.

MEDICAL CORRESPONDENCE COLLEGE, 19, Welbeck Street, London, W.1, provides COACHING for all Medical Examinations, D.A., D.P.M., D.O.M.S., D.L.O., D.C.H., D.M.R.D. and D.M.R.T., M.R.C.P., F.R.C.S., M.D. thesis, and all qualifying exams by a staff of highly qualified Tutors, Honoursmen, and Gold Medallists. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested.

NORTH LONDON POSTGRADUATE MEDICAL INSTITUTE, Bearsted Memorial Hospital, N.16; Chase Farm Hospital, Enfield; North Eastern Hospital, Tottenham, N.15; North Middlesex County Hospital, Edmonton, N.18; The Prince of Wales's General Hospital, Tottenham, N.15.—A **TWO WEEKS' COURSE IN OBSTETRICS,** suitable for those taking the D.Obst.R.C.O.G., will be held commencing on February 9, 1948. Fee for the course 10 guineas. Please apply, with details of qualifications and experience, to the Dean, The Prince of Wales's General Hospital, Tottenham, N.15.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. EXAMINERS FOR THE DIPLOMA IN ANAESTHETICS.—The Council invites applications for additional examiners for the Diploma in Anaesthetics, the examinations for which are conducted by the Examining Board in England. The vacancies are for the following: A **PATHOLOGIST** for Part I of the Examination. A **SURGEON** for Part II of the Examination. Applications in writing must reach the Assistant Secretary on or before Monday, February 2, 1948.—Kennedy Cassels, Secretary, Lincoln's Inn Fields, W.C.2.

THE INSTITUTE OF LARYNGOLOGY AND OTOLOGY, 330/332, Gray's Inn Road, London, W.C.1.—A special course for the **FINAL EXAMINATION IN OTO-LARYNGOLOGY** for the F.R.C.S. (England) commences on February 16, 1948. The course will occupy four evenings weekly for approximately eight weeks. The number is strictly limited. Further particulars may be obtained from the Dean.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment. 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

UNIVERSITY OF OXFORD, RADCLIFFE TRAVELLING FELLOWSHIP, 1948. An examination for a **FELLOWSHIP** of the annual value of £300, and tenable for two years, will be held during Hilary Term, 1948, at the University Museum, on February 16, 1948. Candidates must have passed all the examinations required by the University for the Degree of Bachelor of Arts and for the Degree of Bachelor of Medicine. They must not have exceeded four years* from the time of passing the last examination required for the Degree of Bachelor of Medicine. The successful candidate must before election declare that he intends to devote himself during the period of his tenure of the Fellowship to the study of Medical Science and to travel abroad with a view to that study. The Fellowship will be vacated *ipso facto* by a Fellow who spends more than twelve months in the whole within the United Kingdom. The Regius Professor of Medicine and the Examiners present a yearly report on the work done by each Fellow to the Electors, who may, if they think the report unsatisfactory, declare the Fellowship forfeited. Candidates will be required to submit an essay of not more than six thousand words on some subject, chosen by themselves, connected with the science or practice of Medicine, including preclinical subjects. With this essay they should submit a statement indicating the sort of work they would like to do during the period of tenure of the Fellowship, should they be successful. They will be examined *viva voce* on the date advertised. All intending candidates should send their names, addresses, qualifications and *curriculum vitae* together with the above-mentioned essay and statement regarding the nature of the work desired to the Regius Professor of Medicine, University Museum, on or before January 31, 1948.—(For the Radcliffe Examiners) A. W. M. Ellis, Regius Professor of Medicine.

*Under the provisions of Decree (9) of January 29, 1946, as amended by Decree (21) of January 28, 1947 (Examination Statutes, 1947-48, page 503), candidates are permitted, until September 30, 1951, to exclude any period of approved war service at the rate of one Term for each completed four months of service in reckoning their standing.

UNIVERSITY OF LEEDS.—A TEN WEEKS' COURSE for the Final F.R.C.S. examination will be held in Leeds General Infirmary, beginning on February 24. The number of candidates will be limited to fifteen. The fee for the course will be 10 guineas. Further information may be obtained from the Senior Administrative Officer, School of Medicine, Leeds, 2.

LECTURES

ROYAL COLLEGE OF PHYSICIANS OF LONDON

The following LECTURES IN GENERAL MEDICINE will be delivered at the College in Pall Mall East, S.W.1, at 5 p.m. on each day.

Date		Title	Lecturer
		FEBRUARY	
Mon.	2	Pain	The Lord Moran, M.C., M.D., F.R.C.P.
Tues.	3	Exophthalmus	W. Russell Brain, Esq., D.M., F.R.C.P.
Thurs.	5	Peptic Ulcer	T. C. Hunt, Esq., D.M., F.R.C.P.
Fri.	6	Tumours and Cysts of the Chest (First Lecture)	G. E. Beaumont, Esq., M.D., F.R.C.P.
Mon.	9	Fluid Balance Variations	H. L. Marriott, Esq., C.B.E., M.D., F.R.C.P.
Fri.	13	Tumours and Cysts of the Chest (Second Lecture)	G. E. Beaumont, Esq., M.D., F.R.C.P.
Mon.	16	To be arranged	
Tues.	17	Congenital Heart Disease	J. M. H. Campbell, Esq., O.B.E., D.M., F.R.C.P.
Thurs.	19	Gout	Henry Cohen, Esq., M.D., F.R.C.P.
Fri.	20	Hyperinsulinism and Hypoglycaemia	Henry Cohen, Esq., M.D., F.R.C.P.
Mon.	23	To be arranged	
Tues.	24	The Paroxysmal Tachycardias	J. M. H. Campbell, Esq., O.B.E., D.M., F.R.C.P.
Thurs.	26	Problems of Rheumatism in Childhood	Dr. J. Forest Smith, F.R.C.P.
Fri.	27	Signs of Mitral Stenosis	D. Evan Bedford, Esq., M.D., F.R.C.P.
		MARCH	
Mon.	1	Hormones in Medical Practice (First Lecture)	E. C. Dodds, Esq., M.V.O., M.D., F.R.S., F.R.C.P.
Tues.	2	Treatment of Paraplegia	W. Russell Brain, Esq., D.M., F.R.C.P.
Thurs.	4	Diseases of the Colon with particular reference to Ulcerative Colitis	T. C. Hunt, Esq., D.M., F.R.C.P.
Fri.	5	End Results of Upper Respiratory Infection in Children	Dr. J. Forest Smith, F.R.C.P.
Mon.	8	Hormones in Medical Practice (Second Lecture)	E. C. Dodds, Esq., M.V.O., M.D., F.R.S., F.R.C.P.
Fri.	12	Medical Aspects of Cerebral Tumour (First Lecture)	J. St. C. Elkington, Esq., M.D., F.R.C.P.
Mon.	15	Blood and Urine Analysis in Relation to Medical Practice	E. C. Dodds, Esq., M.V.O., M.D., F.R.S., F.R.C.P.
Tues.	16	The Treatment of G.P.I.	Aubrey Lewis, Esq., M.D., F.R.C.P.
Thurs.	18	Bright's Disease	R. V. Christie, Esq., M.D., F.R.C.P.
Fri.	19	Renal Function in Disease	R. V. Christie, Esq., M.D., F.R.C.P.
Mon.	22	The Common Anaemias	Sir Lionel Whitby, C.V.O., M.C., M.D., F.R.C.P.
Tues.	23	The Leucoses	Sir Lionel Whitby, C.V.O., M.C., M.D., F.R.C.P.
Thurs.	25	Medical Aspects of Cerebral Tumour (Second Lecture)	J. St. C. Elkington, Esq., M.D., F.R.C.P

The Royal College of Physicians is giving the above course of Postgraduate Lectures in Medicine. The inclusve fee for the course will be 7 guineas and the total entry will be limited to 200. Fees are payable in advance and must be received at the College by January 26 1948

H. E. A. BOLDERO, D.M.,
Registrar.

Pall Mall East,
London, S.W.1

UNIVERSITY OF MANCHESTER. DIPLOMA IN MEDICAL RADIOTHERAPY, R.C.P. and S. ENG. COURSE OF INSTRUCTION IN MANCHESTER.—A COURSE OF INSTRUCTION will begin at the Holt Radium Institute, Manchester, on April 1, 1948. This will continue until the end of January, 1949, to include one month's holiday in August. Inclusive fee 50 guineas. Lectures and practical demonstrations will be given in the following subjects: **Physics as applied to Radiotherapy**, W. J. Meredith and Physics Staff **Biological Effects of Radiation**, Dr. E. Paterson and Dr. W. M. Dale. **Pathology in Relation to Radiotherapy**, Prof. S. Baker and Dr. H. Russell. **Principles and Practice of Radiotherapy**, Dr. Ralston Paterson and Radiotherapy Staff. Thereafter it is hoped that paid posts will be found for candidates in Radiotherapeutic Departments where, they may complete the attendance required by these regulations. Further information may be obtained from the Dean of the Medical School, University of Manchester, to whom all applications must be sent. All applicants will be required to attend for interview before being accepted for the course. It is important that applications should be sent in as soon as possible, as only a limited number can be accepted and it is necessary for each candidate to ascertain from the Secretary of the Royal College whether he will be eligible to sit for the examination. Special consideration will be given to practitioners being demobilized. Service candidates may be eligible for grants under the postgraduate education scheme. One vacancy in the Course will be held for a selected candidate holding the Degree of F.R.C.S.* or M.R.C.P. who will be given an appointment as Clinical Assistant on the Radiotherapy Staff. Salary £650 per annum.

POSTAL COACHING for all Medical Examinations. Examination Successes 1901-46; M.D.Lond., 450; M.B., B.S.Lond., Final, 405; F.R.C.S.Eng., Primary, 357; F.R.C.S.Eng., Final, 282; M.R.C.P. Lond., 386; M.R.C.S., L.R.C.P., Final, 859; D.A. (1936-46), 110. F.R.C.S.Edin., D.Obst.R.C.O.G. M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17 Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

UNIVERSITY OF GLASGOW. Postgraduate Medical Education.—INTENSIVE COURSE IN SURGERY.—An intensive postgraduate course in Surgery will be conducted from April 12 to June 4, 1948. The Course will consist of clinical meetings, pathological demonstrations and lectures. Fees: 25 guineas. Since numbers will be restricted, those wishing to attend should make early application to the Director of Postgraduate Medical Education, The University, Glasgow, W.2, from whom further particulars may be obtained.

PRIMARY F.R.C.S.: COURSE OF LECTURE-DEMONSTRATIONS in Anatomy, Physiology, Pathology and Bacteriology on Monday and Thursday evenings, 7.30 p.m. to 10 p.m., February 9, to June 3, 1948. Lecture room, Royal Cancer Hospital. Apply: Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

ASSISTANTSHIPS

VACANT

Wanted immediately, Outdoor single or married Assistant (no children) for mixed industrial practice Yorkshire. Furnished accommodation provided. Car essential. Salary £700 plus £50 car allowance. —Box 6962, B.M.J.

Wanted, February* or earlier, Male Outdoor Assistant. Experienced, for mixed practice. Good salary and prospects. Car provided. Darlington.—Box 6985, B.M.J.

Wanted soon, young male Outdoor Assistant, Scotch or English, with car. Old-established mixed practice, with View if required, Birmingham. Salary by arrangement.—Box 6961, B.M.J.

Wanted, Married Assistant, South Wales country town. Unfurnished house provided. Car essential. £800, including car allowance.—Box 6930, B.M.J.

Wanted, Male Assistant, Scot, married. Must own car. Semi-rural practice, Derbyshire. Good salary. Excellent unfurnished house available.—Box 6945, B.M.J.

Wanted urgently, Indoor or Outdoor Assistant. Car owner essential. Suit newly qualified.—Box 6624, B.M.J.

Wanted, Assistant, Male, for general practice. Unfurnished flat available. Own car. Good salary and prospects. Start at once.—Box 6932, B.M.J.

Wanted, Assistant with Early View to Third Share, must be experienced man. Furnished rooms available with likely possession of house later. Interim salary at rate of £750 per annum, and £100 car allowance. S.W. England. Testimonials.—Box 6908, B.M.J.

Wanted immediately, Male Assistant, Scotch or English, Midlands country practice. Accommodation available. Some experience G.P. Car owner. References, usual bond. Terms by arrangement.—Box 6911, B.M.J.

Wanted, Male Assistant, single, young, long term, outdoor, must be experienced and well qualified. Mixed general practice, Bristol Commencing about March 1. References, usual bond. Car supplied. Salary by arrangement.—Box 6910, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Assistant wanted with View, male, English or Scot, for partnership practice in Beds country town. Salary £750 plus £100 car allowance.—Box 6964, B.M.J.

Assistant required in sound mixed practice South Midlands. Salary £900 per annum. Unfurnished accommodation available. British. Excellent prospects.—Box 6967, B.M.J.

Assistant, Outdoor, male, single, required for mixed practice. Salary £650, all found. Car provided or allowance.—Box 6966, B.M.J.

Assistant, male, aged between 30 and 40, preferably single, required in practice N.E. Midlands. Own car essential. Salary by arrangement. Living out.—Box 6963, B.M.J.

Assistant wanted in pleasant South Coast town, mixed practice (male). Car essential, allowance given. Send particulars to Box 6946, B.M.J.

Assistant, preferably with View to Partnership in West Riding city. Share worth over £1,500 per annum available. Must have own car. House with garden to rent.—Box 6906, B.M.J.

Assistant with View to Partnership in mixed practice in Birmingham.—Apply Box 6907, B.M.J.

Assistant, or with View, Cheshire town. Salary £600, plus accommodation in unfurnished flat.—Box 6909, B.M.J.

Outdoor Male Assistant required for mixed general practice, Reading, with own car. Inclusive salary £750, accommodation to rent.—Box 6928, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

Would doctor employed daytime like to live in comfortable Furnished Maisonette S.W.6. Three bed., gas fires, etc. in Exchange for three Evening Surgeries, on call every second Sunday, and occasional night calls?—Box 6965, B.M.J.

WANTED

Wanted, Assistantship with or without View, by woman aged 29, single, public school education. Qualified London. Three years R.A.M.C. Late H.S. and Medical Registrar London Teaching Hospital. Preferably Southern Counties or in or near London. —Box 6957, B.M.J.

Wanted, Assistantship by M.B.(Edin.), M.R.C.P. (London). Aged 49, married. Outdoor preferably with View. Extensive G.P. and hospital experience. Highest references and testimonials. Non-industrial district with living accommodation essential. Own car. Free on month's notice. State terms.—Box 6969, B.M.J.

Wanted, Assistantship, View to Partnership or Succession, British. 39, married. 11 years in busy general practice. Keen midwifery. Testimonials. Own car. Unfurnished house required.—Box 6968, B.M.J.

Wanted, Assistantship with View by M.B., B.S., aged 31, married. Own car. Southern England. Preferably country practice.—Box 6669, B.M.J.

Wanted, Assistantship with View Partnership or succession by Aberdeen graduate 1938. Six months H.S., five years R.N.V.R., three years G.P. experience. Anywhere in Scotland or North England.—Box 6934, B.M.J.

Wanted, Assistantship, Partnership or Practice by M.B., B.S. (Guy's), married, Horsham, Crawley, Haywards Heath area, but any good country practice in South considered, 13 years' hospital and G.P. experience. New car.—Box 6626, B.M.J.

Wanted, Assistantship, with or without View, in country practice in Lake District or N.W. England, by M.B., Ch.B., ex-R.N.V.R., single, own car, G.P and obstetric experience, good testimonials.—Box 6637, B.M.J

Aberdeen graduate 1942, aged 29, ex-Service, G.P. and hospital experience, desires Assistantship with definite View to Partnership or Buy Small Practice. Non-industrial preferred. Married, two children, own car. Unfurnished accommodation required. Free March.—Box 6912, B.M.J.

Assistantship wanted, age 29, single. Hospital and G.P. experience. South of England, London or Home Counties preferred. Free February.—Box 6935, B.M.J.

Aberdeen graduate, 28, hospital and G.P. experience, requires Outdoor Assistantship with View Partnership. Scotland preferred.—Box 6971, B.M.J.

Assistantship with View wanted by London M.B., B.S., married, own car. E.N.T., orthopaedic, mental, skins, infectious diseases, surgery and medical hospital experience and good G.P. experience. Good house or flat with garage essential. London or surroundings.—Box 6973, B.M.J.

Assistantship required by Irish graduate 1939, L.M. (Dublin). G.P. and hospital experience, 32, married, own car. Unfurnished house essential. Town preferred. Free March.—Box 6947, B.M.J.

Assistantship, Scotland, rural, semi-rural. St. Andrew's graduate, 26, H.S., casualty, district midwifery. Own car. Unfurnished house essential. Free mid-February.—Box 6682, B.M.J.

Assistantship wanted, preferably with View. Rural area or country town. Cambridge and London graduate, age 31, married, two children. Own car and furniture. Capital available.—Box 6671, B.M.J.

Experienced M.D.; recently own practice, free Surgeries, etc., travelling distance Ealing.—Box 6991, B.M.J.

M.B., Ch.B. (Glasgow) seeks Assistantship in London, with or without View. Age 35, married.—Box 6948, B.M.J.

Scot, M.B., 1942, age 28, requires Permanent Assistantship, married, no children, own car. Hospital, Army and G.P. experience.—Box 6970, B.M.J.

Married woman doctor, hospital and G.P. experience, requires Part-time Work in Sheffield, Chesterfield or Peak district.—Box 6933, B.M.J.

M.B., B.S., hospital experience, 33, married, desires Assistantship with View in small cathedral city or country town. Congenial work and partnership considered more important than large income. Capital available.—Box 6665, B.M.J.

Postgraduate student wishes to take one Evening Surgery weekly in N.W. London area; alternatives considered.—Box 6972, B.M.J.

Part-time Work wanted, London, E. or N., by competent practitioner. Prefer morning surgeries, Monday to Saturday.—Box 6914, B.M.J.

St. Thomas's man, qualified 1935, ex-Service, own car, seeks Part-time Work, afternoons or evenings, London area.—Box 6913, B.M.J.

Woman doctor, M.B., B.S., available for Parttime Work or Surgeries. Residence S.E.21.—Box 6949, B.M.J.

Woman doctor doing postgraduate work, experienced hospital, G.P., children, wishes Part-time Work London area.—Box 6668, B.M.J.

LOCUMS

VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars. —British Medical Bureau, 33, Cross Street, Manchester, 2.

Locum wanted for S.E. London practice owing to death of partner. Panel 1,500 and private. One with some experience of private practice preferred. House shortly available to suitable applicant.—Box 6936, B.M.J.

Locum Wanted, January 26, for some weeks, owing to illness. Urban district Hampshire, male or female. Mixed general practice. 1,000 panel, some midwifery. 14 guineas week, all found. Car provided.—Box 6986, B.M.J.

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Locum wanted immediately, at least four months, probable permanency. Preferably with own car. £14 14s. weekly all found, car allowance. Accommodation for wife if required.—Box 6950, B.M.J.

AVAILABLE

Experienced G.P. requires Locum Engagements. Excellent testimonials. London hospital. Ch. of England. Abstainer, preferably S.E. England. Own car.—Box 6974, B.M.J.

F.R.C.S.Ed., late Surgical Specialist R.A.M.C. Oxford and Middlesex. Extensive experience general surgery. Age 34. Free now.—Box 6975, B.M.J.

Locums or Part-time Work in Central or N.W. London. Well experienced hospital. G.P. D.P.H. —Box 6916, B.M.J.

M.B., M.R.C.P., ex-Service, experienced G.P., requires Locum mid-February to end March. S. England preferred. Car required.—Box 6951, B.M.J.

PARTNERSHIPS

OFFERED

East Midlands county town. Half Share old established Practice. Partnership worth £1,200. Small panel. Good class. Scope. Flat for rent. Premium 1½ years'. Capital. Own car.—Box P6976, B.M.J.

Newcastle-upon-Tyne, Junior Partnership is offered in firm of two, in large mixed practice. Share worth £1,800. £2,000 per annum offered.—Box P6977, B.M.J.

One-third Share large Practice, Essex area. Panel over 7,000 units. Suitable house to rent. Share worth approximately £2,400 gross. Best offer.—Box P6939, B.M.J.

Partner required. Share worth £2,500. Two years' purchase. Mixed practice, London, S.E.—Box P6915, B.M.J.

Third Share. Panel 4,100. North London, ten minutes West End. Premium £2,000. Preliminary Assistantship if desired.—Box P6628, B.M.J.

WANTED

Wanted, urgently, Partnership in South Coast area, well established practice. Scottish graduate, experienced, energetic. Capital available.—Box P6613, B.M.J.

Required, Partnership, preferably Jewish, in South Coast area, experienced practitioner, energetic, Scottish. Capital available immediate settlement.—Box P6612, B.M.J.

MEDICAL POSTS

VACANT

Bury Infirmary, Lancashire. Increase in laboratory staff. Applications are invited for the post of **Laboratory Technician.** Candidates should have had previous experience of this type of work and should have reached at least the Intermediate standard of the I.M.L.T. Preference will be given to candidates possessing the Institute certificate in Pathological Technique. Successful applicants will be expected to do general laboratory work in addition to histology. Salary in accordance with the Joint Negotiating Committee (Hospital Staff) salary scales. Federated superannuation scheme in operation. Applications to be forwarded to the Pathologist not later than January 31, 1948, from whom any further particulars can be obtained.—H. Wilkinson, Superintendent.

Jewish (mostly women) Convalescent Home 80 bedrooms, all amenities, including electrical treatment (New Venture), require Jewish lady doctor worldly, able assist management. Salary £1,000 bonus and suite of rooms. State age.—Box 6995 B.M.J.

WANTED

Experienced Oxford Graduate, 32, at present part time M.O. to large factory Middlesex, willing to do Similar Duties other firms in Middlesex and Surrey. Hours by arrangement.—Box 6987, B.M.J.

M.B., F.R.C.S., age 48, with wide experience home and abroad of general work, including surgery with gynaecology as speciality, seeks Post Abroad.—Box 6615, B.M.J.

Medical woman, M.B., D.P.H., who does not wish to practice clinical medicine, would appreciate suggestions of allied branches of work where her medical knowledge would be useful. Willing to undertake special training in other subjects as may be necessary.—Box 6937, B.M.J.

Oxford Graduate, 32, five years' experience organization large-scale clinical investigations and follow-ups, would welcome change. H.S., G.P. R.N.V.R., Factory M.O. experience. Well versed office routines. London area.—BM/OWLO, London W.C.1.

Radiologist, foreigner, with 15 years' practice seeks suitable appointment as Diagnostician.—Box 6917, B.M.J.

Scots Doctor, M.B., Ch.B.(Edin.), married, aged 32, ex-R.A.M.C., hospital, G.P. experience, knowledge tropical medicine, hygiene, wishes Post. appointment abroad. Hard work, adequate salary appreciated.—Box 6918, B.M.J.

PRACTICES

FOR SALE

Essex coastal town, well established mixed Practice, pleasant district. Panel 1,100. Receipts £2,500. Detached, modern house. Vendor going abroad. House and practice £8,200.—Box P6630 B.M.J.

For Sale.—South East Coast. Good-class Mixed Practice. £1,350. Panel 650. Very little night work no maternity. Freehold corner detached 5-bedroom house, with garden and garage, must be sold For practice and house £7,250. Capital essential.—Box P6992, B.M.J.

London, S.W.15, average receipts £2,500 approx certified figures. Panel 1,500, appointment £125 House and surgery combined, very low rental. Two years' purchase.—Box P6952, B.M.J.

Medical Practice, Private and Panel, in prosperous agricultural district 20 miles from Glasgow for sale, with suitable house. Gross earnings exceed £1,800. For full particulars apply Crawford, Herron & Cameron, Solicitors, 257, West George Street Glasgow.

Middlesex County. Well-established Middle Class Practice, 3,000 panel, receipts £5,000 annually. Receptionist kept. A house must be purchased locally Third share for disposal.—Box P6938, B.M.J.

Midlands, west of Birmingham, sound mixed Practice, panel 3,500, gross receipts over £4,000 Two houses, one partly furnished, for sale or rent Suit partners or principal and assistant. Health reasons for sale.—Box P6674, B.M.J.

North East Scotland. Old-established Practice Gross receipts over £2,000. Panel 1,350. Superior modern house in excellent position for sale with practice.—Box P6686, B.M.J.

North East Coast. Large old-established Practice for sale. Income £4,500. Premium £5,000 or best offer for quick sale. Good house.—Box P6988 B.M.J.

Old-established doctor's Practice for Sale, Sunderland, County Durham. Private and panel, panel patients 1,182. House for sale with surgery attached in residential district overlooking park and a second surgery in centre of town. New car also available —Apply Robinsons, Todd, Hope & Wood, Solicitors, 35, West Sunniside, Sunderland.

Old-established panel and private Practice for Sale in Lancs industrial town. Average receipts about £1,000. 1½ years' purchase. Cash only.—Box P6631 B.M.J.

Practices and Partnership Shares for sale in Midlands and Northern Counties. Full details free on request.—British Medical Bureau, 33, Cross Street, Manchester, 2.

Practice, residential area South of Manchester Private, and panel of 600. Receipts 1939, £930 Average last three years £1,741. House to rent Premium £1,860.—Box P6978, B.M.J.

Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool. Telephones: Royal 8116 and Royal 7480 Telegrams: "Organic," Liverpool.

Rapidly expanding Mixed Practice on Kentish border of London. Last year's income approx. £2,500. Unfurnished house to rent. Appointments, midwifery Premium £3,750.—Box P6307, B.M.J.

Sheffield. Compact Practice, over £2,000, panel 1,700. Two insurance appointments. No midwifery. Modern well-equipped furnished premises. All electric flat above. Freehold. Low R/V. Lincoln Zephyr car. Leaving through ill-health. Price £5,000.—Box P6926, B.M.J.

Well established Mixed Practice in rural and mining area. Panel 2,200, P.M.S. and Clubs. Receipts approx. £3,000. Good flat, 3 bedrooms and garage to let. Separate surgery accommodation included in premium of £4,500 for quick sale. Very easily worked.—Box P6685, B.M.J.

WANTED

Wanted, Panel and Private Practice or equal Partnership, with good house and garden, anywhere except London area, income over £2,000. Experienced practitioner with ample capital wishes early transaction. Replies confidential.—Box P6953, B.M.J.

Wanted by husband and wife, Mixed Practice in Southern England, preferably coast town or country. House essential.—Box P6941, B.M.J.

Wanted, Practice in Northern Ireland, preferably in or near Belfast. Income £1,500 to £3,000. Panel and private. Capital available. Replies treated strict confidence.—Box P6940, B.M.J.

Wanted immediately, Practice, Panel, Private or Nucleus with scope. South Coast, preferably Worthing, Hastings, Eastbourne, Bexhill. House or bungalow, modern, leasehold, freehold. Capital available.—Box P6919, B.M.J.

Wanted, by two ex-Service friends (M.B. and M.B., M.R.C.P.), Practice South of England, preferably country town. Income about £4,000 with scope. Panel about 3,000. House to rent preferred. Capital available.—Box P6921, B.M.J.

Wanted, small Practice or Nucleus by experienced practitioner in London area, replies in confidence.—Box P6635, B.M.J.

Wanted, Panel Practice central London, close Baker Street, about £2,000 per annum. House to rent essential.—Box P6657, B.M.J.

London, Home Counties, Practice or Partnership with reasonable panel required, experienced practitioner aged 39. Nucleus with scope considered.—Box P6980, B.M.J.

London, Home Counties, Practice or Nucleus with scope. Partnership considered. House essential, reasonable panel, experienced practitioner.—Box P6687, B.M.J.

Northern Ireland. Practice Wanted in market town. Panel about 1,500. Vendor should be R.C.—Box P6638, B.M.J.

Practices and Partnerships wanted anywhere, England, Scotland, Wales. Purchasers waiting. Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

Scotland. Practice wanted. Income £1,500 to £2,000. Panel 1,000 or over. Good house. Capital available. Replies confidential.—Box P6922, B.M.J.

Small town or good suburban Practice, south Midlands. M.B., M.R.C.S., D.R.C.O.G., aged 28, wife M.B. Capital and references. Hospital and G.P. experience since demobilization.—Box P6920, B.M.J.

Two ex-Majors require suitable Practice outskirts London. Surrey area preferred. Panel 2,000. Capital available.—Box P6979, B.M.J.

DIETITIANS, DISPENSERS, NURSES

VACANT

Dispenser-Bookkeeper, female, wanted early February. Salary according to experience, minimum £5 5s. a week.—Apply, Dr. Barnes, Woburn, near Bletchley.

Dispenser-Bookkeeper/urgently required for practice near Manchester. Liberal free time and holidays. Salary according to experience.—Box 6901, B.M.J.

Dispenser-Bookkeeper, required in practice near Birmingham. Good accommodation available. State when free, experience, etc., send testimonials.—Dr. Blore, Halesowen, Birmingham.

Dispenser-Bookkeeper required. Hall qualified, able to type, and with experience of general practice work. Apply stating age and experience, etc.—Dr. V. N. Fenton; Brand House, Ludlow, Salop.

AVAILABLE

Lady Dispenser-Bookkeeper, experienced, reliable, requires Post, preferably south.—Box 6902, B.M.J.

S.R.N. (Part I Midwifery) seeks post as Doctor's Nurse-Receptionist, London area. Free now.—Box 6958, B.M.J.

S.R. Nurse, ex-Army, 28, knowledge shorthand typewriting, general secretarial duties, desires interesting position, live out. No objection travel.—Box 6942, B.M.J.

Unqualified Dispenser Bookkeeper requires Post. Three years experience in general practice.—Box 6954, B.M.J.

TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

Required, Part-time Typist with knowledge of medical terms, for copying, duplicating and clerical duties. Write the Secretary, Medical Correspondence College, 19, Welbeck Street, W.1, for interview.

Secretary-Typist required at once for Medical Educational Office. Salary £5 per week. Replies: Secretary, University Examination Postal Institution, 17, Red Lion Square, W.C.1.

Secretary-Receptionist required February 1, by medical man, London, S.W.19. Shorthand-typing essential. Write, giving age, experience, etc.—Box 6943, B.M.J.

TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

AVAILABLE

The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

Duplicating, Typewriting, Testimonials, Applications, Lecture Papers, Reports, etc. expertly duplicated or typewritten. Recommended.—Miss Stone, 6, Duke Street, S.W.1, Whitehall 9682.

Doctor's Secretary-Receptionist. Lady, 35, seeks re-engagement as above. Shorthand typing. Own typewriter if required. Nursing experience.—Box 6982, B.M.J.

Lady requires Appointment with West End specialist, medical or dental. Reception, bookkeeping, typing, dispensing, driving, full- or part-time, experienced.—McHugh, c/o 13, Portman Square, W.1.

Lady (over 40) adaptable, use telephone, desires post Receptionist, no typing. West End preferred.—Box 6959, B.M.J.

Lady, young, well educated, good appearance, desires Post, doctor's Receptionist, London area. V.A.D. training. Domestic diploma. Experience bookkeeping. Receptionist Y.M.C.A. Officers' Club. Excellent references.—Box 6904, B.M.J.

Refined educated married woman (no children) offers services to doctor or dentist. Clerical, Typing or light household duties. Accommodation furnished or unfurnished, husband own occupation, reasonable distance of London. Excellent references.—Box 6903, B.M.J.

Typewriting Service, Testimonials, Theses, Notes, etc., accurately and speedily typed.—Phone HAMpstead 7949 after 1 p.m. daily.

Typewriting, Duplicating, Medical Manuscripts, testimonials, etc. Immediate service, ex-R.A.M.C. staff. Satisfaction guaranteed.—Specialist Typewriting Bureau, 30, City Road, E.C.1. Mon. 4881. Mai. 6344.

Young lady, 23, good education, seeks post as Secretary-Receptionist in London. Able to take complete charge.—Major, The Cottage, New Brighton Road, Emsworth, Hants.

MISCELLANEOUS

PRIVATE

Anatomical or Surgical freehand drawings undertaken evenings by doctor's daughter. Apply Miss Niven, 8/9, Lancaster Gate, Paddington, W.2.

Doctor's set, about 75 drug bottles with glass stoppers, 40 oz. to 4 oz.; some coloured glass, labelled gold leaf, little used. Also examination couch, beechwood, upholstered rexine, virtually as new. Seen London area. Offers?—Box 6924, B.M.J.

Microscope, Watson's "Bactil," complete. Eyepieces Nos. 2 and 4. Objectives 2/3 in., 1/6 in., and 1/2 in. oil immersion. Condition as new, in mahogany cabinet. Also Thoma Zeiss Haemocytometer and Sahli Haemoglobinometer (Erka) for sale. Offers to Box 6944, B.M.J.

Microscopic objectives urgently required, 2/3, 1/6, 1/12 oil immersion. Parachromatic or Apochromatic. Offers to Box 6905, B.M.J.

Operating Table by Arnold's, hydraulic base, fully adjustable, perfect working order. £125 or near offer.—Comben, 90, Palace Gardens Terrace, W.8. Bayswater 4034.

Ophthalmic Instruments, practitioner who since demobilization from the Navy finds present-day prices prohibitive, keenly desires to purchase second-hand.—Box 6960, B.M.J.

Real Hide 3-piece Suite (3 cushion settee) loose cushions. Various Persian Rugs, and large Indian carpet. Excellent condition.—Edmonds, 118, Harley Street, W.1. Welbeck 5165.

The new Minnett Gas-air Apparatus with C.M. attachment, for sale.—Box 6989, B.M.J.

Ultra Violet Hanovia Lamp. Modern floor trolley type. Perfect new condition, cream-chrome spare tube. Ideal surgery. 230/60v., 5a. £40.—Heron, 7, Erylmore Road, Liverpool, 18.

Wanted, Circular Shadowless Operating-theatre Lamp, ceiling fitting. State price and full particulars to the Order of St. John Foundation Hospital, 7, Park Circus Place, Glasgow, C.3.

TRADE

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire.

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept. B.M.J.), 3, Railton Road, London, S.E.24.

Microscopes Readily Turned into Cash. Highest prices paid for modern instruments and accessories. Send apparatus for valuation to Wallace Heaton Ltd., 127, New Bond Street, London, W.1. MAYfair 7511.

AUCTION

By Order of the Ministry of Supply. Exhibition Buildings, White City, Shepherds Bush Green, London, W.12. Hospital Appliances and Requisites. Sterilizers by "Dent & Hellyer." Inhalers, 70,000 First Aid Kits, 10,000 Glass Bottles, Enamel Bowls, Steel Stands, Food Containers, Kitchen Utensils, 10,000 Test Tube Stands, Avery Counter and other Scales, Box Waggons and Trucks, 10,000 Brushes, Cooking Stoves, Leather and Fibre Cases. **Leopold Farmer & Sons** will sell the above by auction on the premises **Tuesday, January 27, 1948 and following day at 11 a.m. each day. On view January 22, 23, 26, 1948, from 9 a.m. to 4 p.m.** Catalogues 6d. each (Postal Order) obtainable from Leopold Farmer & Sons, Auctioneers, Surveyors and Valuers, 46, Gresham Street, London, E.C.2.

APARTMENTS, BOARD, ETC.

VACANT

If you are convalescent or in need of rest and relaxation, excellent food and good fires offered in beautiful country house in Gloucestershire. Terms £5 5s. Medical attendance and massage by arrangement if desired.—Box 6983, B.M.J.

Single or Double Room in beautiful home, Romford (25 mins. Liverpool Street). Professional men, especially Christians, welcome. From £2 15s. including morning and evening meal.—Box 6660, B.M.J.

S.W.3, near Sloane Square, Furnished Service Rooms with Breakfast from 3 guineas weekly.—Phone Kensington 4435, or write Box 5228, B.M.J.

Worcester Park convenient for travelling, pleasant southern suburb. Bed-sitting-room, two guineas, meals if required.—Box 6981, B.M.J.

Well Furnished Labour Saving Flat to let, three months, March 1, 3 bedrooms, 2 reception rooms. Country town 50 miles London. Preference given to doctor prepared to give occasional light assistance. Terms by arrangement.—Box 6956, B.M.J.

HOTELS

Cotswold.—Residential Hotel, excellent cooking, well heated, old-world garden, own poultry, bracing, restful, near church, shops, buses, 5-6 guineas.—Old Red Lion, Stow-in-the-Wold, Gloucester. Tel.: 66.

Longnor Hall, near Shrewsbury. For Easter and the glories of Spring An atmosphere of peace and perfect comfort in this beautiful 17th century country house. Excellent food and ideal service. Trout fishing, riding, tennis. Tel.: Dorrington 58.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild, allowing visitors to be out in the wonderful air. The Hotel is central heated, individual heating in bedrooms. H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

The ideal situation for the Convalescent and for those with tired and jaded nerves. **Nailzee Point Hotel, Looe, Cornwall.** (Phone: Looe 24). Every comfort, personal service, and really good food will restore you to perfect health.

Wimbledon Hill. Accommodation, professional gentlemen. Bedsitting rooms with gas fires. Near station, 15 mins. Waterloo.—Tel. Wim. 6020.

HOUSES, CONSULTING ROOMS

Consulting Rooms (two) vacant. One room, fully furnished, first floor, two french windows, balcony. One room, partly furnished, second floor. Would be let separately or together. Both rooms have character and distinction. Quiet house in professional area of Baker Street (Park Road), opposite Regent's Park. Use of ground floor waiting room and receptionist if desired. 'Phone, AMBassador 4930.

Consulting Room available shortly in W.1 district with unfurnished flat. 1 b.r., 1 rec., kit. and bath.—Box 6984, B.M.J.

Harley Street. Prominent Corner, modern building Gd. and 1st floor Consulting Suites to be let.—Box 6604, B.M.J.

To Let, in Sloane Street, S.W.1, large Consulting Room. Rent £300, including use of waiting room, door attendance, central heating and hot water.—Box 6955, B.M.J.

MOTOR CARS

MILHALL MOTOR CO. LTD.

1934 Bentley 3½-litre Sports Saloon. Thrupp & Maberly. Serviced Bentley's.

1946 (first registered) Rolls Royce Phantom III. DL series 7-seater limousine Mulliner. 6,500 miles. New throughout.

1939 Rolls Royce Wraith owner-driver Saloon with division Park Ward. Speedometer reading 26,000.

1940 M.G. 2.6-litre Sports Saloon.

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1938 Rover 20 Sports Saloon.

Showrooms: 5, ST. JAMES'S STREET, S.W.1 (Whitehall 1952/4)

Service: 55/57, South Edwardes Square, W.8 (Western 2269)

Wanted, Rolls Royce, Austin, Armstrong or similar 5-7 seater, year price.—Box 6990, B.M.J.

Gentleman urgently requires 1946-7 Car or low-mileage pre-war model.—King, The Crest, Raggleswood, Chislehurst, Kent. Imperial 3527.

Motourists (London), Ltd., of Great North Road, East Finchley Station, N.2, urgently require late model cars of all makes, any h.p. Representative will call by appointment. Tudor 2301-2.

1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

1935 Humber Saloon, 16.9 h.p., perfect condition throughout. Very low mileage. Ideal doctor's car. £450.—Mrs. Middleton, The Cottage, Beech Way, Gerrards Cross. G. X. 3037.

NURSING HOMES

Broadstairs. High class Nursing Home, delight-fully situated on sea-front. Has vacancies for medical, surgical and convalescent patients. Every comfort. Professional people especially catered for. Terms from 8 guineas. Applications to Matron, Bradstowe Nursing Home, Sea Front, Broadstairs. Phone: Broadstairs 962.

Munster-Royal Nursing Home (Kingston 0111), Teddington, within easy reach of London, has private accommodation for medical, surgical or maternity cases, and a few chronic invalids from 5½ guineas. Children for tonsillectomy specially accepted at 10 guineas inclusive, without undue delay. Reduced terms to doctors' families.

Midlands. Maternity and Surgical accommoda-tion now available from 12 guineas. Excellent cuisine, own farm and garden.—River Park Nursing Home, Leamington Spa, Warwickshire.

Nursing Home, run on private house lines, for chronic (not mental), convalescent, and rest cases. —Weir, Molesey 3165.

Nursing Home, run like first-class private house. Resident medical man and wife. Certificated nurses. Rest Cures, Neurasthenics and Convalescents (not certified, malignant nor tubercular). Guests also received. Lounge hall, large dining-room, lovely drawing-room. Own poultry kept. Private garden. Beautiful country. Shops four minutes. London 40 minutes. Very comfortable, quiet. Good catering and cooking. Consultants and other medicals can visit their own patients.—C. F. Fothergill, M.B., B.Ch., Hensol, Chorley Wood, Herts. Phone: Chorley Wood 24.

FOR SALE

For Sale, owing to bereavement, Registered Nursing Home for aged people as going concern, 32 beds.—Apply Collinge & Halsted, Accountants, St. Annes-on-Sea.

APPOINTMENTS

(Continued from page 23)

Have you read the notice at top of page 12?

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (330 beds)
JUNIOR CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, men or women, for the post of Junior Casualty Officer (A) vacant February 1. Salary at the rate of £175 per annum with full residential emoluments. This officer will be responsible for the immediate treatment of all out-patient fracture and accident cases under the supervision of the Orthopaedic Registrar and will attend the daily and weekly Fracture Clinic held by the Registrar and Orthopaedic Surgeon respectively. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be for a period of six months. Applications should be sent immediately to R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary.

ROYAL SUSSEX COUNTY HOSPITAL
Brighton, 7
(310 beds. 9 Resident Medical Officers)
CASUALTY HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of Casualty House Surgeon (A) vacant about the end of February, 1948. If held by a practitioner who is liable for service under the National Service Acts the appointment will be for a period of six months. The successful candidate will, if desired, be favourably considered for one of the appointments of House Surgeon on the termination of appointment as Casualty House Surgeon. Salary at the rate of £200 per annum with full residential emoluments. Applications should be received by the Secretary-Superintendent not later than January 24, 1948.

ROYAL SUSSEX COUNTY HOSPITAL
Brighton, 7
(310 beds. 9 Resident Medical Officers)

Applications are invited from registered medical practitioners for the undernoted appointments, all vacant about the end of February, 1948.

SECOND HOUSE PHYSICIAN (B2)
HOUSE SURGEON (B2)

HOUSE SURGEON (B2) (mainly Gynaecological) including R practitioners who hold A posts. If held by R practitioners each appointment will be limited to six months. Salary in each case at the rate of £200 per annum, with full residential emoluments. Applications should be received by the Secretary-Superintendent not later than January 24, 1948.

ROYAL BERKSHIRE HOSPITAL, Reading

Applications are invited from registered medical practitioners, male, for the following posts:—

TWO CASUALTY OFFICERS (A). Salary is at the rate of £150 per annum, with full residential emoluments. Duties will involve alternating with each other in the Casualty Department, Fracture Clinic and Accident Wards, and assisting in the treatment of all cases of traumatic origin. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) now vacant. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months; otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A. Stanley Brunt, General Superintendent and Secretary.

ROYAL HALIFAX INFIRMARY (283 beds)

ORTHOPAEDIC REGISTRAR (B1), male (non-resident) required. Vacancy early January. Salary according to experience, but not less than £750 per annum commencing. Candidates should be well trained in Orthopaedics, and the possession of higher qualifications will be an advantage. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2) (one post) (male). R practitioners who hold A posts may apply. Six months post, vacant January 31, 1948. Salary £250 per annum with full residential emoluments.

Applications, accompanied by copies of three recent testimonials, and the names of three referees to be sent to the Secretary as soon as possible.

ROYAL SURREY COUNTY HOSPITAL
Guildford (228 beds)
HOUSE SURGEON (A)

Applications are invited for the post of House Surgeon (A) for Orthopaedic and General Surgery now vacant, from registered medical practitioners, including those within three months of qualification who are liable for service under the National Service Acts. The appointment, which is recognized in connexion with the F.R.C.S. examination is for six months, salary at the rate of £175 per annum, with full residential emoluments. Applications should be sent to the Secretary-Superintendent as soon as possible.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
Myrtle Street, Liverpool, 7
HONORARY ASSISTANT SURGEON AND SECOND-IN-CHARGE ORTHOPAEDIC DEPT.

Applications are invited for the post of Honorary Assistant Surgeon and Second-in-charge of the Orthopaedic Department. Candidates must possess a registrable qualification and the Fellowship of the Royal College of Surgeons of England, Edinburgh or Ireland. Applications, together with the names of three referees should be submitted to the Chairman of the Hospital immediately.

ROCHDALE INFIRMARY, Lancashire
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female), for the appointment of Resident Surgical Officer (B1). Salary £350 per annum. Suitably qualified R and W practitioners holding B2 appointments, also R practitioners holding B1 and rejected by the R.A.M.C., may apply. Applications to the Superintendent-Secretary.

ROYAL LANCASTER INFIRMARY
Lancaster (226 beds)
ORTHOPAEDIC AND CASUALTY HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of Orthopaedic and Casualty House Surgeon (B2) vacant immediately. Salary £275 per annum with full residential emoluments. R practitioners holding A posts may apply when the appointment will be limited to six months. Applications should be sent to the undersigned.—F. A. Milnes, Superintendent-Secretary.

ROYAL PORTSMOUTH HOSPITAL, Portsmouth
(205 beds)
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including those within three months of qualification and liable under the National Service Acts, for the appointment of Casualty Officer (A), vacant immediately. Six months' appointment. Salary £200 per annum, with full residential emoluments. Applications to be sent as soon as possible to G. A. Hughes, Secretary.

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL
234, Great Portland Street, W.1
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2). Duties to commence February 8. Salary at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to be addressed to the House Governor not later than January 28.

ST. THOMAS'S HOSPITAL, S.E.1

Applications are invited for the following posts:—

PHYSICIAN IN THORACIC MEDICINE
PHYSICIAN TO THE DEPARTMENT OF PSYCHOLOGICAL MEDICINE

It is proposed to make the latter appointment in March or April next so that the successful candidate may take over from the present Physician on his retirement in June.

Applicants must be Fellows or Members of the Royal College of Physicians of London, and should submit twenty copies of their applications, giving details of age, experience, and qualifications with dates, and the names of three referees to whom the Hospital may write. Applications should be sent by January 29, 1948, to the Clerk of the Governors, to whom any enquiries should be addressed.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2), vacant January 31, 1948. Salary is at the rate of £300 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications, stating age, qualifications (with dates), nationality and accompanied by copies of three recent testimonials, should be sent to the Secretary, H. F. Donald, The Infirmary, Stamford.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant. Salary is at the rate of £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent immediately to the Secretary, H. F. Donald, The Infirmary, Stamford.

SALFORD ROYAL HOSPITAL
NON-RESIDENT PSYCHIATRIST

Applications are invited from suitably qualified medical practitioners trained in Psychiatry and in Psychotherapy for the post of non-resident Psychiatrist to attend at the hospital four sessions weekly (not exceeding one hour). Salary at the rate of £600 per annum. Applications, accompanied by copies of three testimonials or the names of three referees, should be made in writing without delay to the General Superintendent.

STOCKPORT INFIRMARY (167 beds)
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the post of Casualty Officer (B2), including R practitioners at present holding A posts. Post now available. The appointment will be for a period of six months. Salary £175 per annum, with full residential emoluments. Applications with copies of two recent testimonials, can be sent to the undersigned forthwith.—H. G. Price, Secretary-Superintendent.

SALISBURY GENERAL INFIRMARY (275 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A). Salary at the rate of £175 per annum, with full residential emoluments. The appointment will be for a period of six months. Applications should be sent to the Superintendent and Secretary by January 30, 1948.

ST. MARY'S HOSPITAL, London, W.2
OBSTETRIC AND GYNAECOLOGICAL REGISTRAR (B1)

Applications are invited for the post of Obstetric and Gynaecological Registrar (B1). Candidates must be Members of the Royal College of Obstetricians and Gynaecologists, or Fellows of the Royal College of Surgeons of England, or graduates of a British University in Medicine and Surgery. Suitably qualified R practitioners now holding B2 posts may apply. R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The appointment is for a first period of twelve months as from February 25, 1948, at a salary of £400 per annum. Applications stating permanent address should reach the undersigned by January 31.—W. Parkes, House Governor.

SOUTHEND-ON-SEA GENERAL HOSPITAL
HOUSE SURGEON (B2)
CASUALTY OFFICER (A)

Applications are invited for the following posts vacant February 1, 1948. House Surgeon (B2), Casualty Officer (A) Salary will be at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply for the B2 post and practitioners within three months of qualification for the A post, when the appointments will be limited to six months. Applications to reach the undersigned by January 21, 1948.—John Williams, House Governor and Secretary.

SOUTH-EASTERN HOSPITAL FOR CHILDREN
321, Sydenham Road, S.E.26
RESIDENT MEDICAL OFFICER (B1)

Resident Medical Officer (B1) required end of January. Preference will be given to candidates holding Diploma of Child Health. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Appointment for six months in the first instance, renewable for a further period of six months at the discretion of the Committee of Management. Salary £350 per annum. Applications should be forwarded to the Secretary.

ST. THOMAS'S HOSPITAL, S.E.1
RESIDENT ASSISTANT PHYSICIAN (B1)

Applications are invited for the post of Resident Assistant Physician (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for a period of one year in the first instance, at a salary at the rate of £650 per annum, with full residential emoluments. Applications, including the names and addresses of three referees, should be sent by January 26, 1948, to Clerk of the Governors.

TOWERS MENTAL HOSPITAL
Humberstone, Leicester
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the vacant post of House Physician (A). The appointment will be for six months in the first instance and may be renewed for another six months. Applicants who are within three months of qualification, and who are liable for service under the National Service Acts should note that the appointment will be for a period of six months only if held by a practitioner to whom these conditions apply. Salary £350 per annum together with board, lodging, and washing, valued at £150 per annum. Facilities will be available for learning methods of psychiatric treatment within the hospital, and in the Out-patient Clinics. Applications, accompanied by the names of two referees, should be sent to the Medical Superintendent as soon as possible.

TAUNTON AND SOMERSET HOSPITAL
(150 beds)
TWO HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners for House Surgeons, one to a general surgeon and one obstetrician, and one to a general surgeon and an E.N.T. surgeon. A appointments. One may be B2 if suitable applicant. Salaries, B2, £200 per annum, A, £175 per annum, with full residential emoluments. If held by R practitioners, appointments will be for six months, and are recognized by R.C.S. in connexion with the resident surgical posts required of candidates for the Final Fellowship Examination. Applications to the Secretary.

TIVERTON AND DISTRICT HOSPITAL
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A), vacant mid-February, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be limited to six months Salary at the rate of £200 per annum, with full residential emoluments. Apply Secretary.

TILBURY HOSPITAL, Essex
GYNAECOLOGICAL HOUSE OFFICER AND CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners, including R practitioners now holding A posts, for the appointment of Gynaecological House Officer and Casualty Officer (B2), now vacant. If held by an R practitioner, the appointment will be limited to six months. Salary £200 per annum with full residential emoluments. Applications to be sent to the Secretary.

TYNEMOUTH VICTORIA JUBILEE INFIRMARY
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant February 1. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding Diploma of F.R.C.S. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary £500 plus, according to qualifications and experience, with board, accommodation and laundry also provided.—Chas. Rowell, Secretary, Hawkey's Lane, North Shields, Northumberland.

VICTORIA HOSPITAL
Pettits Lane, Romford (90 beds)
RESIDENT HOUSE DOCTOR (B2)
RESIDENT HOUSE DOCTOR (A)

Applications are invited for the post of Resident House Doctor (B2), including R practitioners who hold A posts, vacant February 15, 1948. Salary £200 per annum. Also Resident House Doctor (A) vacant immediately, including practitioners within three months of qualification who are liable to service under the National Service Acts. Salary £125 per annum. If held by R practitioners the appointments will be limited to six months. Applications to the Secretary.

VICTORIA HOSPITAL, Worksop, Notts (150 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the above appointment, including practitioners within three months of qualification who are liable to service under the National Service Acts The appointment, which is for six months, will be vacant immediately. Salary is at the rate of £250 per annum, with full residential emoluments. The hospital has a full panel of Visiting Consultants and Out-patient clinics. Applications to be addressed to the Secretary-Superintendent.

VICTORIA HOSPITAL, Worksop, Notts (150 beds)
CASUALTY OFFICER AND HOUSE SURGEON TO E.N.T. DEPT. (A)

Applications are invited from registered medical practitioners for the above appointment, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment, which is for six months, will be vacant on February 1, 1948. Salary is at the rate of £250 per annum, with full residential emoluments. The hospital has a full panel of Visiting Consultants and Out-patient Clinics. Applications to be addressed to the Secretary-Superintendent.

WESTMINSTER HOSPITAL (ALL SAINTS') UROLOGICAL CENTRE
Austral Street, West Square, S.E.11
SURGICAL REGISTRAR (B1)
(part-time, non-resident)

Applications are invited for the post of Surgical Registrar (B1) (part-time, non-resident), vacant on February 18, 1948. The appointment is for a period of twelve months in the first instance, with possible extension for a further period of twelve months. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Candidates should hold one of the Surgical Fellowships. Salary will be at the rate of £250 per annum, but if the selected candidate is a demobilized officer eligible under the Government Postgraduate Scheme a full time appointment at £550 per annum will be considered. Applications should be sent to the undersigned not later than January 24, 1948.—D. H. Eade, Secretary.

WESTMINSTER HOSPITAL (ALL SAINTS') UROLOGICAL CENTRE
Austral Street, West Square, S.E.11
TWO RESIDENT SURGICAL OFFICERS (B1)

Applications are invited for two posts of Resident Surgical Officer (B1), one vacant on February 10 and one on March 10, 1948. The appointments will be for periods of six months in the first instance. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary payable by the Centre will be at the rate of £300 per annum for each post. If the selected candidate is a demobilized officer eligible under the Government Postgraduate Scheme, total salary will be at the rate of £550 per annum. Applications should be sent to the undersigned not later than January 24, 1948.—D. H. Eade, Secretary.

WESTMINSTER HOSPITAL
St. John's Gardens, London, S.W.1
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Senior Resident Medical Officer (B1), vacant March 1, 1948. The appointment is for one year. Salary £450 per annum, resident. Applications from R practitioners already holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C., but released Medical Officers are invited to apply. Applications, together with copies of three recent testimonials, should be submitted to the undersigned immediately, and in any case not later than January 31, 1948.—Charles M. Power, House Governor and Secretary.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL, Watford, Herts (206 beds)
RESIDENT ANAESTHETIST AND CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the post of Resident Anaesthetist and Casualty Officer (B2), vacant on February 1 R practitioners who hold A posts may also apply, when appointment will be limited to six months Salary will be at the rate of £200 per annum, with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M Maskell, Administrator.

WEST HERTS HOSPITAL, Hemel Hempstead
ASSISTANT SURGEON (Part-time)

Applications are invited from registered medical practitioners who are Masters in Surgery of a University within the British Commonwealth of Nations or Fellows of a Royal College of Surgeons for appointment of Assistant Surgeon (part-time) to the West Herts Hospital, Hemel Hempstead, at a salary of £700 per annum. Private consulting practice is allowed. The successful candidate will be required to reside within an approved distance of Hemel Hempstead. Applications, giving the names of three referees, to be submitted to the undersigned not later than Saturday, January 31, 1948.—J. Price Jones, Clerk to the Hospital.

WEST HERTS HOSPITAL
Hemel Hempstead (170 beds)
CASUALTY OFFICER AND HOUSE SURGEON (B2)

Applications are invited for the post of Casualty Officer and House Surgeon (B2), including R practitioners who hold A posts. The appointment will be for a period of six months as from February 6, 1948, and the salary £225 per annum, plus board and lodging. Applications would be considered from persons qualified less than six months, but the salary in that case would be £175 per annum Applications should be addressed to the Clerk as soon as possible.

WEST SUFFOLK GENERAL HOSPITAL
Bury St. Edmund's (335 beds)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification who are liable for service under the National Service Acts, for the following appointments :—

1. **HOUSE SURGEON** (A) with special responsibility for Ophthalmic and Orthopaedic cases, vacant immediately. Salary at the rate of £200 per annum.
2. **HOUSE ANAESTHETIST (A)**, vacant immediately. Salary £200 per annum. The hospital is recognized for the D.A.

All appointments will normally be for a period of six months. Applications should be addressed to the Secretary, E E. Hardwicke, F H A.

WEST NORFOLK AND KING'S LYNN GENERAL HOSPITAL
TWO RESIDENT HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners, including practitioners who are liable to service under the National Service Acts, for the two appointments of House Surgeon (A) posts, vacant January 22 and January 30, 1948. Appointments limited to six months in first instance. Salary £200 per annum, with full residential emoluments Duties include charge of Surgical beds, Casualty Department and to give anaesthetics in the absence of the Hon. Anaesthetists. Applications to be sent to the House Governor and Secretary as soon as possible.

WHITTINGHAM MENTAL HOSPITAL
Near Preston
HOUSE PHYSICIAN (B2)

The Committee of Visitors invite applications for the post of House Physician (B2) for a period not exceeding twelve months. Salary £300 per annum, plus full residential emoluments. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications to be received by the Medical Superintendent not later than January 28, 1948.

WHITEHAVEN AND WEST CUMBERLAND HOSPITAL
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), vacant on February 1, 1948, for a period of six months. Practitioners within three months of qualification and liable under the National Service Acts may apply. Salary £200 per annum with full residential emoluments. Applications should be sent immediately to the Secretary Superintendent.

WILLESDEN GENERAL HOSPITAL
Harlesden Road, London, N.W.10
HONORARY ANAESTHETIST

The Council of Management invite applications for the post of Honorary Anaesthetist. Candidates should make one written application to the undersigned stating full particulars, including age, qualifications, experience, and the names of three referees, by February 4, 1948.—J. N. Drake, Secretary.

Have you read the notice at top of page 12 ?

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WESTON-SUPER-MARE GENERAL HOSPITAL
(100 beds)
HOUSE SURGEON (A)

Applications are invited from medical practitioners for the appointment of House Surgeon (A). Duties to commence on February 1, 1948. Salary at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary.

WORKINGTON INFIRMARY (capacity 60 beds)
HOUSE SURGEON (B2) (male)

Applications are invited for the appointment of House Surgeon (B2) (male), vacant now, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications should be sent immediately to Dr. T. T. Graham, Honorary Medical Secretary.

YORK COUNTY HOSPITAL
(222 beds)
SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of Second House Surgeon (A) with Orthopaedic duties, vacant on February 2, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B1), vacant on February 1, 1948. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M Forces. The appointment is for twelve months. Salary £350 per annum, with full residential emoluments. Applications should to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

HOMES

The Psychoneuroses and Neurasthenia

BOWDEN HOUSE
Harrow-on-the-Hill

Diagnostic Week.—All patients spend the first week of their stay in undergoing a careful investigation. Clinical, pathological, and radiological diagnoses are used as routine, and each patient has at least one session of narco-analysis. For this an inclusive fee of 25 guineas is made. The patients come in with no commitment on either side for further treatment.

Those who are anxious to remain, and appear to the staff to be suitable, undergo intensive psychotherapy as before. The fees for this are 12 to 20 guineas a week, inclusive of regular specialist treatment.

Medical Director: H Crichton-Miller, M.A., M.D., F.R.C.P.
Deputy Director: Grace H. Nicolle, M.A., M.B.
Assistant Psychiatrist: W. A. H. Stevenson, B.A., B.M., B.Ch.
Consulting Physician, J. Barrie Murray, M.A., M.D., M.R.C.P.
Warden: Miss Winifred Sherwood, S.R.N.

THE OLD MANOR, SALISBURY

Telephone · 3216 and 3217

A Private Hospital for the Care and Treatment of those of both sexes suffering from MENTAL DISORDERS. Extensive grounds. Detached villas. Chapel. Garden produce from own gardens. Terms moderate.

Convalescent Home at Bournemouth

standing in 12 acres of ornamental grounds with separate villas, tennis courts, etc. Patients or Boarders may visit the Home by arrangement. Illustrated Brochure on application to the Medical Superintendent, The Old Manor, Salisbury.

WYE HOUSE, BUXTON

A Private Hospital for the treatment and care of Nervous and Mental Disorders in both sexes. Voluntary, Temporary, and Certified patients received. Apply to E. Howard Kitching, M.D., M.R.C.P., D.P.M. Tel.: Buxton 130.

RUTHIN CASTLE, NORTH WALES

A Private Clinic, the first in Great Britain, for investigation and treatment of all forms of disease, except mental and infectious. Nursing, Dietetic, Massage, X-ray and Laboratory Departments Central heating and a lift to all floors Inclusive Charges. Apply Secretary. Tel.: Ruthin 66.

ST. ANDREW'S HOSPITAL, NORTHAMPTON
For Nervous and Mental Disorders

President: The Most Hon. the MARQUESS OF EXETER, K.G., C.M.G., A.D.C. Medical Supt.: Thomas Tennent, M.D., F.R.C.P., D.P.H., D.P.M. This Registered Hospital is situated in 130 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or who wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in Hospital or in one of the numerous villas in grounds of the various branches can be provided.

WANTAGE HOUSE.—This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped with all the apparatus for the complete investigation and treatment of Mental and Nervous Disorders by the most modern methods; insulin treatment is available for suitable cases. It contains special departments for hydrotherapy by various methods, including Turkish and Russian baths, the prolonged immersion bath. Vichy Douche, Scotch Douche, Electrical baths, Plombières treatment, etc. There is an Operating Theatre, a Dental Surgery, an X-ray Room, an Ultra-Violet Apparatus, and a Department for Diathermy and High-frequency Treatment. It also contains laboratories for biochemical, bacteriological, and pathological research. Psychotherapeutic treatment is employed when indicated.

MOULTON PARK.—Two miles from the main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres. Milk, meat, fruit, and vegetables are supplied to the Hospital from the farm, gardens and orchards of Moulton Park. Occupational Therapy is a feature of this branch, and patients are given every facility for occupying themselves in farming, gardening and fruit-growing

BRYN-Y-NEUADD HALL.—The seaside house of St. Andrew's Hospital is beautifully situated in a park of 330 acres at Llanfairfechan amidst the finest scenery in North Wales. On the North-West side of the Estate, a mile of sea-coast forms the boundary. Patients may visit this branch for a short seaside change or for longer periods. The hospital has its own private bathing house on the seashore. There is trout-fishing in the park.

At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts (grass and hard courts), croquet grounds, golf courses, and bowling greens. Ladies and gentlemen have their own garden, and facilities are provided for handicrafts such as carpentry, etc.

For terms and further particulars apply to the Medical Superintendent (Telephone Nos.: 2356 and 2357 Northampton), who can be seen in London by appointment

CAMBERWELL HOUSE
33, PECKHAM ROAD, LONDON, S.E.5

Telephone: Rodney 4242 (2 lines)

A PRIVATE HOSPITAL

For the Treatment of Mental Disorders

Full particulars may be obtained from the Secretary

THE CONVALESCENT HOME is HOVE VILLA, BRIGHTON, and is 200 ft. above sea-level.

CHEADLE ROYAL, CHEADLE, CHESHIRE

A registered Hospital for MENTAL DISEASES, and its Seaside Branch, GLAN-Y-DON, Colwyn Bay, N. Wales The object of this Hospital is to provide the most efficient means for the treatment and care of Patients of both Sexes suffering from MENTAL and NERVOUS DISEASES. The Hospital is governed by a Committee appointed by the Trustees of the Manchester Royal Infirmary VOLUNTARY, TEMPORARY, AND CERTIFIED PATIENTS RECEIVED. For terms and further information apply to the Medical Superintendent Telephone: Gatey 2231.

ASHENDENE BAYFORD
Nr. HERTFORD, HERTS

(Formerly at Epping House, Little Berkhamsted)

An attractive and comfortable PRIVATE HOME beautifully situated in its own grounds, 400 ft. above sea-level Exceptionally healthy air and position affords every facility for convalescence. Treatment for Ladies and Gentlemen suffering from Insomnia, Functional, Nervous Disorders, Alcohol and Drug Habits, Chronic Heart and Kidney Disease, also Elderly and Convalescing Cases.—Apply J C. Baker, M.B. Telephone: Bayford 262. Station: Bayford (L.N.E.Ry.).

THE COPPICE, NOTTINGHAM
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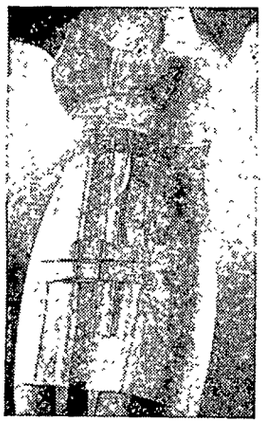

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY JANUARY 24 1948

THE TRAINING OF SPECIALISTS

THE PLACE OF POSTGRADUATE INSTITUTES*

BY

Sir FRANCIS FRASER, M.D., F.R.C.P.
Director of the British Postgraduate Medical Federation

The experience of the war years suggests that the average level of hospital treatment will be raised, but it is not so clear that the standard of the specialist and expert will also be raised, as a result of the new powers and responsibilities of the Minister of Health. There is danger that the effect will be in the reverse direction through too much dependence on the State and the expectation that the Ministry will regulate matters of which it has no experience and for which it may not be willing to accept direct responsibility. It is for the educational bodies to provide the training of a specialist, and the recognition of a specialist should be determined by the profession itself. For the protection of the public it may be wise to state the minimal requirements for recognition, but the standards required by the profession and the public will, it is to be hoped, have little relation to minimal requirements.

In the past the recognition of a medical man as a specialist has depended on his acceptance by his professional colleagues, and I trust that no action by the State will alter this, either directly or indirectly. In the future, under the National Health Service, there will be many more hospital appointments for specialists than there have been in the past, and whatever may be decided about the method of their selection it should ensure that no applicant is appointed who is not accepted by his professional colleagues to be of the standard they require for the post in question. A considerable number of memoranda have been prepared recently by the Royal Colleges and the associations of specialists on the experience and training which they recommend, and these confirm and amplify the valuable report of the Interdepartmental Committee on Medical Schools.

Length of Training

In general they advise that following qualification and registration a period of five years' postgraduate experience is required before recognition as a specialist should be granted and that longer is necessary in the more specialized branches of medicine and surgery. In the past the successful candidates for appointments to the senior staffs of voluntary hospitals have as a rule had a considerably longer period. This is clearly desirable, and the training programmes that have been recommended should be regarded as indicating the necessary essentials only. The plan should not be rigid and should permit of considerable variation to suit differences in intellectual capacity, previous education, and experience.

The years of training can be divided into a first period of one to two years of further junior clinical appointments in general medicine and surgery following registration to practise, and a second period of three years and more devoted to training in the selected specialty. At least a year of postgraduate scientific education and laboratory discipline is also advised, which could be associated with the first period and spent in one of the preclinical sciences or associated with the second period and spent in laboratory investigations or research directly connected with the specialty. The programmes recommended include, as a rule, the passing of an examination for a higher degree or diploma as a test of the candidate's progress, but this alone should never be regarded as indicative of fitness to hold a responsible appointment as a specialist on the staff of a hospital.

General Training

The undergraduate curriculum is designed to give the graduating student the principles of the practice of medicine, and to teach method, as the Planning Committee of the Royal College of Physicians points out; and the State may now require a period of twelve months in junior resident appointments in approved hospitals before registration to practise can be granted. While holding these appointments the graduate will obtain practical experience, with responsibility for the management of patients, and learn to carry out the technical procedures for diagnosis and treatment that he will be required to perform in the practice of his profession. For a specialist in any of the clinical branches twelve months of practical experience as a resident house-officer is insufficient to provide the wide knowledge of patients and their ailments upon which can be built a wise understanding of any special group of patients and diseases. Until, therefore, the graduate can obtain further junior hospital appointments that provide general experience he should not be encouraged to concentrate on a special subject. These appointments will be normally at an undergraduate teaching hospital or a hospital approved by a medical school and will be of the senior house-officer type. They will be obtained in competition with other candidates for specialist careers, and in this way selection will be exercised. This selection will be progressive, as the graduate competes at each stage for the diminishing number of further appointments suitable for the more advanced stages in his training and, finally, for a specialist appointment on the staff of a hospital.

Special Training

At the end of the further period of one to two years in resident appointments after registration, when the graduate has obtained a wide and practical experience of sick persons and of the routine methods used in diagnosis

*Annual address given at the Institute of Laryngology and Otology, Gray's Inn Road, London, on Oct. 10, 1947.

and treatment, he will be ready for education in the basic principles of the specialty as an advanced student. For general physicians and general surgeons this advanced education should be progressive over a period of three years at least and be combined with clinical responsibility. For those intending to practise in one of the special branches of medicine or surgery, training as a general physician or general surgeon should be required first, though the period may be somewhat shortened, and a longer total period will be necessary.

Graded Hospital Appointments

This period of special training has not been well organized in the past but has been regulated largely by individual preferences and initiative, and by local circumstances and opportunities. The customary programmes, however casually they have been devised, show much that is common in their patterns, and it is important that this characteristic should be retained to form the basis of the schemes for improvement which are now possible with increased grants for medical education and the institution of a National Health Service. The basis of training has been the holding of a hospital appointment of the registrar type in the appropriate department of a general hospital or, in the case of some special branches, in a special hospital. In the United States of America this type of appointment is generally known as a residency, and in their teaching hospitals has been planned and developed for the education and training of specialists. Stress is laid on the progressive character of the appointment, so that the holder is given increasing responsibilities as his education proceeds, and in its final stage the appointment might be described as that of a resident assistant physician or surgeon. The comparable appointments in this country, known as resident medical or surgical officer, registrar, chief assistant, tutor, etc., vary greatly in the nature of their responsibilities and opportunities, and the duties have as a rule occupied so fully the time of the holder that there has been little opportunity for study and reflection, and the supervision required to make the period one of advanced education has been seldom provided.

It would be a mistake to lay down any rigid programme of training because of the different careers which specialists ultimately follow. The great majority will be fully occupied in the care and treatment of patients, a few will obtain appointments as teachers in the medical schools in addition to clinical appointments in teaching hospitals, and only a very few will follow careers in experimental work or laboratory research. All should, however, be trained to use their opportunities for clinical observation to advance knowledge, and all should reach such a standard of general education and culture as befits the leaders of a learned profession.

The first stage of the registrarship should if possible be held in a *general teaching hospital* and medical school. There the graduate will be in contact with many others in a similar stage of training, though aiming at specialization in other branches and holding appointments in other departments, and in contact also with experienced practitioners and teachers in his own and in other specialties. The staffs of the pathological and preclinical departments will be ready to help and advise, and their laboratories will be open to him. Library facilities and a museum will be available and he will have opportunities for teaching undergraduates and house-officers. Teaching of this kind and discussions with their contemporaries and seniors should be arranged for the registrars, as these are as important in their training and development as responsibility for the care and treatment of patients. A considerable increase in the number of registrar posts in teaching hospitals is proposed, and this should make it possible in most instances for at least the first year of training to be spent in this way, and at the same time enable the holders of these posts to have more time for study, discussion, and reflection than has been usual in the past.

The clinical material at an undergraduate teaching hospital is regulated by the needs of undergraduate education and, except in general medicine and general surgery, there will seldom be enough patients to provide the registrars with the wide practical experience they require in the technical aspects of their specialties. The second stage in their training might well be arranged to provide this by an appointment for a year or longer in a *regional hospital centre* with a large department for the particular specialty, where the training will be more practical and where the registrar will have opportunities for gaining by experience the skill in diagnosis and treatment which he will require. The hospital or special department should be approved for the purpose by the regional postgraduate committee, for his training must still be closely supervised.

The third stage should vary according to the progress made during the earlier stages and to any aptitudes which the candidate has displayed. If he is a promising undergraduate teacher he might return to his original or some other teaching hospital, and if he has shown ability for original research he might be appointed to a professorial department. On the other hand, if his inclinations and abilities point to a life devoted to the treatment and management of patients a further period in a non-teaching hospital might be best to equip him for a career as a regional specialist and consultant. At some period in his training, no matter what his eventual career may be, he should be given opportunities to see the practice of his specialty in other centres, either by a hospital appointment in another part of the country or by a period of study abroad. In London there are peculiar advantages in an appointment at one of the *special postgraduate hospitals* with the visiting staff representative of the practice and teaching of the general medical schools, for the graduate will be able to obtain there a wider view of the specialty and to form his own opinion on the comparative values of different methods.

Courses of Instruction

In most subjects organized courses of postgraduate instruction are available, consisting of lectures and demonstrations, with varying opportunities for practical work in the wards and out-patient departments. In the training of a specialist these courses cannot take the place of graded hospital appointments with increasing responsibilities. They can, however, play a part. It is doubtful if the better type of graduates who obtain appointments of the registrar type at teaching hospitals and hospitals associated with a medical school over a period of three years or more gain much from an organized course, but there are graduates who lack the ability to generalize from their experiences. For them a well-planned course can be of great value in enabling them to appreciate the principles underlying their practice, to synthesize their knowledge, and to clear their minds of doubts and difficulties. For those who have been unfortunate in their hospital appointments a good course can fill the gaps in their knowledge and compensate to some extent for the deficiencies of their earlier training. Such a course should be of the advanced revision type. It needs skilful planning, and for its success requires a group of able instructors who are keen and experienced teachers as well as experts in their specialties. Only a few courses of this type are available at present.

The usual type of organized course is more suitable as an introduction to a specialty and provides a background for further training by means of hospital appointments. Unfortunately they often enable candidates to obtain diplomas and thus to appear qualified to practise a specialty in which they have not been adequately trained. Success in passing the examination for a special diploma is evidence of progress, not of completion of training as a specialist.

Lectures.—Lectures designed to supplement responsible work with patients are available in most of the specialties. Given by experts each on the subject in which he is specially

interested, with no attempt to cover the field systematically, they can be of considerable value by indicating the directions in which progress is being made, the gaps in current knowledge, and the literature that should be studied. When the lecturers are drawn from all the medical schools in the country such a series can be of great educative value and a stimulating experience.

Research.—There are a relatively small number of graduates whose intellectual capacity and earlier education enable them to develop as fast as their teachers can take them and whom it is a joy to teach. If given the appropriate opportunities and encouragement during their training they are likely to contribute to the advance of knowledge in the specialty. They should be watched for continually and be attached to individual members of the clinical or laboratory staffs to assist them in their investigations and in experimental research. Hitherto there have been very few departments with staff, accommodation, and equipment of university standard in the clinical subjects, except general medicine, general surgery, and obstetrics, and opportunities for higher education and research in the special clinical branches have been difficult to obtain. This has been a serious drawback to specialist education in this country, and the increased financial grants which the Government is now giving for medical education will, it is hoped, improve the position and provide opportunities for this the highest form of medical education and the essential inspiration in the training of specialists.

Graduates from Overseas

This scheme of progressive training, based on competitive selection for hospital appointments and supplemented by courses of instruction, has been outlined with particular reference to the graduates of our own medical schools, and it is necessary to consider how the graduates from overseas can be welcomed and fitted into it in accordance with their requirements. They visit us at various stages in their postgraduate education; they remain here for a few months or for two or three years; they may aim at obtaining the best training we can provide or they may plan to return to their own countries before reaching the standards that we regard as essential.

There are those who have spent several years in graded hospital appointments in their own country and come here for a few months in order to see something of the practice and listen to the teaching of our eminent specialists. An advanced revision course covering two or three months and attendance at a series of lectures by experts from the different centres fulfil their first needs and help them to make those personal contacts that add so much to the educational value of their visit. The remainder of their time can be used to advantage by attachment to individual teachers whose methods and philosophy can be studied only by close association.

For those who visit us at an early stage in their training a longer course of basic instruction, with clinical work, demonstrations, and lectures, is required in order that they may acquire sound principles and technical skill. They may then return to their own countries to continue their training by further hospital appointments. Some will obtain them here and remain for several years, sharing with our own graduates the system of registrar appointments with progressive responsibilities.

Most of the graduates from overseas come to London for part at least of their time in this country, though many obtain what they require at other centres in the first instance, and the opportunities provided in Edinburgh are a notable contribution. The majority of the graduates who come to London come with the intention of acquiring one or more special diplomas. In the minds of many of those from overseas the acquisition of a diploma is more important than experience in the specialty, and they are content to spend the whole of their time here in reading books and listening to lectures. The special diplomas vary greatly in their standards; some should be regarded as little more than qualifying the successful candidate to enter on a period of proper training; few can be accepted as indicative that the candidate is fit for the responsibilities of a specialist and that his training is completed. Few persons, apart from those directly concerned, appreciate the standards of the different diplomas; and there is much misconception of their values in the minds of the public and of the non-medical members of hospital boards even in this country, and they are often given entirely false values by official bodies overseas. Most of the special diplomas are awarded by the Royal Colleges, which arrange series of lectures of considerable educative value, for they indicate the standards of learning which a specialist should possess, without attempting to cover the subjects systematically, but they cannot themselves provide the clinical work essential for the training of a specialist. There is, I believe, a real danger that London may come to be regarded as a purveyor of diplomas, a reputation that might interfere seriously with its development as a great centre of postgraduate education. Closer co-operation between the Royal Colleges, the associations of specialists, and the medical schools is clearly desirable to ensure that the special diplomas take their proper place in the education of specialists.

The number of clinical appointments suitable for specialist training at the general teaching hospitals associated with the undergraduate medical schools has hitherto been insufficient for the training of our own graduates, and only rarely has it been possible for them to provide posts for visitors from overseas. The staffs of the undergraduate teaching hospitals have been fully occupied with the education of undergraduates and they have been unable to contribute to any great extent to the training of the large and increasing numbers of visitors. The experience of the post-war years and the need for additional or supernumerary appointments to provide for medical officers released from the fighting Services have shown that in general medicine and general surgery opportunities eminently suitable for the training of specialists can be provided at the general teaching hospitals to a considerably greater extent than has been the practice in the past. If a few appointments of this type could be allotted at each of the teaching hospitals to selected graduates from overseas it would make a most welcome contribution to the training of specialists for the Commonwealth and Empire. In the special branches of medicine and surgery, however, the undergraduate medical schools, maintaining a proper balance between their general and special departments, cannot as a rule be expected to develop departments with the staff, accommodation, and equipment required for advanced education and research. Appreciating the increasing demand for postgraduate education in London and the peculiar opportunities for creating university departments in the special branches in association with London's famous special hospitals, the University of London has embarked on a policy of developing postgraduate institutes for higher education in the major clinical specialties.

The Postgraduate Institutes

The institutes are being developed from the postgraduate teaching that has been carried on for many years at certain of the special hospitals of London. In addition to resident hospital appointments and the very important training which they provide, the instruction has varied considerably in standard, and has consisted for the most part of clinical demonstrations and lectures, planned in some instances to suit the requirements of candidates for diplomas. In only a few instances was it possible to provide the advanced education that should be regarded as essential for a specialist and consultant, and it is, I think, significant that the standard of education has been generally higher in those special branches in which there are no diplomas.

The aim of the University of London, and of the British Postgraduate Medical Federation acting on behalf of the University, is to provide opportunities for research and higher education in each of the major clinical specialties, with staffs appointed to advance knowledge not only in the clinical field but also in the sciences upon which the practice of each is based. Each institute should be the centre in London of thought and practice to which the specialists will look for help and above all for inspiration. The staff of each institute should be representative of the special departments of the undergraduate medical schools and the general teaching hospitals, and the University will

look to the institute for advice on academic matters concerning the specialty.

As soon as practicable the University will be asked to appoint professors or readers at each of the institutes. Their assistants should be the best of the younger men available from all sources for advancing their subjects by research and experiment, and it should be possible to offer accommodation at each of them to specialists established elsewhere, either at home or abroad, to enable them to work on approved problems. Clearly it will take some time to provide at each institute the laboratory accommodation and equipment, the libraries and museums, that are required, but until this is done the institutes cannot fulfil their main purpose; for teaching must always be dull, uninspired, and lacking in the essential element of excitement unless there is an atmosphere of investigation and progress. This is especially necessary in advanced or postgraduate education.

The number of appointments of the house-officer and registrar types at the teaching hospitals associated with the institutes should be regulated by the recognition that these are training appointments and that leisure for study and reflection is required. In most of the postgraduate teaching hospitals they could be increased in number. These appointments represent the principal method of practical training in the specialty and should be graded to provide progressively increasing responsibilities. The postgraduate teaching hospitals have a peculiar responsibility for graduates from overseas, and they will, I hope, agree to reserve some proportion of their appointments for candidates sponsored by the universities of the Dominions and selected by the representative committees being formed for this purpose.

As a result of interviewing large numbers of graduates coming to London from other universities in this country and of graduates from overseas seeking specialist training here, I believe that to meet their requirements there should be two types of courses of instruction in each specialty. One type should be designed to serve as an introduction to the specialty, to provide training in its basic principles and technical skills, and to give a sound educational basis to the subsequent periods of training by hospital appointments, either here or on the return of the graduate to his own country. With practical work in wards, out-patient departments, and laboratories, supplemented by group discussions, lectures, and demonstrations, such a course can, if organized to cover a period of six months or so, contribute materially. It cannot replace responsible appointments, and the object of the course should be preparatory and educative rather than vocational. In connexion with the course each institute will arrange a series of lectures on the applications of anatomy, physiology, biochemistry, pharmacology, and pathology to its special subject; but there is much, I would suggest, in the application of these sciences that is common to all the special branches of medicine and surgery, and it should be possible to arrange also a central series of lectures in the basic sciences which candidates in all the specialties might attend. The lecturers would be drawn from the medical centres throughout the country, and the series might be organized with the co-operation of the Royal Colleges. There is a philosophy inherent in every specialty which it is the duty of the institutes to foster and impart, and the history of the specialty, its contributions to medicine, to culture, and to the life of the community should be stressed.

The other type of course should be designed to co-ordinate and systematize the practical experiences of the graduate who has completed his training and his hospital appointments either in this country or abroad, to indicate the frontiers of knowledge and lines of progress, and to renew his enthusiasm. Advanced revision courses of this kind are peculiarly exacting on the teaching staff. They should be based on the examination, investigation, and demonstration of selected cases by the graduate students themselves, followed by group discussions of the subject and its literature. Only those graduates who are sufficiently advanced in their training to make good use of these opportunities should be accepted, and the class should be strictly limited in size and divided into small groups for much of the work. Such courses need not extend over more than eight to ten weeks, and they would be most suitable also for established specialists from the regional hospitals of the National Health Service or from overseas who will return to London from time to time for the continuation of their education. They would preferably be part-time, to allow of attendance at other hospitals and institutions and for the study of more general subjects, and a series of lectures on the clinical aspects of the specialty by its eminent practitioners drawn from all the centres in this country might be arranged, with the co-operation of the Royal College especially concerned, to take place at the same time.

Present-day Difficulties

This programme of research, clinical experience, basic training, and advanced revision cannot be fully carried out until considerable increases in accommodation are provided and until suitable staffs can be appointed. Much can be done and is being done now with improvised accommodation and the eager co-operation of existing staffs and hospital authorities. Further progress depends largely on finding suitable persons to direct research and organize the teaching who are able to devote their time to these duties, as well as on the new Boards of Governors of the teaching hospitals that are to be appointed by the Ministry of Health.

During the immediate post-war years there has been a heavy demand for postgraduate education, and the plans for a National Health Service in this country and of similar services in the Dominions and elsewhere have created an unprecedented pressure on our provisions for specialist training. The postgraduate teaching hospitals and medical schools throughout the country have met this pressure by increasing the numbers of students accepted for courses and of appointments of the registrar type, and this has put a heavy burden on their teaching staffs. With the establishment of the National Health Service and the appointment of postgraduate committees in each of the regions it is hoped to extend the opportunities for specialist training and to use the hospital centres in the regions for postgraduate education. This will enable the institutes of the University to be more selective in their acceptance of applicants. For many visitors from overseas instruction of a practical type would be more appropriate than the advanced education which the institutes will provide, and there are some whose training in general medicine and general surgery has not been sufficient for them to make use of the opportunities which the institutes will offer. Others come to London to attend a course in one or more of the specialties in order to add to their equipment for general practice. It should become possible, in due course, suitably to place postgraduates of all types and leave the institutes free to develop as departments of the University and to become focal points of postgraduate education in their specialties. They should be institutions for higher education and research, but they should also be responsible for the co-ordination of training in their subjects in the London area.

Much has been accomplished, and the start is a promising one.* At other universities plans are being developed which will contribute to the same end. Differing in detail and shaped by local conditions, they will provide a welcome stimulus through rivalry. There is still a long way to go before the aim of the University of London is realized and before the peculiar opportunities present here in London are developed fully. When that time comes the postgraduate institutes will send out the future leaders of medical thought and practice, and will be able to welcome those who seek to advance knowledge by research and to improve their skill for the relief of suffering.

*In addition to the Postgraduate Medical School of London, institutes have been established, or are in process of development, in child health, neurology, laryngology and otology, ophthalmology, psychiatry, diseases of the chest, cardiology, dermatology, orthopaedics, urology, and dental surgery.

SMALLPOX IN STAFFORDSHIRE, 1947

OUTBREAK AT BILSTON

BY

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The following report covers the outbreak of smallpox which occurred in the borough of Bilston and in the neighbouring areas of Coseley U.D.C., Willenhall U.D.C., and Dudley C.B., as it is assumed that all the cases were from the same source. Thirty cases were confirmed by the Ministry of Health and seven others were removed to hospital as suspects. One associated case occurred in the Birmingham area—a medical student who had visited the smallpox hospital; this is not included in the present series. Six cases were fatal—five haemorrhagic and one confluent smallpox.

History of the Outbreak

An Army sergeant aged 23 was granted compassionate leave from India. He left Agra by train on Feb. 17, 1947, boarded a plane at Karachi on the 20th and, flying via Basra, Cairo, Malta, and Marseilles, arrived at Heathrow Airport on the 23rd. Next day he travelled to his home in Bilston. He had been vaccinated in infancy and again on Nov. 3, 1944, and Feb. 15, 1946.

On March 1 he felt slightly ill, but remained ambulant until he developed a rash on March 6, when he said he felt as if he had "flu." The local medical officer of health, Dr. B. C. Haller, did not feel happy about the case and attempted to obtain the opening of the smallpox hospital. However, further opinion was sought through the regional office of the Ministry of Health, and a confident diagnosis of chicken-pox was made on March 8.

The patient remained at home, and his mother developed a rash on March 21. A diagnosis of chicken-pox was again made. An unvaccinated man of 21 years, who had visited the soldier on March 6, developed a more severe rash on March 25. Further consultations took place and specimens were sent from the two later cases for laboratory investigation. A preliminary report on April 1 suggested that the condition was variolous. Further experts were called in, and a conference took place on April 3, at which time "reliable clinical opinion still regarded the Bilston cases as chicken-pox" (Regional Ministry Circular).

On the 4th the mother and brother of Case 3 were taken ill and developed rashes on the 8th. By this time confirmatory reports on the laboratory investigations left no doubt that Cases 2 and 3 were smallpox, and the hospital was opened on the 9th, the first two cases having by this time recovered. The outbreak was regarded as variola minor (*Med. Off.*, 1947, 77, 152), but subsequent events proved the infection to be of the major variety.

From Case 1 three further cases originated: the grandmother developed haemorrhagic smallpox and died before removal, and the father and sister developed modified eruptions. No further cases were reported from the known source, but ample opportunity for spread of the infection had been afforded in the 34 days which elapsed between the appearance of the rash in the soldier and the opening of the hospital. One case was known to have travelled from Bilston to Coseley by bus in the late prodromal stage.

Subsequent groups of cases developed in which no apparent origin could be traced, despite vigorous detective work on the part of the staff. The last case was admitted to hospital on July 9 with a confluent rash after being ill at home for six days; an initial diagnosis of measles had been made. This patient lived some four miles from the original focus and her source of infection remains unknown. She had numerous visitors during her period at home, but no contact cases were reported. The 30 cases are classified in Table I and their histories given in Table II.

TABLE I—*Summary of Confirmed Cases*

Severe Cases (15)		Mild Cases (15)	
Haemorrhagic	5 (all fatal)	Copious discrete	1
Confluent	8 (1 fatal)	Moderate discrete	1
Semi-confluent	2 (none fatal)	Mild discrete	6
		"A few spots"	7

Commentary

Cases were seen before admission by experts of the Ministry's Regional Panel, and where doubt existed further examinations were made after admission.

In the *Monthly Bulletin of the Ministry of Health and Public Health Laboratory Service*, July, 1947, special attention was drawn to the fact that the three contacts of Case 9 who developed the disease had been unsuccessfully vaccinated on May 17, 1947, and revaccinated on May 23. This was later found to be incorrect. When examined on the 23rd the reaction to the incisions performed on the 17th was very indefinite and further incisions were made. By the 25th, however, the vaccination of the 17th showed a good reaction.

Group 7 (Bilston).—Opinion was sought in regard to Case 22, aged 7, who was gravely ill. As the other children in the household presented minor lesions they were admitted to hospital. Cases 21 and 23 were regarded by the Ministry expert as confirmed smallpox, but an infant aged 10 months and an older sister, both vaccinated, were not confirmed. When Case 21 was seen in hospital on June 30 a scar was noted on his ankle, and it was suggested that he might have been the original source in the household. No other lesions were then present. Local opinion considered that the scar was due to an old infection caused by a protruding nail. Further opinion on July 7 doubted if the case ever was smallpox. Case 23 was very fretful and obviously ill on removal, but the rash failed to develop beyond the macular stage. She was vaccinated after admission to hospital.

Case 24.—This boy had papules on the forehead only, which soon scabbed and left depressed scars showing staining. The laboratory results were negative, but his was regarded as a highly modified case when seen on July 7. His sister was removed to hospital as a suspected case, but her condition soon subsided and she was regarded as suffering from a vaccinial lichen. It is possible that the boy also was suffering from an eruption of this type.

Case 30 (Dudley).—Clinically this was the most interesting case of the whole outbreak. The prodromal phase was marked with headache, chill, malaise, and backache. The rash appeared on June 19 and streptococcal septicaemia was diagnosed. The patient was removed to the infectious diseases hospital on June 21 by ambulance and before being sent to the ward he was seen by a medical officer who had seen Case 9. As Case 30 presented a similar picture he was transferred to the smallpox hospital. He had a marked

TABLE II.—*Case Histories*

Case No.	Sex	Age	Source of Infection	Vaccinial State	Final Diagnosis	General Remarks
				BILSTON CASES		
				Group 1 (8 cases)		
1	M	23	India	Infancy 3/11/44 15/2/46	Mild discrete	Prodromal phase 1–6/3/47, "like 'flu.'" Rash on palate, face, back, shoulders, and chest. Quick maturation and slight depth
2	F	50	Son (Case 1)	Infancy	,,	Febrile 19–21/3/47. Rash on 21/3/47: palate, face, trunk, forearms, legs. Well-marked vesicular stage. Laboratory confirmation
3	M	21	Case 1	Unvaccinated	Semi-confluent	23/3/47, severe malaise; 25/3/47, rash profuse on face, forearms, palms, legs, and soles. Laboratory confirmation
4	F	48	Son (Case 3)	Infancy 3/4/47	Confluent	Onset 4/4/47: marked rigors. Rash 8/4/47: profuse, typical distribution. Penicillin given from 14/4/47. Laboratory confirmation
5	M	17	Brother (Case 3)	3/4/47	,,	Onset 4/4/47: prodromal phase marked. Rash 8/4/47. Penicillin given from 14/4/47
6	M	51	Son or wife) (Case 1 or 2)	1914–18 10/4/47	Mild discrete	Onset 8/4/47: malaise. Rash 11/4/47. 20 lesions: forehead, arms, scapulae. Laboratory confirmation
7	F	19	Brother or mother (Case 1 or 2)	Infancy 10/4/47	"A few spots"	Onset 8/4/47: slight malaise. Rash 11/4/47. 9 lesions in all. Laboratory confirmation
8	F	79	Grandson (Case 1)	? Infancy	Haemorrhagic	Onset 8/4/47: gravely ill. Petechial rash 10/4/47. Died 11/4/47
				Group 2 (4 cases)		
9	M	70	Unknown	Unknown ? infancy	Haemorrhagic	Onset 26/4/47: headaches. 29/4/47: rash; petechial on trunk and extremities. Bruising on arms, hands, and feet. Blood p.r. Penicillin given. Died 2/5/47. Laboratory confirmation
10	F	64	Husband (Case 9)	2/5/47 (primary reaction)	Confluent	Onset 7/5/47: prodromal phase slight. Rash on 11/5/47. Penicillin given from admission on 11/5/47
11	M	30	Case 9	3/5/47 (primary reaction)	,,	Onset 7/5/47: severe pain in abdomen. Rash on 11/5/47. Penicillin given
12	F	41	Case 9	2/5/47 (primary reaction)	"A few spots"	Onset 11/5/47: symptoms slight. Rash on 13/5/47: 7 pustules in all. Positive laboratory culture
				Group 3 (4 cases)		
13	F	27	Unknown	Unvaccinated	Haemorrhagic	Onset 9/5/47: severe sickness, headache. Rash on 12/5/47; diagnosed as scarlet fever. Admitted 16/5/47. Petechial rash: confluent on face, neck, and throat; discrete on back, abdomen, and limbs. Palms and soles clear. Blood from all orifices. Died 16/5/47
14	F	49	Daughter (Case 13)	Infancy 17/5/47 23/5/47	,,	Onset 29/5/47: intractable headache, abdominal pain. Rash first appeared 31/5/47. Confluent petechial rash by 2/6/47. No maturation. Died 5/6/47
15	F	14	Sister (Case 13)	Infancy 17/5/47 23/5/47	Mild discrete	Onset 30/5/47: no symptoms, but acneiform rash which was vesicular on 31/5/47
16	F	12	Sister (Case 13)	Infancy 17/5/47 23/5/47		No prodromal stage. Rash on 1/6/47. Vesicular. Ambulant throughout.
				Group 4 (1 case)		
17	F	11	Unknown	Unvaccinated	Confluent	Onset 16/5/47: abdominal pain. Rash 19/5/47. Treated with penicillin from 19/5/47
				Group 5 (1 case)		
18	F	39	Unknown	Infancy 4/6/47 (successful)	Moderate discrete	Onset 1/6/47: rigors, etc. Rash 4/6/47: maculo-papular, mainly on legs and arms. None on face. Treated with penicillin
				Group 6 (2 cases)		
19	M	61	Unknown	Infancy	Copious discrete	Onset 9/6/47: backache. Atypical rash on 13/6/47; papular on forehead and scalp, acneiform on body. Specimens reported "presumptive negative." Quick maturation and removal on 17/6/47. Later material positive. Treated with penicillin
20	F	61	Husband (Case 19)	Infancy 16/6/47	"A few spots"	Vague onset 26/6/47. Rash appeared 28/6/47. Scattered papules on body and extremities. None on face. Laboratory confirmation
				Group 7 (3 cases)		
21	M	11	Unknown	May, 1947	"A few spots"	Removed to hospital with Case 22. A few indeterminate lesions. Laboratory-negative
22	M	7	Unknown. ? Case 21 (brother)	Unvaccinated	Confluent	Onset 18/6/47: pains in back, severe diarrhoea. Rash 20/6/47; confluent. Treated with penicillin. Died 2/7/47
23	F	2	? Case 21 (brother)	,,	"A few spots"	Onset 20/6/47. Removed same day with macular rash which did not mature. Laboratory-negative
				Group 8 (1 case)		
24	M	10	Unknown	23/6/47	"A few spots"	Onset 30/6/47: little discomfort. Rash on 3/7/47, forehead only. Laboratory-negative
				COSELEY CASES		
				Group 1 (2 cases)		
25	F	78	Unknown	Infancy	Haemorrhagic	Source probably indirectly from original Bilston case. Onset obscure (patient an invalid). Rash on 7/5/47; petechial. Died 15/5/47
26	M	72	Sister (Case 25)	10/5/47	"A few spots"	Onset 22/5/47: slight symptoms. Two lesions on wrist on same day, positive for variola. No other lesions
				Group 2 (2 cases)		
27	F	18	Possibly Group 2 (Bilston)	6/5/47	Confluent	Onset 13/5/47: prodromata fairly severe. Rash 16/5/47; initial diagnosis "measles." Admitted 19/5/47. Penicillin given
28	F	52	Daughter (Case 27)	20/5/47	Semi-confluent	Onset 27/5/47: headache. Rash 29/5/47, papular on admission on face, neck, trunk, limbs, and in the axillae
				WILLENHALL AREA (1 *case*)		
29	F	19	Unknown	Unvaccinated	Confluent	Onset 3/7/47: dysphagia. Rash developed 6/7/47: original diagnosis "measles." Removed 9/7/47. Gravely ill. Penicillin given
				DUDLEY AREA (1 *case*)		
30	M	45	Unknown	Infancy 25/6/47	Mild discrete	Onset 16/6/47. Original rash 19/6/47. Later crop 1/7/47

vesicular rash on the forehead, face, neck, and thorax; pronounced excoriation of the skin in the neck area; a papular rash on the arms and legs but none on the palms and soles; a haemorrhagic rash on the lower thorax and abdomen; and some lesions in the mouth. He complained of severe abdominal pain. His was suspected to be a haemorrhagic case, and penicillin was administered. The rash continued to extend and the haemorrhagic areas became brighter until June 24, when the rash faded quickly, although the temperature remained raised and the abdominal pain persisted. Laboratory findings at this stage were negative. By June 30 the rash had completely faded, and a Ministry expert expressed the opinion that it might have been erythema multiforme. There were never any bullae, severe stomatitis, or pseudomembrane in the mouth. On July 1 a new crop of lesions appeared, beginning as a vesicle on the abdomen within a previously haemorrhagic area. Specimens gave a positive culture for variola. By July 4

there were more papules present on the hands and chest, the temperature became normal, albumin disappeared from the urine, and the patient felt better. On July 7 an expert confirmed the rash as being a modified smallpox of some six days' duration. Further progress was uneventful. While for record purposes this case was classified as mild discrete smallpox the possibility remains that it was a haemorrhagic case, with a prolonged prodromal period and slow maturation, which recovered.

Suspected Cases

The following four suspected cases were removed to hospital but were not confirmed as smallpox.

An unvaccinated child of 7 years had severe vomiting and epistaxis. Next day a provisional diagnosis of " ? varicella, ? variola " was made and she was admitted to a special isolation unit. On admission she was delirious, with a profuse macular rash on the face, trunk, and palms of the hands. By the following day she had developed post-occipital glands and the rash was fading. Subsequent progress proved the condition to be rubella.

A woman aged 27 developed a profuse papular rash on the hands, shotty to the touch, with a few vesicles, 16 day after vaccination. Laboratory evidence was negative and the lesions soon cleared, leaving considerable brown staining. This was probably a vaccinal eruption. There was no previous history of urticaria.

A girl aged 22 who had been vaccinated in infancy and again on May 17, 1947, developed a rash on June 14 after a well-marked period of sickness, abdominal pain, backache, and conjunctivitis. She had three papules on the forehead, one on the chin, and one on the right leg which became vesicular. Opinion was divided, but she was removed to hospital, where laboratory evidence was negative. The scarring from the lesions was depressed and showed staining.

A man aged 31 who worked in Bilston was vaccinated on May 21, 1947, and developed a rash on June 17 with no initial prodromata. He was removed to hospital with a generalized rash, which gave negative laboratory evidence.

It is suggested that the last two cases may possibly have been late effects of the vaccination.

General Measures Taken in Bilston

Contacts.—All possible steps were taken to obtain lists of contacts, who were kept under surveillance for a period of 21 days to cover any possibility of a prolonged incubation period in vaccinated or modified cases. In the later stages of the outbreak considerable help was given by the Army authorities, a field hygiene unit being drafted in to help in the daily visitations, which then numbered several hundreds.

Vaccination.—Vaccination was offered to all known contacts, and a special clinic was opened to facilitate the work of the public vaccinators. All contacts received three incisions. No endeavour was made to advocate mass vaccination, as it was felt that the protection of the known contacts was the important factor. However, by the middle of May the public panicked at the continued incidence of cases, and the demand for vaccination became so great that assistant medical officers of Staffordshire County Council had to be called upon to act as deputies for the public vaccinators. It is estimated that over half the population of Bilston were vaccinated at the clinics and works or by the practitioners. No cases of encephalitis following vaccination were reported in the Bilston, Coseley, and Willenhall areas.

Chicken-pox.—Section 147 (1) Public Health Act, 1936, was brought into operation and chicken-pox was notifiable from May 19. All cases were visited by the medical officer of health, and several adult cases remained suspect until proved negative.

Staff.—All staff in any way connected with the cases were revaccinated at six-weekly intervals, as it was felt that a virus of very high virulence was responsible for the outbreak.

Hospital Arrangements.—A small disused infectious diseases hospital was opened by the Smallpox Board and staffed by volunteers. Although the hospital was situated in Bilston the distribution of the cases gave no evidence of aerial spread.

Treatment of Patients

General.—Patients were nursed until the crusting stage in darkened rooms. The eyes were treated with boric lotion and sulphacetamide drops. Frequent mouth-washes were given. Lesions occurring on the face and neck were treated with hot sodium bicarbonate compresses, as they were found to be very soothing.

Sedatives.—" Nembutal," 1½–4½ gr. (0.1–0.3 g.), was administered according to the age and condition of the patient.

Use of Penicillin.—As already indicated, penicillin was administered to most of the severer cases. In the first two to receive it it was started in the pustular stage, 20,000 units being given intramuscularly at three-hourly intervals, then being changed to 100,000 units six-hourly. It was later suggested that a dose given twice daily would maintain an effective concentration and cause less disturbance to the patients. Later cases received 1,000,000 units twice daily from admission to the crusting stage. The dosage was purely empirical. This is a greater dose that has previously been noted in the treatment of smallpox (Easton, 1945; Foulis, 1945; Pierce, 1947). One cannot claim too much from the small series, and it is not suggested that penicillin influenced the course of the virus infection. In the pustular stage there was much less photophobia and pus formation, and the nursing staff noted agreeably the great diminution in the quantity of soiled linen. Cultures taken during the pustular stage grew only penicillin-resistant *Staphylococcus aureus.*

The mortality rate compares favourably with other recent epidemics, only one confluent case being fatal—that of a previously debilitated child.

TABLE III.—*Comparison with Other Recent Outbreaks of Smallpox*

Outbreak	Total Cases	Deaths	Haem. and Haem. Confl.	Confluent	Semi-Confl.	Mild	Severe Cases*	
							%	Mort. %
Glasgow, 1942 ..	36	8 (22·2%)	3 (3)	9 (5)	2	22	38·8	57
Edinburgh, 1942 ..	36	8 (22·2%)	6 (6)	5 (2)	3	22	38·8	57
Middlesex, 1944* ..	11	3 (27·3%)	1 (1)	2 (2)	—	8	27·3	100
Middle East, 1944 ..	48	13 (27·1%)	11 (10)	5 (3)	10	22	54·1	50
Merseyside, 1946 ..	31	9 (29·0%)	5 (5)	7 (4)	—	19	38·7	75
Bilston. 1947 ..	30	6 (20·0%)	5 (5)	8 (1)	2	15	50	40

* Severe cases comprise the haemorrhagic, confluent, and semi-confluent. The bold figures in parentheses indicate the number of fatal cases.

Lessons of the Outbreak

Once again an outbreak of smallpox followed a confident diagnosis of chicken-pox by competent experts. This also occurred in 1947 at Scunthorpe (*Medical Officer*, **77**, 152); in the Middlesex outbreak of 1944 (Bradley, Davies, and Durante, 1946); the Edinburgh outbreak of 1942 (*B.M.J.*, 1944, **2**, 54); and at Birkenhead in 1946 (Pierce, 1947). Had the original case at Bilston been removed to complete isolation it is probable that the outbreak would have terminated in the original group. One can but echo C. Killick Millard (1947): " Chicken-pox in adults should always be regarded with suspicion."

The possibility of a modified attack of variola should always be borne in mind when suspicious rashes occur in vaccinated persons who have recently arrived in this country by air. The impact of such a case on a comparatively unvaccinated population was well demonstrated in the Bilston outbreak. One would have expected further cases to arise, especially in the overcrowded conditions prevailing in the area, and the early removal of the patients, with vaccination and close surveillance of the contacts, must have been contributory factors in limiting the spread. Mild missed cases in vaccinated persons must account for the missing links in the spread of the outbreak, the termination of which can be described only as natural or spontaneous.

Laboratory investigations have been of great help in confirming some cases, especially in the original group and in highly modified attacks such as Case 26. However, time must elapse before the receipt of the reports and of negative results in cases showing definite clinical signs.

As in previous outbreaks, vaccination did not fully protect within the first week of the vaccination period. Many contacts were vaccinated too late in the incubation period, owing to delay in diagnosis or even in sufficient suspicion of the true nature of the case. Confluent cases occurred where successful vaccination had been carried out nine and eight days before the appearance of the true smallpox rash, and in one haemorrhagic case successful revaccination had been carried out 12 days before, yet the case had a fatal termination. Modified cases occurred where vaccination had been carried out 12 days before the rash appeared. Many individuals vaccinated in the Services during the recent war years gave reactions which indicated absence of immunity.

An important administrative point in dealing with vaccination of school-children is the necessity for obtaining the written consent of the parents. In the rush of children coming for vaccination from the schools it was assumed that parental consent had been given. Later it was found that some children had been vaccinated "to be in the fashion," without parental consent.

Summary

An outbreak of smallpox is described originating in a soldier who travelled from India by air and was at home for some days before he developed a modified attack of variola which was regarded as chicken-pox.

Of the 30 confirmed cases, 15 were severe, with 6 deaths—5 from haemorrhagic smallpox and 1 in an unvaccinated confluent case.

I wish to express my appreciation of the very great help given to me by Dr. B. C. Haller, medical officer of health for Bilston, during my period of special duty in the area and for his permission to utilize the various records and reports. My thanks are due to his staff for their ready co-operation at all times. I am greatly indebted to Dr. F. Asker, medical officer of the Joint Infectious Diseases Board, and to Miss Marian Curtin, the matron of the Moxley Hospital and Bilston Smallpox Hospital, for their help in giving me access to the cases and treatment records and for permission to use the records in collating this report. I also wish to record my thanks to Dr. G. Ramage, medical officer of health for Staffordshire, for his permission to publish this report.

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ABSORPTION OF VITAMIN D IN STEATORRHOEA

BY

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Osteomalacia, though rare in this country, may sometimes be seen as a complication of steatorrhoea. Ryle (1924) and others have suggested that the formation of insoluble calcium soaps in the fatty intestinal contents inhibits calcium absorption in this condition. Although unabsorbed fat in the bowel does affect calcium absorption (Telfer, 1926–7), soap formation cannot entirely explain the failure to absorb calcium, otherwise the patients should absorb calcium normally on a fat-free diet. In fact, restriction of fat intake alone does not improve calcium absorption (Bauer and Marble, 1932; Bassett *et al.*, 1939), but vitamin D rapidly restores it to normal even with a normal fat intake, indicating that the patients are vitamin-D-deficient. It was suggested that this was due to a failure of absorption of the vitamin, but no direct evidence of such an effect has been given. In three cases successfully treated with vitamin D, Bassett *et al.* (1939) used large doses (225,000–900,000 i.u. daily) by mouth, these doses being similar to those required in cases of vitamin-D-resistant rickets (McCance, 1947); they obtained equivocal results when smaller doses (10,000 i.u. daily) were given parenterally to another patient. Bauer and Marble (1932) obtained an immediate response with 10 mg. of ergosterol daily by mouth.

When a woman with osteomalacia due to steatorrhoea recently came under our observation the absorption of vitamin D was investigated by comparing the responses to oral and parenteral administration, using doses known to be adequate for treatment of osteomalacia of dietary origin (Liu *et al.*, 1935).

Case History

The patient, a nun aged 61, had worked in Poona from 1932 to 1937. In 1938 a right hemicolectomy, including resection of the last 4 in. (10 cm.) of the ileum, was performed for carcinoma of the caecum; healed tuberculous mesenteric glands were found at operation. After this operation she had diarrhoea, and in July, 1944, she was admitted to this unit for anaemia. Steatorrhoea with megaloblastic anaemia was then found. A sternal puncture showed the sternum to be soft; plasma phosphatase was 14 King-Armstrong units, but serum calcium and phosphate were not estimated and osteomalacia was not suspected at that time.

Treatment was begun with a low-fat diet with extra meat, weekly liver injections, and added vitamins A and D (1,500 units daily), and this regime was continued after discharge. The anaemia and diarrhoea responded fairly well, but in the spring of 1946 she had severe pains in the spine, round the trunk, and in the sacro-iliac joints. Radiographs revealed generalized osteoporosis, and calcium sodium lactate (6 g. daily) was prescribed. This helped to control the diarrhoea, but produced little change in the bone pains. These were rather better after a summer holiday, but this improvement may be ascribed to sunlight rather than to the treatment, for in the spring of 1947 her condition had again become much worse. Every movement of the trunk was very painful; from the lying position she could not sit up without pulling herself up by her arms; her muscles felt weak and she was getting involuntary spasms of the abdominal muscles. Her ribs were very tender. Chvostek's sign was positive, Trousseau's sign

negative. She was admitted to hospital, where the presence of steatorrhoea was confirmed, although the anaemia had improved (Hb, 11.7 g. %; R.B.C., 4,400,000 per c.mm.; M.C.V., 91 cu.μ).

The report of biochemical investigations was as follows: blood urea, 35 mg. per 100 ml.; plasma chloride, 464 mg. per 100 ml. (79.5 m.eq./l.); blood bicarbonate, 50 vols. per 100 ml. (22.2 m.eq./l.); blood phosphate, 2.77 mg. per 100 ml. (1.62 m.eq./l.); serum calcium, 8.8 mg. per 100 ml. (4.4 m.eq./l.); plasma phosphatase, 58 King-Armstrong units; plasma proteins, total 4.7 g. per 100 ml.; albumin, 2.75 g. per 100 ml.

Radiographs of the bones revealed considerable decalcification and multiple fractures of the ribs on the right side. These defects, together with the low blood calcium and phosphate and the high phosphatase, confirmed a diagnosis of osteomalacia. The condition had progressed despite the low-fat diet with added vitamin D for nearly three years, and had not responded to the extra calcium intake. During a preliminary period of

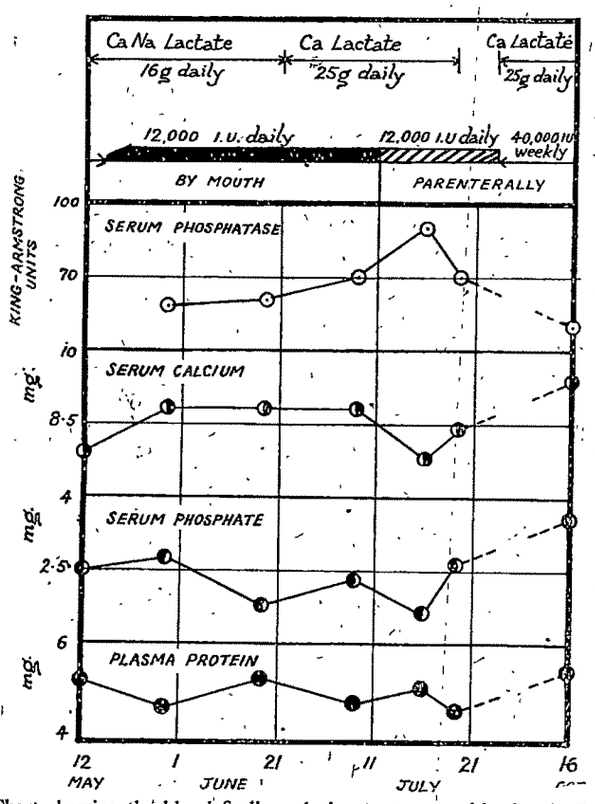

Chart showing the blood findings during treatment with vitamin D.

observation the calcium sodium lactate was increased to 16 g. daily, and the vitamin D to 12,000 units daily by mouth. A low-fat diet (30 g. of fat daily) and liver injections were continued as before. Her pains slowly disappeared, but she remained too weak to get up. Blood findings were practically unchanged (see Fig.). This treatment was continued for five weeks prior to the observations on calcium absorption.

Experimental Observations

The object of the calcium balance observations was to obtain evidence on the absorption of vitamin D. The experiment was begun with a relatively high fat intake (70 g. daily), but time did not permit us to continue the observations on a lower intake. Preliminary tests had shown that 40–50% of the dietary fat was excreted, so that during the experiment 25 g. of calcium lactate was given daily, the diet thus containing more calcium than would combine with this amount of fat in the stools. Observations were made over ten four-day periods, beginning three days after the start of the experimental regime. The fat intake was almost constant throughout the experiment, and the total fat excretion in each period was measured. During the first four four-day periods vitamin D (12,000 units daily) by mouth was continued, but for the next four periods the same dose was given parenterally. Finally, to determine the effect of the added calcium on fat absorption, fat excretion was measured during a further two four-day periods without any added calcium; calcium balances were not determined for these last two periods.

Calcium intakes were calculated partly from food tables (McCance and Widdowson, 1946), but the calcium contents of calcium lactate and milk were measured direct. These sources accounted for about 4.5 g. of the total daily intake of about 4.6 g., so that the probable error of 10% due to using food tables represented a negligible error in estimating the total calcium intake. With the exception of milk, no foods rich in calcium or which contained much oxalate were given. The bread intake was kept constant. All fat intakes were determined from food tables.

For the four-day collection periods carmine (0.6 g.) was used as a faecal marker, and a rectal washout of distilled water was given to complete each collection. Calcium was determined by titration—in the faeces by the method of McCrudden (1911–12), in the urine by that of Shohl and Pedley (1922)—while the inorganic phosphate of urine was estimated colorimetrically, using the method of Berenblum and Chain (1938). Faecal fat was estimated gravimetrically after extracting with petroleum ether an aliquot of wet faeces previously treated with hydrochloric acid and dried with plaster-of-Paris.

Results

During the time of the balance observations there was no significant rise in blood calcium or phosphate (see Fig.), despite apparently effective treatment (cf. Bauer and Marble, 1932; Liu *et al.*, 1935). In periods 1–4, with oral vitamin D, 1.9 g. of calcium was retained, while in periods 5–8, with parenteral therapy, 6 g. was retained (see Table). Marked calcium retention began only during the second four-day period after the

Table showing Four-day Calcium and Fat Balances with Oral and Parenteral Vitamin D Therapy

	4-day Period	Calcium: Intake (g.)	Calcium: In Faeces (g.)	Calcium: Absorbed (g.)	Calcium: In Urine (mg.)	Phosphate in Urine (g.)	Fat (g.): Intake	Fat (g.): In Faeces
Vitamin D (12,000 i.u. daily)	By mouth:							
	1	19·2	17·6	1·6	130	1·36	278	244
	2	18·3	16·7	1·6	130	1·05	263	212
	3	19·2	19·9	−0·7	90	1·60	289	238
	4	18·9	19·5	−0·6	10	1·53	281	240
	Total (16 days)	75·6	73·7	1·9		5·54	1,111	934
	Intramuscularly:							
	5	18·0	20·0	−2·0	7	1·32	266	266
	6	18·7	15·7	3·0	4	1·56	273	200
	7	18·2	16·3	1·9	3	1·43	279	284
	8	18·4	15·3	3·1	4	1·89	280	282
	Total (16 days)	73·3	67·3	6·0		6·20	1,098	1,032
	9, 10	Approx. 6·0					276 280	128 144

start of parenteral therapy. Bauer and Marble found an immediate response to treatment, but Liu *et al.* (1935) and Linder and Harris (1930) also found a negative calcium balance immediately after beginning treatment. The latter authors attributed this to the parathyroid-like action of vitamin D, but the absence of an associated rise in urinary phosphate excretion makes this explanation unlikely (Albright *et al.*, 1946).

The greatly improved calcium balance after parenteral therapy cannot be due to collection errors, for these would affect the results for fat excretion similarly. In fact, fat excretion rose during the second experimental period, when fat absorption was apparently less than 10%. The excessive loss of fat in the faeces was partly due to the high calcium intake: thus the mean daily fatty acid loss in periods 7 and 8 was 71 g., in periods 9 and 10, when no supplementary calcium was given, 34 g.—a difference of 37 g. This amount of fat, assuming an average molecular weight of 271 for fatty acids, would combine with 2.78 g. of calcium. The actual supplementary calcium intake was 3.15 g. This effect of calcium in preventing fat absorption was much more pronounced than in normal people (Fourman), and similar findings in steatorrhoea have been

reported by Bassett *et al.* (1939). On the other hand, the results show that once vitamin D was made available the excess of fat in the faeces did not prevent calcium absorption by soap formation. There may be two reasons for this : first, soap formation possibly does not occur until the calcium and fatty acids come together in the colon (Ingelfinger, 1943); secondly, calcium soaps can be utilized, though poorly (Boyd *et al.*, 1932).

Progress Note.—Ten weeks after the conclusion of the experiment blood calcium and phosphate values had risen to normal with continued parenteral vitamin D therapy, but the phosphatase remained high (see Fig.).

Discussion

The response to the parenteral injection of a dose of vitamin D which was ineffective by mouth indicates failure of absorption of vitamin D in our patient. This failure was not due to the increased steatorrhoea produced by the experimental conditions, since these conditions did not obtain before the experiment was begun, when the patient had been receiving the same dose of the vitamin while on a low-fat diet. Absorption of the vitamin at this time would have affected calcium absorption during the experimental period, since the action of vitamin D even in small doses is a prolonged one (Hannon *et al.*, 1934), so that apparently even without massive steatorrhoea absorption of the vitamin was defective. We were not able, as originally planned, to determine whether absorption of the vitamin occurs in the absence of fat in the bowel.

On the basis of our observations certain recommendations may be made. Ordinary doses of vitamin D may be ineffective in the prevention of osteomalacia in steatorrhoea. In the treatment of this condition parenteral therapy with ordinary doses of the vitamin is effective; oral therapy requires very large doses and is at best uncertain. Large amounts of calcium are necessary to replenish the stores. The patient may absorb 1 g. of calcium daily, equivalent to 7.7 g. of calcium lactate, and may even absorb much more (Starr and Gardner, 1930). It should be remembered, too, that approximately 13.5 g. of fatty acids combine with 1 g. of calcium, and it is possible that some calcium becomes unavailable by forming calcium soaps, so that, though the fat intake need never be severely limited except for diarrhoea, it should be as low as is compatible with a palatable diet when steatorrhoea is complicated by osteomalacia. Possible deficiencies of other fat-soluble vitamins need also to be treated.

Summary

A case of osteomalacia secondary to steatorrhoea is described. The bone disease progressed despite treatment with a low-fat diet and vitamin D and calcium supplements. On a daily intake of 70 g. of fat, 4.6 g. of calcium, and 12,000 i.u. of vitamin D orally the patient retained 1.9 g. of calcium in 16 days. With the same dose of vitamin given intramuscularly she retained 6 g. of calcium in 16 days. Apparently a failure to absorb vitamin D occurs in osteomalacia due to steatorrhoea.

We are indebted to Mr. J. R. P. O'Brien and the Nuffield Department of Clinical Biochemistry for the blood and faecal fat analyses and to the nursing staff of Collier Ward for their willing co-operation. We wish to thank Miss Sheila V. Haddacks for arranging the diets during the experimental periods.

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SUPERIOR MESENTERIC ARTERIAL OCCLUSION

RECOVERY WITHOUT RESECTION

BY

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In the pre-heparin era Whittaker and Pemberton (1938), in a discussion of 60 cases of superior mesenteric arterial occlusion, cited only one case with spontaneous recovery which later, coming to necropsy from an unrelated cause, was proved to have obliteration of the superior mesenteric artery. They also quoted Dye as having had three cases clinically diagnosed as mesenteric thrombosis, in which, on death from unrelated causes, obliteration of that artery was found at necropsy. However, since the introduction of heparin therapy, Jorpes (1946) quotes Ravdin as having two spontaneous recoveries, and Rudberg as having one in which the intestine looked viable and was not resected.

Spontaneous Recovery in Case Management.—The incidence of spontaneous recovery is impossible of assessment from the data available, as a number of cases undiagnosed and untreated will recover; but that a definite percentage do recover is certain, and this should be borne in mind when one is confronted with haemorrhagic infarction of the small gut that is still apparently viable. Especially is this so now, for while in the past the mortality rate of resected cases was 84.2% (Whittaker and Pemberton, 1938) and 83% (Cokkinis, 1926), the rate has no doubt dropped considerably in early cases since the introduction of heparin, —for example, Jorpes (1946) quotes Murray and McKenzie as having six resections with four recoveries.

Aetiology.—Cases of arterial occlusion can be immediately divided into embolic and thrombotic, and most of those in the literature would seem to be due to the latter phenomenon in local arterial disease—a very common condition, whether it be an atheroma, an arteriosclerosis, or a thrombo-angiitis obliterans. Even in cases of degenerative heart disease a thrombosis from associated arterial disease is more likely than an embolism, though in valvular disease of the heart embolism of course does occur. In the following case, with no evidence of embolism and with widespread peripheral arterial degeneration, thrombosis is very probably the correct diagnosis.

Addendum to Accepted Pathology

It is puzzling that a part with so much collateral circulation is so readily subject to infarction, and it has been suggested (Boyd, 1946) that the intense spasm of the gut in response to the local anaemia isolates the segment from the neighbouring circulation, while Cokkinis (1926) avers that infarction takes place when the secondary spreading thrombosis reaches the distal arterial arcade and blocks the vasa

recta. It would seem to be more in line with vascular pathology to suggest that in response to a local thrombosis a state of severe arterial spasm or "stupor" results in the distal arterial tree from a local vasoconstrictor reflex. This would at once place emphasis on treatment by such measures as restoration of the blood pressure by replacement of circulating fluid, moderate heat, and adequate morphine—in themselves powerful methods of overcoming the generalized vasospasm associated with the profound shock found in this condition. Locally, in the viable cases under discussion, an excision of the thrombosed segment of artery should be undertaken, or, if this is impracticable, a periarterial sympathectomy of the main trunk of the superior mesenteric artery. In post-operative care heparin, of course, will always be added to minimize the extent of the secondary thrombosis.

It is perhaps relevant, before leaving this subject of arterial spasm, to refer to the exhaustive account by Cohen (1944), who, studying peripheral vessels, could find no evidence of a sympathetic reflex and little evidence that periarterial sympathectomy has any effect on vascular spasm; nor did he find that arteriectomies had any dramatic effect on the return of distal pulses—in fact, he pointed out that no vasoconstriction occurs in the *deeper* vessels of an extremity on stimulation of the sympathetic nerve. However, in the case of the splanchnic area, conditions are very different, and the importance of vasoconstrictor fibres is very great; in fact, the splanchnic bed forms the most important part of the peripheral resistance (Wright, 1945).

Case History and Course

The patient, a retired bank clerk, aged 64 years, was admitted at 4 p.m. on Aug. 19, 1947. There was no previous history of illness of note. The patient had always been a healthy man, but had been on a pension for several years on account of "gout." The family history revealed nothing relevant. He was awakened at 5 a.m. on Aug. 19 with abdominal colic which made him roll about the bed. He had breakfast at 8 a.m., when the pains became worse, and he vomited at 10 a.m. and again at midday, since when he had been retching. His bowels had not opened since the onset of the pain, but previously they had been quite regular. General interrogation revealed that he had had palpitations both at rest and on exertion and that for several years he had noticed shortness of breath on stair-climbing. There was no swelling of the ankles. He had had frequent severe frontal headaches and some frequency and difficulty of micturition.

On examination the patient was seen to be a rather pale elderly man with slightly cyanotic lips; he was not in obvious pain. The temperature was 95° F. (35° C.), pulse 120, with very poor volume; the tongue was very dry, and the breath faecal-smelling. The central nervous system revealed nothing abnormal. The lung fields were clear. The heart was not clinically abnormal. The blood pressure was 70/50. The peripheral arteries were tortuous and thickened in both upper and lower extremities. The abdomen moved freely on respiration; there was no rigidity or distension, but a generalized ill-defined tenderness was present. There was a distinct rebound tenderness even though the patient was well under the influence of morphine. Shifting dullness could be elicited, and auscultation revealed vigorous widespread audible peristalsis. Per rectum the prostate was felt to be somewhat enlarged, but there was no rectal tenderness at the tip of the finger. The urine contained a trace of albumin and of blood. A first enema produced a few flecks of faeces and no flatus. A second enema after half an hour gave a good faecal result, and the enema fluid looked as though it was blood-stained. Two hours after admission the patient vomited a faecal-smelling light-coloured vomit. A plasma drip was started and operation was decided upon.

Operative Findings (Cyclopropane–oxygen anaesthesia).—A right lower transverse abdominal incision revealed a normal appendix and 2 to 3 pints (1.1 to 1.7 litres) of blood-stained free fluid which was *spontaneously coagulable*. In the upper abdomen two upper loops of jejunum were markedly engorged and contracted, with a mesentery grossly oedematous right up to the border of the intestine. The mesentery was at least 1 in. (2.5 cm.) thick. The bowel was in a condition of haemorrhagic infarction and seemed still viable, so the abdomen was closed without intervention, as it was considered that a patient with a systolic blood pressure of 70 mm. Hg was unfit to withstand any extensive intra-abdominal procedure.

Post-operative Course.—Continuous gastric suction was started and fluids were given by mouth from the first day. Slow intravenous glucose–saline was given to attain rehydration. In addition intravenous heparin, "liquemin" (Roche), 5 ml. (50 mg.), was given every five hours, which kept the capillary coagulation time between 10 and 20 minutes. This was continued for five days. On the first day the blood pressure was 114/64 and the suction fluid dark and foul-smelling. The intravenous fluids were continued. On the second day the blood pressure was 138/84, the suction fluid was clearing, and the intravenous fluids were still being given. On the third day the blood pressure was 138/84, and the suction and intravenous fluids were discontinued. On the fourth day the blood pressure was 152/90; there was no gastric residue and the patient was beginning to feel hungry. Nourishing fluids were started and the bowels opened normally. On the fifth day the blood pressure was 156/98; the patient was now feeling quite well and was taking a normal diet. Heparin was discontinued. From then on convalescence was uninterrupted, and the blood pressure finally remained at 150/90.

Comment

Diagnosis.—In retrospect I feel that the diagnosis could have been made with some confidence, for here was a patient presenting the picture of (*a*) really profound shock, (*b*) partial intestinal obstruction with repeated and progressive vomiting but with good peristalsis and an adequate result from two enemas, and (*c*) peritoneal irritation evidenced by marked rebound tenderness and the presence of clinical free fluid. The blood-stained second enema should really have clinched matters, and is of interest as denoting that the vigorous peristalsis had propelled blood-stained contents of the small intestine into the colon sufficiently to be evacuated with the enema. This picture in a man with obvious peripheral arteriosclerosis was very suggestive indeed.

Differential Diagnosis.—Such profound shock is likely only in the following conditions: (1) *Coronary thrombosis*, which was ruled out in this case as all the signs were so obviously abdominal; (2) *Acute pancreatitis*, which would not be associated with progressive vomiting or with a blood-stained enema and in which the pain is much more severe and constant in character; and (3) *Long-loop strangulation*, which would present a very similar picture but in which some previous operative intervention would probably be noted and the second enema would be unlikely to produce any result, but certainly not a blood-stained one.

The Causation of Shock.—In this case there is little doubt that the shock was due to the escape from the circulating blood of a large quantity of plasma by transudation from damaged intestinal and mesenteric capillaries, and approximately 3 pints (1.7 litres) of spontaneously coagulable fluid was evacuated from the abdomen.

According to the literature, shock and blood-stained intraperitoneal fluid are common findings in these cases. I would suggest that really massive plasma infusions of 2 to 3 pints (1.1 to 1.7 litres) should be given immediately and be continued till the blood pressure reached a satisfactory level and haemo-dilution to 110% Hb was obtained, as the condition of this patient was certainly closely allied to the condition of shock in burns.

Summary

The aetiology and pathology of superior mesenteric arterial occlusion are discussed, and arterial "stupor" is suggested as being of importance.

The history, clinical findings, and course of a case of "spontaneous recovery" are detailed and the diagnosis and differential diagnosis noted.

The causation of shock is discussed and suggestions are made as to its treatment.

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CHEMOTHERAPY OF INFECTED URINES IN PARAPLEGIA

BY

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During the routine bacteriological examination of urines from patients with complete transverse lesions of the spinal cord and suffering from chronic cystitis it was noticed that a large percentage of the lactose-fermenting colonies grown, which on staining were seen to be composed of Gram-negative bacilli, were distinctly mucoid in appearance. They occasionally contained a bubble of gas trapped in the substance of the colony, which suggested that the organisms were *Bact. aerogenes* rather than *Bact. coli*. This observation, together with the increasing interest in the treatment of urinary infections with streptomycin and penicillin, prompted this investigation. Fifty strains of coliform organisms from the above-mentioned paraplegic patients were tested to determine the incidence of *Bact. aerogenes* and their sensitivity to penicillin, streptomycin, and sulphathiazole.

Materials and Methods

Fifty strains of these Gram-negative organisms, which produced acid and gas from a fluid medium containing 1% lactose, were primarily isolated from the routine litmus–lactose–agar plate cultures of paraplegic patients' urines. These were either the predominating or the only organisms grown. A single colony was picked off the plate, spread on a second plate, and reincubated; after incubation overnight at 37° C. a single colony was picked off the second plate and inoculated on a broth–agar slope in a cotton-wool-plugged centrifuge tube (4 in. × 5/8 in. —10.2 cm. × 1.6 cm.). After incubation overnight the slopes were covered with sterile liquid paraffin as described by Morton and Pulaski (1938), who showed that organisms kept under such conditions did not alter their characteristics. After six months at room temperature all cultures were viable. During this period the organisms were subcultured and subjected to biochemical tests for identification and tests for sensitivity to streptomycin, penicillin, and sulphathiazole.

The stock cultures were subcultured on to litmus–lactose plates to check purity. The following day one colony was picked off into peptone water. The peptone water was then incubated at 37° C. for 4 to 6 hours, when subcultures were made into the following media: (1) Clark and Lubs's glucose phosphate medium, (2) Koser's citrate broth, (3) McConkey's broth. The first two were incubated at room temperature and the latter at 44° C. The peptone-water cultures were retained and incubated at 37° C.

Indole Test.—This was performed on the original peptone-water cultures with equal parts of culture and Ehrlich's reagent and one drop of saturated potassium persulphate. The test was performed at 3, 5, and 10 days. All positive reactions were obtained on the third day and remained positive on the fifth and tenth days.

Voges–Proskauer Reaction.—Glucose–phosphate medium was used and incubated at room temperature, and the α-naphthol test of Barritt (1936, 1943) was used. The test was performed at 48 hours.

Methyl-red Test.—Glucose–phosphate medium was used and incubated at room temperature. The test was performed at 3 days.

Growth in Citrate.—Koser's citrate was inoculated with a straight wire from the peptone-water culture and incubated at room temperature. The cultures were not discarded for 10 days, but if growth occurred it was evident in the first 48 hours.

Gas at 44° C.—McConkey's broth was inoculated after being warmed to 44° C. The cultures were incubated in a water-bath running at 44 ± 1° C.

In the case of four anomalous cultures the tests were repeated; the ability to grow in citrate was also tested at 37° C., with a normal as well as a large inoculum, all with the same results.

Penicillin and Streptomycin Sensitivity Tests.—The appropriate concentration of the drug was diluted in infusion broth and approximately 1 ml. of this solution transferred to sterile cotton-wool-plugged tubes, 3 in. × ½ in. (7.6 cm. × 1.25 cm.). These were inoculated with a drop of broth culture of the organisms under test and incubated overnight. The following morning the tubes were examined with the naked eye for growth.

Sulphathiazole Sensitivity Tests.—Poured-broth–agar plates were used with the appropriate concentration of sulphathiazole added and containing laked horse's blood to neutralize sulphonamide antagonizers, as described by Harper and Cawston (1945).

Results

Table I shows the incidence of the different types of organisms and their biochemical reactions. Table II shows the results of the sensitivity tests. Those organisms which were resistant to 500 units of penicillin per ml. were subjected to a further series of tests for sensitivity to penicillin; the results of these and of the tests for sensitivity to sulphathiazole are shown later.

The results of the streptomycin-sensitivity tests show that 9 out of 12 (75%) of the strains of *Bact. coli* are sensitive

TABLE I

Organism	No. of Strains in Each Group	Per cent Incidence	Gas at 44° C.	Methyl-red Test	Indole Production	Voges–Proskauer Test	Utilization of Citrate
Bact. coli	12	24	+	+	+	−	−
Irregular *Bact. coli* type I*	2	4	−	+	+	−	−
Bact. aerogenes	32	64	−	−	−	+	+
Unclassified	4	8	−	−	−	+	−
Total	50	100					

* An atypical form of *Bact. coli* (Wilson and Miles, 1946).

TABLE II

Organism	No. of Strains in Each Group	μg. of Streptomycin per ml. Inhibiting Growth				Units of Penicillin per ml. Inhibiting Growth				
		<1	1–8	8–16	16–32	50–75	75–100	100–200	200–500	>500
Bact. coli	12	4	5	0	3	1	9	0	2	0
Irregular *Bact. coli* type I	2	0	1	0	1	1	1	0	0	0
Bact. aerogenes ..	32	18	14	0	0	0	0	0	2	30
Unclassified ..	4	2	2	0	0	0	0	0	0	4
Total ..	50	24	22	0	4	2	10	0	4	34

to less than 8 μg., and 3 out of 12 (25%) of the strains to between 16 and 32 μg. of streptomycin per ml.; 46 out of 50 (92%) of all the organisms are sensitive to less than 8 μg., and the remaining 8% to between 16 and 32 μg. per ml. Out of 32 strains of *Bact. aerogenes* 30 (94%) will grow in a concentration of 500 units of penicillin per ml.; whereas 10 out of 12 (83%) of *Bact. coli* strains are inhibited by 100 units of penicillin per ml. Seventy-six per cent of all strains grow in 200, 68% grow in 500, and 24% are inhibited by 100 units of penicillin per ml.

Forty-six (92%) of the strains resisted 50 mg. of sulphathiazole per 100 ml.; 4 (8%) were sensitive to 1 mg. per 100 ml. Of the 4 that were sensitive 2 were *Bact. aerogenes* and 2 *Bact. coli*.

The 34 strains (30 *Bact. aerogenes* and 4 unclassified) which were resistant to 500 units of penicillin per ml. were tested in 11 higher concentrations to a maximum of 100,000 units per ml. Twenty-five were inhibited by concentrations of between 1,000 and 5,000 units per ml., but 6 were resistant to 50,000, and 1 strain to 100,000, units per ml.

Discussion

It is generally agreed that *Bact. aerogenes* is found most commonly in soil and on vegetation and when encountered in public-health work is not necessarily considered indicative of recent excretal contamination of water and foodstuffs. But Cruickshank (1931) states that it can be isolated from the stools of the majority of normal people if enrichment methods are used, and Gray (1932) found it in 37 out of 40 samples of faeces from 10 normal people. Other workers give figures from 0 to 26%.

However, *Bact. aerogenes* is not infrequently found in urinary infections. This organism has been reported as constituting 63% (Burke-Gaffney, 1932) and 52% (Burke-Gaffney, 1933) of urinary coliform organisms in Tanganyika territory, 50% of urinary Gram-negative bacilli (Hill *et al.*, 1929) in the U.S.A., and 39% of all urinary organisms from patients with "neurogenic" bladders (Petroff and Lucas, 1946) also in the U.S.A. The latter workers, however, do not mention *Bact. coli* in their list of percentage incidence of organism although it does appear in their tables, so it is impossible to calculate the proportion of *Bact. aerogenes* to *Bact. coli* in their series of 87 cases. It thus appears that the incidence of *Bact. aerogenes* in the series of patients reported in this paper is of the same order as that in groups of patients with urinary infections described by other workers.

The organism called "Irregular type I" resembles *Bact. coli* in its primarily intestinal origin and biochemical characteristics, differing only in that it does not produce gas from McConkey's lactose broth. It also resembles *Bact. coli* in being comparatively sensitive to penicillin (see Table II). The group labelled "unclassified" in the tables resembles *Bact. aerogenes* biochemically except that it does not utilize citrate. The resistance of this group to penicillin and streptomycin is of the same order as that of *Bact. aerogenes*.

It is clear from the results of the sensitivity tests (see Table II) that all the organisms examined here are fairly susceptible to streptomycin irrespective of their type. However, all the *Bact. aerogenes* and the unclassified organisms are sensitive to 8 μg. or less per ml., whereas 3 out of 12 *Bact. coli* strains and 1 out of 2 of the related irregular types are insensitive to 16 μg. but sensitive to 32 μg. per ml. Thus perhaps *Bact. coli* is less sensitive to streptomycin than is *Bact. aerogenes*. In any event 46 (92%) of the strains of coliform organisms lie within, and the remaining 8% are doubtfully within, the therapeutic range of streptomycin.

It is difficult to foretell from these *in vitro* tests how successful streptomycin is likely to be in treatment, because the failures in these cases appear at times to be due to the rapid development of resistance by the organism to the drug. Despite this complication, however, Petroff and Lucas (1946) consider that their paraplegics with "neurogenic" bladders benefited from treatment with the drug, although their paper in some respects is not altogether conclusive. It may well be that streptomycin will become a valuable weapon in these infections, but from my experience it is obvious that as high dosages as possible should be tried Starting the course with a dose considerably greater than the subsequent ones should be borne in mind. The purpose of these precautions is to ensure that the responsible organism is never subjected to a concentration of streptomycin below the bactericidal or bacteriostatic level—that is to say, to those conditions that are likely to increase its resistance to the drug. We are assuming that the development of resistance is the result of contact with the drug and not due to the presence of a small percentage of naturally resistant strains. This point has not been decided, and no convincing evidence exists for either view.

Since Peeney (1947) advocated the use of pencillin in Gram-negative bacillary infections of the urinary tract and Helmholz and Sung (1944) found that *Bact. aerogenes* was relatively insensitive to penicillin, it seemed important to determine here the incidence and resistance of that organism to penicillin, for a high incidence of penicillin-resistant organisms, either widespread or in any particular locality or group of patients, would be a contraindication to the routine use of the drug in treatment.

In this series penicillin divides the organisms into two fairly clearly defined groups: all but two strains of *Bact. coli* and the associated irregular *Bact. coli* are sensitive to 100 units of penicillin per ml., whereas the *Bact. aerogenes* and the associated unclassified organisms are resistant to 200 units per ml. of penicillin, above which level Peeney (1947) suggests that they are not likely to respond to penicillin therapy. Thus resistance to penicillin may be a characteristic of the aerogenes group of organisms, and the incorporation of penicillin in an appropriate concentration in a medium might be suitable for isolating *Bact. aerogenes*. In view, then, of the high incidence of *Bact. aerogenes* in this and other series of cases and the undoubted resistance of this organism to penicillin, it is obvious that this drug cannot be used for the routine treatment of urinary infections involving coliform organisms, especially if we accept Peeney's (1947) suggestions without reserve. Moreover, 76% of the total number of coliforms in this series are resistant to penicillin according to his criteria. Under the circumstances penicillin treatment would be only occasionally successful in these infections and then only under full bacteriological control.

It has been assumed that it is necessary to obtain only the concentration of penicillin in the urine which *in vitro* will be bactericidal to the organisms involved; this obviously is not the case, for the organisms must be causing

the mischief in the tissues of the urinary tract. This is evident from the polymorphonuclear leucocytosis that occurs, and it is generally accepted that these infections are blood-borne or spread by lymphatics (Walker, 1922, 1930). This worker and others have demonstrated organisms and cellular infiltration in the tissues of the urinary tract. Of course the mischief may not be very deep-seated and the concentration of penicillin in the tissues of the urinary tract may be higher than elsewhere owing to the diffusion of that substance from the urine, but even if this is the case the tissue concentration must be lower than the urinary, though it may be greater than the blood. Thus we see that it is impossible to relate directly the urinary level and the sensitivity of the organism to penicillin *in vitro* and in this way determine whether a urinary infection is likely to respond to treatment with a certain dosage of penicillin; this argument will apply to any other drug. The final court of appeal, as always in this particular type of problem, will be clinical trial and error of various dosage systems given under standard conditions and related to the *in vitro* drug sensitivity of the organisms.

With ordinary doses it is practicable to maintain an average level of 200 units per ml. of penicillin in the urine, but theoretically there is no reason why 2 or more million units of penicillin should not be injected every three hours, though even under the best conditions this dosage would be inadequate for one-quarter of the *Bact. aerogenes* and nearly one-fifth of all the organisms in this series (as indicated by the extended penicillin sensitivities listed in the results). When penicillin becomes cheaper and even more readily available it may be possible to treat most Gram-negative urinary infections with it. In any event, it is already useful for treating urinary infections associated with Gram-positive organisms.

Of the coliforms examined 46 out of 50 (92%) resist 50 mg. of sulphathiazole per 100 ml. using the method described above. This is in approximate agreement with the findings of Neter and Clark (1944) but not with Strauss and Finland (1941), who used a synthetic medium. There do not seem to have been any published reports of the correlation of *in vitro* sensitivities with clinical results, but the figure seems high. Bearing in mind the possible site of action of the drug, one must pause to consider how much value the sulphonamides are in urinary infections with Gram-negative bacilli. However, Nathan (1947) reports favourably on them for treating paraplegic patients with suprapubic cystostomy.

Summary

Of 50 strains of lactose-fermenting coliform organisms isolated from infected urines of paraplegic patients 32 were *Bact. aerogenes*, 12 were *Bact. coli*, 2 were irregular types of *Bact. coli*, and 4 were unclassified. The incidence of *Bact. aerogenes* in this group does not differ greatly from that in other patients with urinary infections.

All the organisms were sensitive to streptomycin, and all but 4 resistant to 50 mg. of sulphathiazole per 100 ml.

Bact. aerogenes and the unclassified organisms were relatively resistant, and *Bact. coli* and its irregular types relatively sensitive, to penicillin. The high incidence of *Bact. aerogenes* and its undoubted resistance to penicillin does not favour the use of the drug at present in the routine treatment of urinary infections by Gram-negative bacilli. In this series it was concluded that at least one-fifth of all the organisms were too resistant for penicillin treatment in high dosages and three-quarters too resistant for ordinary dosages.

The results are discussed and their impact on the treatment of urinary infection considered.

My thanks are due to Prof. J. McIntosh and Dr. F. R. Selbie for advice and criticism, and to Lady Florey and Prof. J. McIntosh for supplies of streptomycin.

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CARDIAC MURMURS IN INFANCY

BY

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(From the Institute of Social Medicine, Oxford)

Much has been written about cardiac murmurs in older children, but relatively little work has been done on their incidence and manifestations in infant communities. Von Reuss (1929) states that any definite murmur heard in a child who is quiet should be regarded as evidence of congenital heart disease and that murmurs at this age are very rare. On the other hand Holt (1940) states that 50% of all children have a functional murmur at some time. Lyon and others (1940) examined 7,000 newborn infants in the obstetrical wards of a general hospital and found that 147 (1.9%) had apical systolic murmurs; two of these died of congenital heart disease, and in 14 of the 88 who were re-examined six months later the murmurs were still present.

Since the Child Health Survey of the Institute of Social Medicine was initiated at Oxford three years ago 630 children have been enrolled, and the oldest have now been under observation for three years; 520 children remain in the survey at present, the 110 defaulters belonging chiefly to families which have moved to other areas owing to the housing shortage. The defaulters were followed up for periods varying from six months to two and a half years. It should be emphasized that this is not a hospital series but a sample of ostensibly healthy children drawn from all social classes, whereas the authors quoted either employed a hospital population or have not stated how their samples were obtained. Of the 630 children, 32 (5%) have been noted as having a murmur at some time. It was thought that it would be interesting to investigate the time of development of these murmurs and their subsequent history so far as at present observed.

In the course of the main health survey a full physical examination is made at regular intervals; first at the age of 6 weeks or less, then at 3, 6, 9, and 12 months, with subsequent examinations at six-monthly intervals. It has not always been possible to adhere strictly to the exact intervals owing to illnesses or other difficulties. Three observers, working in succession but observing the same routine as closely as possible, have carried out examinations on children first seen at infant welfare centres or at mother-craft clinics. All the children have had their chests examined radiographically, first at the age of 6 months and

thereafter at six-monthly intervals, except in a few instances where some unforeseen occurrence has prevented this.

Development of the Murmurs

The 32 children with murmurs have been grouped according to the age at which the murmurs were first noted; the murmurs have been described as "transient" if heard at only one examination and not subsequently; "temporary" if heard at more than one examination and then apparently disappearing; "persistent" if heard at more than one examination and persisting up to the most recent examination.

Table Showing Development of the Murmurs

Age in Months when Murmur First Noted	Transient Murmur	Temporary Murmur	Persistent Murmur	Present for First Time and Not Yet Re-examined
0–2	3	1	1	0
3–4	1	1	1	1
6–7	0	0	1	0
9–10	3	0	2	1
12–13	1	0	2	2
18	1	1	6	0
24	2	0	1	0

The murmurs recorded were all systolic in time, and it may be noted that Owen and Kingsbury (1924) state that a diastolic murmur is never heard in a newborn infant. The murmur was often heard best when the child was lying down, and was usually loudest at the apex; it was most commonly conducted over the whole praecordium, but in some cases it was confined to the left border of the sternum. Three murmurs were specifically described as cardio-respiratory.

Some of the following data may prove relevant to the presence or absence of murmurs, but the cases are as yet too few to allow any conclusions to be drawn.

The ante-partum health of the mother was good in 21 cases, in the remainder the illnesses recorded were cystitis 1, ulcerated mouth 1, anaemia 1, ante-partum haemorrhage 1, toxaemia 1, vomiting 1, and giddiness 1; in three the health was recorded as "only fair." The birth weight of one of the children was only 4 lb. (1.8 kg.); the others varied between 6 lb. and 9 lb. 2 oz. (2.7 and 4.1 kg.). The sex distribution was unequal—23 boys and 9 girls. The general physical condition of the children was noted as "only fair" or "poor" in 13 out of the 32, without any specific diagnosis being attached. According to the Registrar-General's classification of social groups which depends upon the father's occupation, one of the 32 children was in social group 1, four were in social group 2, 21 in social group 3, three in social group 4, and three in social group 5. Group 3 has been the predominant single class from which the babies have been enrolled.

Haemoglobin estimations were made in only six of these children, and these gave figures of 60%, 82%, 85%, 88%, 96% and 106%. The haemoglobin estimations were discontinued because we were anxious not to undermine the confidence of the children, and those subjected to the test seemed to remember their visit unfavourably; furthermore, the mothers were not always very willing to consent to the taking of blood samples, and in a long-term survey such as this it is especially important not to risk the default of any more babies than can be helped. The child with the lowest recorded haemoglobin (60%) was treated with iron, and when last seen, while still under treatment, the murmur had become very much fainter.

The *x*-ray examination of the chests in 20 out of 29 of the children showed considerable variation in respect of size or shape of the mediastinal shadow, which my colleague Dr. F. H. Kemp commented upon; but whether the variations are significant or whether they are within the wide range of normal variability manifest at this age has yet to be determined. The mediastinal shadow in infancy shows wide variations not only as between one baby and another but also in the same baby in successive radiographs taken at intervals of only a few seconds. Three of the children in this series were not radiographed.

Discussion

A long follow-up of these cases should provide further clinical data on the significance of the cardiac murmurs observed, and this report can be regarded only as preliminary. The knowledge that a murmur has been present since infancy may be of value to the individual, as it will assist in the differential diagnosis from rheumatic carditis at a later age, and in the absence of other signs or symptoms it may then be possible to allow normal activity, which might not otherwise seem justifiable.

It is apparent from the material studied that some murmurs are present from birth and others appear later. Those already present at the first examination and disappearing later may be due to the changes taking place during the adaptation from foetal to post-natal life. Transient or temporary murmurs may also accompany anaemia or may be exocardial in origin. Persistent murmurs either may be due to relatively insignificant congenital defects or may accompany the more important lesions.

It is noteworthy that 23 out of the 32 murmurs were not detected until the age of 9 months or later, and that six of those appearing at 18 months have persisted. One child who had a murmur first detected when she was 9 months old is now 2½ years old and has a loud persistent murmur with a faint palpable thrill over the pulmonary area, but no symptoms. It is possible that increased activity with crawling and walking may bring out defects not previously detectable.

In only one case in the series was cyanosis observed. It was noted at birth, a murmur was detected soon after delivery, and the mother was informed that the child had a congenital heart lesion. The cyanosis lasted only a few hours, but the murmur was present and clearly audible at each routine examination until the age of 1 year, when it was hardly perceptible. The child has been particularly healthy and active since she came under observation. In view of the fact that murmurs do disappear and that there may be no associated symptoms, it would seem advisable not to alarm mothers unduly. In the case described the mother had waited 12 years to have a child and was then given the impression that the child would be a permanent invalid. One other child showed some suggestion of dyspnoea on exertion. Except in the case of the child with anaemia, who had been suffering from diarrhoea for several weeks, there was nothing to suggest that the development of a murmur was ever a consequence of a specific illness. All the other children with murmurs appeared healthy, and no obvious congenital abnormalities were found affecting other structures.

Summary

In a routine periodic examination of the heart in 630 infants systolic murmurs were detected in 32 (5%).

Some were present at the first examination—i.e., before the sixth week—and later either disappeared or persisted; others appeared for the first time at the second or subsequent examinations, some of these disappearing and others persisting.

In 22 cases the murmur was not detected until the age of 9 months or later.

With the exception of one case in which a thrill in the pulmonary area subsequently developed, and another in which there was some suggestion of dyspnoea on exertion, no associated symptoms or signs were recorded.

No correlation between clinical findings and radiographic appearances could be established.

I am indebted to Prof. J. A. Ryle, to Drs. Allen-Williams and Helen Morley (my predecessors in the survey), and to all my colleagues in the Institute of Social Medicine for their assistance and

advice. Thanks are also due to the medical officers and health visitors of the Oxford City Health Department for their co-operation, and to all the mothers for their participation in the survey.

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Medical Memoranda

Acute Lymphatic Leukaemia Presenting with Skin Lesions and Mastoiditis

It is exceptional for skin lesions to appear as the first or even as an early sign of leukaemia, although examples have been reported by Ketron and Gay (1923), Boardman (1928), and Wintrobe and Mitchell (1940). The paucity of published literature on this subject prompted the recording of the following case.

CASE REPORT

A woman aged 65 was admitted to hospital on Nov. 7, 1946, with a history of pains in the ears and deafness for three weeks and a more recent history of bilateral otorrhoea. Despite difficulties owing to deafness and her critical state it was ascertained that her health had been failing for some time and that within the previous three months she had developed a rash over her body.

On admission she was gravely ill with pronounced anaemia and slight icterus. Her gums were hypertrophied and bled readily, and there were scattered loose stumps of carious teeth in both jaws—accounting for the presence of pathologically enlarged submental and submaxillary nodes. There was evidence of bilateral mastoiditis. Over the trunk and proximal regions of the limbs there were numerous brown-grey plaques varying in size from 0.25 to 3 cm. in diameter. The majority projected above the skin surface, and though some were deeply situated none were adherent to bone. The papules were not painful, did not itch, and were not tender. There was some bruising of the legs, but purpura was absent until shortly before death. Apart from a marked thoracic kyphoscoliosis and a small plaque on the right fundus physical examination was negative.

A blood count showed: haemoglobin, 48%; red cells, 2,500,000; white cells, 1,300; platelets, 67,500. A biopsy revealed lymphadenosis cutis, a lymphatic leukaemic deposit in the skin. Sternal puncture verified the diagnosis of acute lymphatic leukaemia in an aleukaemic phase.

The patient went steadily downhill and died on Nov. 23. Necropsy was carried out, but revealed no evidence of leukaemic infiltrations except in the skin. There was no involvement of any of the nodes in the various groups throughout the body.

COMMENTARY

The skin lesions associated with leukaemia may be subdivided into (1) non-specific—sometimes known as leukamids—including such conditions as herpes zoster, purpura, prurigo, etc., and (2) lesions specific for the disease and composed of infiltrations by the cell types. Forkner (1938) states that the second group conforms to the following types. In myelogenous leukaemia the lesions consist of macules, papules, or plaques, sharply circumscribed, brownish to bluish in colour, and chiefly involving the trunk. The lesions are not painful and do not itch. Ulceration with local loss of tissue and possibly haemorrhage may occur. The lesions associated with lymphatic leukaemia are: (1) Erythrodermia (l'homme rouge), which is characterized by subacute or chronic progressive reddening of the skin spreading gradually to involve a large area of the body surface. This may be accompanied by a sensation of chilliness owing to increased loss of heat, and itching may be a prominent feature. Scaling is found and regional or generalized lymph-node enlargement is not uncommon. (2) Universal leukaemia of the skin, which is an exaggerated generalized form of the above. (3) Circumscribed leukaemia of the skin, where the lesions are usually well-defined maculae, or are slightly elevated, with a wide variation in size and colour from yellow to bluish-red. These are most commonly found on the face, neck, and dorsum of hands and are rarely numerous. Apart from slight burning, subjective sensations are absent.

The circumscribed skin lesions associated with myelogenous and lymphatic leukaemia differ only in their distribution, and the distribution of the lesions in the above case conforms more to the myeloid type. Lewis (1919) published a similar case, with mastoid disease and the blood picture of lymphatic leukaemia, as chloroma. Brannan (1926) states that this term cannot be used correctly unless green pigmentation is present in the tumour, and Kandel (1937) defined the term as being applicable to any tumour which is green when fresh. Jones (1939), in an extensive review of the literature, decided that chloroma presented itself in two clinical forms: (1) affecting children and characterized by rapidly growing bone tumours, and (2) an adult type in which a progressive anaemia and signs of leukaemia are more prominent. He believed, however, that in both types the two essential features are leukaemic changes in the blood and green tumour deposits in the bones. The term "chloroma" should therefore be confined to conditions with lesions which have a frankly green colour, and is not applicable to my case.

I am indebted to Dr. John Craig for permission to publish this case, to Dr. H. W. Fullerton for the haematological findings, and to Dr. W. M. Davidson for the necropsy report.

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Severe Reaction after Penicillin

The following report of a severe reaction following penicillin injections may be of interest.

CASE REPORT

A Regular Army officer aged 32 was hit on the left ankle while playing hockey on Sept. 17, 1947. He consulted me ten days later for pain and swelling of the ankle, and feeling generally out of sorts. On examination his temperature was 101° F. (38.3° C.), and he had an obvious infected haematoma just above the left external malleolus. He was given an intramuscular injection of 100,000 units of penicillin (sodium salt, yellow) immediately and a further 100,000 units that night. The next morning the haematoma was incised under local analgesia and about 1 oz. (28.4 ml.) of thick pus evacuated. He was given two injections each of 100,000 units of penicillin on this day. On Sept. 29 he was given one further injection of 100,000 units. His general condition was now good. Locally much of the pain and swelling had disappeared. The leg was healed and normal by Oct. 5.

On the night of Oct. 10–11 he developed a severe widespread urticarial eruption with intense itching. He was seen in the morning and given "benadryl" capsules to take four-hourly. This controlled the irritation but made him feel so ill that the drug was stopped and ephedrine substituted. On Oct. 13 the urticarial condition was unchanged. He complained of anorexia and indigestion and vomited in the evening, when his temperature rose to 100° F. (37.8° C.).

On Oct. 14 his condition was worse. In addition to the previous symptoms he then complained of stiffness and aching in all his joints. Curiously, if he could provoke an urticarial reaction by rubbing or scratching his skin the joint symptoms were temporarily relieved. Ephedrine was without effect on his joints. Next day he became so stiff that he could hardly move; nor could he move his jaw to eat solids. The aching pain was very severe and was only partially relieved by tablets containing aspirin, phenacetin, and codeine. His evening temperature still rose to about 100° F. This was his worst day, and he slowly improved until by Oct. 21 he had completely recovered.

J. F. L. WALLEY, M.B., B.Chir.

The Ministry of Health reports that about 17,500 doctors and 16,000 nurses attended 506 showings of the film entitled "The Early Diagnosis of Acute Poliomyelitis."

Reviews

PHYSICAL EDUCATION

An Introduction to Physical Education. By Eugene W. Nixon and Frederick W. Cozens. Third Edition. (Pp. 251. 14s.) Philadelphia and London: W. B. Saunders Company. 1947.

The Administration of Health and Physical Education. By Jesse Feiring Williams, M.D., Sc.D., and Clifford Lee Brownell, Ph.D. Third edition. (Pp. 483; illustrated. 15s.) Philadelphia and London: W. B. Saunders Company. 1946.

The authors of the first work are, respectively, Professor of Physical Education, Pomona College, California, and Professor and Director of Physical Education, University of California; of the second work, respectively, Emeritus Professor of Physical Education, and Professor and Chairman of the Department of Health and Physical Education, Teachers' College, Columbia University. These offices alone are significant evidence of the importance which in America is attached to the subject of physical education, and it is a perpetual wonder to our transatlantic colleagues that no corresponding appointments are held in Britain, where it is hardly an exaggeration to say that our activities in this field have been limited to the enterprises of a few amateur enthusiasts. Further evidence is afforded by the general bibliography appended to the first volume. Of 315 references, Great Britain supplies only two—Prof. A. V. Hill's well-known contributions on muscular activity, which incidentally were published in the U.S.A.

We may expect more in the future, for the deeply ingrained traditional interest in athletics in Britain will always inspire individual workers. The post-war appointments in the spheres of social medicine and rehabilitation are perhaps the first steps towards a more widespread recognition of the necessity for physical education—and possibly in time the creation of a special Ministry. For this reason both works may be cordially recommended. The first, less comprehensive, may be regarded as an introduction; the second will prove a useful guide to those who may be in a position to organize and to administer, for in addition to a shrewd common-sense exposition there is much practical assistance in the form of diagrams of gymnasia, swimming-pools, and athletic tracks, as well as illustrations of specimen forms for the collection of information. This work should be in the hands of aspirants to the Diploma of Physical Medicine of our Royal Colleges, and both may be highly recommended to school medical officers.

ADOLPHE ABRAHAMS.

TEXTBOOK OF OBSTETRICS

Principles and Practice of Obstetrics. By the late Joseph B. De Lee, M.D., and J. P. Greenhill, M.D. Ninth edition. (Pp. 1,011; 1,108 illustrations. 50s.) London and Philadelphia: W. B. Saunders Company. 1947.

De Lee's *Principles and Practice of Obstetrics* has long been a standard textbook for advanced students and one to which most obstetricians turn first when in doubt; indeed, it has been called "the obstetrician's Bible." The ninth edition is the work of Prof. J. P. Greenhill and is so altered as to be barely recognizable. Superficial changes in structure include a new type of binding and the arrangement of the text in two columns on each page. Both these features are attractive and make the volume less bulky and easier to read. There are also more fundamental alterations involving spirit and outlook. The original book was characterized by its practical nature and the reader was acutely conscious of the author's personality and clinical experience. Much of this has gone, and in its place has come a more scientific approach with more emphasis on the theoretical aspects of midwifery. Perhaps the change of authorship, as well as the advance of medicine, made this inevitable. In its own way and with its modern setting it is just as good a book, however: in losing an old friend we have made a new one.

The illustrations, always a striking feature of the book, are more numerous and are better than ever. The text has been completely revised and brought up to date, several authorities on special aspects of obstetrics having contributed or assisted. The chapter on analgesia and anaesthesia, as well as many others, has been considerably extended. Those on the "Physiology of the Fetus," "Ante-partum Care," and "Post-partum Care" have been rewritten completely, and the additions include chapters on "Minor Disturbances of Pregnancy," "Premature Labor, Prolonged Labor or Post-maturity, and Missed Labor," "Fetal Erythroblastosis," "Care of Premature Babies," and "Circumcision." As in previous editions a careful and detailed description of obstetric operations and manœuvres is one of the most striking and valuable features of the book. At a time when efforts are being made to popularize the use of the metric system in this country it is interesting to find that the author panders to British conservatism by giving the dose of all drugs according to the imperial as well as the metric system.

No book is perfect, and, good as it is, this is no exception. Some methods of treatment described at length, such as the use of hydrostatic bags for placenta praevia, will in Britain be regarded as out of date, and those looking for a complete reference book will find some omissions. Nevertheless, few textbooks on obstetrics written in English can compare with it. This edition deserves and will undoubtedly receive an enthusiastic welcome, and will become as popular with the new generation of obstetricians as its predecessors were with the old.

T. N. A. JEFFCOATE.

HISTORY OF DRUGS

Drugs from Plants. By Trevor Illtyd Williams, B.A., B.Sc., D.Phil. Sigma Introduction to Science 10. (Pp. 119; 12 plates. 6s.) London: Sigma Books, Ltd. 1947.

The Sigma Introductions to Science series promises to be a notable addition to the already considerable volume of works of popular science. The second of the series, Berenblum's *Science versus Cancer*, was a splendid example of what may be achieved by a medical scientist writing on his own subject for the general reader. Now comes another member of this series on *Drugs from Plants*. There are few subjects upon which the general public needs enlightenment so much as on drugs and their uses and limitations. Dr. Williams's little book will contribute to that enlightenment, especially as his approach is historical and he has wisely confined himself to a few important and representative plant drugs.

In the Introduction there is the inevitable reference to the Papyrus Ebers, followed by brief mentions of some of the writers on the materia medica in ancient times and some of the sixteenth-century herbalists. In the second chapter, on "Science and the Art of Herbalism," the author indicates the importance of active principles of plant drugs, of the experimental study of their effects, and of their standardization. The next chapter, on "The Kinds of Drugs Obtained from Plants," is particularly useful for the clear explanations of elementary chemical considerations. Then follow chapters on particular drugs—quinine, hashish, digitalis, penicillin, ergot, opium, cocaine, and miscellaneous drugs. The book ends with a chapter on "What of the Future?" in which the author refers to probable lines along which pharmacological research will develop. The chapter on penicillin is particularly to be recommended: it is an admirably concise and balanced account of a story that has been wildly distorted in the popular press.

So far, so good. The general reader will obtain from this book a good deal of useful, interesting, and well-presented information about the history of drugs, although the author does not perhaps sufficiently stress the fundamental difference between—to use Ehrlich's terminology—organotropic drugs, which are given for their effects upon an organ or system of the patient, and aetiotropic drugs, where the patient is merely the vehicle for a drug aimed at his parasite. From the test of more searching standards of criticism, however, the book does not emerge so well, although the author in his preface deplores the inaccuracy of many popular scientific writings. For example, it is surprising to find in a work published in 1947 a repetition of the familiar legend of the Countess of Chinchona and quinine. This legend was completely exploded six years ago by the late A. W. Haggis in one of the most scholarly and significant studies in the history of pharmacy of recent years, and it is a pity that the author has overlooked it. Of Venice treacle the author writes that it was "said to have been devised by Dioscorides himself," although it was in fact always attributed to Nero's physician, Andromachus, as was indicated by

its pharmacopoeial name, Theriaca Andromachi. It is also stated that Venice treacle "enjoyed considerable popularity . . . as late as 1739, and possibly a good deal later." Why "possibly"? The facts are not difficult to find and were, as it happens, assembled by the reviewer in a paper published nearly two years ago. Theriac was not only popular but was an official preparation of the *Pharmacopoeia Londinensis* until 1788 and of the French *Codex* until 1908. Later on it is asserted that "Synthetic quinine cures malaria as effectively as crude extracts of cinchona bark." This sounds plausible enough, but has synthetic quinine ever in fact been used in the treatment of malaria? The statement that strychnine is "a general tonic and a valuable stimulant" is uncritical, though it must be admitted that it might be found in many medical textbooks. The name of Halsted, first professor of surgery at Johns Hopkins and one of the founders of American surgical science, is misspelt and he is described as "a New York dentist." Hyoscine is mentioned as a drug used in twilight sleep and "asthma cigarettes," but there is no reference to its more interesting property as the most effective of all drugs tested during the war in counteracting motion-sickness. Plate V is a reproduction of a wood-cut from the *Liber de Arte Destillandi* of Hieronymus Brunschwig. It would surely have been of some interest to indicate in the legend that the scene depicted is the preparation of theriac. Many similar faults of detail could be mentioned, but a major fault is that no bibliography is included—an inexcusable omission in any work which purports to give, at whatever level, a historical account of its subject.

N. HOWARD-JONES.

TREATMENT IN HEART DISEASE

Management of Common Cardiac Conditions. Edited by William G. Leaman, Jr., M.D., F.A.C.P. The American Practitioner Series. (Pp. 306; illustrated. 24s.) Philadelphia and London: J. B. Lippincott Company. 1947.

Twenty-four cardiologists, mostly Pennsylvanian, have contributed to this symposium. Like most editors of such works Dr. Leaman has found it difficult to balance the individual interests of his writers against the continuity of the whole, and the volume is selective rather than systematic. While most of the contributions are carefully expressed and well considered, there are several that do not refer to treatment at all, and in some others discussion of therapy and management is subsidiary. Specially noteworthy are the articles on congenital cardiovascular anomalies, subacute bacterial endocarditis, and pulmonary heart disease. In an admirable appraisal of the meaning of the electrocardiogram Dr. L. N. Katz echoes the feeling of all orthodox cardiologists when he writes that "the electrocardiogram is not a tool for the unscrupulous or a plaything for the erudite physician" but evidence that should never be considered separately from the clinical context.

While this book is often interesting, lack of co-ordination has unfortunately resulted in certain omissions. For example, one seeks in vain for guidance in the treatment of paroxysmal dyspnoea and its common precursor, hypertensive heart failure. The editor contributes the article on congestive heart failure, and though it is of exceptional interest he discusses only the use of the mercurial diuretics. The practising physician and the cardiologist alike will find much worth their attention and, in particular, some useful surveys; on the other hand the book is not sufficiently systematic for the student.

K. SHIRLEY SMITH.

The 1946 Year Book of Industrial and Orthopedic Surgery (H. K. Lewis, 21s.) forms a memorial to that indefatigable New England gentleman, Dr. Charles F. Painter, its editor, who died while the work was being prepared. There are several hundred abstracts of reviews taken chiefly from the English-speaking literature, as well as a large number of the more important illustrations to these articles. Although these are of course abstracts, it is all too often clear that much medical literature to-day contains about 15 ounces of rehash to every ounce of originality. Nevertheless, the present work contains much valuable information in a small space, and its value is greatly enhanced by the excellent illustrations. Future editions could be improved by including critical comment and abstracts of orthopaedic articles more representative of the non-English-speaking countries.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

The 1947 Year Book of General Medicine. Edited by George F. Hick, M.D., *et al.* (Pp. 784. 21s.) London: H. K. Lewis.

Numerous aspects of the present-day practice of medicine are discussed.

Essentials of Fevers. By Gerald E. Breen, M.D., B.Ch., D.P.H., D.O.M.S. 2nd ed. (Pp. 351. 15s.) Edinburgh: E. and S. Livingstone. 1948.

A manual of "fevers" intended for students and young practitioners.

Diseases of the Nose, Throat, and Ear. By I. Simson Hall, M.B., Ch.B., F.R.C.P.Ed., F.R.C.S.Ed. 4th ed. (Pp. 463. 15s.) Edinburgh: E. and S. Livingstone. 1948.

An outline for the general practitioner.

Medical Cases Described for Nurses. By S. Locket, M.B., B.S., M.R.C.P. (Pp. 88. 6s.; paper covers, 4s.) Edinburgh: E. and S. Livingstone. 1948.

A brief introductory manual of clinical medicine intended for nurses.

The Secret Instrument. By Walter Radcliffe. (Pp. 83. 10s. 6d.) London: William Heinemann. 1947.

The early history of the midwifery forceps.

Guide to the History of Physical Education. By F. E. Leonard, A.M., M.D. 3rd ed. revised by G. B. Affleck, A.M., M.P.E. (Pp. 479. 27s. 6d.) London: Henry Kimpton. 1947.

A history of physical education throughout the world from the time of classical Greece.

Unipolar Lead Electrocardiography. By Emanuel Goldberger, B.S., M.D. (Pp. 182. 20s.) London: Henry Kimpton. 1947.

A monograph on unipolar electrocardiographic leads in the normal and abnormal heart.

A Manual of Otology, Rhinology and Laryngology. By H. C. Ballenger, M.D., F.A.C.S. 3rd ed. (Pp. 352. 22s. 6d.) London: Henry Kimpton. 1947.

Intended particularly for students and general practitioners.

Nierenkrankheiten. Two vols. By the late Prof. Erwin Becher. Edited by Prof. F. Volhard. (Pp. 688; 358. No price.) Jena: Verlag von Gustav Fischer. 1944.

A textbook of diseases of the kidney.

Indice Bibliografico de Lepra. Vol. II (I–P; 1500–1944). (Pp. 1,430. No price.) Brazil: Sao Paulo. 1946

An index of references to leprosy.

Traitement de l'Emphysème des Dyspnées Scléreuses de l'Angine de Poitrine. By Paul Cantonnet. (Pp. 275. 600 francs.) Paris: Librairie Maloine. 1948.

A monograph on the treatment of certain cardiac and pulmonary disorders.

Der Gestaltkreis. By Viktor von Weizsäcker. (Pp. 208. No price.) Stuttgart: Georg Thieme Verlag. 1947.

A contribution to gestalt psychology.

Cisti e Pseudocisti del Polmone. By G. Rizzi and O. de Lorenzi. (Pp. 344. No price.) Faenza: Fratelli Lega. 1947.

A monograph on congenital and parasitic cysts and pseudocysts of the lung.

Chirurgia Comune e di Urgenza. By Umberto Nobili. 4th ed. (Pp. 470. No price.) Milan: Ulrico Hoepli. 1947.

A textbook of emergency surgery.

Die Gynäkologischen Operationen. By Prof. Heinrich Martius. (Pp. 424. No price.) Stuttgart: Georg Thieme. 1947.

A textbook of operative gynaecology.

Les Acquisitions Médicales Récentes. By J. Rostand *et al.* (Pp. 316. 650 francs.) France: Editions Médicales Flammarion. 1947.

Papers on a variety of subjects in clinical medicine

BRITISH MEDICAL JOURNAL
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MONEY AND FREEDOM

Reports from all parts of the country suggest that an overwhelming majority of doctors are radically opposed to the National Health Service Act in its present form. Medical men are convinced that this Act is the first and substantial step towards a whole-time State Medical Service. Even those who might be inclined to "give it a chance" see the grave risks of saying Yes. This Act is Mr. Bevan's revolution. Once the profession crosses the Rubicon there will be no retreat. Mr. Bevan will have the power by Regulation to make medical men whole-time servants of the State. Once in his Service we shall be powerless to do anything more than haggle over terms and conditions. As something like £120,000,000 will have to come out of State funds for the payment of Mr. Bevan's Service the Treasury will have the whip-hand in finance. Section 75 (3) states: "Any power conferred on the Minister by this Act to make Regulations shall, if the Treasury so direct, not be exercisable except in conjunction with the Treasury." It is important to stress again that the National Health Service Act is not an insurance scheme, and therefore is something radically different from the National Health Insurance Acts under which at present a large proportion of the population of this country is receiving medical care.

Some men in practice now are naturally worried about their financial position in the event of their refusal to serve under the Act in its present form. Young men wanting to enter into practice are also disturbed about the position. Mr. Bevan hoped that the young men would be on his side. Letters to this *Journal* suggest that he was being optimistic. The young men who qualified just before the war, and since, have had experience of what a Service is. We shall try to see how these two groups will be affected if Mr. Bevan's Act cannot come into operation on July 5.

The medical profession will be able to decide its future only if the majority of Noes is large enough. Our strength will lie in the size of the majority. If, for example, two-thirds or more of general practitioners stay outside the Service on July 5, what will be their position? This country is not over-doctored, and Mr. Bevan cannot run a Service with a third or less of general practitioners, even if they were evenly distributed throughout the country. He, or his successor, would have to reopen negotiations, and if as a result an acceptable Service were to be introduced the two-thirds who stayed out would have to receive compensation if—to contemplate what is unlikely—it was agreed that the custom of buying and selling of practices should cease. If the Minister were to refuse compensation then those two-thirds would persist in their refusal to enter his Service. But it is probable that the two-thirds staying outside the Service would refuse to go in unless the custom of buying and selling of practices was retained. (In any case the profession will not agree to a "peace treaty" which does not include a victimization clause.) Whatever unsatisfactory features there may have been in this custom in the past, doctors are now fully alive to the fact that it is closely bound up with the preservation of the individual freedom of the general practitioner. The abolition of the ownership of goodwill is not essential to a comprehensive medical Service. Mr. Bevan thinks that for the State to own everything is good and that for the individual to own anything is bad—a not unusual thesis among the apostles of collectivism.

Mr. Bevan, whom *The Times* accuses of "crowning misjudgment" and of using "arguments that are both tortuous and pedantic," may hold fast to his appointed day in spite of overwhelming opposition. Few doctors are paid for all the work they do, but what some fear is a situation in which no payment of any kind would be forthcoming. If Mr. Bevan decided to ignore the wishes of the majority of doctors there would indeed be a crisis. The state of affairs would be confused for at least a few weeks. During that period doctors would have to charge their patients fees. If these patients were to say that they are paying 5s. to the National Insurance Fund the doctor would point out accurately and firmly that only 10d. of that was going to the payment of a small proportion of the total cost of the Health Service. And he would also point out that the medical profession was not being paid anything by the State and that the patient must put the blame at the door where it belongs—at the door of a Minister of Health who has refused to make doctors willing partners in his Health Service. We believe, too, that those who are fearful underestimate the loyalty of the individual patient to his own doctor. No working man—and this term includes at least 95% of the population—will grudge his doctor a fee which will be very small in relation to what he spends on beer and tobacco—fees to be paid over a period measured at the most in weeks. And if individual doctors do suffer temporary financial loss there are substantial funds to aid them—a fund which, incidentally, was helped along by a medical man who at a meeting last week handed the Secretary of the B.M.A. a cheque for £500 for this cause.

What are the present prospects for the young man wanting to enter general practice? At the moment some of them are finding difficulty in buying shares in partnerships. One reason for this is that elderly practitioners who would have retired are waiting until the issue of ownership of goodwill has been settled. If the profession should agree to the abolition of this custom these elderly practitioners are expecting to be compensated immediately after July 5. It will not be possible for them to receive this compensation money for at least two or three years after July 5. No compensation can be paid until all claims have been assessed, and the ambiguities of Section 35 are going to make it extremely difficult to arrive at this figure. In fact, no one will know what the situation is until the matter has been thrashed out in the courts, because Mr. Bevan has

told the Negotiating Committee that this is something for the courts to decide.

The young man wanting to enter Mr. Bevan's Service as a principal on or just after July 5 would have to submit his name to the Local Executive Council of the area in which he wished to practise, and after the Executive Council has made its choice from a list of such names the successful applicant would have to receive the permission of the Medical Practices Committee in the Ministry of Health. In any case he will be able to work only in areas which are underdoctored, and these areas, we are told by Mr. Bevan, are at present few in number. Granted that a young man's application is successful, he will then have the privilege of "squatting" on a basic salary of £300 a year. He will have to buy or rent a house suitable for a doctor, and will have to buy his car, just as he does to-day. He will have no introduction to a practice and no list of patients with which he can make a substantial start in his new work. If he could practise from one of the infinitesimal number of Health Centres available he would still have to buy or rent his house to live in and in addition pay a rent for the use of accommodation in the Health Centre—accommodation in a Health Centre is not to be free of charge. And in a circular issued on Jan. 14 the Minister states that he proposes to set up a committee charged "with the task of gathering all useful existing information and formulating expert guidance on the best kinds and purposes of Health Centres at which development should aim." The Health Centre was the keypoint of his new G.P. Service, and Mr. Bevan does not yet know what it should be like!

If a young man wants to enter general practice as an assistant to a doctor in the Public Service his choice of practitioners with whom he may wish to work will be severely limited. If, for example, a practitioner in the Public Service with a maximum number of patients on his list because of his success as a doctor wanted an assistant, he could not engage an assistant to meet the demands of the local community if the Executive Council and/or the Medical Practices Committee considered there were already enough doctors in that area. It will not matter to these administrative bodies whether the doctors in an area are good, bad, or indifferent. Their estimate of a position will, and must, be a purely quantitative one. In a quantitative scheme quality goes by the board.

There have been in the medical profession many critics of the custom of buying and selling practices. In the past some medical men have unfortunately fallen into the hands of unscrupulous moneylenders. Before the war the B.M.A., aware of this, made it possible for young men to borrow money through reputable sources and on reasonable terms. There is room for further exploration of the possibilities of making the loan of money for the purchase of a share in a practice much less burdensome than in the past. Doctors can put their collective heads together on this matter, as is indeed suggested by correspondents to this *Journal*. Ways and means should be sought for making things even easier for the young doctor wishing to buy a share in a practice, because what he gains through this ownership of goodwill is very considerable. First of all he secures an introduction to a practice. He is offered immediately something very much more substantial than a basic salary of £300 a year. Exactly the same argument applies to assistants. A principal will take in an assistant because work is getting too much for him. He is saved the uncertainties and risks of "squatting" at £300 a year.

A man who buys a practice has a stake in the community in which he lives. He has got to make good and command the respect of the people among whom he works. A man in receipt of a salary from the State has no such stake. The struggle to make good is healthy. State subsidy of the mediocre is unhealthy. Doctors are now more sharply aware than ever before of the freedom from State interference which is provided by the ownership of practices. With the abolition of ownership, with the imposition of a universal basic salary, with the refusal of the right of appeal to the courts against the Minister's decision to sack a man in a Service open to the whole community, with the control of the distribution of doctors in the hands of a Ministry Committee, with the power in the hands of the Minister to change by Regulation a part-time into a whole-time State Service, doctors will cease to be members of an honourable profession and will become mere technicians employed by the State. Once this has happened Medicine will cease to attract into its ranks the type of man who generation after generation has made Medicine and the medical profession what they are to-day.

Mr. Bevan and the propagandists who have supported him have spread many illusions about the supposed advantages of the present Act. We have already dealt with some of them in previous articles in this column. But one illusion still seems to persist, and that is that with the introduction of this Act medical men will work shorter hours on fixed rotas, and have longer and better holidays. Mr. Bevan cannot create more doctors, cannot build more hospitals, cannot build more health centres, cannot build more houses. He refers in his circular of Jan. 14 on Health Centres to "the sheer practical impossibility of a new building programme." The first effect of his Act will be vastly to increase the number of items of service. This is what happened when N.H.I. was introduced. A service apparently free to everyone will mean that many in it will have a tendency to use it irresponsibly.

The hypertrophy of bureaucracy is one of the social evils of our time. It may be a sign of our decline from greatness, and we may note that historians held it to be an important contribution in the decline of another great empire. We respect our Civil Servants as able and honourable men of an uncorrupt administration, but we believe nevertheless that the extension of their numbers and powers should be restricted if the freest play is to be given to those indispensable qualities of individuality and initiative which have made Medicine what it is to-day. We should take warning from Herbert Spencer, who sixty years ago wrote thus: "Judge what must under such conditions become the despotism of a graduated and centralized officialism, holding in its hands the resources of the community, and having behind it whatever amount of force it finds requisite to carry out its decrees and maintain what it calls order." Spencer saw a developed administrative organization leading to "a revival of despotism" and described this development in a chapter entitled "The Coming Slavery" in his book *Man versus the State*.

THE PRESS AND THE PROFESSION

Speaking at the opening of the East Glamorgan County Hospital on Saturday, Mr. Aneurin Bevan, the Minister of Health, gave this advice to doctors: "Do not allow your minds to be inflamed or your judgment to be distorted by slogans which are addressed to your emotions and not to your intelligence." This sound piece of advice is perhaps hardly necessary for members of a profession used to making a differential diagnosis. The doctor uses the methods of science, and the politician the technique of the hustings. At this moment the medical profession is being subjected to abuse, misrepresentation, and malicious innuendo from the highly emotional press which supports Mr. Bevan. This campaign was started by the *Tribune*, of which Mr. Bevan was a director and editor until he took office in the present Government in 1945. The *Tribune* suggested that "the B.M.A. may still try to fight the battle of the Tory Party against the development of a socialist service," and it went on to state: "Politically, the Minister's firmness has been most important. If he had been weak in face of this reactionary profession . . . it would have increased doubts as to the intention to carry out a socialist programme." The paper with which Mr. Bevan has been so closely associated started the campaign of abuse, and, be it noted, before the report of the so-called negotiations between Mr. Bevan and the Negotiating Committee was out. *John Bull*, published by Odhams Press, which, with the T.U.C., owns the *Daily Herald*, states that the plebiscite now to be held "does not sound like a genuine attempt to find out what doctors think about Aneurin Bevan's plans. It is more likely to be a time-wasting device thought up by the diehards at the B.M.A. headquarters." Mr. Michael Foot, who has just succeeded Mr. Jon Kimche as Editor of the *Tribune*, in a highly misleading article in the *Daily Herald* of Jan. 16 accuses the B.M.A. of attempting "to destroy a scheme devised by Parliament, even though the B.M.A. itself has never had any real alternative to offer." Mr. Foot begins his article thus: "Many miners object to certain sections of the Coal Nationalization Act; but they still dig coal." Has Mr. Foot never heard of coal strikes? And has he not heard of the recent action taken by the National Coal Board against a section of miners? He knows perfectly well that doctors never have struck and never will strike. Their sense of vocation is too strong, and the refusal to strike puts them in a weak position, and Mr. Bevan knows it. Miners, dockers, food-handlers and distributors can strike and endanger the life and health of the community, yet they become the white-headed boys of political propagandists like Mr. Foot who try to smear a great profession by hinting that they might adopt the methods of other sections of the community with a less educated sense of responsibility.

The *Daily Worker* naturally enough refers to medical men as "reactionary diehards," but also hits out at Mr. Bevan (Jan. 16) in this reference to the Ministry of Health circular on Health Centres: "Striking at the very basis of his own Health Service scheme, Mr. Bevan yesterday announced the postponement for a long time, at least, of any construction of health centres." The *Daily Mirror* observes that after the Bolshevik revolution Russian doctors were opposed to National Health Insurance, and adds, presumably with approval, this: "They got the usual Russian short shrift. . . ." The *Mirror* draws attention to our responsibility in resisting Mr. Bevan's Act when it states: "It's quite certain that if the British plan works it will be copied throughout the Empire and throughout Europe."

The *Sunday Pictorial*, weekly sister to the *Mirror*, calls Mr. Bevan's scheme "the State Medical Service," and observes that "the Health Act went through Parliament by the will of the people. They [the doctors] assume grave responsibility in opposing that will." This is the present propaganda line of Mr. Bevan's supporters, and was most effectively answered last Sunday by Dr. H. Guy Dain, the Chairman of Council. "Parliament," Dr. Dain said, "has imposed no obligation whatever on doctors to join the Service. On the contrary, Parliament has expressly given the profession the right to enter or to stay out as it chooses. Mr. Bevan himself has explicitly admitted that this is so. He has also admitted that doctors, like other workers, have the right to make up their minds collectively, as well as individually." It is important that medical men should keep this fact firmly in mind—namely, that individual and collective opposition to serve under Mr. Bevan's scheme is an action which Mr. Bevan holds to be one to which we have a right. The issue is simply whether medical men are willing to take service under the National Health Service Act in its present form if the plebiscite results in a majority large enough to justify collective opposition. Those who are trying to frighten doctors with the bogy of opposing Parliament should reflect upon Mr. Bevan's own observation and also upon an observation made by a philosopher whose views were endorsed in a preface to a reprint written by that stalwart of the Labour Party, the late Lord Snell. Herbert Spencer[1] wrote:

> "The great political superstition of the past was the divine right of kings. The great political superstition of the present is the divine right of Parliament. The oil of anointing seems unaware to have dripped from the head of the one to the heads of the many and given sacredness to them also and to their decrees."

There is nothing sacred about Mr. Bevan's Act. What is sacred is the freedom of the medical man to decide not to enter a service which threatens his freedom and his responsibility towards his patients.

Large sections of the Press, and in particular the small provincial paper which plays such an important part in forming public opinion, show a sympathetic appreciation of "the doctors' case." We are here more concerned with those who fail to see, or wilfully ignore, what is the fundamental problem the medical profession is faced with. Ranging itself on the side of those papers referred to we find *The Times*, which pursues its unrelenting course of opposition to the British Medical Association. In a leading article of Jan. 8 *The Times* momentarily wavered from its opposition when it stated: "Mr. Bevan has not convincingly explained why the basic salary should not be confined to special cases, and if a majority of doctors now votes against this it would be wise to abandon its general application without hesitation." But in a leading article six days later

[1] *Man versus the State*. By Herbert Spencer. (With an introduction by Lord Snell, C.B.E., LL.D.). The Thinker's Library. London: Watts & Co., 5-6, Johnson's Court, Fleet Street, E.C.4.

(Jan. 14) *The Times* repented of its moderation and stated: "Nor, again, can the ordinary citizen see why the B.M.A. should . . . resist the introduction of a small basic salary for all practitioners." *The Times* completely ignores the basis of the B.M.A.'s opposition, which is that the Act in its present form leads to a whole-time State Medical Service —leads to the nationalization of Medicine. When all services and industries in the State have been nationalized *The Times* and other independent newspapers may see an attempt to nationalize the Press. That it can ignore the implications of the present attempt to nationalize a free and independent profession is surprising. What is perhaps more surprising is to find *The Times* making a misstatement of fact. "The B.M.A.," it states, "has never had a workable scheme of its own." This is not true. Between the two wars the B.M.A. was working on plans for a general medical service for the nation and the last statement of its views on this was published in 1938—a scheme which advocated the inclusion of dependants in the National Health Insurance scheme, the inclusion in it of all persons of like economic status to those to whom the scheme was available, and the extension of the scheme to include consultant and auxiliary services. This was a workable scheme based upon an existing scheme which, whatever its defects, commended itself to the public and the profession. *The Times* writes: "The dispute has been allowed to drag on as though it were a private wrangle of no public importance between the Minister of Health and a score of elderly doctors. It is high time that the Government and public opinion intervened to prevent a conflict which would be as exasperating as it would be futile." Lord Horder dealt effectively with the slighting reference to elderly doctors when he pointed out[2] that the average age of the 34 members of the Negotiating Committee was 59, and that of the Cabinet 58. He added:

> "But in this matter of consultation the Minister has done less than justice to the public, the doctors, and himself. He burked discussion before the Act was put upon the Statute-book, and now it is there he tells us that Parliament has spoken and he cannot reopen matters which he knows full well have always been in dispute. He allowed these matters to be discussed with his subordinates for 12 months and then himself disposed of all of them in two sessions of two hours each. Frank consideration of amending legislation to the Act as it now stands was promised. Such consideration has not been vouchsafed."

The Times asks whether "the B.M.A. questionnaire will be so framed as to indicate whether the doctors' particular objections can be remedied without destroying the basis of the scheme." And it admits that the "doctors certainly have genuine grievances. . . ." Mr. Bevan's comprehensive Health Service can be operated willingly by medical men if he concedes on matters not essential to the working of his Act. These include: the right of appeal to the Courts against the Minister's decision to remove a man from the Service; the abolition of the basic salary except in certain circumstances; payment by a fixed capitation fee; the machinery for directing ("negatively") doctors; and the right of doctors to continue to own the goodwill of practices.

[2] *The Times*, Jan. 16.

THE MINISTER CLARIFIES

In an attempt to clarify some points in the present dispute between the Minister of Health and the medical profession, the *Lancet* put nine questions to the Minister. By the courtesy of the Editor of the *Lancet* we are able to publish in this week's *Journal* these nine questions and Mr. Bevan's replies to them. There are three questions on remuneration; three on the right of appeal in the Tribunal; a question on Section 35 of the Act in relation to the legal position of partnerships; and two questions on the possible postponement of the appointed day.

Mr. Bevan persists in his refusal to give the medical man the right to appeal to the courts against a decision to remove him from a service open to every member of the public. That there can be no real constitutional or administrative obstacle in the way of granting this appeal is clear from the fact that it is included in the National Health Service Bill for Northern Ireland. Mr. Bevan repeats the observations on this matter he has already made to the Negotiating Committee: all the doctor can do is to challenge the legality of procedure, not the decision to dismiss; the Minister is the employer and insists on the right to sack his employees. Mr. Bevan says that "'basic salary' is perhaps a misnomer," and states that the proposed fixed element of £300 "does not in any way affect the prospects of a fully salaried system; that could be brought about with or without this £300 element." He observes that a full-time salaried Service has been possible under existing legislation for some 36 years. This, of course, refers to remuneration under the National Health Insurance scheme. The National Health Service Act is open to all members of the community and has been framed and is being brought into operation by a Government which is pledged to introduce a whole-time salaried State Medical Service. The first of the reasons Mr. Bevan gives for "a universal basic salary" is "that it enables beginners to live while they attract patients." The second is that "it affords a convenient fixed peg on which to hang additional payments," and the third "that it reduces the temptation to build up excessively long patient lists." These read like excuses rather than reasons.

On Section 35 the Minister has retreated from the position he took up when he met the Negotiating Committee on Dec. 2 and 3. He states that, "anxious to clarify the position . . . he . . . proposes to obtain a collective legal opinion of highest standing by appointing straightway a committee of legal experts to say whether or not the partner in an existing partnership is fully and adequately protected." He goes on to say that he will proceed to seek amendment of the Act if on the report of this legal committee "there is evidence that existing partnerships are unfairly prejudiced by the Act." This legal committee has to be set up. It will have to make its considered report. If its report provides evidence of prejudice to existing partnerships Mr. Bevan will seek to amend the Act. Until all this has been done no medical man in partnership will know where or how he stands—probably not until the eve of the appointed day. Mr. Bevan has just been compelled to postpone indefinitely the building of health centres which were the key-point of his general practitioner service,

and now is forced to admit by the evidence of the Negotiating Committee that he does not know how to interpret a Section of the Act related to partnerships and related thereby to the assessment of compensation. Once again Mr. Bevan flouts the Negotiating Committee by making his new proposal not to it but to a medical weekly owned by a publishing firm.

Mr. Bevan states that the National Health Insurance Acts are repealed not by the National Health Service Act but by the National Insurance Act which comes into operation on July 5. The medical profession is expected to enter the Service without being in full possession of all the facts —for example, the remuneration of consultants will probably still be under discussion in June, the legal position of Section 35 has now to be clarified and an amendment possibly introduced, and Mr. Bevan is still unable to make an exact comparison between his proposals for remuneration and the proposals of the Spens Committee, which he has accepted and which have been in his hands for months. If there is administrative difficulty over the postponing of the appointed day it is the job of the administrator to get over it. In reply to the *Lancet's* question whether further postponement of part of the Service will be contrary to the public interest Mr. Bevan replies that for his part "the Minister will give them the Service on July 5." It is the medical men of this country and not the Minister who will be working in the Health Service. Mr. Bevan has had the grace to reconsider one section of the Act. Encouraged by this we must persist in asking him to reconsider other sections of the Act if the comprehensive medical service wished for is to be introduced on July 5.

RECENT OUTBREAKS OF SMALLPOX

The diagnosis of typical smallpox presents few difficulties. Unhappily, when it occurs in individuals who possess some basal immunity the clinical picture is more confusing and may confound even the experts (and they may nod in good company, for even Rickets himself is said to have misdiagnosed a case). But, although the illness may be mild and indefinite in a host who is partially immune, the virus itself loses none of its virulence and may still cause severe disease in susceptible contacts. The results of a missed diagnosis may thus be calamitous, and elsewhere in this issue Simpson Smith describes the events which followed a "confident diagnosis of chicken-pox" in a soldier returned from India. An epidemic of smallpox ensued which smouldered for four months. There were thirty cases in all, of which half were severe and six died

Although there have been no spectacular epidemics in this country since the passing of the Vaccination Acts, we all need constant reminders that smallpox is never absent for long from these islands. In the period 1921–35 inclusive there were 81,556 cases, with 266 deaths in England and Wales.[1] Most of these cases were of a mild type, as is evident from the low mortality. During 1936 only 12 cases were notified—the infection having been introduced from abroad—and Butterworth[2] was induced to prophesy: "Few medical men are likely to see variola major in this country, for it is now very rare."

On the outbreak of war the possibility of infection entering this country from the Eastern Mediterranean and other endemic areas led to a tightening of the usual measures of control at ports and airfields. Despite these, however, an outbreak of smallpox occurred in Glasgow in June and July of 1942, a full account of which was given in this *Journal* by Sir Alexander Macgregor.[3] There were 36 cases, with eight deaths, the first cases being members of the crew and passengers of a ship which had sailed from Bombay. Mass vaccination, which formed part of the administrative procedure to combat the disease in Glasgow, did not materially interfere with the normal work in the docks.[4] The question of the value of this method of control in stopping the epidemic was discussed in our columns at that time.[5] Later in the same year similar outbreaks occurred in Fife and Edinburgh.

The next outbreak to attract attention began in a Middlesex hospital.[6] Here the original case was a soldier who had arrived in a convoy from Gibraltar and who had been admitted direct to the hospital on account of an anxiety state.[7] There followed ten cases of variola major, three of them fatal. During 1946 Asiatic smallpox was introduced into England and Wales on 15 separate occasions. Fortunately vaccination and surveillance of contacts brought the disease rapidly under control in each case, and only 40 persons became infected. Then, after an interval of seven months, the disease reappeared in the middle of February, 1947, and cases were seen at Grimsby, Stepney, Scunthorpe, Doncaster, and in Staffordshire.[8]

Meanwhile the outbreaks among British soldiers in the Middle East had caused van Rooyen and Illingworth[9] to explore methods of rapid diagnosis. They found that the direct examination of carefully prepared smears from early lesions was useful in differentiating chicken-pox and smallpox owing to the larger size of the elementary bodies in the latter disease. Downie[10] has more recently reviewed the laboratory methods available for the diagnosis of smallpox. He is doubtful of the value of direct examination, for a negative result does not exclude smallpox, and considers that the two most reliable methods are the cultivation of the virus from early lesions on the developing egg, and the complement-fixation test, using as antigen material from at least six vesicles or a similar number of scabs. The latter test gave positive results in all of 27 recent cases,[11] and has the great advantage that a definite report can be given within 24 hours, whereas egg culture takes at least three days.

So long as British troops remain in the Middle East their repatriation by aeroplane or ship will entail a risk of localized outbreaks of smallpox in this country. In one month last year cases were landed from the *Empress of Australia*, the *Duchess of Richmond*, and the *Orontes*.[12]

1 *Memorandum on Smallpox*, 1938. London, H.M.S.O.
2 *Lancet*, 1938, **2**, 1426.
3 *British Medical Journal*, 1942, **2**, 627.
4 Buchanan, G., and Laidlaw, S., ibid., 1942, **2**, 394.
5 Millard, C. K., ibid., 1943, **1**, 288.
6 Ibid., 1944, **1**, 399.
7 Ibid., 1946, **2**, 194.
8 Ibid., 1947, **1**, 549.
9 Ibid., 1944, **2**, 526.
10 Downie, A. W., *Mon. Bull. Min. Hlth. Emerg. publ. Hlth. Lab. Serv.*, 1946, **5**, 114.
11 *Publ. Hlth.*, 1947, Jan., 82.
12 *British Medical Journal*, 1946, **1**, 591.
13 Stallybrass, C. O., *Publ. Hlth.*, 1947, Jan., 82.

It is true that the risk to the civilian population is not great, but as movement becomes freer and air travel develops, as it is bound to do, the comparative freedom from the disease which we enjoyed immediately before the war is unlikely to continue. By the National Health Service Act, 1946, all the Vaccination Acts are repealed and vaccination is put on the same voluntary basis as diphtheria immunization. For a country which depends as much now as it has in the past on its maritime associations this bold step is an act of faith which will need to be accompanied by suitable campaigns to educate the public. It will be unsatisfactory to rely on vaccination only after the appearance of a case, for it may be noted that Simpson Smith found that vaccination is no certain prophylactic after contact has occurred. Stallybrass[13] made the same observation following the onset of smallpox in two patients in Liverpool, both of whom died.

Recent experience may be summarized briefly. First, there is no absolute clinical diagnostic criterion; even the distribution of the rash may be misleading in greatly modified cases. Secondly, the appearance of even a few papules after a constitutional upset (which will usually be regarded as "flu") should always arouse suspicion. Thirdly, the diagnosis of chicken-pox in an adult should be made with misgivings, especially if there is a history of recent residence abroad. Finally, laboratory tests now give valuable and accurate information, and there should be no hesitation in using them even if it is only to confirm an apparently obvious diagnosis.

CARE OF CHILDREN

The National Assistance Bill will bring to an end the existing Poor Law and make further provision for the welfare of disabled, sick, aged, and other persons.[1] In this Bill the effect of the recent awakening of public interest in the care of the aged, as shown among other things by the report of a special committee of the British Medical Association,[2] can be traced. The Children Bill, the text of which was published on Jan. 16, is a further instalment of the new legislation which will come into operation when the Poor Law ends, and it reflects faithfully the recommendations of the Curtis Committee and the Clyde Committee. Miss Myra Curtis, C.B.E., presided over the Care of Children Committee which was set up in March, 1945, "to inquire into existing methods of providing for children who, through loss of parents or from any cause whatever, are deprived of a normal home life with their own parents or relatives."

The Curtis Report[3] attracted a great deal of attention when it was published in September, 1946, and so did the less familiar Clyde Report of the Scottish Committee on Homeless Children.[4] The Children Bill gives effect to most of the recommendations of the Curtis Committee, following the main lines of its detailed proposals on administration and also, wherever possible, giving preference to personal relations rather than official intervention. The White Paper[5] summarizing the main provisions of the Bill points out that it will place a duty on the councils of counties and county boroughs in England and Wales and of counties and large burghs in Scotland to receive into their care in the interests of the welfare of the child any boy or girl under seventeen who has no parents or guardians or who has been abandoned or lost or whose parents or guardians are prevented by incapacity or any other circumstances from providing proper accommodation, maintenance, and upbringing. This duty will rest on the local authority in whose area the child is, irrespective of where he or she is ordinarily resident. An important point is that the Bill does not authorize a local authority to keep a child if any parent or guardian desires to take over this responsibility. Local authorities will be able "to assume by resolution" parental rights. But such a resolution will lapse if any parent or guardian whose rights are affected lodges an objection within one month. It will then be open to the local authority to apply to the courts for an order that it should remain in force. The burden of proof will rest upon the local authority, which must satisfy a court that its intervention is necessary in the interests of the child.

In the cases which the Curtis Committee studied, however, and with which the Bill is primarily concerned there is no question of such a dispute. The child is alone and uncared for and the Bill places squarely upon the shoulders of the local authority the duty of taking charge of him. For many years local authorities have been acting voluntarily as "fit persons" to take charge of children reported to be "in need of care or protection." This voluntarily assumed responsibility will now become a duty. Normally the local authority will discharge this responsibility by boarding the child out with foster parents or, if this is not possible, in some form of home or hostel maintained either by voluntary bodies or by the local authority itself for this purpose.

The whole plan will be under the supervision of the Home Office, and the Secretary of State is empowered to make Regulations for maintaining the standard of institutions accepting these homeless children. Local authorities are also to set up Children's Committees under which a children's officer will work. In the great majority of cases this officer will be a woman and, according to *The Times*,[6] "it will be her duty to be the channel for all the forces of public benevolence that flow from legislative and official sources, but to pass them on transformed into personal understanding and solicitude."

The responsibility placed on the local authority under the Bill will end if the child comes under the control of any person or authority under the provisions of the Mental Deficiency or the Lunacy and Mental Treatment Acts. In making Regulations governing the conduct of voluntary homes the Secretary of State may include provisions relating to accommodation and equipment, medical arrangements for protecting the health of the children, and facilities for religious instruction. There will be set up an Advisory Council on Child Care to advise the Secretary of State on matters connected with the discharge of his functions under this Bill once it becomes an Act and under the Children and Young Persons Act of 1933. There will be a separate Advisory Council for Scotland. It is estimated that the Children Bill will affect the upbringing of some 125,000 children in England and Wales and about 13,500 in Scotland.

Prof. G. S. Wilson, M.D., F.R.C.P., will deliver the Milroy Lectures before the Royal College of Physicians of London (Pall Mall East, S.W.) on Tuesday and Thursday, February 10 and 12, at 5 p.m. His subject is "The Public Health Laboratory Service."

1 Cmd. 7248, H.M.S.O. 3d. net.
2 *British Medical Journal*, Supplement, June 21, 1947, p. 133.
3 Cmd. 6922, H.M.S.O., London. 3s. net.
4 Cmd. 6911, H.M.S.O., Edinburgh and London. 9d. net.
5 Cmd. 7306, H.M.S.O., London. 2d. net.
6 *The Times*, Jan. 17.

THE MINISTER OF HEALTH ANSWERS THE "LANCET"

The LANCET *this week publishes the Minister of Health's replies to a series of questions addressed to him by the Editor. The following are the questions and answers, which we reproduce by the courtesy of the Editor of the* LANCET.

1. *Will the Minister further explain the purposes of the basic salary?*

"Basic salary" is perhaps a misnomer. It suggests a salaried State medical service. But the Minister, in the debate on the National Health Service Act on Nov. 4, 1946, said:

> "Some doctors have expressed the fear that this is merely the beginning of a full-time salaried service. I cannot read into the mind of any future Minister or prophesy what may be done by future Governments, but that is not our intention. Our intention is that the main source of a doctor's remuneration shall be by capitation."

This statement is reflected in the remuneration now proposed. It should be remembered that the new Act gives no more power to impose a full-time salaried service than does the existing law. A full-time salaried service has been possible under existing legislation for some 36 years—but doctors have not apparently feared it. It should also be remembered that the proposed £300 "fixed" element in payment does not in any way affect the prospects of a full salary system; that could be brought about with or without this £300 element, which makes no difference.

The values of the "fixed" payment of £300 in the total remuneration are (*a*) that it enables beginners to live while they attract patients, (*b*) that it affords a convenient fixed peg on which to hang additional payments (e.g., for sparsely populated areas) without the administrative complications of a varying capitation rate, and (*c*) that it reduces the temptation to try to build up excessively long patient lists.

2. *Could not the purposes of the basic salary be fulfilled by an alternative capitation fee (if necessary on a sliding scale) offered to those practitioners who opt for it?*

A system of alternative capitation fees would involve substantial administrative difficulties, particularly if "collective responsibility" and a pooled capitation fund are—as they are—to be accepted. Nor would the purposes above be fulfilled. No good case has been made out for it so far.

3. *Will the Minister amplify his statement that the doctor retains "his ordinary legal right to go to the Courts on grounds of unlawful action by the Minister or others" and indicate how far this will give doctors the assurance of protection, where necessary, by the Courts?*

There has been general misunderstanding on this. The business of the Courts is to decide whether a termination of any form of employment is lawful or unlawful. On this the doctor, like everyone else, can still go to the Courts. Any person affected by a decision of the Minister can go to the High Court on the question whether the Minister has, or has not, acted lawfully. Nobody, in any other profession or vocation, has the right to ask a Court to reverse a perfectly lawful decision to terminate an engagement. No such right—indeed, no independent Tribunal—has existed under National Health Insurance in the last 36 years. The Minister could have carried on the present system of that scheme, but—on the doctors' behalf—he provided for the decision to be taken by a separate Tribunal and not by him. The appeal to him is only an appeal to keep the doctor in the Service in spite of the Tribunal. There is no power in him to alter a decision of the Tribunal favourable to the doctors.

Let it be clear what the doctors' protection is. First, the Minister himself cannot ever remove any doctor's name from the list. Locally an Executive Council comes to the conclusion that the continued inclusion of a certain doctor in the lists would prejudice the efficiency of the Service. That Council is itself half professional and has seven doctors on it. That Council, nevertheless, cannot remove the doctor's name from the list; it can only refer the case to a special Tribunal of one doctor, one lawyer (appointed by the Lord Chancellor, not the Minister), and one layman. That Tribunal can decide in favour of the doctor—in which event nobody at all can overrule it. Or it can decide against him—in which case he has the further recourse to the Minister, mentioned in the last paragraph. The Minister can uphold the Tribunal's decision, or reverse it in the doctor's favour—nothing else. There are many who think it is, if anything, the public rather than the doctor who might claim to be more protected.

4. *For the practitioner, what advantages are there in having his case heard by the Tribunal rather than a Court of Law? Could not the advantages of the two forms of hearing be combined by allowing appeal from the Tribunal to a Court?*

Part of the answer is given above. The Courts' proper function is to decide whether what is done is lawfully done. That remains. Under the existing National Health Insurance it is the Minister who decides these cases. Under the proposed new Service an independent Tribunal is set up to decide it, and unless the doctor wishes otherwise the proceedings are private. The Minister can reverse that Tribunal's decision only in the doctor's favour.

5. *It has been suggested that the chairman of the Tribunal, nominated by the Lord Chancellor, should be a judge. Would the Minister consider the appointment of judges as chairmen of Tribunals?*

As the Act stands, this is not possible. The Minister sees no good reason to amend it in this respect. A judge, so appointed, would not be acting as a judge, and the difference is more apparent than real. Nor is it easy to find judges available to give the time to this. What matters is that the chairman should be a lawyer of acknowledged standing, and this it is the intention to secure.

6. *Could not steps be taken, in advance, to clarify the legal position of partnerships after the appointed day?*

The Minister is in complete sympathy with the doctor in partnership who feels that his position under his partnership agreement is uncertain. He is advised that legally the situation is all right and the partner protected. The B.M.A. is advised otherwise. The Minister is anxious to clarify the position, but—on the present legal opinions—it is not easy to do so. He therefore proposes to obtain a collective legal opinion of high standing by appointing, straightway, a committee of legal experts to say whether or not the partner in an existing partnership is fully and adequately protected. He would like the profession's co-operation in the selection of that committee. He will consider its report, and, if there is evidence that existing partnerships are unfairly prejudiced by the Act, he will proceed at once to seek an amendment of it.

7. *Will the Minister comment on the statement that in the middle and higher ranges his proposals for remuneration do not tally with the recommendations of the Spens Committee?*

His intention has certainly been that they should tally. But, at this stage, no exact comparison has been possible. So far, he has published only the main and fundamental remuneration of the general practitioner. Account has still to be taken of additional factors which have not yet been settled—such as additional payments for maternity services, grants for training assistants, income derived from the employment of assistants in the bigger practices, the value of the Exchequer contributions to superannuation (which the Spens Committee said must be taken into account and which will amount to 8% of the net income) and of the right to a widow's pension.

8. *If the "appointed day" for the operation of the National Health Service Act were again postponed, would National Health Insurance continue until that day?*

No. The National Health Insurance Acts are repealed, not by the National Health Service Act, but by the National Insurance Act, which operates from July 5.

9. *Will the Minister explain why in his opinion further postponement of the introduction of the Service, or of the general practitioner part of it, would be contrary to the public interest?*

Since 1942, under different Governments, the conception of a national and comprehensive health service has been actively

pursued. The present Government put it into effect, and Parliament endorsed it, in 1946. It is time that the people had it. The old system is partial and, from the national point of view, not effective enough. The country can have—and should have—the complete cover for health which they deserve. Parliament has decided how they can best have it. It is the Minister's duty to carry out that decision, and he is doing so. He has preserved all the confidential and personal relationships of doctor and patient which are essential to any health care, the freedom of choice of doctor and freedom to change. He has tried to remove the financial worry of health care by a system of pooling costs and drawing benefit when the need arises. To withdraw the general practitioner service would be to remove from the new health "cover" the very first line of medical consultation. Why should the people wait longer? For his part, the Minister will give them the Service on July 5.

THE PLEBISCITE FORM

On Jan. 31 the British Medical Association is sending the plebiscite form to all medical practitioners in England, Scotland, and Wales, those in the Services wherever they are, and those on the Temporary Register. The purpose of the plebiscite is, first, to ascertain the views of the profession on the National Health Service Act in its present form, and, secondly, to decide the question of "service or no service." To this end three questions will be asked and the practitioner gives his answer by marking an X against the affirmative or negative form of the question. They are as follows:

A { *I approve* of the N.H.S. Act, 1946, in its present form.
I disapprove of the N.H.S. Act, 1946, in its present form.

B { *I am in favour* of accepting service under the Act in its present form.
I am not in favour of accepting service under the Act in its present form.

C { *I agree* to abide by the decision of the majority and undertake not to enter the Service if the answers to Part B reveal a majority against undertaking service, as defined in para. 4 above [of the plebiscite form], and if so advised by the British Medical Association.
I do not agree to abide by the decision of the majority if it is against accepting service as defined in para. 4 above. *[See third paragraph below]*

All members of the profession will be asked to complete question A whether they are in practice or retired. Questions B and C should be completed by the following groups of practitioners: consultants or specialists not holding whole-time salaried posts; consultants or specialists holding whole-time salaried posts; general practitioners who are principals; general practitioners who are assistants; and whole-time voluntary staff.

The last category excludes those practitioners of specialist status who appear in the first two categories listed. It includes those practitioners holding B1, B2, and A appointments and Class I and Class III appointments under the Government postgraduate scheme for ex-Service men. It will be seen, therefore, that house-officers, registrars, resident officers, chief assistants, and members of professorial units at voluntary hospitals all vote on these questions B and C.

The advice that the Council of the British Medical Association will give to the profession depends on the result of this plebiscite. If the total replies to question B show a majority against accepting service under the Act, and this majority includes approximately 13,000 general practitioners (out of a present total of about 20,500 general practitioners), the Association will advise the profession not to enter any contract under the Act in its present form but to continue their services to patients, or other professional work. If these majorities are not attained, those practitioners who undertake not to enter the Service (in answer to question C) will be released from their undertaking. *Needless to say, how individuals vote will not at any time be divulged.*

In order to classify the replies 19 categories will be printed on the plebiscite form and the medical practitioner asked to assign himself to one of them. They are as follows: (1*a*) Consultant or specialist not holding whole-time salaried post; (1*b*) Consultant or specialist holding whole-time salaried post; (2) General practitioner—principal; (3) General practitioner—assistant; (4) Whole-time voluntary hospital; (5) Whole-time local authority general hospital; (6) Whole-time local authority special hospital; (7) Whole-time public health service; (8) Whole-time Government service; (9) Whole-time teacher; (10) Whole-time research; (11) Other whole-time non-Government post; (12) Medically qualified dental surgeon; (13) Retired; (14) Unclassified; (15) Services, permanent commission; (16) Services, temporary commission, specialist; (17) Services, temporary commission, graded specialist; (18) Services, temporary commission, general duty officer.

It is particularly asked that every medical man should fill in this important document and return it not later than Feb. 14 (or as soon as possible in the case of practitioners overseas), to the Secretary of the British Medical Association, B.M.A. House, Tavistock Square, London, W.C.1.

THE MENTAL HEALTH SERVICE

WIDER RESPONSIBILITIES OF LOCAL AUTHORITIES

A conference arranged by the National Association for Mental Health was held in London on Jan. 15 and 16, and attended by delegates from a large number of local authorities and voluntary organizations. The subjects of discussion at the four sessions were the rehabilitation of persons who have suffered from nervous or mental disorder, methods of handling "difficult" children, the responsibilities of local authorities in relation to mental health under the National Health Service Act, 1946, and, finally, education for mental health as a national and international responsibility.

The conference was opened by the Rt. Hon. R. A. Butler, M.P., who enlarged upon the opportunity given to the National Association (which now incorporates the Central Association for Mental Welfare, the Child Guidance Council, and the National Association for Mental Hygiene) to play a leading part in developing an effective mental health service for the nation, thanks to the provisions of the Education Act, 1944, and the National Health Service Act, 1946. Mr. L. J. Edwards, M.P., Parliamentary Secretary, Ministry of Health, reminded the Conference that however complete the administrative arrangements under the Health Service Act might be, the success of the new health service would depend upon the quality of the work done by those engaged in it, whether as doctors and health workers or as representatives on local health committees. He urged that particular attention should be paid by local authorities to their after-care organization upon which the restoration to normal health of patients discharged from hospital would depend.

Readaptation after Mental Illness

Dr. G. R. Hargreaves, principal medical officer, Lever Bros. and Unilever, Ltd., said that various estimates had been made of the prevalence of the neuroses, many of them wide of the mark. Perhaps the closest index was afforded by an extensive inquiry which Dr. Russell Fraser had conducted for the Medical Research Council. He had shown that absence from work on account of neurosis was responsible for the loss of 1% of men's time in industry, equivalent to between one-third and one-quarter of all time lost through sickness, and that women lost twice as much time as men. The incapacity caused by neurosis was probably greater than that caused by colds and influenza.

To meet this problem the present facilities for out-patient consultation and psychological treatment were not adequate either in extent or quality, and in-patient facilities, whether in special centres or in general hospitals, were also inadequate. Mental hospitals designed for the care and custody of cases of psychotic illness, with few exceptions, were unable to provide adequate in-patient treatment for neurosis. The E.M.S. and Service neurosis centres had left some trace, notably in the Roffey Park rehabilitation centre and the Princess Elizabeth industrial rehabilitation centre of the L.C.C., but far more in-patient centres of this type were needed.

Most discussion on rehabilitation, said Dr. Hargreaves, was based on the assumption that the chief problem was to get an orthopaedic case back to light work, but every works manager would say that he had no problem in the rehabilitation of such cases compared with the resettlement of neuroses and psychosomatic cases, such as patients with duodenal ulcer, in general industry. An after-care scheme, such as that which the National Association for Mental Health set up during the war for men discharged from the Services on psychiatric grounds, was badly needed for the civilian psychological patient in peacetime to enable him to get resettled in home and work.

The Ministry of Health, as was apparent from the decision to appoint regional psychiatrists, was aware of the social and industrial importance of psychiatric illness. Close collaboration between the remedial activities of the Regional Hospital Boards and the preventive activities of the local authorities would be needed if the resettlement of the neurotic patient in industry was to be achieved.

Resettlement in Industry

Dr. Donald Stewart, medical adviser to the Austin Motor Company, said that neurosis accounted for well over 90% of psychiatric cases, and was probably a factor in 20 to 30% of all sickness. He divided psychiatric cases for practical purposes into three categories: (1) psychiatric cases among the unemployed, including psychopathic personalities, cases with a basis of mental defect, and those who had suffered from psychotic illness; (2) psychiatric cases registered as such with the Ministry of Labour, and in employment, but with a disability which from time to time might render them unfit for work; (3) psychiatric cases not on any register, and largely in employment, many of them detectable in industry by the medical officer, some showing anxiety states or depression superimposed on prolonged organic disability such as tuberculosis or rheumatoid arthritis.

Under the National Health Service Act the treatment of psychiatric casualties in hospitals, clinics, and health centres was apparently to be put on a more rational foundation. It might therefore be that the new health service would pay attention to the adequacy of methods of recognition, treatment, and prevention. But in order to do this adequately its link with industry must be strengthened, particularly in the field of resettlement. Dr. Stewart described the various rehabilitation facilities available, and continued:

"Wide opportunity for modern medicine to take an active part in post-hospital rehabilitation is now offered. The doctor who has insight into and understanding of the psychological reactions of the worker, of his social customs, and of how his present outlook can be determined by fear of unemployment and the feeling of insecurity in his job, can do much to bring about changes in attitude. What industry and those Government departments more intimately concerned with resettlement increasingly require is advice from the doctor closely informed on both industrial and psychiatric matters, and who talks the common language. A further vista in education, both of doctors and laymen, is thus opened out. Training for this specific task now becomes of much significance."

Training, however, depended on research. Some proposals for investigation in this field were at present under consideration. One of the most important was the investigation of placement in jobs by studying on the one hand the physical and psychological demands of the different jobs and, on the other, the corresponding capacities of the individual. In the psychological approach such factors as incentives, fatigue, monotony, and working environment needed careful consideration.

Psychiatric After-care

An account of the working of the National Association's after-care scheme for psychiatric casualties, already referred to by Dr. Hargreaves, was given by Dr. Kenneth Soddy, medical director of the National Association. This scheme, which started in 1942, and in 1946 was thrown open to others besides ex-Service people, had dealt with between 13,000 and 14,000 men and women, and the present active case-load was over 4,000. It looked as if two and a half years was the average time for patients to remain in touch with the scheme. About one-third of the patients came into the scheme suffering from a psychotic illness, while nearly one-half were of the neurotic type. About one-third were referred by hospitals or doctors, and rather fewer by employment exchanges. Only about a quarter of the patients could name a doctor as being their "own doctor," so that the scheme was evidently breaking new ground. About 9% of the patients at any one time were receiving treatment in mental hospitals or neurosis centres, and 7% in psychiatric out-patient clinics. These low figures might be due in part to the patients' lack of co-operation or lack of confidence in psychiatric treatment, but they were also an indication of the inadequacy of psychiatric clinical facilities and of the dearth of trained and experienced doctors. Some 60% of the patients were gainfully employed, and of those in work 63% had found employment by their own efforts, aided in some cases by a social worker. The hard core of unplaceables accounted for about 8% of the case load.

Psychiatric community care, said Dr. Soddy, cut across established divisions of work. It was not confined to medical treatment, nor to social welfare, nor to the promotion of industrial efficiency. Under the new Act it stood in danger of dismemberment between the Regional Hospital Boards and the local health authorities. The arbitrary division between medical treatment and social care had its administrative convenience, but it embarrassed the psychiatric therapist. Purely local schemes might suffer from patchiness and standards vary from area to area. His hope was that the larger health authorities might carry on and expand the National Association's pioneer work in community care and that the smaller authorities might perhaps make arrangements with the National Association to work on a co-operative basis over groups of areas.

New Powers and Duties of Health Authorities

A comprehensive survey of the new powers and duties of local authorities in respect of mental health under the National Health Service Act was given by Dr. Doris M. Odlum, a vice-president of the National Association. She said that from the meagre reference to mental health in the Act it might be supposed that only a limited service was expected from local authorities, but a more careful study made it clear that the door was now wide open for a much more complete and satisfactory mental health service than had been possible in the past.

The local Health Committees to be set up under the Act were empowered to refer all mental health questions to Mental Health Subcommittees, to which co-opted members could be added, thereby bringing in persons with special knowledge in the mental health field. The Minister had suggested to local health authorities that they should appoint a "medical officer of mental health," whole- or part-time, who would be a senior psychiatrist, or at least of consultant status.

Apart from the duties of ascertainment under the older Acts dealing with the mentally disordered and the mentally defective, and the taking of initial steps towards institutional care or other supervision as the case might be, local authorities had the power—and if the Minister so directed the duty—to make arrangements for the prevention of illness and the care and after-care of persons suffering from mental illness or defect. The Ministry had informed them that this provision was to be interpreted in a far wider sense than the categories coming under the older Acts, and that it included uncertifiable psychotics and mental defectives, neurotics, psychopaths, and subnormals, in fact all who were seriously handicapped by mental disease, disorder, or disability.

The care and after-care of all sorts and conditions of mentally ill people opened up an immense field. Dr. Odlum said that she could not pretend that in these austere times it would be possible to carry out all these functions immediately, but it was to be hoped that every local authority would prepare a comprehensive scheme, and in the meantime, with the help of voluntary organizations, would cover as much of the ground as was possible. She indicated ways in which the psychiatric social worker could be of great assistance at the critical time of a patient's readjustment to domestic and working conditions.

Of preventive measures one of the most important was health education. Superstitious and horrific ideas still surrounded mental illness, and some patients were treated with real mental cruelty by their families, which militated against their recovery at the most curable stage of their illness. A programme of health education was necessary to avoid such an unhappy situation. The problems presented by the senile, the

subnormal, the unstable, the epileptic, and the psychopathic personality were widely different, but all these classes were capable of being helped to a greater or less extent by trained social workers. She also stressed the need for co-operation between the Mental Health Subcommittee and the Education Committee on the social care of school-children who were emotionally unstable or maladjusted.

Local Authority Opinion

Many delegates from local authorities briefly addressed the Conference on this subject. Alderman G. R. Spruit (Hull) spoke of the lack of co-ordination between the general practitioner and the local authority and hospital services, especially in cases which developed mental illness as a sequel to physical illness. Councillor T. M. Larrad (chairman of Manchester Health Committee) mentioned the difficulty of persuading councils, with the hospitals taken from their control, that the functions of their health committees would be more important than ever. Mrs. M. Ormerod (chairman of the Mental Health Committee of the L.C.C.) suggested the setting up in every district of a citizens' health bureau, where advice could be given by sympathetic and trained persons. She also thought that there was a reservoir of social workers among women who had had previous experience in that field and had married, but would now be prepared to return in a part-time capacity.

Dr. Kenneth Cowan (M.O.H., Gloucestershire) said that if mental health was to have the attention it deserved there must be a working partnership between the Regional Hospital Board and the local authority. Regional Hospital Boards should extend their plans beyond the curtilage of their hospitals, and local authorities should place their resources at the disposal of the Boards. Adequate access to consulting psychiatrists should be accorded to general practitioners.

Dr. R. F. Barbour (Medical Director, Bristol Child Guidance Clinic) spoke of the advantage of dissociating the psychiatric service so far as possible from the mental hospital. Interviews should take place on neutral ground, not on hospital premises. As for the cost of additional psychiatric services—a Bradford representative had expressed some fear that there might be an outcry against increased rates—he was surprised at the number of authorities who wasted the time of their trained workers by not affording them proper means of transport or adequate secretarial help. He urged the importance of preventive work in child guidance, especially in the earlier years—pre-school years—during which often the main deterioration of personality started. Dr. Mary Burbury (Manchester Child Guidance Clinic) spoke of the value of the indirect approach to parents by means of social meetings; they were not responsive to lectures.

Dr. Greenwood Wilson (M.O.H., Cardiff) urged that more use be made of the health visitor. In Cardiff they were increasing the number of health visitors from 27 to 44, and arranging that they should receive training from the social psychiatric worker, so that they would be able to advise parents on cases of mental deficiency or instability in children, and there would be no necessity to import some fresh person into the home.

A Sheffield delegate said that the Mental Health Service in his city examined all cases of attempted suicide. Such cases (which were often automatically sent to mental hospitals) well repaid careful psychiatric examination, and the examination might be extended to relatives who perhaps had contributed to the difficulty.

Dr. Rees Thomas, who had presided at this session, said that the services of local authorities in the mental health field, notwithstanding the transfer of hospitals to the Regional Boards, might well be the most important side of the health services of the country.

Education for Mental Health

The final session, over which the Earl of Feversham presided, was devoted to education for mental health as a national and international responsibility. Brigadier A. Torrie (Director of Army Psychiatry) declared that the need for information concerning the prevention and early treatment of mental ill-health was as great as the need for information concerning tuberculosis and cancer. Mental ill-health was primarily a social disease, and accordingly it was the responsibility of society to concern itself with prevention and cure. Physical hygiene was accepted by parents, who cared for their children's nutrition and physical condition, but the need for mental care was equally great. Classes for parents could easily be arranged, but it was important also to have regard to emotional difficulties during pregnancy, and here the antenatal clinic came into the picture.

In the absence of Dr. J. R. Rees, who, it was announced, was in Denmark in connexion with the forthcoming International Congress on Mental Health, to be held in London in August, the closing address was given by Miss Sybil Clement Brown, the programme secretary of the Congress, who said that the theme would be "Mental Health and World Citizenship." Discussion groups had been at work in many countries for some months, and the results would be brought together for international exchange.

THE PROGRESS OF THE MUNICIPAL HOSPITAL

The annual meeting of the Medical Society of the L.C.C. was held at County Hall on Jan. 7, when Dr. R. C. Harkness, the retiring president, delivered his address. It was reported that the Society now numbered 349 members. Sir Allen Daley paid a tribute to the late Dr. G. F. Stebbing, one of the founders of the Society.

Dr. Harkness said that his own first experience of a municipal hospital was in the North of England many years ago, when he was appointed medical superintendent (though technically only a medical officer) of a combined institution in which hospital and workhouse were in the same curtilage, and there were two blocks for mental cases. For a hospital of 350 beds the medical staff consisted of only himself and one junior assistant medical officer. There was no consultant staff, no pathological laboratory, and such x-ray equipment as was available was in charge of a ward sister. The nursing staff numbered 70. From there he went in 1919 to the charge of a metropolitan general hospital, where he had a staff of five assistant medical officers, but three of them were allocated to district medical work and to two old workhouses, so that for 670 beds the medical staff in effect consisted of the medical superintendent and two medical officers. Again, there was no pathological laboratory, and the x-ray department was run by the theatre sister. At the same time he acknowledged that before the Act of 1929 some of the boards of guardians which were progressive in spirit made noteworthy improvements in their hospitals.

The London County Council took over the hospitals in 1930, and the first important step after that was the approval given by the Council in 1931 to a report on medical staffing. This established the basic structure of L.C.C. hospital staff which had continued ever since, though there had been many changes in detail. There were medical superintendents, deputy medical superintendents, and senior assistant and assistant medical officers. The assistant medical officers roughly corresponded to registrars in voluntary hospitals and had a limited tenure of four years. Promotion was so far as possible within the service. There was a steadily rising standard in the work done, and, of course, the better the quality of the work done by the medical staff the larger the medical staff required, because so much more was done for the individual patient. The consultant position was regularized in 1933, when the so-called group system was instituted. The consultants were not given charge of beds: they were consultants in the strict sense of the word, visiting the hospital for a certain number of sessions. Nevertheless, in such specialties as ophthalmology and oto-laryngology, by the circumstances of the case, consultants had taken charge of beds to a large extent. In 1937 the so-called half-time obstetricians and gynaecologists were appointed.

Before the war a scheme of reorganization was worked out, involving a large increase in the number of specialists and a modification of staff structure, with the setting up of clinical units of various kinds, but the recommendations were not formally presented to the Council. The position of the medical superintendent had received a good deal of consideration. In a general hospital no one man could now be held responsible for any degree of clinical supervision of all the branches of the work. What the final position with regard to the medical superintendent would be he did not know. The number of full-time specialists had been increased, and the conditions of

remuneration of many existing officers had been improved, but the basic structure had not been altered, and with the hospitals about to pass under regional authority it did not seem desirable that any large reorganization should be entered upon: it should await the new conditions.

One possibility was that the fever hospital would disappear, fever cases being dealt with in a branch of the general hospital. Yet just as in ophthalmology it had been found advisable that while ophthalmic cases should be treated at the general hospital there should be one highly specialized ophthalmic hospital, such as Moorfields, so it might be found justifiable to run one highly specialized fever hospital.

THE DOCTOR'S PART IN CRIMINAL INVESTIGATION

Another lecture for final-year students and newly qualified practitioners, arranged by the Metropolitan Counties Branch, was given at B.M.A. House on Jan. 6 by Dr. C. Keith Simpson.

Dr. Keith Simpson reminded his audience that the reason why the doctor's assistance was so often invited in criminal investigation was because of his professional equipment and knowledge and also because he was a man trained in sound observation and in making proper deductions from what he observed. What was it that the law required of a doctor? The law did not require him to be a sleuth; he was not asked to interest himself in criminal investigation as such: he was there to make his accurate and leisurely professional observations, and to draw from them any reasonable inferences. If he had had a good training and had retained, say, not less than 20% of what he had been taught, he would as a rule afford the police good service. His duty was to make entirely impartial observation, and he should remember when he was asked to assist the police that the Crown was not out to prosecute the individual but to prosecute the truth.

The lecturer went on to describe what should be the procedure of the doctor—meaning the ordinary doctor, not one claiming special knowledge of criminal investigation—when called to examine the victim of a fatal accident or of presumed murder. His first duty was to make sure that the victim was dead. Suspended animation, especially in electrical accidents, was not uncommon, and in cases where there was a doubt means of resuscitation should be sought. If the victim was dead a point of importance was to determine how long it was since death had taken place. The temperature should be taken by the ordinary thermometer, preferably in the rectum or armpit. By the time an expert had been called in the body might be completely cold and evidence on this point be lost. His next duty was to recognize any signs of foul play. The position of the body might give rise to suspicion. The scene of the crime, if such it was, should be disturbed to the smallest extent possible. Nothing should be handled which would take a finger-print. But the doctor should not be so cautious in his approach as, for example, to fail to look for evidence of asphyxiation, which was the form of death most common in the victim of sexual assault. Manual asphyxiation was something which could only spell crime, for it was impossible for a person manually to strangle himself. Injuries which might or might not be suspicious were those caused to the side of the face by contact with a hard surface. Some injuries plainly suggested a street accident; others could have resulted only from very deliberate blows. In stab injuries those which were self-inflicted were often characterized by feeble scratches by the suicide who timidly stroked his throat or wrist with the weapon before making the fatal wound. Most suicides shot themselves through the temple, the mouth, or the middle of the forehead, and if the wound was not in the usual situation it was always a matter for suspicion. One should also look for any signs of resistance on the part of the victim.

Dr. Keith Simpson, whose lecture was illustrated by lantern-slides and was greatly appreciated by the large audience, concluded by saying that if the doctor had made sound and reasonable observations he need fear nothing in the witness-box, and he must not imagine that he was being urged by the authorities to go any further than his scientific investigation warranted.

THE ROYAL SURGICAL AID SOCIETY

The Lord Mayor of London presided over the 85th annual meeting, at the Mansion House, of the Royal Surgical Aid Society. It was reported that over 19,000 appliances had been supplied during the past year, an increase of more than 1,000. Nearly 7,000 of the appliances were trusses, and nearly 4,000 were stockings and knee-caps. The list included 293 artificial legs and 1,639 high cork and special boots. Appliances are supplied only in accordance with surgeons' prescriptions. It was mentioned by one of the speakers that the high and still rising price of all appliances is a matter of concern. It may not be generally known that many surgical appliances require the surrender of coupons, also that further coupons are necessitated by reason of the wear on the clothing which the appliances often cause.

In responding to a vote of thanks to the surgeons of the Society, which was proposed by Mr. R. E. Goodfellow and seconded by Major-General E. H. Fitzherbert, Mr. Cecil Flemming said that it was embarrassing to be thanked for something one naturally liked doing, and to be a surgeon for such a Society was an enjoyable occupation. The surgeons were the people who came into contact with the patients and were best able to judge what the help given meant to them. With regard to the durability of the appliances furnished by the Society, he mentioned that recently a man came to the Society's offices complaining that his belt was wearing out. On being asked when it was supplied, he said that it was in 1904.

Financially it was reported that the subscriptions and donations had been well maintained and had increased slightly. There was nothing in the National Health Service Act to indicate any intention on the part of the Government to take over the Society or its work. Despite the far-reaching effect of the Act, the annual report stated that it was "apparent that the work of the Royal Surgical Aid Society will be required for many years to come, and it would be tragic if its income should fail because subscribers feel that its work may become a Government responsibility." Other speakers at the meeting included Alderman and Sheriff Sir Leslie Boyce, Admiral Sir Martin Dunbar-Nasmyth, and the Rt. Hon. Thomas Wiles.

MEDICAL FOUNDATION OF EPSOM COLLEGE

The Royal Medical Foundation of Epsom College appeals to all members of the medical profession who do not already do so to subscribe to the Foundation. "In every profession some must fall by the wayside; others must inevitably fall upon evil days. Our object is to help the families of these less fortunate brethren. To that end the Foundation in 1947 has provided:

	£
50 ordinary pensions	1,500
43 Foundation scholarships for boys (educated, clothed, and maintained entirely free of cost)	8,010
13 scholarships for girls	570
24 Council exhibitions for boys	1,500
140 pensions and annuities of varying amounts	3,023
Grants towards education of 51 boys and girls	1,443
Grants to widows and spinsters	339

"This is an expenditure of £16,385 in the year. In order to maintain this assistance we have to rely upon the generosity of our subscribers and donors for over £10,000 per annum. Without sufficient help from them even our existing benefactions would have to be curtailed. Owing to lack of funds many deserving applicants—medical men and widows, and children of school age—remain unassisted. The Sherman Bigg Fund enables the Foundation to make educational grants for those who cannot obtain scholarships. Donations to augment the income of this Fund will be most welcome. We have many applicants on the list for pensions—both widows and spinsters, all hoping for help some day, some of whom have been waiting for years.

"We therefore beg you earnestly to send either a subscription or a donation to this Foundation during 1948. When doing so you may, if you wish, stipulate the particular form of benefaction on which it is to be expended. Subscriptions and donations may be sent to the Secretary, the Secretary's Office, Epsom College, Surrey, by whom information will be sent on request."

ORDER OF ST. JOHN OF JERUSALEM

The *London Gazette* has announced the following promotions in, and appointments to, the Venerable Order of the Hospital of St. John of Jerusalem:

As Knights: Major-General Sir Robert Hay, K.C.I.E., K.H.P., I.M.S., Brigadier W. W. S. Johnston, C.B.E., D.S.O., M.C., Colonel H. H. E. Russell, O.B.E., V.D., Colonel E. Cotter, C.I.E., V.H.S., I.M.S., and Dr. H. F. J. Norrie. *As a Dame:* Dr. Frances C. B. McKay. *As Commanders (Brothers):* Major-General F. A. Maguire, C.M.G., D.S.O., V.D., Colonels N. Briggs, C.I.E., V.H.S., I.M.S., and L. H. A. R. Huggard, Lieutenant-Colonel E. A. H. Russell, V.D., Messrs. R. D. A. Douglas, M.B.E., H. R. Rishworth, C.B.E., J. J. Abraham, C.B.E., D.S.O., and Drs. W. Benton, C. D. Newman, S. F. Chellappah, O.B.E., and E. S. Bowes. *As Officers (Brothers):* Air Marshal T. E. V. Hurley, C.M.G., C.B.E., Colonels T. E. Holland and A. M. McIntosh, Major A. Ehrmann, O.B.E., T.D., Captain C. J. Evers, Mr. F. H. Edwards, Drs. T. P. Lalonde, F. W. Hebblethwaite, E. P. Scott, D. M. MacManus, W. Megaw, J. C. D. Carothers, R. V. S. Cooper, C. R. de C. Sadler, E. H. Lodge, F. C. Middleton, M.B.E., J. Mackenzie, and R. C. Inglott, M.B.E. *As Associate Officers (Brothers):* Major D. P. Mitra and Dr. R. S. B. Gopal. *As Officer (Sister):* Lady Margaret Ramsden, M.D. *As Serving Brothers:* Surgeon Captain C. T. Baxter, R.N.(ret.), Brigadier W. Leslie, M.C., T.D., Major G. K. Wood, R.A.M.C., Drs. E. J. A. Dougan, T. H. McOwat, M. A. Oulton, L. D. Densmore, J. F. Eustace, W. D. Dyson, E. W. C. Thomas, F. W. Moffitt, W. L. Jack, R. N. Gibson, H. D. Wallace, E. J. G. Wallace, W. G. Denholm, L. C. J. Edwards, J. G. Bremner, H. C. Geldard, J. W. Flynn, W. E. George, H. H. Hurst, and D. J. Tailt. *As Associate Serving Brothers:* Captain M. Solomon, R.A.M.C., and K. B. M. S. Mahmood. *As Serving Sisters:* Drs. Eda S. Curtis, Helen M. McNeill, Olive S. May, Marguerite A. C. Douglas-Drummond, and Laura K. M. Horne.

Reports of Societies

ORTHOPAEDIC SURGERY IN RHEUMATOID ARTHRITIS

At a meeting of the Section of Physical Medicine of the Royal Society of Medicine on Jan. 14, Mr. W. A. LAW, who has recently spent some months at the Massachusetts General Hospital studying the orthopaedic services of Bauer and Smith Petersen, discussed the part played by orthopaedic surgery in rheumatoid arthritis and ankylosing spondylitis.

Mr. Law said that the orthopaedic surgeon had lately been taking a greater share in overcoming the deformities of these common diseases. For this purpose a high standard of team work was essential, the team including a physician, an expert on physical medicine, an orthopaedic surgeon, and in certain cases deep *x*-ray therapy might also be needed. The principle of rest was still the basis of the so-called conservative treatment of rheumatoid arthritis. The aim of all treatment must be to relieve pain, arrest the disease process, and restore function; but rest might be harmful from the point of view of restoration of function, particularly if by putting one joint at rest there was interference with the function of other joints of that limb. While a case was undergoing surgical treatment a careful balance must be preserved between rest and active exercise, pain being controlled if necessary by drugs. In many rheumatoid cases there were multiple deformities necessitating a long programme of reconstructive or functional treatment. The patient might also have to undergo one or more revision operations to secure a satisfactory end-result.

Upper Limb

He proceeded to discuss, with illustrative cases, the orthopaedic procedure for various joints affected by rheumatoid arthritis. A painful shoulder joint with adduction and internal rotation deformity was frequent; excision of the acromion process, together with removal of sub-acromial bursae, eliminated the source of pain and allowed free movement. Relief of pain also helped to remove muscle spasm. In rheumatoid arthritis of the elbow joint, spasm of the biceps muscle was a pronounced feature. Smith Petersen had drawn attention to the fact that the radial head might be drawn upwards so as to impinge upon the capitellum. Excision of the head of the radius overcame such faulty joint mechanics, pain was relieved, and a considerable improvement in range obtained. Arthroplasty of the elbow joint with excision of the lower end of the humerus and upper ends of the radius and ulna was indicated where there was gross joint destruction or complete ankylosis.

Lower Limb

The hip joint and the knee joint frequently demanded surgical treatment on account of pain and deformity associated with a variable degree of ankylosis. Where the patient's morale was low and the muscles wasted and fibrotic a stabilizing procedure such as arthrodesis might be useful. In too many cases the problem of bilateral painful stiff hips and/or knees had to be faced. A strong plea was made for a reconstructive operation before fibrosis of muscles and ligaments and atrophy of the bones and joints had progressed too far. More than one operation might be necessary.

In 1939 Smith Petersen announced his technique for the performance of arthroplasty of the hip, his aim being to create all the elements which made up the joint. This technique had been greatly improved by the introduction of the vitallium mould. Originally a two-stage procedure was intended, but the inertness of vitallium had now made the second stage (for mould removal) unnecessary. The mould became a permanent insurmountable barrier to recurring ankylosis. Any reconstruction of the hip joint must aim at producing a joint which was painless, stable, and capable of bearing weight. The response to the procedure was conditioned by the degree of muscle wasting and involvement of other joints, but even in bed-ridden cases there was marked improvement. In a few patients increased use of the hip joint resulted in pain and effusion in the knee joint, but this was temporary.

Mr. Law reviewed four types of reconstruction: (1) routine arthroplasty in which the femoral head and enlarged and deepened acetabulum were reshaped and made smooth and congruous; (2) the modified Whitman procedure, which was indicated if the femoral head had undergone atrophy or the bone was so soft that after reshaping by gouging the femoral neck became too short; (3) the modified Colonna operation, which was carried out if there had been a more severe degree of absorption or loss of the femoral head and neck; (4) arthroplasty at the level of the lesser trochanter, should the greater trochanter be unsuitable for reshaping. This last operation resulted in loss of leg length, but this was of little significance in bilateral cases.

Painful and swollen knee joints could always be rendered painless and stable by arthrodesis. In cases where the joint was grossly distended by synovial effusion or the synovial membrane was thickened, much might be achieved by excising the synovial membrane so far as possible, together with the semilunar cartilages. Internal derangement of the knee joint owing to a meniscus lesion in a joint with rheumatoid arthritis should be treated by excision of the meniscus. In performing posterior capsulotomy difficulty might be found owing to dense adhesions. Subperiosteal stripping of the capsule might prove a safer method. As a less radical alternative to the complete excision of the patella, plastic operations on the bone were of value, and it was possible that the retention of a portion of the patella aided in repair and improved the quadriceps mechanism.

After touching on the spinal osteotomy operation devised by Smith Petersen, Mr. Law concluded by saying that these joint reconstructions were formidable operations, requiring patience and vision on the part both of surgeon and patient, but the benefit was seen not only in the restoration of function but in the marked improvement in the patient's outlook, always an important factor in the treatment of rheumatoid diseases.

Discussion

Dr. W. S. TEGNER, President of the Section, referred to a case which Mr. Law had mentioned of a man who after arthroplasty of the elbow sustained an elbow injury on being lifted from the ambulance, whereupon the rheumatoid condition flared up again. It was interesting to learn that joints which had been treated surgically were still subject to this possibility. At what stage should operation be attempted? Those who saw a good deal of rheumatoid arthritis mostly

believed that movement should be undertaken early. Was it possible that in a joint which had been treated by arthroplasty a recurrence of rheumatoid arthritis might occur as bad as, or even worse than, that in a joint on which no operation had been done? Mr. Law appeared to think that rheumatoid arthritis and ankylosing spondylitis were very much the same condition. On this side of the Atlantic most people thought they were not the same.

Mr. LAW said that there was no doubt that a joint which had undergone arthroplasty was still subject to any disease process to which the unoperated joint was subject. Rheumatoid arthritis might recur in a joint on which an arthroplasty had been done. The main value of arthroplasty at such a stage in the disease was in the maintenance of muscle power. If the old idea of waiting until the disease had "burnt itself out" still obtained, the muscles and fascia by that time would be just ribbons of fibrous tissue. There were no soft structures with which to work. Hence the value of the teaching of Smith Petersen on the necessity of considering revisions of these operations. An arthroplasty on the hip joint, done to-day, might result in six months' time in a flexion range of 60 to 80 degrees, but in eighteen months' time the range might have come down to 30 to 40 degrees, and if there had been further flare-ups there would be more pain and more joint swelling, and it would be worth while revising that arthroplasty. In the hands of Smith Petersen that procedure worked extremely well. But it was a colossal programme to put to the patient. With regard to ankylosing spondylitis and rheumatoid arthritis, he felt that there was a difference in the state of the bone as between the two conditions, but it was not a gross difference. In the former condition the bone was much harder, so that one had to use hammer and osteotome to get through the bone, whereas in the ordinary rheumatoid case one could often do the gouging by hand. Rheumatoid bone was more vascular and was associated with the thick overgrown villi; so that there was more bleeding in the operation.

Dr. FRANK COOKSEY said that the practice in this country in the active stage of the disease was to rest the joint as much as possible and maintain prophylactic movement rather than institute active exercises. He found it difficult to believe that the same flare-up after operation might not occur as was sometimes seen in their own unoperated cases which, after conservative treatment, were allowed to get about too soon. Was there any evidence that by operating early the period of activity of the disease was shortened?

Mr. LAW replied that there was no evidence on that last point. The benefit of early operation was the maintenance of muscle power and tone. Joint movements were dependent on these muscles. If they had been reduced to mere ribbons of fibrous tissue no chance was given for joint reconstruction. He would not say that early surgery should replace conservative treatment. He thought that the patients must have their proper medical treatment before any surgery was considered. But he felt that there was a place for surgery before the disease was "burnt out." There was a point where conservative treatment (splintage, traction, and various therapeutic measures) ceased to make for real advance, and this was before the muscles became completely atrophied. That was the ideal time to begin to think of surgery.

Preparations and Appliances

SIMPLIFIED APPARATUS FOR COLLAPSE THERAPY

Dr. FINTAN L. CORRIGAN, Military Unit, Harefield County Hospital, Middlesex, writes: The cylinder shown below was designed to simplify the apparatus at present in use for collapse therapy and to produce, if possible, a fool-proof machine. By the use of automatic valves at the inlet and outlet allowing air in one direction only, the machine is at once independent of taps, and refills can be given by use of the plunger only. However, a tap is desirable between the cylinder and the manometer for the following reasons: (1) To control the rate of flow of air (the tap being set to the desired speed beforehand); (2) to take pressures at more frequent intervals than 200 ml. if required. The capacity of the cylinder shown is 200 ml. (as in the Maxwell apparatus), this being a convenient figure, and, as the pressure change produced by each discharge of the cylinder can be read on the manometer while the cylinder is being recharged, the operator can carry out a large refill clinic using the plunger only. The aspiration of air from the chest calls for exactly the same procedure—the connexion having first been transferred from the outlet to the inlet after removal of the filter.

By using this cylinder connected to a manometer we have been able to reduce our refill clinic time by one-quarter. This

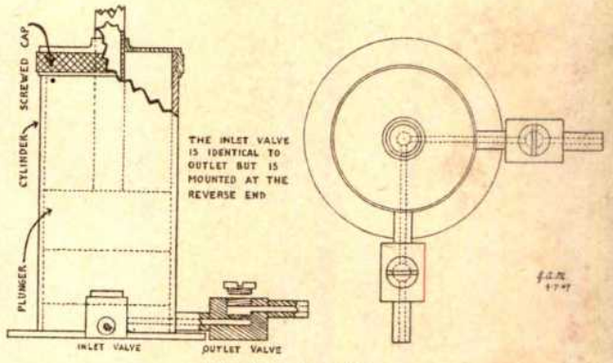
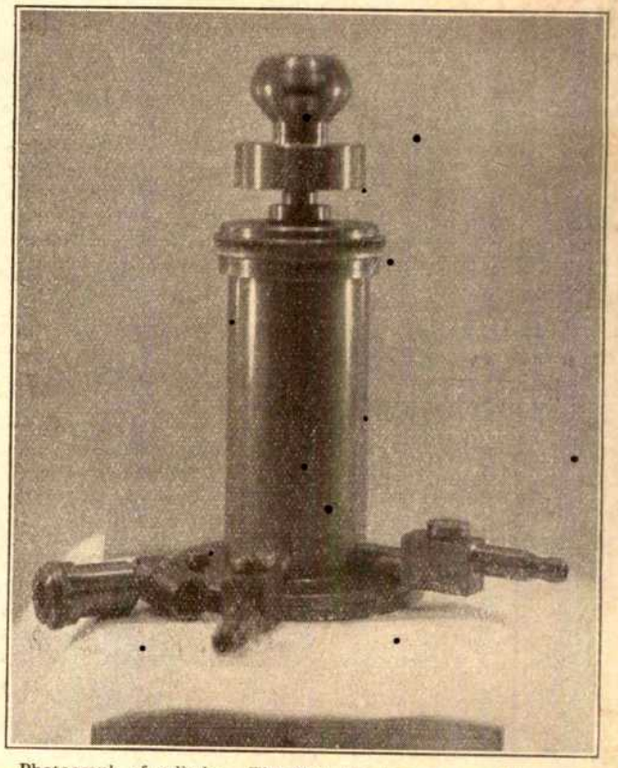


Diagram of cylinder.



Photograph of cylinder. The filter has been removed from the inlet tube and laid beside the cylinder.

speed can be maintained when the operator has to manipulate the apparatus for himself, in contradistinction to the use of an apparatus with taps. The cylinder shown was made to my design at the hospital by a member of the engineering department (Mr. A. Barons) and is at present being used with an aneroid manometer as fitted in the Maxwell box, a tap being incorporated between the cylinder and the manometer. It is, of course, essential that the valves should be accurately machined.

I am indebted to Dr. K. R. Stokes, the Medical Director of Harefield County Hospital, for his help and encouragement in producing this modified apparatus.

Correspondence

The Issue is Freedom

SIR,—The Minister of Health has refused to consider making any amendment to the National Health Service Act, 1946.

If we take service under this Act, we shall be subjected to serious encroachment on our liberty, both professional and personal. This applies to consultant and specialists as well as to general practitioners, but it is the general practitioners who will be most obviously affected.

This is how the Act will curtail the freedom of the general practitioner :

1. His practice will no longer belong to him but will become the property of the Minister of Health of the day. The doctor instead of being the owner will be reduced to the status of tenant.

This clearly involves a loss of freedom.

2. He will no longer be able to make his own arrangements to move from one area to another. If he wishes to move he will have to get the consent of (*a*) the Local Executive Council of the place he wishes to go to ; (*b*) the Central Medical Practices Committee in Whitehall ; (*c*) the Minister of Health of the day.

This is another loss of freedom.

3. He can be dismissed from the Service on the personal decision of the Minister of Health of the day without right of appeal to the courts.

This is a grave loss of freedom. He is deprived of the rights which are enjoyed by every other citizen.

4. The Minister has unparalleled powers under this Act. One of them is the right to appoint a large proportion of the members of all the important committees concerned with the administration of the Act, and above all the right to appoint the chairman. This includes the Local Executive Councils, to whom the general practitioner will be directly responsible. A bad or biased chairman can wreck any committee and completely obstruct its activities. The chairman appointed by the Minister can be removed only at the Minister's pleasure. Thus the members of the committees are helpless and have no control over their chairmen.

This is a grave loss of freedom. It resembles the set-up of the Fascist corporations by Mussolini in Italy.

5. The Minister of the day has the power to alter the terms of remuneration and the conditions of service by Regulation. This means that without having to obtain the consent of Parliament he can arbitrarily fix or vary the amount of income that a doctor can receive whether by way of salary or capitation fee. Regulations have to be laid on the table of the House for a relatively short period, and unless someone makes a prayer for their annulment within this time (a prayer which in practice hardly ever succeeds) they automatically have the force of law. This means that the doctor has no security, since every new Minister of Health can vary the remuneration and conditions of service at his pleasure.

This is a dangerous loss of freedom.

6. The present Minister proposes to pay a basic salary. Thus the general practitioner will become a salaried servant of the State. This inevitably involves Civil Servant status and is the thin end of the wedge to whole-time salaried service. The present Minister said in Parliament in 1946 words to the effect that the time was not yet ripe to make the general practitioner a whole-time salaried servant. This shows that it is his ultimate objective. In any case the next Minister or any subsequent Minister can do this by simple Regulation.

This is one of the gravest losses of freedom.

Taken together all these encroachments on freedom will leave the general practitioner and, in the long run, the consultant and specialist also at the mercy of the Minister of Health and of the Government which he represents.

Governments and Ministers come and go and their political outlook varies. The doctor will be subject to political pressure through his loss of freedom.

His patients must suffer because they are no longer his employers ; his loyalty is not to them but to his master the Minister and to the Treasury on whom his livelihood depends.

Once in the Service there can be no going back. Private practice will be crushed out or will be so precarious that very few doctors will be able to risk it.

Thus there is no alternative, and that in itself constitutes a grave threat to freedom.

At the first meeting of the World Medical Association held in Paris in September, 1947, the future relations of the doctor to the State were discussed. Delegates from many countries said that the freedom of the medical profession in their own countries was in serious jeopardy. They stated that the eyes of the world were on the British doctors, and they prayed that we should have the wisdom and the strength to stand out for the preservation of our freedom, for if we permitted it to be taken from us this would lead to the enslavement of Medicine to the State all over the world.

To accept service under this Act is to accept servitude.—I am, etc.,

Bournemouth. DORIS ODLUM.

Working Hours in N.H.S.

SIR,—The thing most noteworthy is that no Labour spokesman, big, medium, or little, nor any Labour newspaper, has dared to discuss doctors' working hours in the N.H.S. They know too well how impracticable the scheme is under their trade union hours but have not the courage to say a twelve-hour day with the other twelve on call will be required.

The value of the salaries offered cannot be assessed apart from the hours of work required, but the Minister does not dare to state them. His own party and the rest of the public would be too shocked if he did.—I am, etc.,

Birmingham. W. J. BURNS SELKIRK.

Remember Willesden

SIR,—We are being alternately coerced and invited by Bevan to sit under a "sword of Damocles." This is our last chance to answer "No" in a voice of thunder that shall penetrate the obsessed brain of the Minister, but some apparently would feel quite safe if they were allowed to own the chair they are to sit on, oblivious of the real danger above.

Let us consider the position when the *entire* nation becomes compulsorily insured by the State. A middle-class or professional man with a wife, three older children at school, and a daily maid will find his multiple "five and tuppences" amounting to a tidy yearly sum and will not for long afford the luxury of a private G.P. or consultant. The estimate is 95% State patients, leaving 5% for private practice. What are the implications ? Many now realize that a basic salary, so helpful for beginners, may mean the thin end of the State wedge when it is capable of being increased to 99% by Regulation. But a capitation fee can lead the same way when there is no private practice to fall back on as at present. Should we offend the Minister, our quarterly cheque would cease to arrive. We should face starvation not for a medical but for a political offence. The Willesden incident showed up the Minister's hand quite clearly, though prematurely, for the profession is not yet in the bag.

Again, what in the name of logic is the use of owning the goodwill of a practice from which one can be "fired" without redress by a tribunal of three, of which only one is a medical man, with no right of appeal whatsoever ? Are we to be the first section of the nation to be deprived of what has been the right of every Englishman since the time of King John—the right to be tried by his peers : "for to none will we deny, sell, or delay right or justice" ? Are we to allow the clock to be put back to the evil days of tyrannical injustice normal here before Magna Carta ? To divide the profession by setting the divergent interests of G.P.s, consultants, salaried M.O.s, and young ex-Service doctors against each other is a skilful technique too familiar to be pleasant. If we are duped we shall be the first sad link in the chain of fettered trades and professions which would follow. The three wise Presidents of Gotham, versed in courtcraft, urged us to negotiate, foreseeing that otherwise we should lose the sympathy of a bewildered public ; but even the three must be nursing their venerable

pates from having banged them for a wasted year against a brick wall.

Is there no escape for patient or doctor? If all are State-insured and the doctor is paid by the State, then neither capitation fee nor ownership of one's practice can be a safeguard without justice, and, as Clause 42 now stands, since the Government defeat in committee there is no appeal whatever from the decision of the tribunal open to a disqualified practitioner. "Power corrupts, but absolute power corrupts absolutely." A man must live, but I am prepared to starve for this one fundamental principle of justice (and my wife agrees with me); without it the rest are shadows. We shall become the Minister's menials unless we vote "No" to his ideological fantasy.

If all must be State-insured an alternative is for the patient to choose his doctor, pay his G.P. or specialist a prescribed fee for services rendered, and for the State to repay the patient. This would avoid political tyranny.—I am, etc.,

E. Dereham, Norfolk. E. PUDDY.

The Younger Generation

SIR,—I am in whole-hearted agreement with the views expressed in Dr. Sybil Tremellen's letter (Jan. 10, p. 69). If, however, there is truth in the statement that "too many younger members of our profession are terribly afraid of insecurity and seem to prefer safety to freedom," I would like to encourage her, and the medical profession in general, by stating emphatically that this is certainly not true of those of us who have yet to qualify. Let it be remembered that the majority of present-day preclinical medical students have served in the Forces, and that most of us will be 30 or thereabouts by the time we have finished our course, and, although not afraid of insecurity, are consequently extremely cognizant of the dangers of State control.

As at present our opinion is ineffectual it is the responsibility of the medical profession to stand fast and ensure that the tradition of which the profession is so justly proud is handed on to those of us who have yet to uphold it.

Although unable actively to involve ourselves in your struggle against Mr. Bevan, I feel duty bound on behalf of the thousands of similar thinking medical students to express our confidence in the profession's ability to maintain that freedom which will enable us to qualify as doctors and not become State servants once more.—I am, etc.,

St. Bartholomew's Hospital Medical College. GERALD C. WATMOUGH.

SIR,—May I as a young doctor whose philosophy is not of the sterile safety-first variety reassure Dr. Sybil Tremellen, who appears disturbed according to para. 2 of her letter (Jan. 10, p. 69)? Most of my contemporaries are against a whole-time State Medical Service, of which the present scheme is clearly the thin end of the wedge.

The good will between and the combined efforts of the doctors themselves comprise the effective force in any health organization. This can be maintained only by preservation of the profession's high principles in their entirety. The Act in its present form sabotages these principles.

Close study of the Act and of the Minister's statements reveals his stratagems as *réchauffé* and unconvincing. The attitude of the intransigent Mr. Bevan to our spokesmen suggests that he regards the intended National Health Service as a *fait accompli*. Let us disillusion him. By dint of trade unionism the *coup de grâce* may be implemented by the forthcoming plebiscite.

If this linchpin of the Socialist programme is not established in "annus mirabilis the third" of the present regime, then Mr. Bevan will surely forfeit his mandate. His successor may be less biased and more reasonable. Politicians are ephemeral, the Health Service is lasting and must therefore be as perfect as possible at its inception.

Let the profession exemplify by a united stand that it can halt the tidal wave of Socialist compulsion.—I am, etc.,

"SERVING OFFICER."

Action and Reaction

SIR,—The letter by Dr. Dan E. Davies (Jan. 10, p. 70) is perhaps not without significance, both on account of its direction and its ethical content. It is refreshing to have such a decided opposition to the general run of the correspondence appearing in your columns weekly. I suppose there are others who hold similar views. The danger is that their misinterpretation of obvious facts may mislead others at this time. The figures so confidently quoted may have some relevance. But it is not figures we are chiefly concerned about so much as the general bias of the Minister's whole attitude, and his unflinching refusal to budge an inch. Like many of my fellow practitioners I am of opinion that it is quite hopeless to expect consideration or fair play from him.

With some young doctors at the outset of their medical career there may be some excuse for a period of vacillation during the present crisis: with the majority of practitioners of standing I can see none. And I do not believe there is really any occasion for a plebiscite. But if it can clear up our position let us have it by all means. Will I enter the new Health Service in July, 1948? Not if I can possibly help it.—I am, etc.,

Helmsley, Yorkshire. ALEXANDER C. BLAIR.

SIR,—Mr. Bevan appears to be determined not to amend his Health Service Act. Possibly he believes that all its provisions command the support of a majority of the electorate. But it is more probable that his stubbornness is supported by a conviction that this Act, as far as possible, embodies those general principles for which he and his party stood at the last General Election. Indeed it is not at all easy to deny the Government's mandate for this Act, especially as in so many respects it falls short of the full-blooded Socialist principles held by a large section of the House of Commons. Furthermore, there would appear to be little general justification for the plea that the Government in framing legislation should cater primarily for the principles of that section of the public which has the greatest personal interest in it. On the contrary, many would feel on sounder ground pointing out that this Government's legislation already shows far too much sectional influence of that sort.

On what basis, then, can we justifiably claim a right to demand amendment of this Act? Surely if we can do this at all it cannot be by insisting that Mr. Bevan should adopt the general principles of an interested minority rather than of those he is supposed to represent. We must demonstrate to everyone that a large majority of the profession by reason of its expert status is honestly convinced of certain definite errors in the Act. But in fact what steps are we taking in the matter? There is to be no attempt to ascertain what majority of the profession is opposed to any particular provision of the Act; the sole source of any specific guidance upon that must still be sought in the original questionary. After Dr. Hill had addressed a recent meeting of the local profession more than one questioner raised this point. But Dr. Hill in his replies would not allow that individual members should be asked for anything more or less than wholesale support (or opposition) of the entire list of points upon which the B.M.A. opposes the Act—these points being derived from principles which are by no means the product of machinery democratically comparable to that of a plebiscite.

Doubtless some doctors support the entire Act, while others subscribe to the whole range of B.M.A. opposition to it. However, the probability is that the majority of the profession is to be found dispersed between these extremes. It would therefore appear that the B.M.A. intends to combat Mr. Bevan's undiscriminating thrusting of the Health Bill with an equally comprehensive and uncompromisingly exerted force in the opposite direction. A doctor wishing to express his opposition to some clause in the Act, which the vast majority believe to be vital, is obliged to wager his livelihood in support of other issues which he does not believe the majority of the profession would consider worth while.

This blunderbuss plebiscite is going to rob the B.M.A. of many votes that would have strengthened more specific opposition to the Act. And if the B.M.A. and the Negotiating Committee should nevertheless receive a mandate to oppose Mr. Bevan on broad principles, they will still be in a very unsound position to claim that they have anything like wholehearted support when it comes to pressing a reasoned case against each controversial clause of the Act. Indeed, at best, the position will only be changed in so far as the doctors

can point their blunderbuss at the heads of Mr. Bevan and everyone else who sponsors his legislation. At worst, those comparatively few vital issues for which long before now we should have united will finally go under—once more swamped in a sea of relatively unessential or controversial matter.—I am, etc.,

Eye, Suffolk. J. SHACKLETON BAILEY.

Young Practitioners

SIR,—As an elderly G.P. of more than a quarter of a century's standing may I be allowed to voice the very genuine fear of many young practitioners? Of recent years they have come out of the Forces; have bought a practice or share of one; have settled down with their young wives and families, perhaps two or three children from a few months to six or seven years of age; and are enjoying for the first time the bliss of a happy married life. Their practice is their daily bread-and-butter, and, while wholeheartedly agreeing with what the B.M.A. has done and is doing, they are most apprehensive about the future. The loss of capital which they will incur by staying out is bad enough, but to look at their homes and families, and then to go out and cut the very ground of livelihood from under their feet, is asking a very great deal from them, and many will not be able to do so.

To such men the B.M.A. must give some assurance. For many years we have been building up funds for such an emergency. I know not to what these funds amount, but I believe it is over a quarter of a million, and, if so, the B.M.A. might consider helping some of these men over the interim period. I am a "die-hard," and, though I should like to have been allowed to carry on my practice for a few more years, nothing will induce me to join the Service as it now stands.—I am, etc.,

Chipping Norton. J. C. RUSSELL.

Ownership of Goodwill

SIR,—At a recent meeting of the Labour Party in Marylebone Major Duncan Bruce, Principal Private Secretary to Mr. Aneurin Bevan, gave an able explanation of the health services under the Health Act. Among other things he said that: (1) *At first* the pay-beds in hospitals would be set aside for those who wished to buy privacy and that consultants would be able to charge fees on a sliding scale in other beds; (2) voluntary effort was ingrained in the character of the British people, and full scope would be given for that in the new Health Service; (3) the Government would no longer allow doctors to own the goodwill of their practices, because in the past the custom of buying and selling practices had been sometimes abused.

It is well that the medical profession should realize that an uncompromising spirit pervades the official utterances of those who are forming the Health Service of the future and who expect the medical profession to co-operate with them. When the speaker was asked why those doctors who wished to remain independent in the National Health Service should not be permitted to do so, owning the goodwill of their practices and introducing their successors or partners, he replied that in his opinion committees were far more likely to choose the best man for the practice than the doctor who was retiring. While it must be admitted that a State service would involve committee rule and negative direction for a large number of doctors in present-day conditions, can this be any possible justification for abolishing all independent public practice? As the Voluntary Hospitals are being mercilessly cramped into a unified system, it is difficult to regard the invitation to voluntary work as serious or honest.

It is fortunate that we have been forewarned as to what the future holds by responsible Ministry officials by using such expressions with regard to the conditions of service as "at first." Dragooning and bureaucratic direction are bound to follow with the establishment of the State Service unless safeguards are insisted upon for those in the Service. For the public who demand independent service there must be even stronger safeguards, so that independent hospital, nursing-home, consultant, and general-practitioner service may be perpetuated.

What is it then that the medical profession considers essential in terms of the Act and which will satisfy them in recommending service in the Act?

(1) *Administration.*—That the present Central Advisory Health Council should become an Executive Body in the sense of the Coal Board and the Central Electricity Board and other undertakings.

(2) *Independence.*—(*a*) That consultants and specialists should retain a service independent of the State Service by the pay-blocks of hospitals remaining outside the Service and any pay-beds within the hospitals which can be allocated from hospitals that have no pay-blocks; that existing nursing-homes and all hospitals which can remain self-supporting with upkeep contributions should remain outside the Service, and that full permission for nursing-homes and existing clinics to have full facilities be recognized. (*b*) General practitioners who go into the Service should be allowed to retain the goodwill of their practices if they so desire it and not be merely compensated. They should have full rights to introduce their own partners and successors.

(3) *Direction.*—That there should be no direction by negative or positive means.

(4) *Remuneration.*—That there should be no salaried element for general practitioners.

Briefly, Ministerial intention to monopolize medicine must be met by a united profession protecting the interests of those who wish to go into the Service as well as those who elect to stay out.—We are, etc.,

E. T. WRIGHT.
GEORGE ROSSDALE.

London, N.W.8.

SIR,—The Minister of Health states: "There will be amending Acts, without any doubt, and the scheme will be so bettered and remoulded as experience is gained. But first it has to be begun. . . ." An amending Act after the scheme has begun certainly cannot revise the clause dealing with ownership of goodwill. The Minister intends to spend £66,000,000 of the country's money on what a large proportion of general practitioners are unwilling to sell and on which the country can never again realize the capital so expended. Let us seriously ask ourselves the reason why.

I, together with many of my fellow practitioners, consider not only that with the loss of ownership of goodwill we should lose a large part of our personal freedom but that our future negotiating powers with the Ministry would be reduced to practically *nil*.

What, also, would be the position of the young man embarking on general practice? Presumably he would join a "pool" and await his turn to be sent as assistant to wherever there might be a demand (I doubt whether he could reasonably expect a "view" to partnership). Later he might hope to be sent to "put up his plate" at £300 p.a. in an "under-doctored" area, where all the patients, with the exception of a few malcontents, were perfectly satisfied with the doctors of their choice; eventually he might hope to fill a vacancy through the death or retirement of an established practitioner.

With the loss of ownership of goodwill we should not only lose the freedom we have heretofore enjoyed but we should lose that freedom to all posterity. Other matters with which we disagree may possibly be rectified later by an amending Act, but not this vital point.

The Minister also states: "A failure to co-operate can redound only to the detriment of the people . . ." yet although by entering into negotiation we have shown our willingness to co-operate, it would appear that he himself has failed to do so. I will therefore conclude with what I hope may be a constructive suggestion. Let there be an addendum to the plebiscite questions—viz., "Are you willing to accept service under the Act if the Minister undertakes to forgo his demand to purchase the goodwill of practices and to introduce an amending Act accordingly?"—I am, etc.,

Kirkby-in-Ashfield, Notts. J. D. DURANCE.

SIR,—In your issue of Jan. 10 (p. 72) there appeared under the heading "Remuneration in N.H.S.," a letter from Dr. W. Maxwell Penny in which he cites the terms offered to a young doctor presumably for the purposes of purchasing a share in a practice. It is quite outside my province to enter into any discussion of the National Health Service terms, but as there is a major error in the illustration given I feel that this should be corrected.

Dr. Maxwell Penny states that the doctor concerned would be called on to "repay the capital at 12% per annum—£30 per quarter on £1,000—in ten years. So for £1,000 he would have

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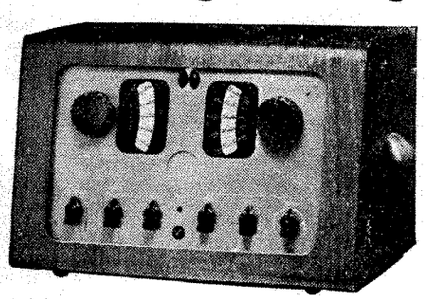

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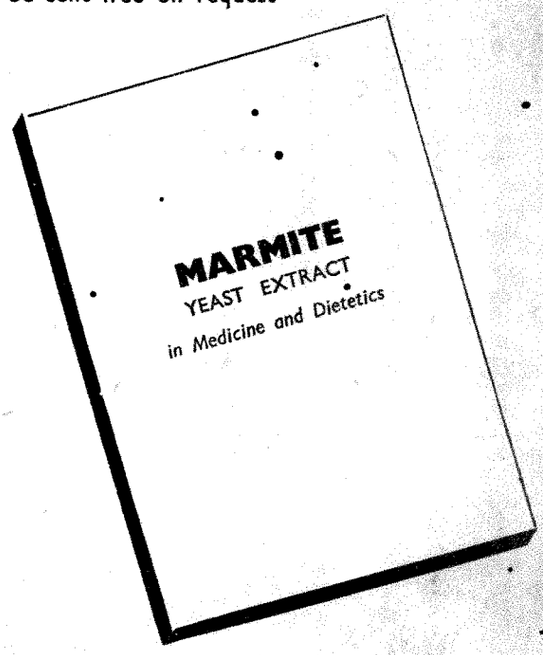

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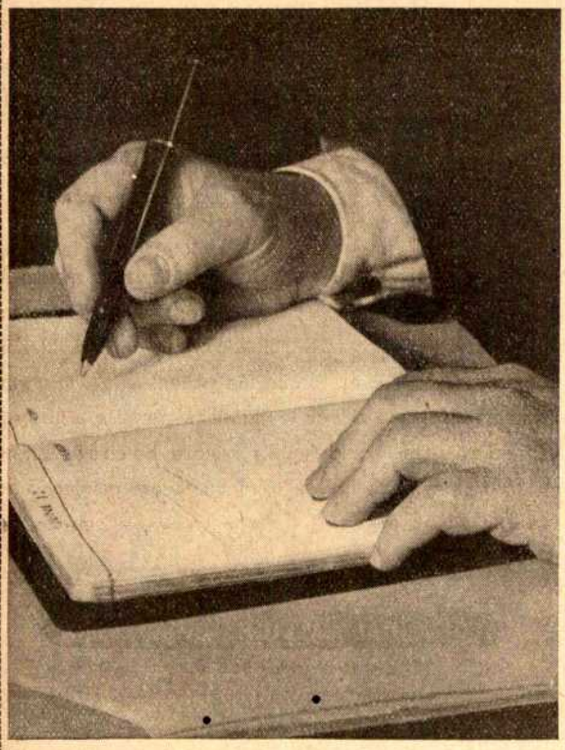

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to pay £1,200 spread over only ten years, *as well as 4%* interest and a life insurance premium" (my italics). The correct figures are that for a loan of £1,000 the quarterly repayments amount to £30 9s. 1d., but these *include* repayment of both capital and interest at 4% and there is no further interest payable in addition. On this basis, the total amount paid over the whole period of ten years amounts to £1,218 3s. 4d., which is inclusive of all interest. I think it will be agreed that this presents the matter in quite a different light, and in my experience of medical practice loans, which is extensive, such terms have never before been obtainable.

One further point emerges, and it is that from Dr. Penny's letter it might be gathered that the life assurance premium is also substantial. In fact, assuming the applicant to be under 35 years of age and a first-class life, £1,000 life assurance for this specific purpose can be provided at a figure not exceeding £15 per annum per £1,000. This premium is also subject to tax relief at 3s. 6d. in the £, so that the resultant commitment can in no circumstances be considered excessive. Comparing these terms with those of pre-war days, and taking into account that it is now possible in approved cases to advance 100% of the purchase price (providing this does not exceed 1½ years' purchase calculated on the average of the past three years), I think it may be agreed that the terms offered are not unduly onerous.—I am, etc.,

Medical Insurance Agency, London, W.C.1. A. N. DIXON, Manager.

SIR,—I have always been strongly opposed to the custom of buying and selling practices, and as was pointed out by Dr. Dan E. Davies (Jan. 10, p. 70), with whose letter I entirely agree, this opposition was shared by a large majority of the profession—at any rate as late as March, 1944. This custom was bad enough in the old days, when the cost of running a practice was considerably lower than it is to-day and income tax round about 2s. in the pound. A young man buying a practice then could by hard work and steady application possibly remove the millstone from his neck in four or five years—but what hope has he to-day, with the high cost of everything and income tax at 9s. in the pound?

I suggest to all young men hoping to enter private practice under the bad old custom to first do a little sum in arithmetic to find out how long they will have to struggle along, with a very small income, until they can finally remove the cramping fetters of debt. I think then they will appreciate the fact that it is better for their practice to be owned by the State than by some heartless moneylender, and by voting "Yes" at the plebiscite remove one of the biggest evils which has hampered the profession in past years.—I am, etc.,

Tonyrefail, Glam. F. L. BREWER.

SIR,—Dr. W. Maxwell Penny (Jan. 10, p. 72) raises a point of the greatest importance. Unfortunately he quotes payment of £30 per quarter for ten years as repayment of capital only, when it is payment of interest as well on a loan of £1,000. But still this payment of interest and life-insurance premiums is too heavy a burden for younger practitioners without capital who are at all unlucky.

Can it not be clearly acknowledged that the split in the profession on which Mr. Bevan pins his hopes with his unprincipled bribes for blacklegs is between the prosperous doctors and those who have yet to prosper? And cannot this gap be bridged by a system of interest-free loans from the moneyed doctors to the moneyless? Such a scheme would indeed be worthy of the noble and learned profession that we claim to be.

As it is, the younger man without capital might be induced to think that his choice lies between servitude either to Mr. Bevan or to banks and insurance companies. If he nobly renounces this Minister's bribes and blandishments we certainly shall owe to him greater financial consideration than we ourselves enjoyed from our elder brethren in the past.—I am, etc.,

Ruislip, Middlesex. WILLOUGHBY CLARK.

SIR,—One of the main arguments put forward by various protagonists of the National Health Act is that the young doctor will be saved the financial worry of buying a practice. On this assumption I was for a while a supporter, but now I am either "dim" or sadly disillusioned, for, however I view the situation, I cannot see this advantage being gained by the young practitioner on joining the medical service on or after the appointed day. At the moment there are two main methods of joining in general practice. One either buys a practice, thereby ensuring an immediate income at the cost of a capital expenditure, or one puts up a "plate" in a suitable area and sits and waits.

This latter method is equally costly, as for the first two or three years a certain standard of living has to be maintained, to say nothing of buying the house. Under State medicine the new practitioner is left with only the latter method, with the slight advantage that when he has an as yet unspecified number of patients he'll be given the handsome basic salary of £300 a year. The idea of stepping into a ready-made practice for nothing is a myth for the great majority, as at the best it means waiting for a "dead man's shoes." It may be that I have not correctly interpreted the full details of the new Act, but I understand that at the present the Minister has no power to dictate to a patient as to which doctor he must attend.—I am, etc.,

London, N.2. S. EDELMAN.

SIR,—Should we not do more to remove the mote from our own eye when we have removed the beam from that of the Minister?

I can still recall the anxious days and sleepless nights I spent fifteen years ago when, as an almost penniless assistant after five years, the death vacancy in the partnership threatened to elude me for the lack of £420. I was finally enabled to carry out what proved to be a satisfactory piece of business by the generosity of an unexpected guarantor and the farsightedness of a bank manager who did not insist on collateral security.

Surely the profession does not require outside assistance from either the Minister or commercial firms to ensure that no deserving young practitioner is precluded from purchasing his practice or share by lack of capital?

I suggest that when we have won our battle each owner of an established practice forthwith loans to a central fund one-twentieth of the value of his goodwill; he may with luck receive annual interest thereon at 2½%. The central fund would, after due safeguards, advance capital to prospective purchasers at 3½%, using the estimated profit for administrative expenses.

An alternative method might require a much smaller capital sum, non-interest-bearing, to form a non-collateral guarantee fund; such a fund would earn little interest for the medical lenders as this would be payable to such banks as allowed overdrafts to purchasers on the guarantee thereof. The figures are of course subject to auditor's adjustment and are based on the arbitrary assumption that at any given moment one in twenty of the then existing practices are in the process of being purchased.

Some such scheme would be of great benefit to both purchasers and vendors, and would eliminate one of the "sob-stuff" arguments used against the private ownership of goodwill.—I am, etc.,

Edlington, nr. Doncaster. R. S. GILCHRIST.

Remuneration in the N.H.S.

SIR,—A matter which does not seem to have been discussed is the treatment in the N.H.S. of the older G.P. compared with the young novice. In private practice the man of ripe experience and judgment was able to command higher fees owing to his greater worth. Thereby he obviated to some extent the necessity of working himself to death by taking too many patients in order to support his family in their increasingly expensive upbringing and education, and to provide for old age. Often he was able to employ an assistant or son, a young strong man without responsibilities who could spare him much of the nightwork and other exacting duties, and who meanwhile was learning the art of general practice, perhaps to follow on as a partner.

Under the N.H.S., however, this will be quite changed. Assistants will be unobtainable except at excessive rates of pay. In order to gain the higher income which is due to him and often necessary the older man will have to take more patients—in fact, work harder than the young man with fewer patients. Furthermore, with the basic salary he will actually

get paid a smaller sum per patient than his less experienced colleague.

Example.—With 95% of the population on doctors' lists: The young man with only 1,000 patients will receive £1,058—i.e., £1 1s. 2d. per patient. The long-established man with 4,000 patients will receive £3,332—i.e., 16s. 8d. per patient.

Thus the older and presumably more experienced and reliable doctor will have to work four times as hard for only 10/13 the amount per service compared with the young doctor. Income tax will make the discrepancy even greater. This is a fine reward indeed for a man of 50 who has given his best to his patients for a quarter of a century, who knows their histories, family histories, and environments for a generation. His opinion is apparently not worth as much as that of a young colleague in his twenties of a couple of years' standing. This state of affairs is sure to sow discord at the present time. But maybe this will not be unwelcome to the Minister of Health.—I am, etc.,

Heanor, Notts. J. W. O. HOLMES.

The Basic Salary

SIR,—Great stress is laid on the basic salary as being the first step to absolute control by the Minister of Health. The first step was taken in 1912 when we consented to serve under the National Health Insurance Act. We have only recently learned how to combine and fight against increasing duties and poor remuneration with considerable success. We have previously served under Ministers of all parties and none has been kind to us. I consider that the system in the Armed Forces, which gives increased pay for seniority, rank, and special qualifications, is preferable to capitation payment.

I agree with Dr. W. Edwards that it puts a premium on untutored youth and physical stamina and a discount on greying hairs and wise judgment. Surely the man with 1,000 or 2,000 actual patients on his books must give better individual attention than the one with 4,000 or 5,000. Under present conditions the doctor with smaller numbers will probably charge higher fees. If the bulk of his private list is to be brought in at contract rates he will suffer enormous loss. The 1944 questionary showed that general practitioners voted 12% in favour of a salary, 28% for a small basic salary and capitation, and 55% for capitation alone. One may fairly conclude that 40% favoured some salary and 55% no salary: 40% is a very considerable minority, which deserves full consideration.

As I am approaching the retiring age I wish to point out especially the injustice of the clause in the Act referring to the value of houses to be transferred to one's successor. My house is at a busy corner. Since I bought it in 1920 it has become mainly a built-up area, and I spent more than I paid in modernizing it. Surely I have the same right as any other owner to get the best price I can. My successor has the same right to accept or refuse my terms. The question of goodwill does not come into the matter; the house is a good centre for any doctor, but if some non-medical man thinks it worth more for another purpose I have surely a right to the best price I can get without interference.—I am, etc.,

Stockport. C. HIBBERT.

Economic Persuasion

SIR,—I notice from recent correspondence that the Minister of Health considers the medical profession divided. Dr. Guy Dain denies this. I think we are almost unanimous in rejecting the N.H.S. Act as it now stands, particularly the section giving no right of appeal to the High Court. However, on the "appointed day" many of us will be compelled to join the new Health Service.

I am a young ex-Service doctor, a member of the B.M.A., 5½ years qualified, and am struggling to keep my wife and family on £270 per annum in a junior resident hospital appointment. For over six months I have been searching in vain for an assistantship in a country practice in the southern half of England, and judging from the *B.M.J.* advertisement columns there are many others in the same predicament. What other representative body, professional or otherwise, would allow its younger members to be treated thus? Surely it is high time the more prosperous and senior members of the B.M.A. gave a helping hand to the young ex-Service doctor; otherwise in July many of us will have no option but to join the Government Service.—I am, etc.,

Tavistock, Devon. G. W. GIBBS.

Work the Act

SIR,—After reading carefully through the National Health Service Act, 1946, and the comments of Mr. A. Bevan addressed to the profession, together with the White Paper and the Negotiating Committee's report, I state quite freely that I like the Act. Mr. A. Bevan has kept the seven principles of the profession as published in the *Journal* of Dec. 15, 1945 (p. 833), well in mind, and he has watched with care the replies given to the British Institute of Public Opinion's questionary on the White Paper set out in the *Supplement* of Aug. 5, 1944 (p. 25), as shown by his following the lead of the profession in its desire for a basic salary and a capitation fee, but relying mostly on the capitation fee. There are no doubt ambiguities and legal perplexities in the Act, but what legal document has not got them? We are all human. But the main principles of the Act are sound and give the prospect of a good health service for the nation.

It is now for the profession to show its usual good will and forget the bickerings of the politicians and work the Act. Many doctors will ask, "What do my fellow colleagues think about it all?" To that question there has been a complete answer in the *Supplement* of Aug. 5, 1944, when 25,435 medical men and women answered the questionary on the medical service and the results were published. It would be well for all doctors to study those figures again, and it would be better for the B.M.A. to take a little more cognizance of those findings. The heads of our profession in the Presidents of our Royal Colleges of Physicians, Surgeons, and Obstetricians have set the example of seeking to co-operate with the Government. Let the general practitioner do the same and work the Act with all his accustomed good will and energy. I hope that all the 19,478 doctors (*Journal*, Jan. 11, 1947, p. 64) who were willing to negotiate with the Government will join the Service and give us a medical service worthy of our nation.—I am, etc.,

Croydon, Surrey. C. I. STOCKLEY.

A Warning

SIR,—It appears to be widely supposed that any forecast of the condition of the profession under the National Health Service Act cannot be based on experience for the simple reason that no such Act has ever before been operated in this country. On the contrary, we have had for a century, in every town and hamlet of this country, a comprehensive medical service, administered by the Minister of Health, providing treatment and certification without charge, having hospital and general practitioner services. The practitioners are paid variously by salary, by capitation, and by attendance. Some of the practitioners do no other work; most, however, have other patients; some work at health centres provided by the local authority, others at their own premises. They have security of tenure of office "until they die or resign."[1] There is a superannuation scheme[2] in which some, but not all, participate.

In this letter I refer to the practitioner service, the District Medical Service of the Poor Law, a part of the Public Assistance Medical Service. It is so very similar to the practitioner service envisaged in the National Health Service Act that the new Act would, in fact, do little more than abolish the present income limit of patients and extend the principle of "free choice," thus increasing the number of patients and doctors in the service.

In other words the proposed "changes" are proposals for expansion of an existing service. The power and control of the Minister are fundamentally the same in this existing service as they will be after expansion. In case anyone should suppose that the Minister's concern with practitioners in the District Medical Service is remote I will quote the statute. The Minister is "charged with direction and control," may "define the duties . . . direct the mode of appointment and determine the continuance in office or dismissal . . ." of District Medical Officers, and "regulate their salaries and the time and mode of payment thereof."[4] The Minister of Health was until 1919 known as the President of the Local Government Board, and

earlier still, until 1871, as the President of the Poor Law Board. Let it not be thought that the Minister has any less statutory authority or responsibility in his first-begotten service than he has in the proposed new one.

Now the Minister, in the second paragraph of his address to the individual doctor,[5] says that the latter "wants to know exactly where he stands" on simple questions. At almost the same date the Minister has told us where we D.M.O.s do stand.[6] And this is where: (1) All appointments, including permanent superannuable appointments, are to be terminated. (2) There will be no compensation for loss of security of tenure and none for loss of superannuation rights. (3) The Minister refuses to hear representations on this matter.[7] (4) The Minister's principal officers state that it is in accordance with "*the general principles of compensation which are being adopted in current legislation*—the principle that there should be no compensation in the case of part-time officers."[8]

As is well known, security of tenure and superannuation are, in all appointments, inducements to set against a lower rate of remuneration, and the rate of remuneration in the existing service (in my locality, at least) has gradually dwindled and is now less than half that of panel service. On this question of remuneration the Ministry refuse to hear representations.

It must be added that there are certain not very clear rights of transfer of credit for superannuation provided that the doctor serves under the National Health Service Act.[8] In previous Acts, such as the Local Government Act, 1933,[9] there have been appropriate and clearly defined provisions for compensation, so that if the holder of a permanent superannuable appointment could not continue in a similar capacity with continuing superannuation rights he would at least be compensated.

The Ministry, in declining to consider compensation, have suggested that where (as in most cases) we have other patients, we are "part-time," and imply that this "*principle of current legislation*" does not apply to "whole-time" officers. Whether it will extend to them in the future remains to be seen. I have worked for many years without imagining that it would ever apply to me. I give the facts but I offer no criticism. By Regulation I am not allowed to. For the same reason I must remain anonymous.—I am, etc.,

D. M. O.

REFERENCES

1 Public Assistance Order, 1930, Regulation 157.
2 Poor Law Officers' Superannuation Act, 1896; Local Government Superannuation Act, 1937.
3 Poor Law Act, 1930, Sect. 1 (1).
4 Ibid., Sect. 10 (3).
5 *British Medical Journal, Supplement*, 1947; 2, 154.
6 Ibid., *Supplement*, 1947, 2, 164.
7 Ibid., *Supplement*, 1948, 1, 4.
8 National Health Service Act, 1946, Superannuation Regulations 16, 38, etc.
9 Fourth Schedule.

Tell the Public

SIR,—Is it not time that the British Medical Association, by means of the lay press, made the position quite clear to the public why it feels that the National Health Act, as it stands at the moment, is not satisfactory towards patient or doctor? I hear it so often expressed that doctors are against the Act because they will suffer financially, and it seems to be this that has produced a very strong feeling in the lay mind against the doctors at the present time. In fact I often hear it stated that doctors are already overpaid. Many laymen also feel that now they will obtain the services of a "London specialist" in the provincial hospitals, and that patients will be much more likely to be treated in their own locality, be it university town or small provincial or market town.

I suggest the following points need emphasizing: (1) That the argument over remuneration has been on a capitation basis in order to exclude slackers getting unearned pay. (2) The profession's view on the buying and selling of practices is in the patients' interest as well as the doctors'. (3) Section 35, being a very important issue, should be expounded and explained more fully to the public. (4) That control and regionalization will give the patient less liberty and choice over the doctor "specialist" who treats him and the locality of the hospital where he is to be treated. (5) The legal anomalies in the Act will lead to serious hardship to the public.—I am, etc.,

Greenhithe, Kent. MARGARET DUDLEY-BROWN.

The Only Answer

SIR,—A few weeks ago I submitted an application for additional rations for one of my patients, suffering from inoperable gastric carcinoma. In due course I received a reply from the Ministry of Food stating that "the Medical Advisers regret that they are unable to recommend that the additional foods be supplied." We have seen numerous examples of this form of petty tyranny in recent months, the most odious aspect of which is the absolute callousness and disregard for individual human life, so entirely characteristic of the totalitarian system.

In the course of the last three years we have witnessed the spectacle of our liberties and individual rights being insidiously filched from us one by one; and I have not the slightest doubt that, if the National Health Service in its present form is inflicted upon us, we shall see yet further extensions of this form of control of our profession by our medical gauleiters. One of the primary objects of totalitarian States—so well exemplified by Nazi Germany and Communist Russia—is the absolute control of the learned professions, which, by virtue of their long-established traditions of liberty of thought and opinion, have always provided the nucleus of resistance to all forms of autocratic tyranny.

Surely the issue before us in the coming plebiscite is simple: it is not the merits or demerits of basic salary, capitation fees, or sale of goodwill; it is simply whether we want to live and work in a free country or a totalitarian slave-State. The history of the last ten years has shown conclusively the futility of attempting to "negotiate" with totalitarian systems, and that the answer, and the only answer, to tyranny is firm and unflinching resistance to the last. To our profession to-day belongs the honour of being the first line of resistance to the new despotism; let us therefore not fail, but stand together and return a united and uncompromising "No" in the approaching plebiscite.—I am, etc.,

Catford, London. G. TAYLEUR STOCKINGS.

Whole-time Practitioners and the Act

SIR,—We have been surprised to hear the view expressed at recent meetings that the whole-time people do not matter, and that it appears to have been generally assumed that whole-time officers employed in hospitals will automatically accept service under the Act, because they do not find anything in it which conflicts with their principles. It is important that this misapprehension should be removed. Those of us who have chosen full-time service have done so voluntarily, and up to the present time have been happy to work in our respective fields with a full sense of professional freedom and independence. We have derived that independence from our ability to change our employing authority at will or in the last resort to transfer our allegiance solely to our patients and ourselves in the freedom of general practice.

We believe the broad intentions of the Act to be excellent and desirable, but the Minister's statement makes it abundantly clear that there is to be one employer and all are to be employed. To many of us who are at present engaged in whole-time service the Act may offer substantial material advantages, but it is vital that none of us shall ignore the fact that our freedom is essentially dependent upon a large body of general practitioners who shall not be paid by salary and who shall have the fundamental right of all men to appeal to a court of justice.—We are, etc.,

D. H. BARNBROOK.
K. A. COWAN.
J. C. FORD.
F. J. FOWLER.
West Bromwich.

J. R. ANTHONY HALL.
GRAHAM POOLE.
G. E. E. USHER-SOMERS.
W. E. WIMBERGER,
Medical Superintendent.

Support for the N.H.S.

SIR,—I have not yet noticed any letter in your columns supporting the Minister of Health's new Act in its present form, though I have no doubt that there are some doctors who take the view which I feel sure you are too courteous and impartial not to publish. I agree that Mr. Aneurin Bevan may well be planning a fully salaried State medical service as his ultimate

objective. If this be so, I see no reason why the public should not derive at least as satisfactory service as they do from the public health departments, the Naval, Military, and R.A.F. medical services during the war, the E.M.S., or the "panel." Although our Civil Service is much decried by us it is a model to all others throughout the world. There is no institution that I know of which has not the faults (and the advantages) of its inherent structure.—I am, etc.,

London, W.3. RONALD LIVINGSTON.

State Servants

SIR,—During the course of conversation with many general practitioners I have found that almost without exception they are opposed to participation in the new Act. The main reasons are: (1) The insidious danger of becoming eventually full salaried servants of the State, with a certain duty to Whitehall. (2) That they are, from the word "go," potential Civil Servants, at the whim and fancy of one Minister whose views and record are only too well known. *But* they want reassurance concerning the "compensation" clause. Trying to avoid the money issue about which so much has been written, and which can be so unimportant, they cannot but be concerned that if they do not join on the appointed day they will lose all right to eventual compensation.

If we can firmly stipulate that we are not going to part with a very ancient and sound tradition—namely, the buying and selling of practices—we shall convince the Minister, and more important still our patients, that we are not parting with our goodwill; which is, after all, only a sound business proposition, saving for our dependants and our retirement.

The "mess of pottage" will surely be ours if we sacrifice ethics for financial worries.—I am, etc.,

Gloucester. J. B. W. HAYWARD.

No Confidence in Minister

SIR,—Mr. Bevan has shown himself incapable of negotiation, or even of being polite to our committee; and his remarks and threats of a sharply reduced capitation fee "if there is much more quibbling" should convince even the most ardent young supporters of his scheme that their future and ours, when once we have signed on the dotted line, would be very uncertain financially. Apart from that, we don't like to think of medical officers of health being classified as "spivs" and "drones"; and the question of compensation is so vague that no confidence can be placed in the Minister or his Act as it stands.

We have only one course open, and that is to give our Negotiating Committee a 95% "No" in the forthcoming plebiscite. As Mr. Bevan is unwilling to negotiate there will be no point in attempting to deal with him further, and a demand for his resignation would only be in line with his own statement made in the House last year that he would "stand or fall by the Act." Our personal freedom and our patients' welfare must come first.—I am, etc.,

Appleby Magna, Burton-on-Trent. J. R. SALMOND.

Will of the People

SIR,—Despite the numerical strength and the fervour of opponents of the Act, close perusal of your columns has failed to reveal a single valid argument to refute the view that "to oppose the Act is to oppose the will of the people as expressed through Parliament," as you succinctly put it (Jan. 10, p. 53). The only moral principle at issue is, Are we morally justified in insisting on a Conservative type of medical service in a State governed by a Parliament committed to the putting into effect of Socialist principles? Conservative, B.M.A. principles—private ownership and practice—like Socialist governmental principles—public ownership and practice—are merely political, and no moral issue is involved whichever side we take.

Who pays the piper calls the tune. Our patients pay us, and they should be allowed to call the type of medical service they want. We seek to impose on them the type we want and put ourselves gravely in the wrong.

I can admire the honesty of Dr. Dan E. Davies when he writes, "What we are really studying is our own interest, first, last, and always" (Jan. 10, p. 70). We ought, of course, to be studying first, last, and always what type of medical service will best serve the health of the people. The patient's interests must come first; we exist merely to serve him.—I am, etc.,

Wallasey, Cheshire. LENNOX JOHNSTON.

*** Dr. Johnston should have given the full quotation. What we said was this: "Some medical men have argued that to oppose the Act is to oppose the will of the people as expressed through Parliament. But as Dr. Hill put it in his speech last week: 'The Minister has told us of our right as individuals and our right collectively to determine our attitude to this Service. We are within our rights in saying No.'"—ED., *B.M.J.*

Refusal

SIR,—I refuse to enter the National Health Service unless the Act is amended. I am under 40, have no other training, have a family to support, and cannot live without working as a doctor. I have also left the area where I could have counted on a good following. If those members of the B.M.A. who have accepted seats on boards, etc., cannot see their way to follow, will they at least resign from a scheme they know to be wrong?—I am, etc.,

Newquay, Cornwall. J. P. O'SHEA.

"Free Choice"

SIR,—The Minister of Health has taken great pains to stress the "free choice" of the individual doctor to join or not to join the National Health Service. It would be of interest to see what the Minister understands by a "free choice." For example, the value of an individual practice may be between the figures £1,000 and £7,000. Thus if on the appointed day the doctor exerts this so-called "free choice" and contracts out of the Service, he will lose this asset, since he is no longer permitted to sell his practice. If he does sign, however, he will be compensated, perhaps equably, perhaps not. The larger the individual doctor's practice the greater the financial loss should he decide not to join the new Service.

In any other circles but the Minister's, a choice between two courses—one involving heavy financial loss and the other no loss but perhaps even a slight gain—would be considered rather an unusual interpretation if described as free. The doctor, I feel, might be forgiven if he thought a little pressure was being put on him to take a certain line of action. He might in fact even feel he was being bribed.—I am, etc.,

Brighton. S. L. KAYE.

National Health Service

SIR,—As an active and lifelong Conservative I never thought I should find myself in agreement with a left-wing Socialist periodical, but I am bound to say that the *Tribune's* reference to us as a reactionary profession very adequately describes the bulk of the correspondence in your last two numbers.

If we can find no stronger grounds upon which to fight this Socialist Minister of Health than direction, which does not exist, or anyway which is unchanged, than the retention of the right to buy and sell practices, already agreed upon by the profession as undesirable in the 1944 plebiscite, and by opposition to payment by part-salary, upon which in the same plebiscite the profession was almost equally divided, then we are lost indeed.

Is it seriously suggested, except for propaganda, that we have ever been able to practise where we want to? If it is, let whoever thinks so go and try. After the war I wanted to practise in Sussex. The only country practice that came into the market then had seventy applicants. We all obviously wanted to practise there. Could we? For heaven's sake let us drop this nonsense.

With regard to the sale of practices, is it fully realized that with interest and taxation at its present rate it is impossible for a young man without capital to borrow money to buy his practice, maintain a decent standard of life, and at the same time provide for himself and his family after retirement? The assured income, pension, and widow's pension in the Health Act must be a real ray of hope to many young doctors, and these are the people who should be considered. Also to think it reasonable that one should be able to buy oneself into a comprehensive service is just as absurd as to think one should

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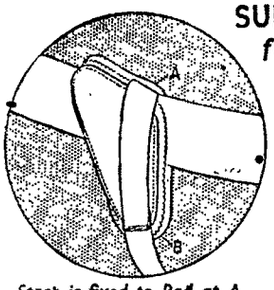

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still be able to buy a commission in the Army, and I am sure that the latter practice only died after a hard fight from the reactionaries of that time!

And now as to the salary. It is freely stated that the inclusion of a basic salary is the prelude to a whole-time salary within two years. (Incidentally, I believe, the original policy of the Conservatives.) Is this pure conjecture, or is there any inside information that we lack? If there is positive information on this point, let's have it and I'll believe it.

We are getting our usual indifferent Press. *The Times* advises us to drop our opposition to the question of the sale of practices, the *Sunday Times* to concentrate on getting the right of appeal to the courts—and there's the really important thing, the only one that matters. Let us concentrate on this, and also get the question of partnerships cleared up, and we shall be all right.—I am, etc.,

Stradbroke, Norfolk. J. V. DOCKRAY.

A Sign of Carcinoma

SIR,—I am indebted to Mr. A. Dickson Wright for drawing attention to the value of the diagnostic manœuvre which he described and portrayed in the *Journal* of Jan. 3 (p. 27). But first we must insist that the preliminary examination of breast cases should be made with the patient stripped to the waist and standing. It is only in this position that the breasts are really dependent and that the signs of the presence of malignant disease due to general retraction are most likely to be observed. These signs are diminution of the size of the organ with elevation or deviation of the nipple, and, however slight, they are most significant. It is as a corollary to this examination with the patient standing that I conceive the arms above the head position may be useful.

But the breast must also be examined with the patient recumbent. It is an additional aid in the examination of the axilla, and especially in stout people, to get the patient to lie on the side with the suspected organ uppermost. In this position the contents of the axilla are dragged forwards by the weight of the breast, and quite often enlarged nodes, not previously detected, may be easily palpated or even seen.

Of course there are many other points useful in diagnosis, but if, when all the aids have been employed, there is still real doubt, then direct exploration is justified. In making this statement I am well aware of the hornets' nest I may be disturbing. It was my former colleague, Mr. A. K. Henery, who taught me that an incision down to, but not into, a doubtful lump may settle the question of its nature, the curious drawing in and fixation of the fat around a malignant neoplasm being characteristic. If, with this restraint, the surgeon still has doubt, he can deepen the cut to obtain the information which may be so valuable in the interest of the patient. To arrive at an accurate and complete diagnosis in doubtful breast cases we need to take much care and not grudge the time spent in investigation. I have heard it said that Halsted sometimes took nearly an hour over the complete examination of a difficult breast problem.—I am, etc.,

Taplow, Bucks. G. GREY TURNER.

Cancer of the Lung

SIR,—I was interested to see in your account of the annual report of the British Empire Cancer Campaign (Jan. 3, p. 22) the suggestion that the increase in the incidence of cancer of the lung (16.5 times in men, 8 times in women) between 1921 and 1938 might be connected with the doubling of the consumption of tobacco in this period. I have often wondered if tobacco smoke had anything to do with carcinoma of the lung, but I think that the mere statement that smoking has increased misses an important point. When I was a young man pipe-smoking was the main form of the pleasure or vice, as one may look at it: cigarettes were "used when one was not smoking," as I think the author of the *Wind in the Willows* said. Few people inhaled, and I cannot remember seeing a case of primary cancer of the lung when, early in the century, I was a student. Somewhere about the time of the first world war pipes fell rather out of fashion and cigarettes came to the fore. Most cigarette-smokers inhaled—they could not get much fun out of it otherwise—and cancer of the lung began to be more common. This may be a mere coincidence, for I do not know if the tar in tobacco smoke contains a carcinogenous element. I have also heard it suggested that the inhalation of the dust from tarred roads, also more or less corresponding in date, might be a factor. Perhaps both are. But even if inhaling cigarette smoke is proved to be a cause of carcinoma I doubt if people will give it up.—I am, etc.,

Guildford, Surrey. E. W. SHEAF.

Simple Test for Pulmonary Tuberculosis

SIR,—This is a plea for the use in general practice of a very simple test by which to estimate progress in cases of pulmonary tuberculosis. Britton and Whitby say that the normal average of monocyte to lymphocyte is 1 to 3; that Sabin and his colleagues found that in cases of pulmonary tuberculosis 1 to any number less than 3 suggested possible activity, and 1 to 1 or any number less than 1 was a bad prognostic sign. I had a simpler suggestion from Heap in England more than 30 years ago and have found it of immense value in connexion with the sedimentation rate and *x*-ray findings. I have not yet found a case of unfavourably advancing pulmonary tuberculosis without a ratio of 1 to 1 or less than 1; nor in controls without pulmonary tuberculosis has the blood picture been anything like it.

It has even an advantage over the high sedimentation rate in that (1) there is no need to correct for anaemia; (2) there are comparatively few conditions giving a blood picture of high monocyte–lymphocyte ratio—glandular fever, an early stage at commencement of measles—while there are many that produce a high E.S.R. Thus it may help in differential diagnosis. I had two patients illustrating this. A mongol with a swinging temperature 101°–97° F. (38.3°–36.1° C.) for two months, cough, and wasting, and E.S.R. 150. Clinically it seemed obviously a case of pulmonary tuberculosis. His blood picture never gave a high monocyte–lymphocyte ratio: a week before his death it was 1 to 5. At necropsy it was found to be bronchial cancer, and no evidence at all of tuberculosis. The second was a man of 70 who suffered for years from chronic bronchitis. Tuberculosis was not suspected, until on one routine examination of his blood I found a 1 to 1 monocyte–lymphocyte ratio. *X*-ray examination and the presence of tuberculosis bacilli in his sputum confirmed the diagnosis.—I am, etc.,

London, W.C. H. ANGELL LANE.

B.C.G. in Control of Tuberculosis

SIR,—In his paper on B.C.G. (Nov. 29, 1947, p. 855) Prof. G. S. Wilson submits some of the published reports to a criticism which, as your leading article suggests, is rather exacting, having regard to the conditions under which the evidence must be obtained. But he is more tolerant towards Levine and Sackett's[1] report of the New York results, which purports to show B.C.G. as ineffective. Had he applied to this analysis the same standard of criticism which he applied to the more favourable results of Rosenthal, Blahd, and Leslie,[2] he would have made more than casual reference to the gross fallacy which the former contains, a fallacy which should exclude it from serious consideration but which is neglected by those who use the results to support their own argument. The whole New York investigation, of course, has little bearing on the efficacy of B.C.G., since it neglects the principle of avoiding infection before immunity has been established. But there is a much more serious error in the statistical analysis which, if corrected, would leave the results showing almost the maximum possible difference in favour of B.C.G., though even that would have only a limited significance.

During the total period of 20 years deaths from tuberculosis among vaccinated children were 11, of which 8 occurred during the period 1933–46, to which importance is attached because selection was then automatic. During this latter period the death rate among vaccinated and controls was almost the same. But of the total 11 deaths, 10 occurred in infants known to have been exposed to positive-sputum contact in the home *prior to vaccination*. No claim has been made that B.C.G. immunization could check an infection already established, and individuals for whom that possibility exists must be excluded from analysis. In some analyses all those exposed before allergy appears are excluded. If, however, the 10 deaths where previous exposure was known are excluded, there is left 1 death

in the vaccinated group (period not stated). The difference in favour of B.C.G. is almost the maximum possible, but for the period of automatic selection even that maximum is less than three times its standard error. As a matter of fact, the data given suggest that some of the vaccinated who died were really infected after vaccination, but the probability is not one which can be admitted in selection of statistical material. The correct verdict on Levine and Sackett's analysis is that it has, at best, doubtful significance, but that what admissible evidence it presents is in favour of B.C.G.—I am, etc.,

Cardiff. W. H. TYTLER.

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SIR,—Dr. W. E. Snell's letter (Dec. 20, 1947, p. 1007) prompts us to state that nothing has arisen in connexion with B.C.G. during the last three years to cause some of us to change the opinion that we formed of it twenty years ago. Propaganda has reached such proportions in this matter that even those like Dr. Snell who knew of the excellent work with B.C.G. in Oslo, and those who are now learning of it for the first time, are perhaps arriving at wrong conclusions.

Among other matters Dr. Snell states: "I was glad to read in your leading article that tuberculin-negative nurses certainly need protection, a point I endeavoured to make in your correspondence columns some three years ago. Unfortunately, some of our leading tuberculosis workers still await conversion to this belief." While disclaiming the title of "leading tuberculosis workers," we did take part in that correspondence, in which we insisted that tuberculin-negative nurses, like all hospital workers, need protection. But it is yet to be proved that B.C.G. gives the protection that is needed; for those who use B.C.G. in tuberculin-negative nurses still get cases of tuberculosis in these girls. Therefore the strictest medical supervision, healthy living conditions, and proper measures to reduce the risk of infection are still necessary and should be enforced at once—even if B.C.G. is to be given a trial, or even if a better vaccine becomes available.—We are, etc.,

PETER W. EDWARDS.
A. CLARK PENMAN.

Market Drayton, Salop.

Diagnosis of Poliomyelitis

SIR,—I am surprised that in the many recent articles published on poliomyelitis no mention has been made of the value of repeating lumbar puncture in establishing the diagnosis in this disease. The frequent occurrence of a late rise in the protein content of the C.S.F. as well as the dissociation between the protein content and the cell count has been previously observed. These facts can sometimes be utilized in clinching a doubtful diagnosis, as illustrated by the following five cases, selected from a total of 53 cases which were under my care at Clayponds Isolation Hospital during the recent epidemic.

Case 1.—A boy aged 14 years was admitted on Aug. 8, 1947, with a history of lumbar pain and weakness of the legs, commencing on the previous day. Pyrexia and signs of meningeal irritation were present. C.S.F. examinations gave the following results: Aug. 8, 1947, 4 cells per c.mm. and 20 mg. of protein per 100 ml. Aug. 22, 187 cells per c.mm. and 75 mg. of protein per 100 ml. During the interval between the above examinations the patient suffered from a remittent pyrexia and stiffness of the back. No definite paralysis could be established and recovery appeared to be complete.

Case 2.—A woman aged 20 years was admitted on Sept. 15, 1947, with a history of weakness of the right hand since Sept. 7. The signs present on admission were entirely paralytic and practically confined to the right forearm extensors—an unusual distribution in poliomyelitis. Other causes of wrist-drop had to be considered. Result of C.S.F. examinations: Sept. 15, 8 cells per c.mm.; 30 mg. of protein per 100 ml. Oct. 9, 8 cells per c.mm.; 40 mg. of protein per 100 ml.

Case 3.—A boy aged 12 years. The disease commenced with headache on Sept. 13, 1947, and the patient was admitted on Sept. 17 showing signs of meningeal irritation. Result of C.S.F. examinations: Sept. 18, 10 cells per c.mm.; 35 mg. of protein per 100 ml. Oct. 3, 5 cells per c.mm.; 50 mg. of protein per 100 ml. This was a purely meningeal case showing no evidence of paralysis at any stage.

Case 4.—A man aged 40 years. The illness commenced on Sept. 16, 1947, with pain in the arms, legs, and neck. The patient was admitted on Sept. 22 with general muscular weakness. This patient had widespread but mostly incomplete paralysis involving in a rather symmetrical fashion all four limbs and trunk. Partial respiratory paralysis necessitated four weeks' continuous treatment in a respirator, during the greater part of which time he suffered from marked mental abnormality. A workmate engaged in paint-spraying was treated for paralysis at another hospital, where a neurologist suspected lead poisoning. Result of C.S.F. examinations: Sept. 23, 3 cells per c.mm.; protein, 30 mg. per 100 ml. Oct. 21, 1 cell per c.mm.; protein, 40 mg. per 100 ml.

Case 5.—A boy aged 17 years. The illness commenced with stiffness of the neck on Oct. 12, 1947, and he was admitted on Oct. 17. On admission there was pain and weakness in the neighbourhood of the right shoulder and hip, and left wrist and ankle. It was thought that the affected ankle had a slightly puffy appearance, and the erythrocyte sedimentation rate was 50 and 70 mm. after one and two hours respectively. A rheumatic condition was suspected. Result of C.S.F. examinations: Oct. 18, 1 cell per c.mm.; 30 mg. of protein per 100 ml. Oct. 28, 22 cells per c.mm.; 45 mg of protein per 100 ml. The second result weighted the diagnosis in favour of poliomyelitis.

Though it is possible that in some cases the C.S.F. remains normal throughout the course of the disease, I believe that many of the normal findings depend on the particular phase of the disease during which lumbar puncture has been performed. I am indebted to the staff of the Pathological Laboratory, Churchfield Road, Ealing, for the examination of the cerebrospinal fluids.—I am, etc.,

Croydon. J. J. LINEHAN.

Measles Prophylactic

SIR,—Dr. Harwood Stevenson (Dec. 6, 1947, p. 928) and Dr. A. H. Morley (Dec. 27, 1947, p. 1054) have both advocated the use of parental whole blood as a routine in the attenuation of measles in contacts. There is, however, a danger which should be taken into account before advocating this procedure as a routine. I refer of course to the possibility of sensitizing the recipient of the blood to the Rhesus agglutinogen. It is now accepted [1 2] that the intramuscular injection of Rhesus-positive blood into a Rhesus-negative individual may result in the sensitization of the recipient, which, although giving rise to no ill-effects at the time of injection, may do so at a later period, so that in the case of females a "Rhesus-positive pregnancy" may result in iso-immunization and its sequelae.

There is no such danger attached to the use of adult serum, the use of which I should advocate until a satisfactory gamma-globulin fraction is produced in sufficient quantities in this country.—I am, etc.,

T. S. MARSHALL,
Regional Transfusion Centre.

Leeds.

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[2] Diamond, L. K., *Proc. roy. Soc. Med.*, 1947, **40**, 546.

Herpes Zoster

SIR,—In view of the recent publication of cases of herpes zoster showing unusual clinical manifestations we wish to record the following case which appears to be similar to Case 3 reported by Dr. Thomas Parkinson (Jan. 3, p. 8).

A man aged 63 was admitted on Dec. 16, 1947, from a neighbouring hospital with a diagnosis of erysipelas and ulcerative stomatitis. For the previous two weeks he had experienced pain in the right ear, buzzing noises in the head, and severe headache, which had prevented sleep for the two days prior to admission. For a week his throat had been sore and there had been ulcers on the gums and tongue, causing difficulty in swallowing solids. The right side of the face became inflamed on Dec. 13. There was no previous history of chicken-pox or herpes zoster, nor any contact with these two conditions.

On examination he was a plethoric man with swelling of the right side of his face, particularly affecting the lips, cheek, temple, and submaxillary region. There was a well-marked erythema over this area, with typical zoster vesiculation and crusting. There were no vesicles in the external auditory meatus. On the right side of the tongue there were circumscribed areas of shallow ulceration, and two or three smaller areas were present on the inner side of the cheek and the hard palate on the same side. The temperature was 98.8° F. (37.1° C.). No further spread of the lesions occurred and the pain subsided slightly, although oedema of the submaxillary region with lymphadenitis became very marked owing to infection of the lesions of the chin. This was treated with 40 g. of sulphathiazole and 3 mega units of penicillin, and by Dec. 23 the mouth lesions and infected areas had healed, except for a small ulcer on the tongue and a patch of eczema on the chin. This latter area

was noticed to be continually moist owing to saliva dribbling out of the right corner of the mouth, particularly at night. On Dec. 30 a definite right facial palsy became apparent, and at the same time intense neuralgic pains occurred in the area of the face which had previously been affected by herpes. The paralysis became absolute in both upper and lower facial areas, and although there was no sensory loss over the face the neuralgia and feeling of numbness persisted and spread up into the right side of the temporal region, over the right eye. There was no alteration in taste, but there was a diminution in the acuity of hearing in the right ear. The patient was discharged on Jan. 8 to attend as an out-patient for physiotherapy.

—We are, etc., E. G. BREWIS.
Newcastle-upon-Tyne. C. NEUBAUER.

SIR,—I read Dr. Thomas Parkinson's article on herpes zoster (Jan. 3, p. 8) with great interest, and I feel it opportune to quote briefly two cases which occurred about a year ago in this practice.

Case 1.—A man of 34 came to see me complaining of dysuria and pain in his left side. The urinary symptom was one of precipitant micturition and was of two days' standing. His background showed that he was in the midst of divorce proceedings, and I decided the symptoms were functional in origin. I gave him an appointment to come and see me at a later date to take a fuller psychiatric history, but he returned the next day with a herpes rash in the line of the 3rd lumbar nerve. A few days later his urinary symptoms cleared and the herpes rash ran its usual course. I told my partner about this man and he quoted the following case to me which he had seen about the same time.

Case 2.—Dr. W. J. Meldrum was called in to see a man of 75 who had all the symptoms of a subacute intestinal obstruction. His abdomen was distended and he looked very ill. Rectal examination revealed hard masses of faeces, which were digitally removed. Before leaving, the patient complained of a pain in his left side, but in view of the more obvious obstructive symptoms it was not considered of any great significance. The next day the old man had a herpes zoster rash where previously he had had pain. Neither before nor since has he had such difficulty with his bowels, and it is suggestive that the herpes lesion had caused intestinal atony.

I mention these two cases because Dr. Parkinson makes no mention of the autonomic nervous system in his paper. If two such cases can occur in one practice, it is obvious that similar zoster symptoms must be relatively common, but they usually pass unnoticed.—I am, etc.,

Ibstock, Leicester. C. A. H. WATTS.

Relief of Pain in Midwifery

SIR,—It is indeed surprising that so little attention is given to the problem of analgesia in labour. Anaesthetics are many, and useful in their sphere, but methods of analgesia (complete or partial relief of pain in the wear and tear of labour) are few. At the best, they would appear to be confined to verbal adjurations such as: "Bear down," "Don't hold your breath," "I should give her a sniff, now"; "See you later, when it's ready"; "I'll give you something"; "Nurse will see to it"—with perhaps "an injection" or "a tablet." I believe that the worry of labour can be lessened for everyone—for, although the woman is the main sufferer, the attending doctor and nurse must also participate to a greater or lesser degree if they are "midwifery conscious." I am of the firm belief that midwifery should be done by a team, not necessarily composed of experts, but of experienced practitioners who have the welfare of midwifery at heart and who are supported by nurses of similar persuasion. They would assume complete responsibility for antenatal care, conduct of labour and delivery, thus inspiring in the woman a confidence in her outlook which in the present state of affairs is certainly not engendered.

As invaluable and proved adjuvants I would suggest the resuscitation of two aids, both simple and safe, which provide relief from pain, sleep, and a degree of oblivion. The reason these have fallen into disuse appears to be only that they involve a little trouble for everyone but the woman. I refer to, first, Dr. David R. Jennings's hyoscine amnesia in labour (*B.M.J.*, 1929, 2, 801), and, secondly, Minnitt's gas-air analgesia. Briefly, Jennings's treatment is similar to "twilight sleep" but no morphine is used, resulting in a feeling of well-being in the woman during and after labour and a notable absence of somnolence in the child. In regard to Minnitt's apparatus, suffice it to say that in his observations Dr. Minnitt has conscientiously recorded the causes of failure to relieve pain, the main one being lack of co-operation. Sad to say, this may occasionally be the woman's fault, but much more often is failure to relieve pain owing to the complete lack of sympathy for the woman and understanding of the apparatus by the attendant—doctor or nurse. Dr. Jennings and Dr. Minnitt have rendered signal service to midwifery which has yet to be fully appreciated, while Dr. John Elam, of New Barnet Hospital, has spent many years in careful observation of gas-air analgesia, with very favourable findings. To these voices crying in the wilderness I would add mine and say, "*Tell the women!*"—I am, etc.,

Dundee. C. A. ALLAN.

Drug Addiction

SIR,—It is a sad but true fact that morphine addiction is incurable, notwithstanding all evidence to the contrary. Relapses after extensive treatment appear to be inevitable and necessitate constant supervision, combined with periods of hospital treatment from which the addict gains little and suffers greatly. When, in other branches of medicine, an incurable condition is encountered, all available knowledge is used to alleviate suffering. Treatment in such cases does not consist in giving repeated therapy which hurts but does not help.

The morphine addict after a time ceases to gain pleasure from the drug, and in order to do so increases the dose. All pleasure and security gained from the drug soon vanish and the process of deterioration sets in. It would appear to me more logical and kinder to treat this addiction with controlled doses of the drug. This would be arranged so that the minimum dose necessary to produce that indescribable sense of well-being for which the addict craves is given as required. Short periods of abstinence would be necessary when the minimum dose no longer produced the desired effect. These periods need be very short, as tolerance is lost rapidly. Hyoscine or a barbiturate could be given at these times.

The dreadful agony produced by the conventional form of treatment is indescribable and does not appear to justify the result. In your annotation (Dec. 13, 1947, p. 965) it is stated that ". . . treatment of this group is unnecessary, and possibly dangerous in that it may lead to true and progressive addiction." I would suggest that the "arrested development stage" of morphine addiction could be produced in most if not all cases, provided therapy is directed towards controlling and not curing this incurable condition.

The same principle might be applied to other forms of drug addiction.—I am, etc.,

London, W.9. F. R. ELLIS.

The Extent of Neurosis

SIR,—According to different observers it appears that between 10% and 50% of all who consult a doctor are sufferers principally from a neurosis. To these estimates must be added the many patients who do not go near a doctor for their neurotic troubles—either through ignorance, or through fear (sometimes justified) that these may not be objectively and sympathetically understood and dealt with. Taking this into consideration, even the most conservative estimate of the extent of neurosis must represent a degree of suffering and loss of efficiency, both national and in some cases individual, comparable in magnitude to that produced by the main physical diseases—tuberculosis, heart disease, rheumatism, cancer, etc. Despite this, however, there is no provision made for training in the understanding and therapy of personality problems and the neuroses on anything approaching an adequate scale.

In the training of the medical student there is little advance from the old days when the sole experience of functional disorders—apart from passing references to them in somewhat derisive terms such as "purely neurotic" or "merely functional"—was confined to a few demonstrations of the more grotesque and advanced specimens from a mental hospital. In the training of the postgraduate the situation is comparable: 50% of the theoretical instruction (and a large proportion of the practical) is given over entirely to the study of anatomy, physiology, and neurology. Of the remainder the bulk is occupied with the psychoses, physical methods of therapy, mental deficiency, legal aspects of insanity, administration, etc., with a passing reference to Freud, Adler, Jung, and others. On the clinical side the whole emphasis is on the mental

hospital—and increasingly so, it appears—where are assembled patients the majority of whom are psychotic or who have at least "broken down." These present, on the whole, problems very different from those of the ambulant cases, who have not "broken down" and who comprise the great majority of sufferers from the functional disorders.

The problem is a much wider one than the purely medical. A comparable situation exists in the sphere of academic psychology in this country. Here the main emphasis, theoretically and practically, is on such subjects as perception, reaction times, statistics, philosophy, and elementary physiology, to the almost total exclusion of clinical study and investigation into problems of motivation and personality.

Important as is the work of bodies such as the Tavistock Clinic, the Institute of Psycho-analysis, and of numerous gifted and conscientious individuals besides, they are left almost entirely to their own initiative and (necessarily limited) resources. It would be pertinent to ask what steps are envisaged by the authorities—Governmental, medical, and academic—responsible for the introduction and running of what purports to be a comprehensive health service, to cope with this vast problem, which amounts practically to a national emergency (if the available figures mean anything at all). What is being done to train the many psychologists—medical and non-medical—needed to cope adequately with these millions of sufferers from functional personality and behaviour disorders and to carry out research into their deeper causation?—I am, etc.,

London, N.6. A. W. F. ERSKINE.

Synthetic Vitamin A

SIR,—I have read with interest the annotation on synthetic vitamin A (Dec. 27, 1947, p. 1040). This topic was also the subject of a recent leading article in the *Lancet*[1] and I have already written to the editor of the latter journal to make certain observations.

Regarding your annotation, I should like to indicate some inaccuracies concerning the work of van Dorp and Arens.[2] The C_{18} ketone, derived from β-ionone, was condensed with ethoxyethynylmagnesium bromide (and not the ethoxyethylene derivative) to give a disubstituted acetylene (which is not a C_{22} ketone). The product was then converted to vitamin-A aldehyde by the method summarized in your publication. As stated in your article, vitamin-A acid has been obtained by Arens and van Dorp,[3] but it is also of interest to note that very similar syntheses were being studied simultaneously by both Heilbron[4] in this country and Karrer[5] in Switzerland, with their respective schools. The starting material, β-ionone, is of course only conveniently prepared from citral. Finally, I should like to draw your attention to the synthesis by Isler *et al.*[6] of pure crystalline vitamin A by a method similar to that proposed earlier by Heilbron and his collaborators.[7]—I am, etc.,

London, S.W.7. B. C. L. WEEDON.

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7 *J. chem. Soc.*, 1942, 727.

British Transport Medical Services

SIR,—Your leading article (Jan. 10, p. 54) prompts me to ask whether it would be possible for the Medical Department of the London Passenger Transport Board to arrange for the extraction of the dirt on the platforms and in the passages of their underground stations. Twice a day much of this dreadful mixture is swept up into the air after being watered, generally from a can without a rose so as to save time and lessen the effort. This method results in wetting the broom rather than the dirt. Were extraction done early in the morning and perhaps again before the evening rush the dangers of infection would be greatly diminished. Electricity is available at all necessary points and watering would not be required. Some twelve years ago I suggested this course to the Public Relations Officer, but nothing came of it. I am told that the coaches are dust-extracted. Perhaps they are also aerosolled.

When the "Tuppenny Tube" was first opened there was no forced ventilation; the air was dry and irritating and had an earthy smell. Max Rittenberg obtained permission to measure the humidity, confirmed the dryness, and suggested spraying the air with water. No notice was taken until each of us bought a share, attended the general meeting, and spoke of the matter. The provision of forced ventilation by conduits in the spiral staircases was the direct result of our trouble. The suggested spraying by means of the company's tunnel whitewashing-machine could clearly be adapted to aerosol disinfection if more simple means for this would not suffice.—I am, etc.,

London, W.1. G. H. COLT.

POINTS FROM LETTERS

Censorship

Dr. G. C. PETHER (Hadley Wood, Herts) writes: I consider it essential that freedom of expression and publication should be accorded to those employed in a State medical service. Many of us are acquainted with attempts made for political reasons to silence doctors employed in municipal services, while those employed with the Armed Forces are controlled by certain regulations. . . . It is a small point among many more vital, but I should insist, if I entered a State service, that I could say what I liked regardless of persons or politics. Did not one of the fathers of democracy say that he entirely disagreed with a man's opinions but he would defend to the death his right to express them? Presumably we are still democrats?

Negative Health

Dr. G. L. DAVIES (Hove, Sussex) writes: . . . A good many years of practice among so-called working-class patients has revealed to me that one of the chief pastimes of the masses, apart from dominoes, darts, and drinking beer, is discussion—and that usually about health. But let us not be mistaken in thinking that this is intelligent talk on how to keep well. It is, in actual fact, luxurious wallowing in details of ill-health. Very casual observation over many years has shown me that my waiting-room is usually most crowded on a Monday or on a day following some public holiday. The inference is obvious: fire-side chats have been in progress, and the ghastly pallor (often largely imaginary) of Cousin Jane or the horrifying cough of Uncle John have been on the agenda, and the sufferers by unanimous vote have been recommended to see their respective doctors. This may be a wholesome piece of advice, but so frequently such talk about disease is merely the one and only conversation piece of a population educated at enormous expense by the State. State education, however, has had one important effect. It has produced a nation of newspaper readers and readers of much literary garbage of different kinds. Herein lies the clue to the disease-consciousness of the masses. The lower the standard, as a rule, of the paper the more is it filled with all kinds of specious advertisements related to disease. This fact is of course well known, but nothing is ever done to check this pandering to the ignorance and morbid instincts of the masses. One may have one's own opinion about the true purpose of the Commission now sitting on the Press, but here is one great evil to which it should give its undivided attention. . . .

Appendicitis Symptoms due to a Worm

Dr. A. S. GARRETT (Enugu, Nigeria) writes: In Nigeria appendicitis in any form is extremely rare. I therefore hesitated to diagnose it when I had a patient with a chronic pain in the right iliac fossa and a tender spot over McBurney's point. She had no other signs to suggest ovarian or other trouble. I operated, and found everything perfectly normal except for a calcified worm imbedded in the parietal peritoneum. There was no inflammation, but I can only assume that the worm was the cause of the symptoms.

Unclean Hairdressers

Mr. M. E. SPENCER HARRISON (Market Rasen, Lincs) writes: "Aurelia's" letter (Dec. 13, 1947, p. 978) concerning the condition of hairdressers' shops describes the other side of a situation which is assuming significant proportions. Otitis externa was a disease affecting chiefly the male, but of recent years one has noticed a preponderance of female cases in the out-patient departments. With the ears continually covered by the hair, it is not surprising that, once established, an infection which arises primarily in the scalp will be resistant to treatment.

Fluids and Sulphonamides

Dr. BERNARD ROWLANDS (Tunbridge Wells) writes: While the relative toxicity of sulphamerazine, sulphathiazole, and other sulphonamides is being investigated and discussed, I would like to emphasize the fact that there is inadequate supervision of the amounts of fluid taken by patients who are being treated by these drugs. No doubt this supervision is very difficult in large hospitals. I speak from personal experience.

Obituary

A. C. DOUGLAS FIRTH, M.D., F.R.C.P.

Dr. Douglas Firth died suddenly at Cambridge at the age of 67 on Jan. 9. His friends knew that a few years ago he had had a warning of the disease which finally struck him down, but he had been so well in the interval, and so cheerful, that they were apt to forget that he was not in robust health.

Arthur Charles Douglas Firth, son of Charles Frederick Firth, of The Briary, Harrogate, was born on Feb. 10, 1880, and was educated at Harrow (Church Hill, Mr. J. C. Moss's House) and Trinity College, Cambridge, where he graduated B.A. in 1901, proceeding M.A. in 1905. As an undergraduate he was coxswain of the first Trinity boat. On coming down from Cambridge he went to St. Thomas's Hospital, where he took his M.B. in 1911. He was admitted M.R.C.P. in 1912, and went on to take the Cambridge M.D. in 1914. He soon became known as one of the young men well qualified to take up a post in a teaching hospital, and he was appointed assistant physician to the Royal Free Hospital, the Victoria Hospital for Children, the City of London Hospital for Diseases of the Chest, and the Royal National Orthopaedic Hospital. In 1919 he became assistant physician at King's College Hospital, retiring then from the staff of the Royal Free Hospital, and in the following year he was elected a fellow of the Royal College of Physicians. It was at King's College Hospital that most of his teaching work was done, and he became senior physician on the retirement of Sir Charlton Briscoe.

Firth loved teaching, and he particularly liked to teach the young student the first steps in clinical medicine. He brought to this important task a simplicity and an earnestness that were most impressive. He was also an examiner in, among other places, London, Cambridge, and Glasgow, and he treated the candidates with that kindliness which was characteristic of him. Apart from his teaching work he carried on a large practice and was consulting physician to a number of small hospitals in Surrey and Kent, where his opinion was greatly valued by many general practitioners.

On the outbreak of war he played a great part in the transfer of King's College Hospital to the Sector Hospitals and was in charge of the teaching of students at Leatherhead Emergency Hospital. At this time he gave up private practice and devoted himself to hospital work. He took great pleasure in this, as he had charge of the students in their earliest days of clinical work, and he took care not only of their teaching but also of their social life. At the same time he became active in the affairs of the Royal College of Physicians and was elected a member of council in 1939, a censor of the College from 1940 to 1942, and in 1945 became senior censor. During this period, as it was difficult to arrange the examination for the M.R.C.P. in London, he made the necessary arrangements for the examination to be held in the Emergency Sector Hospitals.

In 1940 he was due to retire from the staff at King's, but owing to the war he remained on as senior physician, and when the war was over he was appointed to Cambridge University, taking charge of the arrangements for the postgraduate work of returning Service officers. This appointment necessitated his living in Cambridge and retirement from King's, and it also brought him the added pleasure, and honour, of being made a Fellow of Trinity Hall, Cambridge. Between the wars, while in active practice, his home in Manchester Square was the scene of many social functions where Firth and his wife delighted in entertaining their friends. He married in 1914 Violet Dorothea, daughter of Lieut.-Col. H. N. Reeves, of the Bombay Political Service, and had a son and three daughters. Firth's chief recreation, which was shared by his family, was walking, and their holidays and leisure were chiefly spent in the Lake District, which he loved and knew intimately. His death will be mourned by his old students throughout the world, and our sympathies go out to his widow and children in their sudden bereavement.

Prof. J. W. McNee writes: Douglas Firth had not many close friends and I was fortunate to be one of them. He had a deep reserve through which few were allowed to penetrate, and many interesting facts of his good life are unlikely to be well known. His reserve was not easily detected, for he enjoyed good company and good conversation, and his quick eager voice and ready smile enlivened many a social evening or an otherwise dull examiners' meeting. He completed his clinical studies at St. Thomas's Hospital and, after qualifying, became house accoucheur to Mr. Tate. Then followed appointments as H.S. and H.P. at West London Hospital, to be succeeded by a most successful time as R.M.O. at the Victoria Hospital for Children, Tite Street. Firth loved children, and his success at this hospital was so great that he was made an honorary consulting physician, a post which he retained with pride for many years.

His marriage in 1914 was a very happy one, and his professional career seemed assured. When war broke out he began to assemble a Red Cross Ambulance Unit intended to serve with the French Army, but almost immediately serious illness overtook him which lasted a long time and seriously complicated his career. In 1915 he had recovered sufficiently to enter the R.A.M.C. but was always rejected for service overseas. In 1916 illness returned and lasted almost continuously until 1919. In October, 1919, he was appointed assistant physician to King's College Hospital, and from then onwards his health steadily improved and his career was never again disturbed. A wise decision, however, took him into the City as consultant physician to three large insurance companies, which saved him much of the harassing work and travel of an ordinary consultant. I first met Firth as a co-examiner in the Final M.B. at Cambridge, and subsequently we examined together on many occasions both there and in Glasgow. Firth liked examining because he was always so young in spirit himself and loved young people—some of his happiest hours in Scotland were probably spent in animated discussion with my young assistants.

Firth had an unusual hobby, recorded in *Who's Who* as "Postal History," which puzzled many people. He was an expert philatelist, but specialized in an interesting branch only known to a few. He collected ships' letters—that is to say, letters sent home in the early days of our colonial history through the captains of small brigs and sailing ships, to be posted and post-marked at small and now-forgotten ports such as Poole, Rye, Bantry, Galway, and many others. He found, to my astonishment, another collector of ships' letters in Glasgow with whom he would occasionally exchange notes and duplicates. Firth did not write much on modern medicine but was greatly interested in general and medical history. One of his most delightful essays was on the first case of disseminated sclerosis described in English by the patient himself—"The Case of Augustus d'Este," published in the *Proceedings of the Royal Society of Medicine* in 1941.

On his retirement from King's College Hospital after the second world war Firth was soon given a post at Cambridge which ensured his contact with young doctors and which suited him perfectly. To this was added the joy of his election as a Fellow of Trinity Hall, and his life was full until his first coronary attack a year or two ago gave him a warning; like the first, the second attack came suddenly, and proved fatal. Douglas Firth was a perfect example of the courteous and cultivated general physician, and his death is a great loss to all the young members of the profession whom he helped so much as well as to the friends of his own generation.

E. W. HEDLEY, M.B.E., M.D.

Dr. E. W. Hedley, who died at his home at Thursley, near Hindhead, on Jan. 3 at the age of 74, was consulting anaesthetist to St. Thomas's Hospital. He had been living in retirement for the last ten years.

Edward Williams Hedley was the eldest son of a large family. He was born in Middlesbrough, and at Uppingham he won the scholarship which took him to King's College, Cambridge. There he took a first in the first part of the natural sciences tripos, and he graduated M.B., B.Ch. as a student of St. Thomas's in 1900. He proceeded M.D. five years later. Meanwhile he had acted as a house-physician and later as obstetric house-physician at St. Thomas's, and he was also a clinical assistant at the West London and the Brompton

Hospitals. He was in general practice for a while, but when a vacancy occurred at St. Thomas's he was elected to the staff as an anaesthetist. When the hospital became the 5th London General Hospital during the 1914–18 war Hedley was commissioned in the R.A.M.C. with the rank of captain and did a great deal of work there and at several officers' hospitals in London. He was awarded the M.B.E. in recognition of his services in this connexion. On reaching the age limit he was made a consulting anaesthetist and elected a governor of the hospital.

He leaves a widow, two sons, and two daughters, and he will be greatly missed by many former colleagues and students who were grateful to him for much sound teaching.

Mr. JOHN JAMES ROBB, the well-known Dundee surgeon, died suddenly at his home at the age of 50 on Jan. 2. Mr. Robb was a son of the Scottish manse and was born in Kemnay, Aberdeenshire. Before starting medicine he held a commission in the Royal Horse Artillery, and was awarded the Military Cross while serving in France during the 1914–18 war. In the early years of his medical studies at Edinburgh he took a high place in the examinations in physiology and pathology and was appointed demonstrator in these subjects. After graduating M.B., Ch.B. in 1923 he filled various resident posts in Edinburgh Royal Infirmary, and it was then that he found his interests lay in surgery. After leaving the Infirmary his first post was with the Ministry of Pensions under Mr. Mercer in Edinburgh and later he was transferred to Bath. He took the F.R.C.S.Ed. in 1926, and thereafter, on obtaining a surgical appointment at the Bristol General Hospital, he was made assistant to the professor of surgery in the University of Bristol.

A colleague writes: For the next five years Mr. Robb occupied the important position of consulting surgeon to the County of Zetland and surgeon to the Gilbert Bain Hospital, Lerwick. The appointment of honorary assistant surgeon to Dundee Royal Infirmary came in 1933, followed by promotion to honorary surgeon in 1940. At the same time he was appointed lecturer in clinical surgery in the University of St. Andrews. He was also surgeon to Ashludie Sanatorium, King's Cross Infectious Diseases Hospital, the Royal Victoria Hospital, and Meigle Hospital. Mr. Robb contributed to the medical journals on various subjects, but his main interest was in abdominal surgery. He spent many of his holidays visiting hospitals abroad. Mr. Robb quickly settled down in Dundee to his work as a hospital surgeon and teacher of students—work which was arduous but always congenial and always conscientiously done. He was a man of unruffled temperament and of great kindness and personal charm. He never seemed hurried or harassed by pressure of work, and although his working day was often a long one, he answered every call with cheerfulness. He will be much missed by the many who sought his advice and help. Deep sympathy is extended to Mrs. Robb and his young son and daughter in their bereavement.

Dr. ALEXANDER TAYLOR WOODWARD died at the early age of 52 after a long period of ill health—actually over two years. He was educated at Taunton School, Somerset, and Edinburgh University, where he graduated M.B., Ch.B. in 1917. Before graduating he served as a surgeon-probationer and afterwards as a temporary surgeon, R.N., in the 1914–18 war. He was later a house-surgeon at the Royal Infirmary, Edinburgh, and at the Sunderland Royal Infirmary. In 1920 he settled in general practice in Sunderland, his native town, and quickly became a popular and busy practitioner. He was an active member of the British Medical Association, serving on the National Formulary Subcommittee from 1928 to 1933; he was chairman of the Sunderland Division in 1937–8. He was an assistant physician at the Monkwearmouth and Southwick Hospital and an honorary life member of St. John Ambulance Association, for which he was an examiner. His loss will be keenly felt by his patients, colleagues, and many friends.—A. J. G.

Dr. THOMAS EDWARDS READE, of Banbridge, Co. Down, died suddenly, following a heart attack, on Jan. 5 at the early age of 40. The elder son of the late Adam Reade, he was educated at Coleraine Academical Institution and took his medical course at Queen's University, Belfast, where he graduated M.A., B.Ch., B.A.O. in 1931. After qualifying he held resident posts as house-physician and house-surgeon at the Royal Victoria Hospital and as senior resident at the Royal Maternity Hospital, Belfast. He settled in Banbridge about eleven years ago, taking over the practice of Dr. Robert Martin and the posts of surgeon to the Royal Ulster Constabulary and the Post Office; he was also certifying factory surgeon for the district. During the war he rendered valuable service as an officer in the Home Guard and for a time he attended the troops stationed at Gilford. He was an enthusiastic member of the Banbridge and District Medical Club, of which he was secretary and treasurer. His high degree of professional skill and his sound clinical judgment were recognized by both patients and colleagues, and his untimely death is mourned by a host of friends. He married the daughter of Dr. William Boyd and Mrs. Boyd, of Banbridge, who survives him.—R. S. A.

Universities and Colleges

UNIVERSITY OF OXFORD

In a Congregation held on Dec. 13, 1947, the following degrees were conferred:

B.M.—P. J. R. Nichols, E. M. Vaughan Williams, P. B. Croft, W. H. D. Fairbank, [1]J. H. Lloyd Jones, [1]B. R. Hunt, [1]P. S. Moore, Mrs. Anne Gall, Marie Sadka.

[1] In absence.

UNIVERSITY OF LONDON

The following candidates at the London School of Hygiene and Tropical Medicine have been approved at the examination indicated:

ACADEMIC POSTGRADUATE CERTIFICATE IN PUBLIC HEALTH.—M. H. M. Abdulcader, A. A. Cameron, P. J. Cowin, C. W. Davies, G. J. Ll. Davies, M. A. C. Dowling, D. F. Eastcott, Patricia M. Elliott, D. G. Evans, J. Glass, Margaret Graham, V. T. H. Gunaratne, Helen E. E. Gunn, M. N. Gupta, Kathleen M. Harding, E. A. Hargreaves, J. A. Harrington, J. P. Harrison, S. I. Heinsheimer, N. S. Hepburn, G. R. Holtby, B. E. C. Hopwood, J. B. Kershaw, L. Kulczycki, R. G. Ladkin, A. H. MacGeachy, I. W. MacKichan, Olwen R. Major, Phyllis Morley, Margaret E. Munro, G. D. K. Needham, A. J. Patterson, P. A. B. Raffle, A. T. Roden, F. Schulz, E. S. O. Smith, C. N. D. Taylor, S. W. W. Terry, W. B. Thorburn, P. Tomlinson, S. J. Walsh, Edith H. Williams, N. Williams, J. S. Wilson, W. A. Wilson, G. M. Wright.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

At a quarterly meeting of the Council of the College held on Jan. 8, with Sir Alfred Webb-Johnson, Bt., President, in the chair, the following resolution of condolence was passed on the death of Mr. G. F. Stebbing, a Member of the Council: "The President and Council of the Royal College of Surgeons of England hereby express their deep regret at the death of Mr. George French Stebbing and their sincere sympathy with Mrs. Stebbing and her family in their bereavement. The medical profession has suffered the loss of a surgeon and radiotherapist of ability and vision, who will be remembered for his quiet and unswerving determination to achieve what he knew to be right. The Council mourn the passing of a wise counsellor and beloved colleague."

Prof. Geoffrey Hadfield, M.D., was appointed Sir William H. Collins Professor of Human and Comparative Pathology of the College.

The following hospital was recognized in respect of the resident surgical posts required of candidates for the Final Fellowship examination: Tindal Hospital, Aylesbury (resident surgical officer and house-surgeon).

Diplomas of Fellowship were granted to M. S. Brett and P. A. Ring.

A Diploma of Membership was granted to J. Davenport.

Diplomas in Tropical Medicine and Hygiene; Psychological Medicine; Laryngology and Otology; Anaesthetics; and Industrial Health were granted, jointly with the Royal College of Physicians of London, to the following successful candidates:

DIPLOMA IN TROPICAL MEDICINE AND HYGIENE.—B. L. P. Brosseau, J. D. Cruickshank, A. J. Fulthorpe, D. B. Jelliffe, L. F. Koyl, S. Miles, A. M. Pugh, P. D. Stewart.

DIPLOMA IN PSYCHOLOGICAL MEDICINE.—E. S. Foote, W. Forster, C. E. L. Haffner, H. E. W. Hardenberg, N. C. Horne, S. Karagulla, M. Klass, H. S. Klein, A. Lask, N. Morrissy, D. F. D. O'Neill, Nydia E. Panton, M. Silverman, Margaret S. S. Small, Jeannie E. Stirrat, C. Tetlow, J. I. Timothy, V. J. K. Wright.

DIPLOMA IN LARYNGOLOGY AND OTOLOGY.—H. Anderson, L. V. Arundel, J. C. Ballantyne, B. Bellon, G. R. Evans, J. Fine, H. S. Gild, E. W. Jarratt, R. H. S. Lee, I. J. L. Morris, K. O'Brien, M. A. O'Brien, B. H. Pickard, Q. R. Schindler, A. K. Sear, B. K. Sengupta, R. Smith, R. W. Tipple.

DIPLOMA IN ANAESTHETICS.—J. J. Ll. Ablett, Aileen K. Adams, J. T. Anderson, G. E. Badman, I. N. Bahl, H. C. J. Ball, A. K. Bannister, V. B. Bhargav, Jocelyn R Bodington, J. A. Bowen-Jones, H. C. Burbidge, G. W. Campbell, D. M. Carnegie, J. H. Challenger, H. J. E. Christie, S. Citron, R. F. Connell, H. S. A. Corfield, J. L. S. Cresswell, D. Dangerfield, A. Danin, D. H. Davies, Doreen Davies, G. G. Donaldson, C. H. Dunn, W. O. M. Ede, E. M. Edwards, J. L. C. Fernando, R. A. Fisher, F. W. A. Fosbery, C. M. Friedland, J. R. Gallie, R. E. Gibson, L. A. Gifford, Muriel M. Gloster, R. N. Grabowsky-Atherstone, Margaret A. Griffiths, J. Hamilton, Phoebe N. Harvey, D. R. Hughes, A. M. Hutton, J. N. T. Hutton, D. H. Irish, Ll. H. James, H. Jefferson, J. Johnston, D. F. McAlpine, G. McLoughlin, M. C. Macqueen, H. B. Maliphant, J. P. Murphy, A. O'Connor, Barbara D. Owens, J. G. Peacock, G. F. Purves, L. Rendell-Baker, J. R. Rook, E. H. Seward, D. W. Shannon, J. C. Skelley, A. C. Smith, G. H. Stuart, V. V. Tarvadi, L. L. Theron, Betty Thomas, J. M. van de Walle, F. van Nouhuys, N. S. Walls, H. Waters, D. S. Wilson, J. R. J. Winter, J. Woodley, A. P. Wright, G. V. S. Wright.

DIPLOMA IN INDUSTRIAL HEALTH.—G. Buchanan, H. F. Chard, F. H. King, P. Pringle, M. W. Robinson, R. S. F. Schilling, C. L. Sutherland, A. Ll. Thomas, D. R. Thompson, H. Wyers.

No. 1

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Jan. 3.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever ..	55	4	26	1	2	61	8	32	1	—
Deaths		2	1				2	—		
Diphtheria	225	22	31	10	3	242	19	65	33	6
Deaths	5	1	—	—	—	4	—	2	—	—
Dysentery	86	11	19	1	—	65	2	17	—	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	2	—	1	—	—	2	1	—	—	—
Deaths		—					—			
Erysipelas			31	11	2			40	13	4
Deaths		1					—			
Infective enteritis or diarrhoea under 2 years				36					38	
Deaths	59	3	11	3	5	76	9	7	16	1
Measles*	4,490	251	163	174	23	10,823	359	206	28	758
Deaths	1	—	1	—	—	10	—	2	—	2
Ophthalmia neonatorum	58	5	10	1	—	67	5	9	—	—
Deaths										
Paratyphoid fever ..	39	2	—	—	—	3	1	—	—	—
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal ..	1,098	99	3	5	10	1,264	76	40	5	5
Deaths (from influenza)†	35	7	5	—	1	36	5	12	1	—
Pneumonia, primary ..			284	41				385	48	
Deaths		60		18	12		82			19
Polio-encephalitis, acute	4	—				1	—			
Deaths		—					—			
Poliomyelitis, acute ..	59	7	5	2	—	9	2	1	20	—
Deaths		—					—			
Puerperal fever		3	6		1		4	15		—
Deaths										
Puerperal pyrexia‡ ..	112	11	11	—	—	120	10	23	—	—
Deaths		—					—			
Relapsing fever ..	1	—			—	—	—			—
Deaths										
Scarlet fever	1,786	125	298	42	34	1,161	75	246	37	35
Deaths	—	—	—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	5	—	2	1	1	5	—	2	4	—
Deaths	—	—	—	—	—	—	—	—	—	1
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough* ..	1,891	135	20	65	9	2,030	115	68	64	62
Deaths	5	—	—	1	—	17	2	3	3	—
Deaths (0–1 year) ..	420	41	73	28	22	612	82	86	49	19
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	5,720	968	665	236	165	6,820	1171	851	297	177
Annual death rate (per 1,000 persons living)			13·8	14·9				18·7		
Live births	9,608	1535	963	470	291	10,882	1770	1217	510	338
Annual rate per 1,000 persons living ..			19·4	29·7				24·5		
Stillbirths	227	31	26			336	41	36		
Rate per 1,000 total births (including stillborn)			26					29		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

‡ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Poliomyelitis

Notifications of poliomyelitis in England and Wales in the week ending Jan. 10 were 52 (59) and of polio-encephalitis 6 (4). Figures for the previous week are shown in parentheses. The hope lately expressed in these notes that notifications would fall to their normal winter level by the middle or end of February now seems unlikely to be fulfilled.

Discussion of Table

In England and Wales an increased incidence was recorded for all notifiable diseases. The increases included measles 1,907, whooping-cough 750, acute pneumonia 408, scarlet fever 317, diphtheria 68, dysentery 33, paratyphoid fever 17.

A large increase in the notifications of measles was recorded throughout the country and the total was the largest since the beginning of August. The largest rises during the week were Lancashire 185, Durham 152, London 136, Monmouthshire 104, Sussex 98, Lincolnshire 93, and Nottinghamshire 90.

The largest increases in the notifications of whooping-cough were London 68, Kent 56, and Yorkshire West Riding 46. An increase in the incidence of scarlet fever was also recorded in all regions; the largest rise was Staffordshire 41. The notifications of acute pneumonia were the largest since February, and the largest increase was London 61. The chief features of the returns for diphtheria were increases in Essex 14, Durham 11, and Warwickshire 11.

No fresh outbreaks of dysentery of any size were reported; the largest returns were Lancashire 21, London 11, and Surrey 9. A further 21 cases of paratyphoid were notified from the outbreak in Suffolk; 14 of these were reported from Ipswich C.B.

The largest returns of poliomyelitis during the week were those of London 7 (Shoreditch 3), Middlesex 6, Lancashire 5, Surrey 5.

In *Scotland* infectious diseases were less prevalent than in the preceding week. There were decreases in the notifications of measles 115, acute primary pneumonia 88, and diphtheria 34, while the largest rise was in the notifications of cerebrospinal fever 10. Of the 5 cases of acute poliomyelitis 3 were notified in the city of Glasgow.

In *Eire* rises were recorded in the incidence of measles 81, whooping-cough 38, acute primary pneumonia 30, scarlet fever 24, and diarrhoea and enteritis 23. The rise in the incidence of scarlet fever and measles was fairly general throughout the country, while the increase in cases of whooping-cough was contributed by Dublin C.B. and Waterford C.B.

In *Northern Ireland* a rise was reported in the incidence of measles 16 and scarlet fever 13. The former was due to an outbreak in Antrim county and the latter to the experience of Belfast C.B.

Quarterly Returns for Eire

The birth rate during the September quarter of 1947 was 23.4 per 1,000, the highest rate in a third quarter since 1942. The infant mortality of 47 per 1,000 births was 7 below the rate for the September quarter of 1946 and 26 below the rate for the third quarter of 1943. Maternal mortality was 1.8 per 1,000 registered births and was 0.2 above the rate for the corresponding quarter of 1946. The general death rate was 11.2, being 0.3 below the rate for the third quarter of 1946. Deaths from diarrhoea and enteritis among infants under 2 years numbered 156; this total was 168 below the average of the third quarters of the five preceding years. Only 10 deaths were attributed to diphtheria—a figure which was 39 below the five years' average. The 43 deaths from measles were 34 above the average of the last five third quarters. Deaths from pulmonary tuberculosis were 636 and from other forms of tuberculosis 219; these were 75 and 35, respectively, above the number recorded in the third quarter of 1946.

Infectious Diseases in 1947 in England and Wales

The number of notifications of diphtheria in 1947 was the lowest ever recorded. There has been a steady decline in the incidence of diphtheria since 1942, and it is now about one-sixth of the immediate pre-war level. The lowest number of weekly notifications in 1947 was 138, compared with 815 and 788 in 1938 and 1937, and the largest weekly total in 1947 was 256 as against 1,889 in 1938 and 1,823 in 1937. The decline in the notifications of cerebrospinal fever since the outbreak in 1940, when 12,791 cases were notified during the year, has been interrupted and the notifications in 1947 were slightly above the totals for the three preceding years.

The large decrease in the incidence of dysentery recorded in 1946 has been repeated and the disease has now reverted to the pre-war level. Notifications of typhoid and paratyphoid

were considerably fewer than in 1946 but were above the level of the three years preceding 1946. In the outbreak of acute poliomyelitis, perhaps the chief feature of 1947, the notifications exceeded 600 per week for the four weeks from the 33rd–36th week, compared with 10 to 30 cases in the preceding four years. A comparison of the totals recorded during the last five years is:

	Number of Notifications				
	1943	1944	1945	1946	1947
Scarlet fever	116,217	93,801	74,392	57,614	60,524
Whooping-cough	95,857	93,107	62,022	92,028	94,241
Diphtheria	35,944	29,446	25,059	18,156	10,528
Measles	374,198	117,437	443,002	154,826	399,461
Acute pneumonia	52,225	38,175	34,059	36,106	34,348
Cerebrospinal fever	3,380	2,883	2,691	2,627	3,147
Dysentery	7,772	10,150	16,533	8,441	4,179
Enteric (paratyphoid and typhoid) fevers	707	536	679	1,367	880
Acute poliomyelitis	414	510	799	703	8,592
Influenza. Deaths in the great towns	6,280	1,744	1,307	2,629	1,774

Week Ending January 10

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,525, whooping-cough 2,057, diphtheria 216, measles 3,746, acute pneumonia 975, cerebrospinal fever 60, acute poliomyelitis 52, dysentery 114, paratyphoid 8, and typhoid 3.

The Services

The War Office has announced that Major-General Neil Cantlie, C.B., M.C., late R.A.M.C., will succeed Lieutenant-General Sir Alexander Hood, G.B.E., K.C.B., as Director-General, Army Medical Services, on April 1.

Captain S. S. Pavillard, M.B., Ch.B., Straits Settlement Volunteer Force, has been appointed M.B.E. (Military Division) in recognition of gallant and distinguished services while a prisoner-of-war in Japanese hands (prior to September, 1945).

The King of the Hellenes has conferred the following decorations in recognition of distinguished services in the cause of the Allies:

Commander of the Royal Order of King George I with Swords.—Brigadier (Temporary) F. R. Sandford, C.B.E., M.C., T.D., late R.A.M.C.

Knight of the Royal Order of King George I with Swords.—Major (Temporary) W. F. Felton, R.A.M.C.

The President of the U.S.A. has conferred the following decorations in recognition of distinguished services in the cause of the Allies:

Legion of Merit, Degree of Officer.—Lieutenant-Colonel W. B. F. Brennan, R.A.M.C.

Bronze Star Medal.—Lieutenant-Colonel (Temporary) J. M. Barnes and Major H. G. Skinner, R.A.M.C.

The Queen of the Netherlands has conferred the following decorations in recognition of distinguished services in the cause of the Allies:

Commander of the Order of Orange Nassau with Swords.—Colonel T. F. Kennedy, O.B.E., late R.A.M.C., and Lieutenant-Colonel J. P. Douglas, O.B.E., R.A.M.C.

Officer of the Order of Orange Nassau with Swords.—Colonel (Acting) A. F. Kennedy and Lieutenant-Colonel (Acting) M. S. Harvey, R.A.M.C.

Medical News

Sickness Benefit Regulations

The National Insurance Advisory Committee will report on the Unemployment and Sickness Benefit Regulations (H.M.S.O., price 2d.) to be made under the National Insurance Act, 1946. Written objections to the preliminary draft of the regulations will be considered by the Committee and should be sent before Feb. 6 to the Secretary, National Insurance Advisory Committee, 6, Curzon Street, London, W.1.

Medical Certificates Prolonged

In future medical certificates issued to expectant mothers in connexion with their applications for the supplementary ration book will be valid for four months instead of for three, and medical certificates for people with active tuberculosis will be valid for periods of 26 weeks instead of 13 weeks.

Committee on Health Centres

When the Central Health Services Council has been formed the Minister of Health proposes to set up a committee in collaboration with it to gather information and proffer expert guidance on the best kinds of health centres to develop.

Royal Sanitary Institute Prizes

The Royal Sanitary Institute offers the John Edward Worth Prize of £40 for an essay on "Practical Improvements of Appliances or Inventions in or about Dwelling-houses," and the John S. Owens Prize of £15 for an essay on "Atmospheric Pollution." A copy of the general conditions may be obtained from the secretary of the Institute, 90, Buckingham Palace Road, London, S.W.1. Entries must be submitted by Dec. 31.

Pharmacists' College

The Pharmaceutical Society of Great Britain has decided that the steady rise in costs and salaries makes it impossible to continue to maintain its College as it has done since it was founded in 1842. After consultation with the University of London it has therefore proposed that the College should become an independent corporate body governed by a Council including representatives of the Society, the University, the academic staff, and the pharmaceutical profession and industry. The College would remain a "school" of the University. The Society and the University are now discussing a proposal that the latter should take over the building in Brunswick Square intended to house the College, on which the Society has already spent £200,000 and for which as much again would be needed to complete it at present-day prices.

Peter Edwards Ward

An extension of the Cheshire Joint Sanatorium at Loggerheads, near Market Drayton, was opened on Dec. 5. It has been named the Peter Edwards Ward in recognition of the long and faithful services rendered by Dr. Peter W. Edwards.

Liverpool Heart Hospital

In order to obtain more space, particularly for treatment by graduated exercise, the Liverpool Heart Hospital has acquired Caldy Manor. The site covers 13 acres of land in sheltered countryside.

Foundling Estate

The Dominion Students' Hall Trust, in order to provide scope for its increasing activities and with a view to furthering ancillary objectives of a charitable or educational nature centred in Bloomsbury, has acquired the Foundling Estate, which surrounds its headquarters at London House, Guilford Street. The Estate was bought about 1740 by Captain Coram, the renowned sailor, to endow the old Foundling Hospital for children. The hospital itself was moved to Berkhamsted in 1926.

British Association

Prof. H. Hartridge, F.R.S., has been appointed president of the physiology section of the British Association.

To Lecture in Scandinavia

Prof. Macintosh, Nuffield Professor of Anaesthetics in the University of Oxford, leaves Britain on Jan. 24 for a lecture tour on behalf of the British Council in Finland, Sweden, and Denmark.

Gift to Polish Clinic

The Polish Ambassador received a thoracoscope on Jan. 15 from the Cultural Subcommittee of the British-Polish Society. It is inscribed in English and Polish: "Presented by the British-Polish Society, London, to the University Tuberculosis Clinic, Wroclaw."

Wills

Sir Thomas John Carey Evans, of Criccieth, left £23,172. Dr. Reginald Cecil Bligh Wall, formerly archivist to the Society of Apothecaries, left £8,305.

COMING EVENTS

Services Hygiene Officers' Dinner

Brigadier A. E. Richmond will deliver his presidential address before the Navy, Army, and Air Force Hygiene Group of the Society of Medical Officers of Health at B.M.A. House, Tavistock Square, London, W.C., on Friday, Jan. 30, *at 5 p.m.* (not 5.30 p.m. as announced in this column last week). The reunion dinner of the group will be held at the time and place arranged.

Meeting for Prayer

A prayer meeting for medical men who are professing Christians will be held on Thursday, Jan. 29, at Livingstone House, Broadway, Westminster, London, from 3.45 to 4.45 p.m. It will be preceded by tea and light refreshments at 3.30 p.m.

Association of Industrial Medical Officers

A meeting of the Association of Industrial Medical Officers will be held at the London School of Hygiene and Tropical Medicine, Keppel Street, W.C., on Friday and Saturday, Jan. 30 and 31, 1948. On Jan. 30, at 5.15 p.m., Dr. C. M. Fletcher will speak on "Coal Miners' Pneumoconiosis and Recent Developments." A dinner at the Connaught Rooms (Great Queen Street, London, W.C.) will follow. On Jan. 31, at 10.30 a.m., Prof. E. J. King will discuss "Recent Developments in the Study and Treatment of Silicosis."

Association of Clinical Pathologists

The Association of Clinical Pathologists will celebrate its coming-of-age with a dinner at the Piccadilly Hotel, London, W., on Friday, Jan. 30, at 7.30 p.m. for 8 p.m.

Course on Medical Treatment

The University of Leeds Postgraduate Committee has arranged a clinical week-end course devoted to the subject of medical treatment, and open to general practitioners and others interested, to be held at the General Infirmary at Leeds on Feb. 21 and 22. The fee for the course is £1 1s. Further information and application forms may be obtained from the Senior Administrative Officer, School of Medicine, Leeds, 2.

SOCIETIES AND LECTURES

Monday

BRITISH INSTITUTE OF PHILOSOPHY.—At University Hall, 14, Gordon Square, London, W.C., Jan. 26, 5.15 p.m. *"Existentialism."* Prof. H. J. Paton.

INSTITUTE OF LARYNGOLOGY AND OTOLOGY, 330–332, Gray's Inn Road, London, W.C.—Jan. 26, 2 p.m. *"Headache."* Mr. W. M. Mollison.

ROYAL SOCIETY OF ARTS, John Adam Street, Adelphi, London, W.C.—Jan. 26, 4.30 p.m. *"The Common Cold."* Cantor Lecture by Dr. C. H. Andrewes, F.R.S.

Tuesday

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—Jan. 27, 5 p.m. *"The Sclerodermias."* Dr. Hugh Gordon.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHARMACOLOGY, Gower Street, W.C.—Jan. 27, 5.15 p.m. *"Symptomatic Drugs: Sympathomimetics and Sympatholytics."* Mr. F. Bergel.

Wednesday

EDINBURGH CLINICAL CLUB.—At Edinburgh Royal Infirmary, Jan. 28, 4 p.m. *"Surgical Aspects of the Treatment of Peptic Ulcer."* Prof. J. R. Learmonth.

INSTITUTE OF LARYNGOLOGY AND OTOLOGY, 330–332, Gray's Inn Road, London, W.C.—Jan. 28, 4.30 p.m. *"The Larynx." "Organic Nervous Affections of the Larynx." "Laryngeal Paralysis. Treatment—Educational and Operative."* Mr. V. E. Negus.

ROYAL SOCIETY OF ARTS, John Adam Street, Adelphi, London, W.C.—Jan. 28, 2.30 p.m. *"Recent Progress in the Making of Precision Instruments."* Mr. A. J. Philpot.

Thursday

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—Jan. 29, 5 p.m. *"Dermatoses due to Filtrable Virus."* Dr. G. B. Mitchell-Heggs.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (SCIENTIFIC AND TECHNICAL GROUP), 16, Prince's Gate, London, S.W.—Jan. 29, 7 p.m. *"Photographic Visual Aids."* D. A. Spencer, Ph.D., Hon. F.R.P.S.

SOCIETY OF PUBLIC ANALYSTS AND OTHER ANALYTICAL CHEMISTS.—At Royal Society of Medicine, 1, Wimpole Street, London, W., Jan. 29, 2.30 p.m. Joint meeting of the Physical Methods Group and the Biological Methods Group. Subject of meeting: *"Methods of Penicillin Assay—Their Purpose, Scope and Validity."*

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, S.W.—Jan. 29, 4.30 p.m. *Psychiatric Lecture-demonstration.* Dr. D. Curran.

Friday

KENT AND CANTERBURY HOSPITAL.—Jan. 30, 5 p.m. Clinical meeting. Demonstration of Cases.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.—At Pathology Department, School of Medicine, Leeds, Jan. 30, 8.30 p.m. *Pathological meeting.*

LONDON CHEST HOSPITAL, Victoria Park, E.—Jan. 30, 5 p.m. *"Selection of Cases for Artificial Pneumothorax."* Dr. E. H. Hudson.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—Jan. 30, 8 p.m. *"The Rh Factor Assessment in Disease."* Dissertation by Mr. J. S. Barrett.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—Jan. 30, 5 p.m. *"The Living Fabric: Blood and Breath."* Dr. E. A. Underwood.

APPOINTMENTS

Jung Bahadur Singh, O.B.E., L.R.C.P.&S.Ed., and Jacob Alexander Nicholson, M.B., Ch.B.Ed., have been appointed Unofficial Members of the Executive Council of the Colony of British Guiana.

GAWNE, STANLEY C., M.D., D.P.H., Deputy County Medical Officer for Lancashire.

HOLMES, J. MACD., M.D., M.R.C.P., Visiting Neurological Physician, Wrexham County (E.M.S.) and War Memorial Hospitals.

HOWIE, JAMES ERSKINE, M.D., D.P.M., Regional Psychiatrist, Liverpool Regional Hospital Board.

KING'S COLLEGE HOSPITAL MEDICAL SCHOOL.—*Directors of Clinical Studies (Part-time):* Medicine, Terence East, D.M., F.R.C.P.; Surgery, Sir Cecil P. G. Wakeley, F.R.C.S.; Obstetrics and Gynaecology, J. H. Peel, F.R.C.S., F.R.C.O.G.; Child Health, Wilfrid Sheldon, M.D., F.R.C.P. *Honorary Teaching Staff:* A. H. Galley, M.B., B.S., D.A., Assistant Anaesthetist; A. J. Heriot, M.S., F.R.C.S., Assistant Surgeon; R. S. Lewis, F.R.C.S., Assistant Surgeon for diseases of the Ear, Nose, and Throat; Samuel Oram, M.D., Assistant Physician; Dennis Hill, M.B., B.S., Physician in Psychological Medicine; S. G. Clayton, M.D., M.S., F.R.C.S., Assistant Obstetric and Gynaecological Surgeon; D. I. Williams, M.B., B.S., Assistant Physician for Diseases of the Skin. *Full-time Staff:* A. H. Baynes, M.B., B.Chir., Acting Assistant Chemical Pathologist and Demonstrator in Chemical Pathology; G. F. M. Hall, M.B., Ch.B., Demonstrator in Morbid Anatomy; A. C. Cunliffe, M.B., B.Chir., Assistant Bacteriologist and Lecturer in Bacteriology.

MIDDLESEX COUNTY COUNCIL.—At West Middlesex County Hospital: *Dermatologist:* F. J. V. Jenner, M.R.C.P.; *Director of Department of Physical Medicine:* D. M. L. Doran, B.M., B.Ch.

MILNE, JAMES, M.B., Ch.B., D.P.M., Deputy Medical Superintendent, Fife District Asylum, Springfield, Cupar.

PORTSMOUTH: ROYAL PORTSMOUTH HOSPITAL—*Honorary Assistant Surgeon,* John D. Younghusband, F.R.C.S. *Honorary Assistant Anaesthetists,* P. R. Bromage, M.B., B.S., D.A., Paul Merlin, M.B., Ch.B., D.A.

STREET, F. N., M.B., F.R.C.S., Resident Surgical Officer, Hospital for Sick Children, Great Ormond Street, London, W.C.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Bickford.—On Dec. 25, 1947, at the Mayo Clinic, U.S.A., to Dr. Joyce Bickford (*née* Davies), wife of Dr. R. G. Bickford, a son.

Brown.—On Jan. 7, 1948, at Edgbaston Maternity Home, Birmingham, to Jean, wife of Dr. R. J. K. Brown, a daughter.

Fraser.—On Jan. 7, 1948, to Dr. and Mrs. R. J. A. Fraser (*née* Dr. Mary E. Chalmers), 77, Anderson Drive, Aberdeen, a son.

Kay.—On Jan. 11, 1948, at Claremont Nursing Home, Glasgow, to Janice and Drew Kay, M.D., F.R.C.S.Ed., a daughter.

Oakes.—On Jan. 13, 1948, at Southmead Hospital, Bristol, to Jean and Henry Oakes, a son.

Roberts.—On Dec. 31, 1947, at the Queen Elizabeth Hospital, Birmingham, to Margaret (*née* Holloway), wife of Dr. Keith D. Roberts, a daughter—Meryl Elizabeth.

Thompson.—On Jan. 7, 1948, at Woodfield Nursing Home, Oldham, to Doreen (*née* Backstedt), wife of Dr. John Thompson, a second child—Joanna Mary.

MARRIAGE

Cox—Monaghan.—On Jan. 14, 1948, at Melton Mowbray, John Cox, M.B., D.R.C.O.G., and Irene Monaghan, M.B., Ch.B.

DEATHS

Anderson.—On Jan. 10, 1948, at 74, Lower Baggot Street, Dublin, Joseph Barcroft Anderson, M.D.

Beesley.—On Jan. 16, 1948, at 7, Lion House, Exmouth, Clarence Beesley, L.R.C.P.&S.Ed.

Bell.—On Jan. 11, 1948, at "Edzell," Lundin Links, Fife, James Bett Bell, M.B., C.M.Ed.

Bevis.—On Jan. 9, 1948, Harold Bevis, M.R.C.S., L.R.C.P., of Cromwell House, Haydon Park Road, Wimbledon, S.W., aged 64.

Colmer.—On Jan. 10, 1948, at 8, Junction Road, Oldfield Park, Bath, Vyvian Colmer, M.R.C.S., L.R.C.P., aged 65.

Downes.—On Jan. 12, 1948, Mary Mourney Downes, M.B., Ch.B., of Elgar Avenue, Tolworth, Surbiton, Surrey, aged 53.

Duncan.—On Jan. 18, 1948, at Manchester Royal Infirmary, Helen Winifred Duncan, M.D., M.R.C.P., of 11, Wennington Road, Southport.

Glenny.—On Jan. 7, 1948, at Mereham Terrace, Warrenpoint, Co. Down, Ireland, William Charles Watson Glenny, L.R.C.P.&S.I. and L.M., aged 72.

Greathead.—On Jan. 13, 1948, at Durban, South Africa, Edward Rivers Greathead, M.R.C.S., L.R.C.P., late of St. Albans, Herts.

Lewys-Lloyd.—On Jan. 12, 1948, at Towyn, N. Wales, Evan Lewys-Lloyd, M.R.C.S., L.R.C.P., aged 75.

McMillan.—At Shotts, Lanarkshire, John McMillan, M.B., Ch.B.

Maunsell.—On Jan. 18, 1948, at 6, Courtfield Road, London, S.W., Debonnaire Frederick Maunsell, M.R.C.S., L.R.C.P.

Murphy.—On Jan. 17, 1948, at 2, Ethelbert Road, Canterbury, Charles Edward Murphy, F.R.C.S.I., aged 77.

Oldmeadow.—On Jan. 14, 1948, at Bramley, Hampshire, Lloyd John Hollis Oldmeadow, M.D., F.R.C.S.Ed., late of Kineton, Warwickshire.

Plumbly.—On Jan. 12, 1948, George Lewis Spurrell Plumbly, M.B., B.S., of Harvey House, Watton, Thetford, Norfolk, aged 44.

Reardon.—On Jan. 11, 1948, at 88, Blackford Avenue, Edinburgh, James Clement Purcell Reardon, L.R.C.P.&S.Ed.

Staley.—On Jan. 11, 1948, at 70, Barton Road, Barton-upon-Irwell, Lancs, Robert James Staley, M.B., Ch.B., aged 56.

Thomas.—At Brynmawr, Breconshire, John Lewis Thomas, M.D., aged 85.

Watson.—On Jan. 12, 1948, at Gibraltar, William Bertram Watson, M.D., of Harrogate, aged 70. Funeral at Gibraltar Jan. 14. Memorial service at St. Peter's Church, Harrogate, Jan. 21, 11.15 a.m.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Vitamin D for Chilblains

Q.—*Very large doses of vitamin D_2 (up to half a million international units at weekly intervals) have been recommended as a preventive of chilblains. Is there any risk of heavy deposition of calcium in the tissues if old people take the vitamin in such amounts?*

A.—According to the most recent evidence vitamin D is ineffective in both the prevention and treatment of chilblains (*Lancet*, 1947, 2, 794). It should never be used for this purpose, as it can be toxic if given in the high doses often recommended. Half a million units at weekly intervals would probably not produce toxic effects. Many patients apparently tolerate 150,000 units daily over a period without any harmful effects, although toxic effects have been reported from doses of 100,000 to 200,000 units daily. Doses of more than 150,000 units daily are potentially dangerous. The chief dangers of overdosage with vitamin D are metastatic calcification, particularly in the kidneys and blood vessels, and renal failure, which may be irreversible. Early symptoms of intolerance are nausea, vomiting, headache, tiredness, muscular weakness, and polyuria.

Prescribing Dangerous Drugs

Q.—*In some hospitals the procedure adopted for prescribing dangerous drugs is for the resident medical officer or consultant to state the strength of the dangerous drug required and to initial the prescription. In the Dangerous Drugs Regulations it is stated that the prescription should be signed by the responsible medical officer. Does this mean that initialling of the prescription is inadequate?*

A.—The law relating to this subject is well set out in Speller's *Law Relating to Hospitals*, pp. 167–74, which would well repay study by any member of a hospital staff who may have occasion to handle these drugs. The regulations made under the Dangerous Drugs Acts, 1920–5, were modified by the Dangerous Drugs (Hospital General Exemption) Order, 1924, which provides that the initials only need be added to a prescription for such drugs, if written by a properly authorized member of the staff on a printed prescription form issued by the hospital. If a blank sheet of paper is used it must bear the full signature of the prescriber, together with the other particulars required under the D.D.A. regulations. The prescription must be dated, and must bear the name of the patient who is to receive the drugs (or his registered number; this applies particularly to patients attending a clinic for venereal disease, who may be identified only by such a number).

Dangerous drugs may also lawfully be supplied by a hospital dispenser on the requisition of a sister in charge of a ward, for the purpose of replenishing her stock, to be used in accordance with the orders of the doctor or dental surgeon concerned; there is no definition of the qualifications of the sister (as there is of the hospital dispenser) under these regulations, but it is probable that she must be a State registered nurse. Her requisition must be filed in the dispensary and she must keep a copy of it.

Industrial Hazard of Sodium Chromate

Q.—*What will be the effect, if any, on the health of workers cleaning returned empty biscuit tins with a solution of sodium chromate, 1 in 1,440, in a detergent solution of 0.8% trisodium phosphate plus sodium metasilicate at 180° F.? The tins are subsequently sprayed with hot water.*

A.—Dermatitis of the hands and forearms, if exposed, and possibly also irritation of the nasal mucosa, may occur. It is true that the solution of sodium chromate in the bath is very dilute, but, with the evolution of steam, there is a possibility of this monochromate being carried into the atmosphere. It is now known that the characteristic effects of the bichromates and chromic acid may also be produced by monochromates. Trisodium phosphate with sodium metasilicate may be expected to exercise its detergent effect also on the exposed skin of cleaners, and, even though the bath contained nothing more than heated water, constant immersion of the unprotected skin over long periods might be expected to have a deleterious macerating effect.

Insomnia and Loss of Memory

Q.—*What are the likely causes of insomnia and loss of memory for current events and duties in a woman in the early forties? What investigations are required?*

A.—Insomnia might be due to actual bodily illness or to emotional disturbances. Loss of memory for current events suggests an organic factor, and, if it is of severe degree and of any permanence, would be classifiable as dementia. In this case a cerebral lesion would have to be looked for. Its nature might be of many different kinds, including chronic alcoholism, cerebral syphilis, cerebral tumour, and the presenile dementias. The investigations required are along the usual neurological and psychiatric lines, and directed in the first place towards establishing a real impairment of memory. It is quite probable, however, that memory itself is not impaired, although the patient herself or her relatives feel that it is. Complaints of a subjective experience of memory failure are common in psychiatric states without organic lesion, especially in mild depressive conditions. It is possible that the patient is suffering from a neurotic state or a mild involutional depression.

Wax in the Ears

Q.—*Wax accumulating in the outer part of the auditory canal impairs already defective hearing. Can anything be done to prevent this?*

A.—If there is an underlying dermatitis of the external auditory meatus which is causing excessive secretion or abnormal consistency of the wax, then treatment of the skin affection should help. Apart from this the best treatment is to use drops, such as olive oil, which will render the wax as fluid as possible.

Pain on Cutting Nails

Q.—*My niece, aged 14 years, causes herself pain when cutting her nails with scissors, and for some days afterwards she feels the nail edges raw and painful. There is no question of any functional cause. It is a case of "Let me cut my nails and I cause pain." The only treatment I can think of is to apply some anaesthetizing ointment afterwards. What do you suggest?*

A.—Pain on cutting the nails is not likely to have any anatomical basis in fact and is likely to be psychogenic in origin. It would be interesting to know how long this symptom has existed. Ruling out mental deficiency, this appears to be a case of masochism, which is usually defined as sexual pleasure in having pain inflicted on one. Dependence and sensuous passivity are normal characteristics of the infant; and also in the sexual relations of the woman, who desires to be overmastered, even to the extent of being hurt—a relic of "marriage by capture." The perverted tendency of which this seems to be a case comes about when sexual feelings are aroused in the child in association with the infliction of pain. The commonest instance is where a child sexually stimulates itself and is smacked while experiencing such feelings. The sexuality in such a case not only is associated with the smacking but is repressed by it, so that it is fixated and arrested in that form and may not develop into normal adult sexuality. The specific cause in this case, which it is necessary to investigate for radical cure, would have to be discovered by "play therapy" at the hands of an expert. If expert advice is not available, then so far as possible the child should be given counter-attractions at such times, in the hope of diverting her interest. Many such perversities disappear when more adult sexuality begins to appear at puberty, and in this case the girl may grow out of it. On the other hand, it is often found that such perversities begin to show themselves only at puberty,

when the sex feelings are beginning to be aroused, and therefore precipitate the unconscious conflict already mentioned. Treatment of the end-result by antiseptics is of course indicated.

Lochial Discharge

Q.—*Why is it that, whereas before the war the lochia became yellow or clear by the eighth or tenth day, nowadays the discharge remains bloodstained almost without exception for anything up to three weeks? What treatment is advised?*

A.—The old view that the lochial discharge normally ceases to be bloodstained by the tenth day is not true, and most modern textbooks comment on this. The bleeding may clear up temporarily while the woman is in bed, but almost always comes on again when she becomes more active, and then continues on and off for varying periods of time. The average is probably about three weeks from the time of delivery, but slight intermittent bleeding persisting for five to six weeks is by no means rare and is not necessarily pathological. These observations apply to the pre-war period as well as the present, and there has not been any significant alteration. No treatment is necessary unless the bleeding is heavy.

Toxic Effects of Formalin

Q.—*What are the possible effects of continued inhalation of small concentrations of formalin? The mother of a family living in close proximity to a pathological laboratory which continuously reeks of formalin complains that her 3-year-old son regularly wakes pale and querulous after going to bed quite cheerful and sleeping for a period of from ten to twelve hours. She suspects that this may be due to the presence of formalin in the atmosphere, as the child's bedroom is immediately above the factory. Is this likely?*

A.—Formaldehyde is an irritant gas and a protoplasmic poison. Its most noticeable effect is irritation of the mucous membranes and of the skin. Brunnthäler (*Occupation and Health*, I.L.O., Geneva, 1930, p. 809), in his position as Keeper of the Botanical Institute in Vienna, studied the effects on himself of the prolonged use of formalin. These effects included acute catarrh of the nose and eyes, chronic pharyngitis and laryngitis, and acute nervous manifestations. The latter are thought to be very rare, and it is suggested that other explanations for the condition described above in the little boy should first be excluded.

Skin Graft for Leg Ulcer

Q.—*A woman aged 56 has a leg ulcer of twenty years' duration; it measures 4 by 6 inches (10 by 15 cm.). There is a watery odourless discharge; the edges are thick and sclerotic. How should this be prepared for skin-grafting and how should the graft be made?*

A.—The problem in such leg ulcers is to achieve a clean vascular base free from scar tissue. Preliminary rest in bed, with four-hourly eusol packs, is helpful; but careful excision of the area and its base at operation is essential. An alternative regimen involves the Bunyan–Stannard envelope routine. Thin razor grafts "take" best, and it may be safer to use them in "postage-stamp" form. It is assumed that there are no associated varicose veins.

Calcium Metabolism in Osteitis Deformans

Q.—*Has recent work on calcium metabolism thrown any light on the treatment of Paget's disease (osteitis deformans)?*

A.—The answer to this question must unfortunately be in the negative. The general consensus is that no convincing alleviation of symptoms can be consistently obtained by treatment based on any particular concept of the role of calcium metabolism in this disease. It has of course been claimed by many workers that osteitis deformans is a manifestation of hyperparathyroidism, though the cause of the alleged hyperparathyroidism has not been demonstrated. A recent theory has been advanced by Helfet, who suggests that the fundamental cause is a retention of phosphates in the body and that this stimulates a compensatory hyperparathyroidism. He has accordingly advocated treatment by the administration of small doses of aluminium acetate, which inhibits the absorption of phosphorus from the intestine by combining with it to form insoluble aluminium phosphate. This is excreted unchanged by the bowel. Although promising results have been claimed from this treatment in a small number of patients it is impossible to contrast them with suitable controls because of individual variations in the natural course of the disease. Much further evidence is therefore required before the merits of this line of treatment can be fully evaluated.

Relaxation of Bronchial Spasm

Q.—*Has 50% ether in 50% olive oil given as a retention enema any effect on bronchial spasm and on tenacious mucus? What should be the dose and how often may it be repeated?*

A.—If ether is absorbed from a retention enema of this composition in sufficient amount to relax bronchial spasm it would certainly intoxicate the patient. Such a treatment should not be used, as it is most unlikely to be effective.

Whalemeat and Iodine

Q.—*It is suggested that whalemeat is probably rich in organic iodides, and therefore should be a valuable food in chronic nervous diseases. Is there any foundation for this idea?*

A.—It appears that no estimation of iodine in whalemeat has been made. It seems likely, however, that whalemeat does contain relatively large amounts of iodine, like other foods which come out of the sea. It would be difficult for the whale to avoid being iodine-rich. It is impossible to give a precise answer to the question about chronic nervous diseases. It seems to be true that a good many people are benefited by the administration of iodine. Some think that the benefit of cod-liver oil is due in part at least to the iodine it contains. It is probable that many people eat a diet which is for them partly deficient in iodine, and this accounts for the improvement they observe when iodides are taken. Iodine is, of course, essential for the thyroid gland. In many conditions, however, sodium iodide administered without precise reason seems to be beneficial: amounts such as 5 gr. (0.32 g.) daily by mouth are usual.

White of Egg

Q.—*Am I right in thinking that raw white of egg is not digested and absorbed, and that consequently the giving of albumen water is pointless?*

A.—Raw white egg is digestible and readily absorbed. The statement that it is not digested has as little convincing experimental backing as the even more frequently repeated assertion that "lightly cooked" eggs are much more easily digested than the boiled article. Overheating—for example, frying with smoking fat—can, however, greatly decrease the digestibility of egg white.

Black Tongue

Q.—*What is "black tongue"? Is it of any significance in an otherwise healthy individual, and can you suggest any treatment?*

A.—Black tongue is a harmless condition which gives rise to no symptoms. It is usually due to enlargement and hyperkeratosis of the filiform papillae upon which becomes engrafted an infection with a mould, most often *Aspergillus niger*. In many instances the condition disappears spontaneously in a few months. Treatment is not very satisfactory, but scraping under local surface anaesthesia followed by painting of the area with 2% iodine may be effective. Sometimes weak applications of acetic or lactic acid cures the condition: stubborn cases have yielded to irradiation.

Injection of Varicose Veins

Q.—*When I inject superficial varicose veins of the leg a marked discoloration of the vein appears. It persists for a long time and is ugly. There is no extravasation and the discoloration is definitely along the course of the vein.*

A.—In some dark-skinned persons there is a tendency to a permanent brown discoloration of the skin over the thrombosed veins. This is a source of great annoyance to the female

patient. It can be prevented by making "cigarette" rolls of elastoplast, sticking these along the course of the injected vein, and then applying firm elastoplast bandages from toes to thighs for seven to fourteen days. The two walls of the veins are thus brought into contact, a clot does not form, and the exuded blood pigments do not discolour the skin.

Burnt Sugar and Allergy

Q.—*I heard the instructor of a cookery class warn his pupils that the common Continental custom of burning sugar for a base for sauces is liable to produce allergic rashes in some people. Is this suggestion likely or unlikely?*

A.—The suggestion is possible, but further observations and experiments would be necessary to substantiate it. Although some patients suspect sugar as the cause of their allergies, this is rarely if ever true. Rowe has suggested that the possibility of sensitization to the allergens in brown sugar or molasses should be kept in mind (Rowe, A. H., *Food Allergy*, 1937, p. 607).

NOTES AND COMMENTS

Enuresis in Young Adults.—Dr. R. F. KAYE WEBSTER (Monkseaton, Northumberland) writes: In four cases of this condition—i.e., chronic bed-wetting—I have found the use of nicotinic acid 50 mg. t.d.s. invaluable. In fact since I started this treatment with these cases I have not found it fail. The worst case was a young man of 30 who had had the condition since a boy; all other treatment failed. With nicotinic acid he was immediately cured. This was essential for him before he married. He has been married a year and is quite happy now. During this year I gave him a small tablet of phenobarbitone in lieu of nicotinic acid to see if cure was imaginary; he came back in a week with condition returned. When nicotinic acid was again given he immediately settled down. My youngest patient is a girl of 11 who has always bed-wetted nightly, sometimes two or three times a night. With 25 mg. of nicotinic acid t.d.s. she stopped from the first day's treatment and has remained cured so far. I am not prepared to analyse the chemistry of the treatment but pass it on as a useful tip, knowing particularly how embarrassing it can be for young men about to marry and young men joining the Forces, with the old-fashioned guard-room routine.

Constipation in an Infant.—Dr. JOYCE E. MARSHALL (London, N.W.) writes: With reference to the question and answer on constipation in an infant (Nov. 29, 1947, p. 896), exception might be taken to the treatment suggested on the following grounds. It is a physiologically unsound approach. For example, the nature of the baby's diet is not considered, whether breast or bottle, fluid intake, and supplements. It is psychologically unsound. Considerable fear may be caused in a normal child by a daily painful stimulus to a highly sensitive area of the body, such as stretching a sphincter or applying an irritant. Cases have been published which show that such treatment, also the use of enemata and suppositories in childhood, may bear a direct relationship to serious disorders in emotional development manifest in later life. In infant-welfare work it is, in my experience, a common feature of this age period that children show a change to infrequent bowel actions for a period, which is usually terminated when mixed feeding is being introduced later. Over-zealous toilet training from early infancy in some cases seems to result in a resistance in the child shown by his withholding his stools for periods, and this may exaggerate the common trend to less frequent bowel actions in this period. In the case described the history of the previous digestive disorder of four weeks' duration possibly resulted in diminished bowel tone, which would be a contributing factor.

Judicial Hanging.—A retired senior medical officer of the English Prison Service writes: From time to time rather absurd statements appear in your columns about judicial hanging. I was thirty years in the English Prison Service and can say that the statements by Dr. J. R. V. Foxton (Dec. 13, 1947, p. 986), especially those attributed to Prof. Frederic Wood Jones, are without foundation. A carefully worked-out "drop" is used on all occasions. All the cases at which I was present (28 in number) had a post-mortem examination—at first partial only, but latterly a full post-mortem examination—which showed in each case fracture dislocation of the cervical vertebrae with rupture of the cord. In every case the "knot" was placed at the angle of the jaw.

Dr. PAUL G. DANE (St. John's Wood, London, N.W.) writes: With reference to Dr. J. R. V. Foxton's remarks on judicial hanging (Dec. 13, 1947, p. 986), some years ago, together with Dr. G. C. Godfrey, I attended the execution of six criminals in Melbourne Gaol. Death was instantaneous in each case. Some hours after death I performed a necropsy, and in each case the second cervical vertebra was fractured. Definite preparations based upon experience are made for each execution—the length of the drop varying with the weight of the victim, and the gauge and quality of the rope definitely assessed.

Food Allergy.—Dr. JOHN FREEMAN (London, W.) writes: With regard to the courteous reply by your adviser (Dec. 13, 1947, p. 986), I nevertheless stick to my guns. My co-workers and I have usually found test feeding to be unreliable: it is far too difficult to make in this way anything like a crucial experiment. On the other hand, skin testings with egg protein are reliable—so far as they go, but no further. I agree emphaticallly with your adviser that they are often misleading, but that is because of faulty interpretation; a definite positive does *not* mean necessarily that there is an important causal relationship between, say, egg protein and the disease in question. An egg sensitiveness can most certainly be removed by inoculation treatment, if thought worth while; and this usually causes less hospitalization than careful feeding experiments would entail.

Chilblain of the Nose.—Dr. J. F. LYONS (Almondsbury, nr. Bristol) writes: With reference to your correspondent's question (Dec. 20, 1947, p. 1017) I suggest that he should apply a solution of either 1 or 2% picric acid to the parts two or three times daily for a few days. I have found this treatment very satisfactory in relieving the tension and irritation in chilblains of the hands and feet.

Ringworm of Scalp.—Col. W. H. CRICHTON, C.I.E., I.M.S.(ret.), writes from Sittingbourne, Kent: Dr. I. M. Scott's comment (Dec. 27, 1947, p. 1066) on my letter on the treatment of an outbreak of ringworm of the scalp in North Devon calls for a clarification if a useful measure of treatment is not to be lost to the profession. In the first place it should be understood that the form of treatment I employed—namely, depilation with a saturated solution of $KMnO_4$ applied for 14 days followed by applications of Whitfield's ointment—was one recommended by an experienced dermatologist *as an alternative to x-ray treatment*, which is often extremely difficult or impossible to obtain. Secondly, my cases in the North Devon outbreak were all definitely proved to have been infected with *Microsporon felineum*, which undoubtedly responded to the treatment to the extent of cure if this can be measured by subsequent observation over a period of several months and by the fact that specimens of stumps pulled out after completion of the course of treatment were found negative by the county laboratory. To my knowledge there has been no recurrence. Thirdly, I have been advised that infections with *M. felineum* are much more susceptible to treatment than those of *M. audouini*, and the success achieved in the North Devon outbreak may therefore be attributed to this fact. On the other hand I have hitherto found no evidence that this form of treatment has been tried in cases of proved *M. audouini* infection and, if so, with what result. Lastly, it should be noted that in several cases the course of treatment had to be repeated once and even twice before a negative laboratory result was finally obtained. I do not know if Dr. Scott has actually had any experience of this form of treatment for tinea capitis, but it certainly would not be fair to condemn it without a trial.

Dr. ROBERT ANDERSON (Erdington, Birmingham) writes: Dr. I. M. Scott (Dec. 27, 1947, p. 1066) states that there is no effective vehicle to carry a fungicide inside the hair shaft. I think glacial acetic acid acts in this way. A layman gave me the method and I found it always successful. The acid is applied with a glass rod or cotton-wool on a probe. Immediately a whiteness appears a pad of cotton-wool squeezed out of very hot water is applied. That removes the stinging of the acid. Next day the hairs can be easily depilated.

In 1910 I attended a family of five children—two girls and three boys—who were all suffering from tinea. I had the boys shaved but only had the girls' hair cut round the affected areas. The girls had only one patch each, but in the case of the boys the disease was scattered all over their scalps. I found the hairs came out quite easily without breaking. It took me a month or six weeks to finish the epilation.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated.

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SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY JANUARY 24 1948

INSURANCE ACTS COMMITTEE

The following resolution was passed at a special meeting of the Insurance Acts Committee on Jan. 15.

"The Insurance Acts Committee, representing every insurance practitioner in the country, owes it to its constituents to make abundantly plain exactly where it stands on the grave issue which now confronts insurance practitioners, as it does other members of the profession. Fully conscious of all the implications, the Committee condemns the National Health Service Act, 1946, in its present form as contrary to the best interests of the public and advises insurance practitioners firmly to reject it in the forthcoming plebiscite."

The meeting was called to consider the situation in relation to the National Health Service in so far as it affects insurance practitioners, including the desirability of convening a Special Conference of representatives of Local Medical and Panel Committees. Dr. E. A. Gregg presided, and there was a full attendance.

The Chairman of Council, Dr. Dain, said that after the result of the plebiscite was known there would be another Special Representative Meeting, which had been fixed for March 17, and the Committee might think it desirable to hold a Special Panel Conference at about the time of that meeting. Should there be an adequate majority against acceptance of service a good deal of organization work would have to be done, particularly in panel committees.

The Committee decided that a Special Panel Conference should be called for March 16.

The question was then debated at length whether the Insurance Acts Committee as such should give a lead to insurance practitioners as distinct from the lead which the Council is giving to the entire profession. The Secretary detailed the various documents which would be sent out to members of the profession before the plebiscite. Although some members of the Committee desired that a special communication should be sent individually to insurance practitioners, they recognized that this would impose an addition to the heavy work at present being done at Headquarters, making it virtually a physical impossibility. It was suggested that any manifesto of this kind might be sent to local medical and panel committees and distributed locally, but in the end the Committee agreed that the manifesto, addressed specially to insurance practitioners, should be included in the second set of documents to be sent out to the whole profession.

Discussion then took place on the nature of the statement to be made. Some members of the Committee were anxious that it should be a detailed statement of objection to the Minister's contentions, but here again it was pointed out that such detail was covered by the documents already prepared. The resolution set out above was thereupon carried, and forty members of the Committee present signed their names to the document. Two members abstained from signing, saying that they wished to leave the vote in the plebiscite to the free deliberation of the individual, uninfluenced by any lead from the centre.

Purchase and Sale of Practices

Following a resolution of the last Annual Conference, the Committee had asked one of its members, Dr. F. M. Rose, to prepare a memorandum on the possibility of establishing a special fund to finance the purchase and sale of practices, the scheme being so designed as to eliminate the difficulties and objections experienced in the past. Dr. Rose brought forward a memorandum in which the whole position was examined. One of his recommendations was that the purchase price of practices should be such that it would be possible to redeem the debt out of income in ten years or less. Dr. Rose considered that the purchase price, in particular of smaller practices, had been too high in the past, and that if the profession valued the retention of goodwill it should be prepared to make a sacrifice by a reduction in sale price. If 1¼ years' purchase was regarded as a maximum for higher-income practices, few doctors, in view of the increase in income of most practices since 1939, would receive less than the 1939 value at the rates accepted then. This was challenged by one member of the Committee, who contended that the devaluation of the pound made it not sensible to talk about cutting the value of capital.

Dr. Rose also suggested the setting up of a central agency under medical control, replacing all existing agencies, to give advice on matters relating to practice transfers, partnerships, and assistantships, to furnish particulars of all vacancies, to arrange loans if financial arrangements were desired, and to supervise legal agreements.

The Chairman said that their minds were very much occupied with many matters which made it difficult at the moment to give the attention it deserved to this complex question. It was accordingly deferred to the next meeting with a view to the setting up of a section of the Committee to proceed further with the question.

Other Business

Dr. Sutherland, chairman of a subcommittee which has been examining the draft medical card with a view to discussing with the Ministry such modifications as were considered desirable, reported a number of detailed recommendations which were provisionally approved; the subcommittee has not yet finished its work. Dr. Pridham, as chairman of the Organization Committee, reported that that body was of opinion that it was premature to consider any changes in the constitutional powers of the Insurance Acts Committee and the General Practice Committee, though with the shaping of events such consideration may soon become necessary.

It was reported that a reply had been received from the Ministry to the Committee's application in September last for an increase in the capitation fee for emergency drugs and appliances. The Minister had decided that the existing capitation fee payable to insurance practitioners for the provision of drugs and dressings before a supply could be conveniently obtained otherwise under the medical benefit regulations should be doubled in all areas, with effect from Oct. 1, 1947. A circular on the subject is shortly to be issued.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

County Borough Councils.—Gateshead.

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Leyton, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

HEARD AT HEADQUARTERS

A Good Day's Work

The Special Representative Meeting was a businesslike affair, without any oratorical embroidery. Representatives seemed to feel that the time for talk had passed. The purpose of the meeting was to secure the most clear and unambiguous expression of opinion in the plebiscite. The absence of the Chairman of Council at the beginning caused some concern, but he appeared within half an hour and explained that the train from Birmingham, desiring no doubt to celebrate its recent nationalization, had taken a roundabout, erratic, and unscheduled course to Euston, arriving an hour late. The serious part of the business over, Mr. Lawrence Abel again obliged with some nursery rhymes adapted to the occasion.

Form Filling

A very sensible remark was made by the opener of the discussion at a meeting of the Royal Statistical Society the other day—Mr. H. Cotton, of the Nuffield Bureau at Oxford. He was talking about the collection of morbidity data from hospitals, but his point has a wider connotation. He deprecated the excessive use of questionaries and "quiz" forms intended to guarantee the collection of all possible relevant information. A thing to be particularly resisted in drawing up a question form, he said, is to collect something interesting but not vital simply because the opportunity to do so is there. A form which requires a busy doctor to enter particulars which can be obtained as easily and as accurately by a clerk is not a sensible form. The doctor should be asked to complete only that part of a form which cannot be completed by anybody else, and if he has already given the needed information in some other document he should not be asked to repeat it. Mr. Cotton was all against omnibus forms which provide for details not generally applicable, or at any rate not applicable to a substantial proportion of all cases.

Transatlantic Glimpses

An American doctor seems to be asking rather a lot of human nature. He says that it is his custom to send a special Christmas greeting to patients who have owed him a guinea or less for over a year. He sends them a receipted account. Often, he says, they return the greeting, including payment in full of the outstanding debt.

An Army medical officer had a corporal in his charge who was suffering from bronchopneumonia. He sent a telegram to the corporal's mother, telling her of her son's serious illness but assuring her that he was receiving all possible attention. Next day the corporal himself received a telegram from his mother: "Let me know how you are getting on. If you die, have body shipped home."

Ready for the Post

Headquarters just now are asking big things from the General Post Office. This week a detailed analysis of the Minister's reply, the pictorial folder already referred to in these notes, and the reprint of the leading article in the *Journal* of Jan. 17 have been sent out to all members of the profession. Next week there will go out two more documents. It is simple to say, "Let it be circulated to all members of the profession," but few have any idea of the Herculean labour behind such an instruction. Including the sending-out of the Negotiating Committee's case and the Minister's reply, the two circularizations just mentioned, and finally the plebiscite forms, something like 240,000 envelopes will have been addressed. The cost in postage, if we assume a penny stamp on each envelope, is £1,000, but the bigger thing is the amount of work involved in the careful addressing and dispatching of this record documentation.

RETURN TO PRACTICE

The Central Medical War Committee announces that Mr. R. Vaughan Payne, M.Chir., F.R.C.S., has resumed civilian practice at Woodhay House, 17, Osborne Road, Windsor.

Association Notices

SPECIAL MEETING

Consultants and specialists will meet to discuss the National Health Service Act and the plebiscite at B.M.A. House, Tavistock Square, W.C.1, at 8.30 p.m. on Tuesday, Jan. 27. *Chairman.*—Mr. A. M. A. Moore, Chairman of Consultants and Specialists Committee. *Speakers.*—The Right Honourable Lord Horder, Dr. Geoffrey Marshall, Mr. A. Dickson Wright, Mr. N. Ross Smith.

Branch and Division Meetings to be Held

BOURNEMOUTH DIVISION.—At Boscombe Hospital, Friday, Jan. 23, 8.15 p.m. Report of Representatives to Special Representative Meeting, Jan. 8; National Health Service Act.—The Plebiscite. Address by Dr. D. P. Stevenson, Assistant and Regional Secretary, B.M.A., followed by questions and discussion.

DERBY DIVISION.—At Derbyshire Royal Infirmary, Tuesday, Jan. 27, 7.30 p.m. Mr. A. G. G. Melville: Demonstration of Results of Radiotherapy; 8.15 p.m., Mr. J. R. Ratcliffe: Cancer of Stomach, Colon and Rectum.

METROPOLITAN COUNTIES BRANCH.—At B.M.A. House, Tavistock Square, London, W.C., Tuesday, Feb. 3, 5 p.m. Lecture to Senior students and newly qualified practitioners by Mr. Claud Mullins: "The Court and the Doctor."

H.M. Forces Appointments

ARMY

Colonel Q. V. B. Wallace, C.B.E., M.C., late R.A.M.C., has been retained on the Active List supernumerary to Establishment.

Colonel F. G. Flood, O.B.E., M.C., late R.A.M.C., has retired on retired pay.

ROYAL ARMY MEDICAL CORPS

Captain (War Substantive Major) E. L. O. Hood to be Major.

Captain E. A. Balls, from R.A.M.C., Emergency Commission, has been granted a Short Service Commission in the rank of Captain.

LAND FORCES: EMERGENCY COMMISSIONS

ROYAL ARMY MEDICAL CORPS

War Substantive Captains S. Hickling, G. H. Robertson, and K. M. Robertson have relinquished their commissions and have been granted the honorary rank of Major.

Short Service Commission, Specialist.—War Substantive Captain R. Schneider has relinquished his commission and has been granted the honorary rank of Major. F. G. W. Marson to be Lieutenant.

War Substantive Captains F. O'N. Daunt and D. C. Roberts have relinquished their commissions on account of disability and have been granted the honorary rank of Captain.

Lieutenants J. R. G. Edwards, J. J. Gilleran, A. G. M. Watt, J. W. Aalders, E. L. Arnold, M. A. Cooke, J. W. E. Dunphy, C. L. Joiner, C. I. Levene, E. R. O. E. Spearing, W. O. Spence, and R. P. Harwood to be Captains.

INDIAN MEDICAL SERVICE

Lieutenant-Colonel D. P. Lambert has retired and has been granted the honorary rank of Colonel.

Lieutenant-Colonel G. F. Taylor has retired on account of ill-health and has been granted the honorary rank of Colonel.

Lieutenant-Colonel R. K. Tandon to be Colonel.

Lieutenant-Colonel P. M. Antia has retired.

Major C. J. H. Brink has retired receiving a gratuity.

COLONIAL MEDICAL SERVICE

The following appointments have been announced: E. W. Brett, L.R.C.S., Lady Medical Officer, Nigeria; T. W. Buckley, M.B., B.Ch., Travelling Medical Officer, Sarawak; R. C. Drummond, M.B., Ch.B., Medical Officer of Health, Tanganyika; G. M. Gorrie, M.B., Ch.B., and T. L. W. McCullagh, M.C., M.B., B.S., Medical Officers, Kenya; R. M. Irwin, M.B., Ch.B., Medical Officer, Fiji; J. Toner, M.B., B.Ch., Medical Officer, Nigeria; F. W. M. Lamb, M.B., Pathologist, Health Department, Palestine; F. R. S. Kellett, M.B., Medical Officer, St. Lucia, Windward Islands; L. Winkelhaken, M.D., Supernumerary Medical Officer, Leeward Islands; L. Wittels, M.D., Medical Officer, Gold Coast; R. C. Burgess, M.B., Ch.B., Senior Nutrition Officer, Malaya; N. Chilton, B.Ch., D.T.M.&H., Senior Medical Officer, Tanganyika; G. D. Drury, M.R.C.S., L.R.C.P., Senior Medical Officer, Labour Department, Kenya; A. M. Fleming, M.B., B.S., R. McFiggans, M.B., Ch.B., and H. N. Turner, M.B., B.Ch., Senior Medical Officers, Kenya; A. H. Lowther, M.B., Ch.B., Specialist, Grade B., Ophthalmologist, Malaya.

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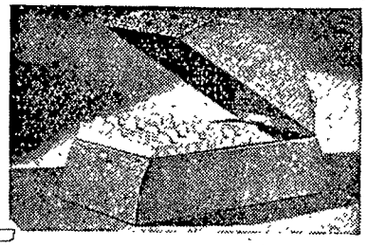

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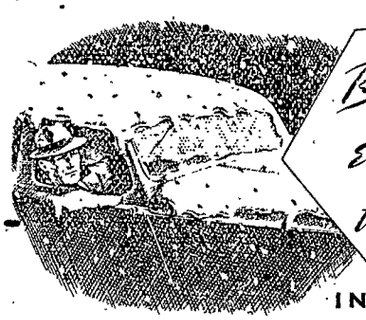

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★ Warmth for winter—coolness in summer
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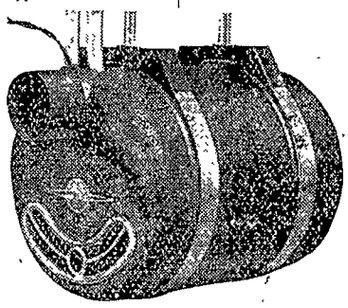

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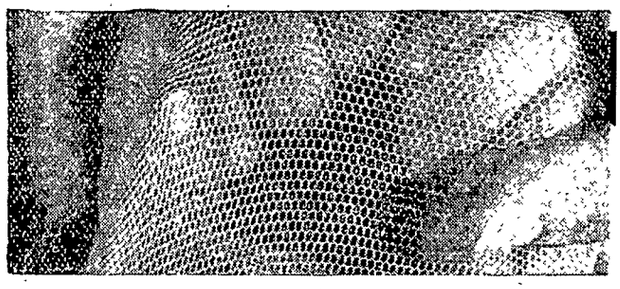

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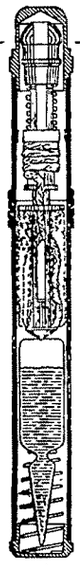

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For these reasons, 'Alasil' is an analgesic, antipyretic, and anti-rheumatic, which can be administered with complete confidence in all the conditions in which such an agent is indicated. It is so well tolerated that its use can be continued to the desired extent.

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Phenoxetol is very effective in pyocyanea infections of burns or superficial wounds. It is especially useful in the preparations of surfaces for skin grafting associated with Ps. pyocyanea, and may also be used together with Penicillin in solutions and creams.

References: Lancet, 1944, 247, pp. 175 and 176. British Medical Journal: 1946, I, p. 50. Pharmaceutical Journal: 1945, 155, p. 245.

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During pregnancy Andrews Liver Salt will be found of great service. Its pleasant taste and refreshing qualities make it an acceptable draught, which can be repeated with advantage two or three times a day if necessary. Taken thus, Andrews obviates the tendency to constipation and also relieves hepatic congestion. In the persistent vomiting of pregnancy the sedative effect of Andrews will be found helpful, and its aperient action is of great value in cases of renal insufficiency. During lactation, Andrews can be used with confidence for the relief of constipation.

APPROX. ACTIVE CONSTITUENTS:

Tartaric Acid	26.33%
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During the present International Emergency, Importation is restricted.

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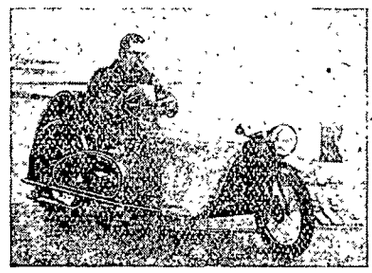

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The old-fashioned and ill-advised will still give baby his dummy and wonder later why teeth come through badly in over-crowded jaws. Bickiepegs are very tough biscuit bones that solve teething problems so that sound well spaced teeth come through comfortably in well shaped jaws.

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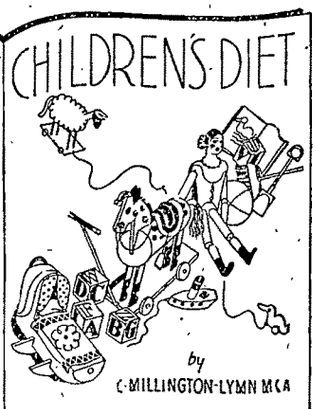
NOTE FOR FATHERS *You can earn full marks (for once) if you ask Bickiepegs Ltd. of Welwyn Garden City to send your wife a copy of 'Children's Diet'. Enclose 7d. in stamps and you will receive free samples of Bickiepegs products.*



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★ *SERVICE MEMBERS may have difficulty in supplying recent testimonials, but this should not deter them from applying.*

A—Whole-time resident house appointments open to practitioners without previous experience.
B1—Whole-time appointments usually resident within the senior establishment—e.g., Registrar, R.S.O., etc.
B2—Whole-time house appointments not within the senior establishment, usually resident, and usually held by practitioners with six months' experience.
R—Male, liable to military service under the National Service Acts.
W—Women practitioners.

APPOINTMENTS

THE ROYAL NEW ZEALAND SOCIETY FOR THE HEALTH OF WOMEN AND CHILDREN (INC.) (PLUNKET SOCIETY) ASSISTANT MEDICAL ADVISER TO THE COUNCIL

Applications for the above position are invited from duly registered medical practitioners under thirty-five years of age, with experience in Paediatrics and Child Health. Duties will commence on August 1, 1948. The commencing salary will be £1,000 per annum (New Zealand currency). Conditions of appointment and duties may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London, W.C.2, with whom applications close on February 16, 1948.

AUCKLAND HOSPITAL BOARD, New Zealand DIRECTOR OF RADIOLOGY

Applications are invited from qualified medical practitioners of the British Empire of at least seven years' standing for the position of Director of Radiology, Auckland Hospital Board's Institutions. Applicants must possess D.M.R.E. or equivalent degree and the appointee shall be registered in New Zealand before taking up duty. The salary, living out, shall be at the commencing rate of £N.Z.1,400 per annum, rising by one annual increment of £N.Z.100 to £N.Z.1,500 per annum. Any further increments will necessarily be in accordance with the salary scale to be approved by the Director of Stabilization on the advice of the Advisory Committee to the Hon. the Minister of Health. Conditions of appointment and form of application may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London. Applications, addressed to the undersigned, will close at the Office of the Board, Kitchener Street, Auckland, New Zealand, at noon on Monday, February 23, 1948.—R. F. Galbraith, Secretary.

UNIVERSITY OF SYDNEY SENIOR LECTURER IN GENERAL BACTERIOLOGY

Applications are invited for the position of Senior Lecturer in General Bacteriology. Preference will be given to candidates with experience and training in non-pathogenic Bacteriology and with some biochemical background. Duties: To conduct an elementary course in General Bacteriology for third-year students and an advanced course for fourth-year (Honours) students in the Faculty of Science. Adequate opportunities for research work. The salary falls within the scale £750 (Australian) ranging to £1,000 per annum (Australian) by annual increments of £50; the commencing salary will be fixed according to qualifications and experience. The salary is subject to deductions under the State Superannuation Act. Travelling expenses will be paid as arranged at time of appointment. Generally speaking, they will cover first-class steamer fare in the case of a successful applicant coming from abroad. Further particulars may be obtained from the Secretary, Universities Bureau of the British Empire, 8, Park Street, London, W.1. Applications, giving the names of three referees, should reach the undersigned not later than May 1, 1948. —G. Dale, Registrar, University, Sydney.

UNIVERSITY OF ALBERTA Vacancies September 1, 1948

PROFESSOR OF BACTERIOLOGY AND PROFESSOR OF PHYSIOLOGY, both Chairs with initial salary of $5,000 to $6,000, according to qualifications and experience.

ASSOCIATE PROFESSOR OF BACTERIOLOGY, salary range $3,900 to $4,400.

ASSISTANT PROFESSOR OF ANATOMY, salary range $3,200 to $3,800.

Removal grant equal to two months' salary for married men or one month's salary for single men from overseas.

Applications, giving age, nationality, marital status, and other relevant details; academic qualifications, experience, and publications; names and addresses of persons to whom reference can be made, stating salary required, and supplying a recent photograph or snapshot, should reach the Dean of Medicine, University of Alberta, Edmonton, Canada, not later than March 1, 1948.

QUEEN VICTORIA MEMORIAL HOSPITAL 172, Lonsdale Street, Melbourne, Australia MEDICAL SUPERINTENDENT

Applications are invited from fully qualified medical women for the position of Medical Superintendent (210 bed hospital for women and children—obstetric, surgical and medical beds). Salary at the rate of £500 per annum, plus board and residence. Applications, stating age and experience, and enclosing copies of testimonials, should reach the Manager not later than February 15, 1948.—Marion Mossman, Manager and Secretary.

MINISTRY OF PENSIONS STOKE MANDEVILLE HOSPITAL, Aylesbury, Bucks SENIOR ANAESTHETIST

A vacancy exists for a Senior Anaesthetist at the above named hospital; and applications are invited from registered medical practitioners, men and women. Applicants must hold the qualification of D.A. Salary £800 per annum, plus consolidation addition and free board and lodging, or an allowance of £100 per annum in lieu if permission is given to live out. Suitably qualified R practitioners holding B1 posts and who are ineligible for H.M. Forces are invited to apply. Applications, stating age, qualifications (with dates) and nationality, accompanied by copies of two recent testimonials, should be addressed to the Secretary, Ministry of Pensions, Medical Services Division, Norcross, Blackpool, Lancs.

ROOKWOOD HOSPITAL, Llandaff, Cardiff SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for appointment as Surgical Officer (B1) at the above named hospital. Applicants should have held house appointments and have had surgical experience. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary is at the rate of £350 to £550 per annum, according to experience, plus appropriate consolidation addition. The post is non-residential and an allowance of £100 per annum is given in lieu of board and lodging. Applications, stating age, qualifications (with dates), and nationality, accompanied by copies of two recent testimonials, should be addressed to the Secretary, Ministry of Pensions, Medical Services Division, Norcross, Blackpool, Lancs.

RONKSWOOD HOSPITAL, Worcester MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, men and women, including R practitioners who already hold A posts, for appointment as Medical Officer (B2) at the above named hospital. The appointment offers opportunities for experience in general medicine. If an R practitioner is appointed the appointment will be limited to six months. Salary £300 per annum, plus consolidation addition and free board and lodging, or an allowance of £100 per annum in lieu if permission is given to live out. Applications, stating age, qualifications (with dates) and nationality, accompanied by copies of two recent testimonials, should be addressed to the Secretary, Ministry of Pensions, Medical Services Division, Norcross, Blackpool, Lancs.

CHILDWALL HOSPITAL, Liverpool MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for appointment as Medical Officer (B1) at the above named hospital. Applicants should have held house appointments and have had medical experience. Suitably qualified R practitioners holding B2 appointments are invited to apply Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary is at the rate of £350 to £550 per annum, according to experience, plus appropriate consolidation addition and free board and lodging, or an allowance of £100 per annum in lieu if permission is given to live out. Applications, stating age, qualifications (with dates), and nationality, accompanied by copies of two recent testimonials, should be addressed to the Secretary, Ministry of Pensions, Medical Services Division, Norcross, Blackpool, Lancs.

GOVERNMENT TRAINING CENTRE, Yardley CENTRE MEDICAL OFFICER

Applications are invited from registered medical practitioners (preferably with industrial experience) for a part-time appointment as Centre Medical Officer at the Government Training Centre at Clay Lane, Yardley, Birmingham. Duties include general medical supervision, including supervision of first-aid arrangements, etc., and (where required) examinations of trainees. Attendance will be required for about two hours a week in one or two sessions. Fees are by scale, depending on length of session, at rate of £1 1s. for a session not exceeding one hour, and £1 11s. 6d. for a session not exceeding two hours (subject to revision. Negotiations pending). Applications, stating age and experience, qualifications, with dates and period of service (if any) with Forces, should be sent to the Secretary, Ministry of Labour and National Service (P.R. Dept.), Room 013, St. James's Square, S.W.1, by January 31, 1948.

CIVIL SERVICE COMMISSIONERS MEDICAL OFFICERS

The Civil Service Commissioners give notice of about ten vacancies in the general service grade of Medical Officer in the permanent establishment of the Home Civil Service to be filled by competitive interview. Vacancies arise at the Rampton State Institution of the Board of Control, in the Ministries of Civil Aviation, Pensions and Supply, and in the Prison Commission. Candidates must be qualified medical practitioners not less than 28 on January 1, 1948. The consolidated salary scale (London) for both men and women is £1,000 by £30 to £1,300 by £50 to £1,400; the £1,000 is linked to age 35, £30 being deducted for each year of age below 35 and added for each year over 35 up to age 40; deductions up to £80 are made for posts outside London. Application forms from civilian candidates in the United Kingdom must be completed and in the hands of the Commissioners not later than February 19, 1948; those from candidates now serving in H.M. Forces or the Women's Services or civilians now overseas not later than March 20, 1948. Forms of application and copies of the regulations may be obtained from the Secretary, Civil Service Commission, 6, Burlington Gardens, London, W.1, quoting C.S.C. 51A.

OXFORD REGIONAL HOSPITAL BOARD ASSISTANT SENIOR MEDICAL OFFICER

Applications are invited for the post of Assistant Senior Medical Officer at an inclusive salary of £1,450, rising by annual increments of £50 to £1,650, subject to a decrease of 6 per cent for superannuation purposes. Candidates must have had experience in hospital administration (general, special or mental). Applications, endorsed Assistant Senior Medical Officer, together with the names of three referees, should reach the Secretary, The Oxford Regional Hospital Board, 16, King Edward Street, Oxford, not later than January 31, 1948.

KENT EDUCATION COMMITTEE ASSISTANT COUNTY MEDICAL OFFICER (School Health Service)

Applications are invited from male and female practitioners, including those in H.M. Forces, for the above appointment in the Margate-Canterbury District. The salary will be within the range of £650 by increments of £25 to £850, plus a temporary cost-of-living allowance. The appointment is superannuable, and the successful candidate will be required to pass a medical examination. The duties are mainly those in connexion with the School Health Service, but the person appointed may be required to undertake such other duties (including duties in Maternity and Child Welfare Clinics) as may be directed by the Committee's School Medical Officer. Preference will be given to those candidates who have had special experience in the diseases of children. The officer appointed will be required to provide a car, for which a travelling allowance will be paid in accordance with the County Council's scale. Applications, stating age, qualifications and experience, accompanied by the names and addresses of two persons to whom reference may be made as to professional ability and character, should be addressed to the undermentioned not later than February 5, 1948.—A. Elliott, M.D., School Medical Officer, County Hall, Maidstone.

BLACKBURN JOINT HOSPITALS ADVISORY COMMITTEE ASSISTANT RADIOLOGIST

Applications are invited from registered medical practitioners holding appropriate qualifications for the post of Assistant Radiologist. The post is a whole-time one with a salary of £900 per annum, rising by two annual increments of £50 to £1,000, with membership of the Federated Superannuation Scheme. The duties are diagnostic at the Blackburn and East Lancashire Royal Infirmary and Queen's Park Hospital, Blackburn, but include, at present, participation in the work of the Therapeutic Department at the Royal Infirmary. Applications, with three recent testimonials (or names for reference), should be sent as early as possible to T. Dewhurst, General Superintendent and Secretary, Royal Infirmary, Blackburn.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE NEWCASTLE GENERAL HOSPITAL

Applications are invited from registered medical practitioners for the following posts, tenable for six months and vacant on February 1, 1948:

FOUR HOUSE SURGEONS (A). Salary at the rate of £150 per annum together with cost-of-living bonus and residential emoluments. For these posts, practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1, immediately.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

Have you read the notice at top of page 11 ?

BROCKHALL CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Langho, near Blackburn, Lancs
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) including R practitioners holding B2 and (if ineligible for H.M. Forces) those holding B1 appointments for the post of Assistant Medical Officer (B1). Salary £465 rising by annual increments of £30 to £555 per annum, with full residential emoluments valued at £200 per annum. An additional £50 per annum is payable to holders of the D.P.M. or recognized equivalent, together with the current cost-of-living bonus. There is no accommodation at present for a married man. The appointment will be pensionable and the successful applicant will be required to pass a medical examination. The Institution is modern, fully equipped and accommodates 1,996 patients, affording extensive experience in mental deficiency practice. Applications giving the usual particulars should be sent to the Medical Superintendent as soon as possible.

ADMINISTRATIVE COUNTY OF ESSEX
TEMPORARY ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The County Council invite applications for the above-mentioned temporary appointment from registered medical practitioners with experience in maternity and child welfare and school health work. The appointment will be for a limited period and so far as can be ascertained will not be continued beyond July 5, 1948. Salary will be at a rate of not exceeding £950 a year according to experience, plus bonus and travelling expenses. Applications, on forms obtainable from me and accompanied by copies of not more than three recent testimonials, which will not be returned, should be addressed to me and delivered at the County Hall, Chelmsford, as soon as practicable. Full information should also be given as to the applicant's position in relation to military service. Canvassing, directly or indirectly, is forbidden.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

BOROUGH OF WALTHAMSTOW
THORPE COOMBE MATERNITY HOSPITAL
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications are invited from medical women for the position of Junior Resident Medical Officer (B2) at a salary of £250 per annum, plus full residential emoluments, and cost-of-living bonus at present £24 1s. per annum. The person appointed will be eligible for consideration to proceed to the senior appointment. The hospital is recognized for work done for the D.R.C.O.G. The hospital has 54 beds. The annual number of confinements is over 1,200. The appointment will be subject to the Local Government Superannuation Act, 1937, to the Council's conditions of service, to the successful candidate passing a medical examination, and to termination by one month's notice on either side. Application forms are obtainable from the undersigned, and must be returned, endorsed "Junior R.M.O.," and accompanied by copies of three recent testimonials, as soon as possible. Canvassing in any form will be deemed a disqualification and applicants must disclose any relationship to any member of the Council or holder of any senior office under the Council.—G. A. Blakeley, Town Clerk, Town Hall, Walthamstow, E.17.

BOROUGH OF DAGENHAM
DEPUTY MEDICAL OFFICER OF HEALTH
ASSISTANT MEDICAL OFFICER

Applications for these posts are invited from male registered medical practitioners, preferably with experience in Maternity and Child Welfare and School Medical work. Salary scale £750 by £25 to £950 per annum plus bonus at present £59 16s. The Deputy Medical Officer of Health will be paid an additional £50 per annum. A car allowance on a mileage basis is payable in each case. The possession of the D.P.H. will be deemed an advantage. Application forms and further particulars from the Medical Officer of Health. Closing date February 14, 1948. Canvassing disqualifies. The Council cannot offer housing accommodation. —Keith Lauder, Town Clerk, Civic Centre, Dagenham.

CITY OF YORK
CHEST REGISTRAR
at the Fairfield Sanatorium and the City General Hospital

Applications are invited from medical practitioners who are members of the Royal College of Physicians or hold a higher medical qualification, for the post of Chest Registrar to Fairfield Sanatorium and the City General Hospital. Experience in the prevention, diagnosis and treatment of pulmonary tuberculosis is essential. Commencing salary £900 rising by bi-annual increments of £50 to £1,087 10s. plus war bonus at present fixed at £59 16s. per annum. Applications accompanied by two recent testimonials and the names of two persons to whom reference may be made should be submitted to the undersigned not later than Saturday, January 31, 1948.—C. B. Crane, M.B., B.S., D.P.H., Medical Officer of Health, Health Department, 50, Bootham, York.

BOROUGH OF TWICKENHAM
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of Deputy Medical Officer of Health. Applicants must be registered medical practitioners holding the D.P.H. or equivalent. The Borough has a population of about 106,000 and is an Excepted District under the Education Act, 1944. The duties will be partly administrative and partly clinical in the Public Health Maternity and Child Welfare and School Health Services or other such work as the Corporation or the Medical Officer of Health may require to be undertaken. The commencing salary will be £950 per annum rising by annual increments of £30 to a maximum of £1,100 per annum, plus bonus at present £59 16s. per annum, and a car allowance ranging from £84 to £108 per annum, plus from 1½d. to 2d. per mile depending upon the horse power of the car. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate selected for the appointment will be required to pass a medical examination. Applications together with the names of two persons to whom reference can be made should be sent to the Medical Officer of Health, Public Health Department, Elmfield House, High Street, Teddington, Middlesex, not later than January 31, 1948. Canvassing, directly or indirectly, will disqualify.—W. H. Jones, Town Clerk, Municipal Offices, Twickenham.

BOROUGH OF SWINDON
ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners for the whole-time permanent appointment of an Assistant Medical Officer of Health and Assistant School Medical Officer at a salary of £650 per annum rising by annual increments of £25 to £850 per annum. In addition, the person appointed will receive such cost-of-living bonus as may from time to time be paid by the Corporation (at present £59 16s. per annum). Applicants must possess the Diploma in Public Health or an equivalent qualification. The appointment, which will be subject to the provisions of the Local Government Superannuation Act, 1937, and, if necessary, to the passing of a medical examination, is terminable by three months' notice on either side. A form of application and conditions of appointment may be obtained from the undersigned and applications endorsed "Assistant Medical Officer of Health," together with the names of three persons to whom reference may be made, must be delivered to me not later than January 31, 1948.—D. Murray John, Town Clerk, Civic Offices, Swindon.

CITY OF STOKE-ON-TRENT EDUCATION COMMITTEE
CHILD GUIDANCE CLINIC STAFF

Applications are invited for the following posts in the Local Authority Child Guidance Clinic about to be set up. The persons appointed will be subject to the Local Government Superannuation Acts or the Teachers Superannuation Acts, whichever is applicable, and a satisfactory medical examination.

1. **PSYCHIATRIST.** (Director of Clinic responsible to School Medical Officer.) (a) Qualifications: Registered medical practitioner holding a Diploma in Psychiatric Medicine with training in Child Psychiatry. (b) Salary Scale: £1,000 to £1,200 by annual increments of £50.

2. **PLAY THERAPIST.** (a) Qualifications: (i) Honours degree in Psychology or equivalent with training and/or experience in Play Therapy, or (ii) Membership of Association of Psychiatric Social Workers with training and experience in play therapy. (b) Salary Scales: (i) Men—£700 to £900 by annual increments of £25. Women—£635 to £730 by annual increments of £20. (ii) £420 to £580 by annual increments of £20.

3. **PSYCHOLOGIST (CLINICAL).** (a) Qualifications: Degree in Psychology with training and experience in child guidance work. (b) Salary: In accordance with Scale (i) or (ii).

Forms of application may be obtained from the undersigned, completed and returned as soon as possible. Canvassing is a disqualification.—J. F. Carr, Director of Education, Education Office, Hanley, Stoke-on-Trent.

CITY OF PLYMOUTH
MOUNT GOLD ORTHOPAEDIC HOSPITAL
(120 beds)
Assistant RESIDENT SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B2), including suitably qualified R practitioners now holding A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be renewable for a further period of six months, terminable by one month's notice on either side at any time. Salary is at the rate of £250 per annum, plus war bonus and with full residential emoluments. All other fees received by the officer must be refunded to the City Council. Married quarters are not provided. Preference will be given to applicants who have had some experience of orthopaedic and fracture work. Applications, stating age, nationality, qualifications with dates, and details of previous experience, with copies of two testimonials, should be sent to the undersigned before February 7, 1948.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF BIRMINGHAM
City Bacteriological Department
(a) DIRECTOR, AND (b) DEPUTY DIRECTOR

The Health Committee invite applications from medical men for the above-named posts, vacant by reason respectively of normal retirement and of death. The laboratory deals with the bacteriological and serological work of the public health services of the City and is associated with the National Public Health Laboratory Service. Applicants for either post should have had experience in laboratory work of this character and preference will be given to those who have also had experience of laboratory administration and staff control. The present salary scales are respectively as follows: (a) Director, £1,000 per annum, rising by £50 annually to £1,600 per annum, inclusive. (b) Deputy Director, £900 per annum, rising by £50 annually to £1,200 per annum, inclusive. In both appointments the initial salary up to the maximum of the scale is determined by the candidate's experience. The appointments will be subject to the Local Government Superannuation Act, 1937, to the Birmingham Municipal Officers' Widows' and Orphans' Pension Scheme (if applicable), to the candidate passing a medical examination, and, in the case of the Director three months, and in that of the Deputy Director, one month's notice on either side. Applications, and statement as to the post for which application is made, should be forwarded to the Medical Officer of Health, Council House, Birmingham, 3, not later than Saturday, January 31, 1948.

CITY OF BIRMINGHAM
CANWELL BABIES' HOSPITAL, Sutton Coldfield
HOUSE PHYSICIAN (A)

Applications, including those from practitioners within three months of qualification who are liable to service under the National Service Acts, are invited for the appointment of House Physician (A) at the above Hospital. The appointment will become vacant on March 1, 1948, and will be held for six months. For the first three months, the successful applicant will be appointed to the A post at a salary of £200 per annum, plus full residential emoluments. Thereafter, subject to satisfactory service, the successful applicant will be appointed to the B2 post for a period of three months, at a salary of £250 per annum, plus full residential emoluments. Forms of application may be obtained from the Medical Officer of Health, Council House, Birmingham, 3, and should be returned, together with three testimonials, not later than January 31, 1948.

CITY OF BIRMINGHAM
Public Health Department
TWO HOUSE SURGEONS (A)

Applications, including those from practitioners within three months of qualification who are liable to service under the National Service Acts, are invited for the appointment of House Surgeon (A) (two vacancies) appointments, in the City Maternity Hospitals. The salary will be at the rate of £200 per annum, plus full residential emoluments, for the first three months. Thereafter, subject to satisfactory service, the successful applicants will be appointed to the B2 appointments at a salary of £250 per annum, plus full residential emoluments, for a further period of six months, making a total of nine months in all. The appointments fall vacant on March 1, 1948. The hospitals are recognized for the D.R.C.O.G. Forms of application may be obtained from the Medical Officer of Health, Council House, Birmingham, 3, and should be returned together with copies of three testimonials, not later than January 31, 1948.

CITY OF PORTSMOUTH
SAINT MARY'S HOSPITAL (1,085 beds)
RESIDENT ANAESTHETIST (A)

Applications are invited from male registered practitioners including those within three months of qualification who are liable under the National Service Acts, for the position of Resident Anaesthetist (A post) at the above hospital. The appointment is a temporary one of six months' duration and the salary is at the rate of £250 per annum, with residential emoluments valued at £150 per annum, and a cost-of-living bonus of £29 18s. Ex-Servicemen are especially invited to apply and if they are eligible for acceptance under the Oxford University Scheme for Postgraduate Education of Medical Officers released from the Forces the salary will be at the rate of £350 per annum, plus residential emoluments, as a Class I appointment under that scheme. The hospital is at present seeking recognition for the D.A. and there is a part-time Specialist Anaesthetist on the staff. Applications in writing stating date when available, if appointed, should be made to the Medical Officer of Health, 1, Western Parade, Southsea, not later than Saturday February 7, 1948. —V. Blanchard, Town Clerk City Council Chambers, 1, Clarence Parade, Southsea.

CITY OF BRADFORD
MUNICIPAL GENERAL HOSPITAL, St. Luke's
HOUSE SURGEON (B2)
to the Obstetric Unit

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2) to the Obstetric Unit. Salary £200 per annum, plus full residential emoluments. R practitioners who now hold A appointments may apply, when the appointment will be limited to six months. Applications should be forwarded to the Medical Officer of Health, Town Hall, Bradford, as soon as possible.—W. H. Leathem, Town Clerk, Town Hall, Bradford.

CITY OF COVENTRY
ASSISTANT SCHOOL MEDICAL OFFICER AND ASSISTANT MEDICAL OFFICER OF HEALTH
(Male)

The Coventry Education Committee invite applications for the above post from registered medical practitioners, preferably under 40 years of age. The possession of a Diploma in Public Health will be an advantage. The duties are mainly in connexion with the medical inspection and clinic treatment of school children. The salary payable will be £650, rising by annual increments of £25 to a maximum of £850 per annum, plus bonus, at present £59 19s. 3d. In deciding the commencing salary, account will be taken of previous experience and qualifications. The successful candidate will be required to pass a medical examination as to fitness and to contribute under the Local Government and Other Officers' Superannuation Act, 1937, as amended by the Coventry Corporation Act, 1936, in regard to annuities to Widows, and to the Coventry Municipal Officers' Widows' and Orphans' Pensions Fund. Applications (no forms provided), stating age, qualifications and experience, and enclosing copies of two recent testimonials, should reach the undersigned within ten days of the last appearance of this advertisement.—Charles Barratt, Town Clerk, The Council House, Coventry.

CITY OF CARDIFF
CITY LODGE HOSPITAL
ASSISTANT PAEDIATRICIAN

Applications are invited from specialist medical officers who served in H.M. Forces during the 1939-45 war, for the above mentioned full-time appointment under the terms of Ministry of Health Circular 202/46 dated November 8, 1946. The duration of the appointment will be limited to the interim period pending the establishment of the National Health Service, provisionally fixed for July 5, 1948. The post is primarily for the City Lodge Hospital, Cowbridge Road, Cardiff, but will include duties in the Maternity and Child Welfare and School Health Services. The salary for the post will be at the rate of £1,000 per annum, plus £140 per annum in lieu of residential emoluments. Applications, on forms obtainable from the Medical Officer of Health, City Hall, Cardiff, should be returned to him not later than January 31, 1948. Canvassing will disqualify.—S. Tapper Jones, Town Clerk, City Hall, Cardiff.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
NEWCASTLE GENERAL HOSPITAL
JUNIOR RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners, male and female, for the post of Resident Anaesthetist (B1), which will become vacant on February 1, 1948. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The appointment is tenable for a period of twelve months and the salary is at the rate of £350 per annum plus cost-of-living bonus and the usual residential emoluments. Applications should be forwarded immediately to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1, immediately.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

COUNTY BOROUGH OF NEWPORT
ASSISTANT MEDICAL OFFICER OF HEALTH
(Female)

Applications for the above position are invited from women who are registered medical practitioners, and, preferably, possess a Diploma in Public Health. Salary is £650 per annum, rising by annual increments of £25 to a maximum of £850 per annum, plus cost-of-living bonus. The appointment, which will be whole time, will be chiefly for Maternity and Child Welfare work and the person appointed will be under the immediate supervision of the lady Medical Officer in charge of the Maternity and Child Welfare Department, but will be expected to carry out such additional duties as may be imposed by the Medical Officer of Health to whom she will be responsible. The appointed candidate will be required to pass a medical examination as to physical fitness and contribute to the Corporation Superannuation Fund. The appointment is terminable by two calendar months' notice on either side. Applications, which should be received by February 14, 1948, in candidate's own handwriting on special forms to be obtained from this office, must be sent, with copies of three testimonials, addressed to the Medical Officer of Health, Royal Chambers, Newport, Mon.

COUNTY BOROUGH OF WEST HAM
CENTRAL HOME, Leytonstone, London, E.11
(800 beds, Chronic Sick)
SECOND ASSISTANT RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Second Assistant Resident Medical Officer (B1). Suitably qualified R practitioners holding B1 appointments cannot apply unless they have been rejected by the R.A.M.C. Salary £455 per annum by annual increments of £25 to £555 per annum, plus temporary cost-of-living bonus, together with full residential emoluments valued at £150 per annum. Further particulars and application forms from Medical Officer of Health, 225, Romford Road, West Ham, London, E.7, to be returned to him by January 31, 1948.—E. E. King, Town Clerk, West Ham Town Hall, Stratford, London, E.15.

COUNTY BOROUGH OF SUNDERLAND
General Hospital
HOUSE SURGEON (A)
(Including duties in the Public Assistance Institution)

Applications are invited from registered medical practitioners, including those within three months of qualification, for the appointment of House Surgeon (A) of the General Hospital (including duties in attached Public Assistance Institution). If held by a practitioner who is liable under the Military Service Acts the appointment will be for six months, otherwise renewable at the end of that time. Salary at the rate of £200 per annum, with full residential emoluments valued for superannuation purposes at £135, plus bonus, at present £29 19s. 7d. The appointment will be subject to the rules and regulations from time to time adopted by the Council, and any fees received for work within the scope of the engagement or earned within normal working time must be paid over to the Borough Treasurer, unless given specific permission by the Council to retain them. The appointment is superannuated, is subject to passing a medical examination satisfactorily, and is determinable by one month's notice on either side. Applications should reach the undersigned not later than February 7.—G. S. McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY BOROUGH OF MIDDLESBROUGH
DEPUTY MEDICAL OFFICER OF HEALTH, DEPUTY SCHOOL MEDICAL OFFICER AND DEPUTY PORT MEDICAL OFFICER

Applications are invited for the appointment of Deputy Medical Officer of Health, Deputy School Medical Officer and Deputy Port Medical Officer. Applicants should be under the age of 40 and possess a Diploma in Sanitary Science, Public Health or State Medicine, and must be capable of assuming full responsibility in the Public Health Department, in the absence of the Medical Officer of Health. Previous public health administrative experience is essential, and preference will be given to candidates who have experience in infectious diseases and port health work. The salary will be in accordance with the interim revision of the Askwith memorandum—namely, £960 per annum, rising by annual increments of £50 to a maximum of £1,160, together with cost-of-living bonus. A car allowance of £50 is also payable. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Applications should reach the undersigned not later than Saturday, January 31, 1948.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough.

COUNTY BOROUGH OF MIDDLESBROUGH
MIDDLESBROUGH GENERAL HOSPITAL
(355 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the appointment of Resident Medical Officer (B1) at the above Hospital which is an acute General Hospital. The salary is £350 per annum and most of the duties will be in the arministration of anaesthetics, but the successful candidate will be required to carry out duties in the medical wards. Suitably qualified R practitioners holding B2 or B1 appointments are invited to apply. The appointment which is limited to one year is superannuable and the successful candidate will be required to pass a medical examination. Applications, giving details of qualifications and experience, should be sent not later than Wednesday, February 4, 1948, to the Medical Superintendent, Mr. E. W. Grahame, M.D., Ch.M., F.R.C.S.(E.), F.R.C.S. (Eng.), General Hospital, Ayresome Green Lane, Middlesbrough, from whom further information may be obtained.—E. C. Parr, Town Clerk.

COUNTY BOROUGH OF MIDDLESBROUGH
HEMLINGTON EMERGENCY HOSPITAL
(200 beds)
ASSISTANT RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Medical Officer (B2) at the above hospital. Duties are mainly surgical but the successful candidate will be required to assist in the administration of anaesthetics and general duties in the hospital. The salary is at the rate of £200 per annum plus cost-of-living bonus, together with full residential emoluments, and the successful candidate will be required to pass a medical examination. R practitioners who now hold A posts may apply, when the appointment will be limited to a period of six months, otherwise it will be for a period of twelve months. Applications should be sent to the Medical Officer of Health, Municipal Buildings, Middlesbrough, not later than Wednesday, February 4, 1948.—E. C. Parr, Town Clerk.

COUNTY BOROUGH OF WOLVERHAMPTON
NEW CROSS HOSPITAL
ASSISTANT MEDICAL OFFICER (A)

Applications are invited from male registered medical practitioners for the appointment in February, 1948, of an Assistant Medical Officer (A), for a period not exceeding twelve months, with salary at the rate of £230 per annum (inclusive of cost-of-living bonus), plus full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, in which case the appointment will be limited to a period of six months, otherwise it may be extended to twelve months. Applications should be addressed to the Medical Superintendent of the hospital.—J. Brock Allon, Town Clerk, Town Hall, Wolverhampton.

COUNTY COUNCIL OF DURHAM
Education Department
ASSISTANT SCHOOL OCULIST

The County Education Committee invite applications from registered medical practitioners, men or women, who have had special experience in ophthalmology for appointment as Assistant School Oculist, to act under the direction of the School Medical Officer, in connexion with the examination and treatment of eye defects and diseases in children attending schools in the administrative County area. Preference will be given to candidates holding a higher qualification in ophthalmological medicine and surgery. Commencing salary, £650 per annum, rising by annual increments of £25 to £850 per annum, plus bonus at the current rate. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to satisfactory medical examination. For conditions of appointment and form of application, which must be returned not later than first post on February 14, 1948, apply, enclosing stamped, addressed foolscap envelope, to the Director of Education, Shire Hall, Durham. Canvassing, directly or indirectly, is prohibited and will disqualify.—A. A. Denholm, Director of Education, Shire Hall, Durham.

COUNTY BOROUGH OF SOUTHEND-ON-SEA
TUBERCULOSIS OFFICER AND CONSULTANT PHYSICIAN FOR TUBERCULOSIS

The Council invite applications for the appointment of Tuberculosis Officer and Consultant Physician for Tuberculosis to the Southend Municipal Hospital. Salary £1,000 by £50 to £1,250 per annum, together with appropriate cost-of-living bonus. In fixing the commencing salary regard will be had to previous specialist experience. The person appointed will have clinical charge of beds for tuberculosis in the Southend Municipal Hospital (where a new block of 60 beds was opened in 1947), and the Borough Sanatorium for Infectious Disease. A car allowance (at present £80 per annum) will be paid, or alternatively a motor car will be provided. The Local Government Superannuation Act, 1937, will apply, and the appointment is subject to medical examination. Application, with names of three referees, to be sent to the Medical Officer of Health, Municipal Health Centre, Southend-on-Sea, from whom full particulars can be obtained.—Archibald Glen, Town Clerk, Town Clerk's Office, Southend-on-Sea.

COUNTY COUNCIL OF THE COUNTY OF STIRLING
AIRTHREY CASTLE MATERNITY HOSPITAL
RESIDENT HOUSE PHYSICIAN (A)

Resident House Physician (A) required immediately for Airthrey Castle Maternity Hospital. The person appointed will also carry out work in the County Ante-natal Clinics and at Stirling Royal Infirmary under the supervision of the Consultant Obstetrician. Salary £150 per annum plus full board and lodgings. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply, and if such a practitioner is appointed, the appointment will be limited to six months. Applications should be lodged with the undersigned not later than January 31, 1948.—George J. Sherriff, County Clerk, County Offices, Viewforth, Stirling.

COUNTY BOROUGH OF DONCASTER
ASSISTANT MEDICAL OFFICER (B1)
for Obstetrics

Applications are invited from registered medical practitioners, male or female, with previous experience in midwifery, to act as medical officer at Hamilton Annexe, Springwell House (63 midwifery beds), and to perform such other duties as may be required. The salary will be £455 per annum, rising by annual increments of £25 to £555 per annum, plus bonus, with emoluments valued at £150. The appointment is subject to three months' notice. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should be sent to me, endorsed "Assistant Medical Officer," not later than February 7, 1948.—H. S. Essenhigh, Town Clerk, Town Clerk's Office, 1, Priory Place, Doncaster.

COUNTY BOROUGH OF SWANSEA
Public Health Department
HILL HOUSE ISOLATION HOSPITAL
RESIDENT MEDICAL OFFICER (A)
(Male or Female)

Applications are invited from registered medical practitioners of either sex for the post of Resident Medical Officer (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner so liable, appointment will be for a period of six months, otherwise it will be for a period of twelve months. The appointment will not be renewable, and will be terminable at any time by one month's notice on either side. Salary £350 per annum, with board, residence, and laundry, plus an emergency cost-of-living bonus, at the discretion of the Council. Applications must be sent to the Medical Officer of Health, The Guildhall, Swansea, not later than February 2, 1948.—T. E. Bowen, Town Clerk, The Guildhall, Swansea.

Have you read the notice at top of page 11 ?

Have you read the notice at top of page 11?

CORNWALL COUNTY COUNCIL
GERIATRICIAN

Applications are invited from registered medical practitioners for the whole-time appointment of Geriatrician to the Cornwall County Council. The person appointed will be required to work under the general direction of the County Medical Officer. The commencing salary will be at the rate of £1,000 a year, rising by one biennial increment of £50 and one of £37 10s. to £1,087 10s., together with cost-of-living bonus. A car is essential, and there will be a travelling allowance in accordance with the County Scale. The appointment is non-resident. The duties will include assistance and advice regarding the establishment of a Rehabilitation Centre for the treatment of the chronic sick; the clinical care of patients admitted to the Centre; the regular visiting of Public Assistance Institutions in the County to select patients suitable for transfer to the Centre; and the general supervision of the Council's arrangements for the treatment of the chronic sick. Applications should reach the County Medical Officer, County Hall, Truro, not later than February 4, 1948. The post is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The Regional Hospital Board has been consulted and approves of this appointment.—E. T. Verger, Clerk of the County Council, County Hall, Truro.

ESSEX COUNTY COUNCIL HOSPITAL
Black Notley, near Braintree
TWO SENIOR MEDICAL OFFICERS (B1)

The Essex County Council invite applications from registered medical practitioners, including those now serving in H.M. Forces, for the above established post. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applicants should have had considerable experience in either general surgery or orthopaedics and preference will be given to candidates holding higher qualifications. The salary, which is inclusive of residential emoluments or cash in lieu, attaching to each post will be at a rate to be determined by the qualifications and experience of the candidate selected, on the scale £700 a year, rising, subject to satisfactory service, by annual increments of £26 to £1,000 a year, together with such war bonus as may be decided by the Council from time to time. The successful candidates must pass a medical examination and contribute to the Council's Superannuation Fund and may be required to be resident or non-resident; if non-resident they will be expected to reside within a reasonable distance of the Hospital. Applications, on forms which may be obtained from me, accompanied by copies of not more than three recent testimonials (which will not be returned), should be delivered to me not later than February 6, 1948.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

ESSEX COUNTY COUNCIL HOSPITAL
Black Notley, near Braintree
RESIDENT MEDICAL OFFICER (B1)

The County Council invite applications from registered medical practitioners, including those now serving in H.M. Forces, for the whole-time appointment of Resident Medical Officer on the staff of the above hospital, which is a sanatorium for the treatment of cases of pulmonary and non-pulmonary tuberculosis. The person appointed would be required to devote most of his time to patients suffering from pulmonary tuberculosis. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment will be limited to a period of not exceeding twelve months. Remuneration will be within the scale £450 by £25 to £650 a year, plus bonus, and plus residential emoluments valued at £160 a year. The successful candidate must pass a medical examination and may be required to contribute to the Council's Superannuation Fund. Applications, stating applicant's position in relation to military service, should be addressed to me as soon as possible. Canvassing, directly or indirectly, will disqualify.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

GLASGOW ROYAL INFIRMARY
SURGICAL REGISTRAR (B1)

Applications are invited from registered medical practitioners for the post of Surgical Registrar (B1). Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for a period of two years and a salary of £450 per annum for the first year and £500 per annum for the second year will be paid. Particulars as to duties, etc. may be obtained from the Superintendent, Glasgow Royal Infirmary, 84, Castle Street, Glasgow, C.4. Applications, giving three names for reference, should be lodged with the undersigned. No canvassing.—A. A. MacIver, Secretary, Glasgow Royal Infirmary; Office: 135, Buchanan Street, Glasgow, C.1.

ESSEX COUNTY COUNCIL
SENIOR MEDICAL AND SURGICAL OFFICERS

The County Council invite applications from registered medical practitioners, including those now serving in H.M. Forces, for the following established posts at St. John's Hospital, Chelmsford:

SENIOR MEDICAL OFFICER (B1)
SENIOR SURGICAL OFFICER (B1)

Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applicants should have had either considerable experience in general medicine and paediatrics or in general surgery and preference will be given to candidates holding higher qualifications. The salary attaching to each post, which is inclusive of residential emoluments or cash in lieu, will be at the rate of £700 a year, rising, subject to satisfactory service, by annual increments of £25 to £1,000 a year, together with such war bonus as may be decided by the Council from time to time. The commencing salary will be fixed according to the qualifications and experience of the successful candidates. The successful candidates must pass a medical examination and contribute to the Council's Superannuation Fund. The successful candidates may be required to be resident or non-resident and if non-resident will be expected to reside within a reasonable distance of the hospital. Applications, on forms which may be obtained from me, accompanied by copies of not more than three recent testimonials (which will not be returned), should be delivered to me not later than February 5, 1948.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

GLOUCESTERSHIRE COUNTY COUNCIL
SENIOR ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The Gloucestershire County Council invite applications for the appointment of Senior Assistant County Medical Officer of Health (female) at a salary of £850 per annum, rising by four annual increments of £25 to £950 per annum, plus bonus £48, together with travelling and subsistence allowances in accordance with the county scale. Applicants must be registered medical practitioners. The possession of a Diploma in Public Health would be an advantage. The appointment will be subject to the Local Government Superannuation Act, 1937, and to a satisfactory medical report by the Council's Medical Adviser. Forms of application, with particulars of duties and conditions of appointment, may be obtained from the County Medical Officer of Health, 18, Berkeley Street, Gloucester, to whom completed applications, with copies of three recent testimonials, should be sent not later than February 9, 1948. Canvassing, directly or indirectly, will disqualify.—Guy H. Davis, Clerk of the County Council.

HERTFORDSHIRE COUNTY COUNCIL
LISTER EMERGENCY HOSPITAL, Hitchin
(350 beds)

Applications are invited from registered medical practitioners for the following appointment:—

HOUSE SURGEON (A), vacant February 1, 1948. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months, otherwise it will not exceed a period of one year.

Applications to Mr. A. G. Young, F.R.C.S.E., Deputy Medical Superintendent.

HERTFORDSHIRE COUNTY COUNCIL

Reference advertisement January 17, page 16, the title should have indicated that the vacancies were at **LISTER EMERGENCY HOSPITAL, HITCHIN (350 beds).**

KINGSTON-UPON-HULL CORPORATION
Health Department
MUNICIPAL MATERNITY HOME (68 beds)
SENIOR RESIDENT MEDICAL OFFICER (B1)
(Woman)

Applications are invited from unmarried or widowed registered medical practitioners, under the age of 40 years, for the appointment of Senior Resident Medical Officer (B1) (Woman) at the Municipal Maternity Home, Hedon Road, Kingston-upon-Hull. Salary £455 per annum, rising by annual increments of £25 to £555 per annum, plus cost-of-living bonus, together with board, washing and residence at the Maternity Home. Candidates must have had at least six months' resident post-graduate experience in obstetrics, experience in the care of normal and premature infants and in venereal diseases in women. The duties of the appointment will also include attendance at ante-natal, post-natal, and other clinics. Forms of application, etc., may be obtained from, and the form should be returned duly completed to, the Medical Officer of Health, Guildhall, Kingston-upon-Hull, not later than 10 a.m. on Monday, February 2, 1948.

INVERNESS DISTRICT MENTAL HOSPITAL
SECOND ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment as Second Assistant Medical Officer (B1). Salary at the rate of £590 per annum, with board, lodging and laundry. Suitably qualified R practitioners holding B2 appointments, and those holding B1 appointments and ineligible for H.M. Forces, are invited to apply. The appointment is subject to the Asylums Officers' Superannuation Act, 1909. Applications to be sent immediately to the Medical Superintendent.

KENT COUNTY COUNCIL
COUNTY HOSPITAL, Chatham (416 beds)
Resident ASSISTANT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners for the above appointment. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Duties will be primarily those of House Physician. The salary is £200 a year, with full residential emoluments, plus a cost-of-living bonus. Medical examination necessary and superannuation can be arranged. Applications should state age, qualifications, experience and the names and addresses of two responsible persons to whom reference may be made as to professional ability, and should be addressed to the Medical Superintendent, so as to reach him by February 3, 1948.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

KILMARNOCK INFIRMARY
THREE HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners (male), including practitioners within three months of qualification who are liable for service under the National Service Acts, for appointment as House Surgeons. Three A posts will become vacant on February 12, 1948. If the person appointed is an R practitioner, appointment will be for a period of six months. Salary is at the rate of £156 per annum, with full residential emoluments. Applications should be sent to the undersigned not later than January 24, 1948.—E. R. H. Forbes, Superintendent-Secretary.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE SURGEON (B2) (E.N.T.)
HOUSE SURGEON (B2) (Orthopaedic)
HOUSE SURGEON (B2) (General Surgery)

Applications are invited for the above appointments from registered medical practitioners, male and female, including R practitioners who now hold A posts. The hospital is approved for the D.L.O. If held by R practitioners, the appointments will be limited to a period of six months, otherwise the successful applicants will be eligible for reappointment for a further period of six months. Salary for each appointment is at the rate of £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, February 9, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL
Ashton-under-Lyne, near Manchester
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the above appointment, including R practitioners who now hold A posts. If the successful applicant is an R practitioner, the appointment will be limited to six months, otherwise it may be renewed for a further period of six months. Salary is at the rate of £250 per annum, together with a cost-of-living bonus and full residential emoluments. The appointment is subject to medical examination and is superannuable. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom all applications must be forwarded not later than Monday, February 9, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL, Ormskirk, near Liverpool
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from male and female registered medical practitioners for the above appointment, which will be tenable for a period of twelve months. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £350 per annum, plus cost-of-living bonus and residential emoluments. The appointment is subject to medical examination and is superannuable. Full particulars and forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom applications must be returned not later than Monday, February 9, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

BIRMINGHAM ACCIDENT HOSPITAL
Bath Row, Birmingham, 15
HOUSE SURGEON (B2)
for the Medical Research Council Burns Unit

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2) now vacant, including R practitioners who now hold A posts. The appointment will be for six months. The salary for newly qualified practitioners is at the rate of £200 per annum, with full residential emoluments. The salary for practitioners who have already held hospital appointments is at the rate of £300 per annum, with full residential emoluments.—W. George Spencer, Secretary.

LONDON COUNTY COUNCIL
Public Health Department
ASSISTANT PHYSICIST

Applications are invited for appointment to a position of whole-time Assistant Physicist in the hospital service. The duties will be mainly in connexion with x-ray and radium work at Hammersmith Hospital, Du Cane Road, W.12, and Lambeth Hospital, Brook Drive, S.E.11. Salary £600, rising by annual increments of £36 to £775 and by a final increment of £25 to £800 a year. There are no emoluments. Application forms, giving further particulars and conditions of appointment and service, obtainable from the Medical Officer of Health (S.D.6), County Hall, S.E.1, returnable by February 20, 1948. Canvassing disqualifies. (49)A.

LONDON COUNTY COUNCIL
PSYCHIATRIST

The London County Council invites applications from suitably qualified medical practitioners for the position of Psychiatrist (part-time) at its remand homes. The salary will be £1,000 by £50 to £1,200 a year. There are no emoluments or additional allowances. The appointment will be deemed to be two-thirds of full-time, and the person appointed will be required to visit a remand home or a magistrate's court every week day. Further details, duties, etc., are set out on the application forms, obtainable from the School Medical Officer (S.D.5), the County Hall, Westminster Bridge, S.E.1, which should be returned by February 7, 1948. Canvassing disqualifies. (2A).

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth
(approx. 1,400 beds, with many specialized departments; wide range of radiological diagnosis, plastic surgery, fracture units)

(a) **RADIOLOGIST.** Men and women of high professional qualifications, with wide experience in their specialty. Inclusive salary £1,100 (plus any temporary bonus, now £60 per annum) by £100 to £1,700 per annum; on proof of outstanding achievement further increments of £50 up to £2,000 per annum may be granted. Practitioners serving in H.M. Forces may apply.

(b) **SENIOR ANAESTHETIST** experienced in modern methods of anaesthesia. Inclusive salary £1,000 (plus any temporary bonus, now £60 per annum) by £100 to £1,600 per annum; on proof of outstanding achievement further increments of £50 up to £1,800 per annum may be granted.

(a) and (b). General scope of duties arranged by Medical Director, may include teaching. Whole-time, established, pensionable, subject to medical examination. Non-resident but required to live near hospital, and to act as Deputy Medical Director for a period if called upon. Applications to undersigned by January 31, 1948 (quoting D.401, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
ASHFORD COUNTY HOSPITAL,
Ashford, Middlesex
RESIDENT HOUSE PHYSICIAN (A)

Resident House Physician (A), male, required at Ashford County Hospital, Ashford, Middlesex, for cardiac, dietetic and children's wards. Registered medical practitioners within three months of qualification and liable for National Service are eligible. Salary £150 per annum, plus any temporary bonus (now £30 per annum, cash). Six months' appointment. Post vacant March 1, 1948. Applications to Medical Director of hospital by February 7, 1948 (quoting D.449, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL, Enfield, Middlesex
JUNIOR HOUSE OFFICERS (A)
(Physician and Surgeon)

Junior House Officers (A) (Physician and Surgeon) required at Chase Farm Hospital, Enfield, Middlesex, for general medical-surgical duties. Registered medical practitioners within three months of qualification and liable for National Service eligible. Salary £150 per annum, board, lodging, laundry, plus any temporary bonus (now £30 per annum, cash). Six months' appointment. Vacant March 1, 1948, and March 4, 1948, respectively. Applications to Medical Director of hospital by February 16, 1948 (quoting D.445, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
NORTH MIDDLESEX COUNTY HOSPITAL
Edmonton, N.18
RESIDENT SENIOR HOUSE OFFICER (B2)

Resident Senior House Officer (B2) required at North Middlesex County Hospital, Edmonton, N.18. R practitioners holding A posts eligible. Salary £250 per annum, plus any temporary bonus (now £30 per annum, cash), board, lodging and laundry. Whole-time duties such as Council may require under supervision of Medical Director. Six months' appointment. Vacant February 25. Applications to Medical Director of hospital by February 5 (quoting D.448, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MANCHESTER CORPORATION
CRUMPSALL HOSPITAL (1,400 beds)
HOUSE OFFICER (A) for Surgical Wards
HOUSE OFFICER (A) for Medical Wards

Applications are invited for the above-mentioned appointments from registered medical practitioners, male or female, including those within three months of qualification who are liable to service under the National Service Acts. If held by practitioners who are liable under these Acts, the appointments will be for a period of six months, otherwise they will be for a period of twelve months. The basic salary for each appointment is £200 per annum, with board, residence and laundry in addition, subject to the Manchester Corporation conditions of service. A temporary bonus is payable in addition to the basic salary. Applications, stating the full name, age (giving date of birth), nationality, professional qualifications (with dates), particulars of present appointment and past hospital appointments, are to be addressed to the Medical Superintendent, Crumpsall Hospital, Crumpsall, Manchester, 8, as soon as possible. Canvassing in any form is prohibited. —Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

NOTTINGHAMSHIRE COUNTY COUNCIL
MANSFIELD WOODHOUSE AND WARSOP URBAN DISTRICT COUNCILS
JOINT MEDICAL OFFICER

The Nottinghamshire County Council and the Mansfield Woodhouse and Warsop Urban District Councils jointly invite applications from duly qualified and registered medical practitioners, including those now serving in H.M. Forces, for the joint whole-time appointment of a Medical Officer to act as: (a) Assistant Medical Officer of the County Council. (b) Medical Officer of Health of the Urban Districts of Mansfield Woodhouse and Warsop. The salary attaching to the position will be £960 by £50 to £1,160 per annum plus cost-of-living bonus. The person appointed will be required to live within a radius of three miles from the Mansfield Woodhouse Post Office. Applicants must have had at least three years' professional experience since qualifying, must be conversant by experience in the duties of a Medical Officer of Health, Medical Officer for Maternity and Child Welfare and School Medical Officer and must possess a Diploma in Public Health. Experience in the examination of defective children is desirable. As regards his duties under the County Council the Officer will act under the general control and supervision of the County Medical Officer and will be required to perform such duties either as Assistant School Medical Officer or otherwise as may be from time to time prescribed. As regards his duties as Medical Officer of Health of the Urban Districts of Mansfield Woodhouse and Warsop the Officer will also be required to act as Medical Officer for Maternity and Child Welfare in the Urban Districts. The appointment is subject to superannuation and the selected candidate will accordingly be required to pass a medical examination. Forms of application and conditions of appointment may be obtained at my office and applications accompanied by copies of not more than three recent testimonials must be forwarded to me not later than February 16, 1948.—K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

SURREY COUNTY COUNCIL
ST. HELIER COUNTY HOSPITAL
Carshalton (862 beds)
(a) REGISTRAR (B1)
for the Department of Physical Medicine
(b) ASSISTANT MEDICAL OFFICER (B1)
for Paediatric Department

Applications, including those from suitably qualified practitioners serving with H.M. Forces, are invited for the above appointments. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have completed a period of service with H.M. Forces or have been rejected for such service.

(a) **Registrar for Department of Physical Medicine.** Candidates must have had experience in house appointments and should have had special experience and interest in Physical Medicine. The commencing salary will be fixed according to qualifications and experience on the scale £550 by £50 to £700 per annum inclusive, plus payment in cash of £150 per annum in lieu of residential emoluments. The tenure of the appointment is limited to a maximum of four years.

(b) **Assistant Medical Officer for Paediatric Department.** Candidates must have had previous experience in house appointments. The duties will be mainly in the Paediatric Department but may also include general duties as required by the Medical Superintendent. Salary £250, £350, £400 or £450 per annum, according to qualifications and experience, plus full residential emoluments and bonus. The appointment will be for six months, renewable for a further period of six months.

Information concerning the appointments may be obtained from the Medical Superintendent of the hospital, to whom applications, by letter, should be sent by January 28, 1948.

SURREY COUNTY COUNCIL
SURREY COUNTY SANATORIUM
Milford (348 beds)
Resident ASSISTANT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those serving in H.M. Forces, for the above appointment, which provides good experience in modern Thoracic Surgery. Candidates must have had previous experience in a house appointment. Salary £350, £400 or £450 per annum according to qualifications and experience. Appointment is for six months renewable for further six months. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have already completed a period of service with H.M. Forces or have been rejected for such service. Enquiries relating to the appointment should be made to the Medical Superintendent of the Sanatorium, to whom applications by letter stating present appointment should be sent by February 7, 1948.

SURREY COUNTY COUNCIL
ST. HELIER COUNTY HOSPITAL, Carshalton
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners now holding A posts, for the above appointment which will be for a period of six months (renewable for a further six months if the candidate appointed is not liable for service with H.M. Forces). Candidates must have had experience in a house appointment. Salary £250 per annum, plus bonus and full residential emoluments valued at £150 per annum. Applications should be sent to the Medical Superintendent of the Hospital by February 7, 1948.

SURREY COUNTY COUNCIL
ST. HELIER COUNTY HOSPITAL
Carshalton (862 beds)
LOCUM TENENS ANAESTHETIST

Locum Tenens Anaesthetist required. Candidates should preferably hold D.A. Salary will be £10 10s. per week for holder of D.A. or £8 8s. per week for anaesthetist not holding this qualification. Further particulars may be obtained from the Medical Superintendent of the hospital, to whom applications should be sent as soon as possible.

BRACEBRIDGE HEATH MENTAL HOSPITAL
near Lincoln
DEPUTY MEDICAL SUPERINTENDENT

The Visiting Committee of the above hospital invite applications for the whole-time post of Deputy Medical Superintendent. Applicants must have had previous Mental Hospital experience and be fully conversant with modern methods of treatment in psychiatry, including psychotherapy, and with out-patient work. Their age must not exceed 45 years. A D.P.M. is essential and a higher medical qualification desirable. Commencing salary £1,000 per annum plus emoluments valued at £200 per annum, consisting of a modern unfurnished house, rates, gas, electricity, water, coal in accordance with the National scale, laundry, vegetables for day-to-day requirements and cleaning materials. The successful applicant will be required to devote whole time to the service of the hospital, accounting for all fees received in respect of all work outside the hospital to the Clerk of the Hospital. Deductions will be made under the Asylums Officers' Superannuation Act, 1909. The appointment is subject to satisfactory medical examination and will be terminable by two months' notice on either side. Applications, accompanied by the names of three referees, to be sent to the Medical Superintendent not later than January 31, 1948.

BURY INFIRMARY, Lancashire (161 beds)
(With post-operative unit to be opened during the next few months—190 approx.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from suitably qualified male practitioners for the above post which becomes vacant at the end of February. Possession of the Fellowship of one of the Royal Colleges will be an advantage, but applications from others (including those studying for this qualification) will be considered. The post is particularly suitable for those who are intending to take the F.R.C.S. examinations in due course, and its tenure is for one year in the beginning with the possibility of an extension for a further year. Applicants should have held a house appointment and R practitioners holding B2 posts are invited to apply. Applications from practitioners holding B1 posts can only be considered where the applicant is ineligible for H.M. Forces. Salary will not be less than £400 per annum to commence, and with full residential emoluments. Applications, stating whether married or single, to the undersigned not later than February 7.—H. Wilkinson, Superintendent.

BIRKENHEAD AND WIRRAL CHILDREN'S HOSPITAL, Woodchurch Road, Birkenhead
ASSISTANT HONORARY PHYSICIANS

The Committee invite applications to fill two vacancies on the Medical Staff. Special experience in children and a higher qualification required. Applications, together with copies of testimonials, to be sent to the Honorary Secretary at the Hospital, not later than January 30, 1948.

Have you read the notice at top of page 11?

Have you read the notice at top of page 11 ?

BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY
(248 beds—7 Residents)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) to become vacant on March 1, 1948, including R practitioners within three months of qualification. Salary at the rate of £175 per annum with full residential emoluments. Applications, together with three testimonials, should be sent to the undersigned.—T. Dewhurst, General Superintendent and Secretary, Royal Infirmary, Blackburn.

BATTERSEA GENERAL HOSPITAL
Battersea Park, S.W.11
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the above appointment. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications, accompanied by two recent testimonials, should be sent to the Secretary of the Hospital.

BRITISH HOSPITAL FOR MOTHERS AND BABIES
Samuel Street, Woolwich, S.E.18
HOUSE SURGEON (A)

Required on February 1, House Surgeon (A), male or female. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. If held by an R practitioner the appointment will be limited to six months. Hospital approved for the M.R.C.O.G. Salary £150 per annum. Apply to the Secretary.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (B1), vacant now. Applicants should have held house appointments and had surgical experience. Capability to perform emergency operations a recommendation. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, are invited to apply. Salary £350 per annum with full residential emoluments. Applications should be sent to the undersigned.—Arthur L. Bourne, Secretary-Superintendent.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male, for the post of House Physician (B2), including R practitioners who hold B1 appointments. Salary £225 per annum, with full residential emoluments. To R practitioners appointment is for six months. Applications should be sent immediately to A. L. Bourne, Secretary-Superintendent.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £225 per annum, with full residential emoluments. Applications should be forwarded as soon as possible to C. E. Lowndes, Secretary.

BOOTLE GENERAL HOSPITAL, Liverpool, 20
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Salary £350 per annum, with full residential emoluments. There are three other resident officers. Preference will be given to actual or intending Fellows of the Royal College of Surgeons. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and ineligible for H.M. Forces, may apply. Applications should be sent to the Superintendent at the above address as soon as possible after the appearance of this advertisement.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Resident Surgical Officer (B1), vacant on February 1, 1948 (including R practitioners who now hold B2 posts). Applications from R practitioners who hold B1 posts cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £300 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BOLINGBROKE HOSPITAL,
Wandsworth Common, S.W.11
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the post of House Physician (B2), becoming vacant on March 1, 1948, for a period of six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications should be sent not later than February 12, 1948, to the Secretary-Superintendent.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth
REGISTRAR IN THE RADIOTHERAPY DEPT.

Applications are invited from registered medical practitioners for the full-time appointment of Registrar in the Radiotherapy Department. Salary according to experience with a minimum of £650 per annum. The hospital is the main centre for Radiotherapy in Cornwall under the South-West Joint Cancer Organization. Applications should be addressed to the undersigned, from whom further details may be obtained.—J. C. Field Secretary-Superintendent.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Resident Medical Officer (B1) for the Children's Department now re-organized as a result of the amalgamation of the Cheltenham General and Eye Hospital with the Cheltenham Hospital for Children (48 beds). Candidates should have held previous hospital appointments and have had some paediatric experience. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for a period of at least one year, and will be at a salary of £350 a year with full residential emoluments, or at a higher appropriate rate for a candidate with special qualifications or experience. Applications should be addressed to Stanley T. Davis, Secretary-Superintendent, Cheltenham General Eye and Children's Hospital, Cheltenham.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the position of House Physician (A). Practitioners within three months of qualification and liable for service under the National Service Acts may apply, in which case the appointment will be for six months, otherwise renewable. Salary £175 per annum with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

CREWE AND DISTRICT MEMORIAL HOSPITAL
Crewe
RESIDENT HOUSE PHYSICIAN AND ANAESTHETIST (B2)

Applications are invited from registered medical practitioners for the post of Resident House Physician and Anaesthetist (B2), which becomes vacant February 1, 1948, including R practitioners who hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary from £200 to £350 per annum according to experience and qualifications. Applications should be sent together with copies of two recent testimonials to reach the undersigned within a fortnight of the publication of this advertisement.—Stanley W. Johnson, Secretary-Superintendent.

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant now. Salary at the rate of £100 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent to the undersigned immediately. The successful applicant must be a member of a Medical Defence Society.—T. H. G. Gartland, Superintendent and Secretary.

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital, 200 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Physician (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Resident, six months. Salary £150 per annum. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

CHESTER ROYAL INFIRMARY (225 beds)
TWO HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners (male and female), including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointments of House Surgeon (A) to take up duty on February 5 and February 14, 1948. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £200 per annum with full residential emoluments. Applications should be sent to the General Superintendent and Secretary.

CHESTER ROYAL INFIRMARY
(Voluntary Hospital, 225 beds)
MEDICAL AND SURGICAL REGISTRARS (B1)
SURGICAL REGISTRAR

Full-time appointment. A higher qualification in surgery is necessary. Salary £500 per annum with full residential emoluments. Appointment for one year, renewable. Copies of three testimonials should be sent with application. To commence duties as soon as possible.

MEDICAL REGISTRAR

Full-time appointment. A higher qualification in Medicine is necessary. Salary £650 per annum, non-resident. Appointment for one year renewable. Copies of three testimonials should be sent with application. To commence duties as soon as possible.

Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

Further particulars of all appointments may be obtained from the undersigned to whom applications should be addressed, to arrive not later than February 23.—P. R. J. Arnold, General Superintendent and Secretary, The Chester Royal Infirmary.

CHESTER ROYAL INFIRMARY
(Voluntary Hospital, 225 beds)
VISITING MEDICAL STAFF
VISITING CONSULTING PHYSICIAN

Candidates are required to hold the degree of a Doctor of Medicine of a University in the United Kingdom or Eire, or to be a Member of a Royal College of Physicians, and to engage in consultant practice only. An Honorarium of £1,000 per annum will be paid. Applications with full particulars and copies of three recent testimonials should be submitted.

VISITING DERMATOLOGIST

One Out-patient session weekly. Remuneration on a sessional basis on agreed B.M.A. Scale. Applicants should submit evidence of suitability for the appointment.

Further particulars of all appointments may be obtained from the undersigned, to whom applications should be addressed, to arrive not later than February 16.—P. R. J. Arnold, General Superintendent and Secretary, The Chester Royal Infirmary.

CHESTER ROYAL INFIRMARY (225 beds)
CASUALTY HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of Casualty House Surgeon (A) to take up duty as soon as possible. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the General Superintendent and Secretary.

COSSHAM MEMORIAL HOSPITAL
Kingswood, Bristol
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, preferably holding a higher surgical qualification or up to Fellowship standard, for the appointment of Resident Surgical Officer (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The position is tenable for twelve months from March 1, 1948, with optional extension to two years. Salary, with full residential emoluments, to be £400 per annum. Applications to be sent to the undersigned as soon as possible.—E. N. Roper, Secretary.

COSSHAM MEMORIAL HOSPITAL
Kingswood, Bristol

Applications are invited from registered medical practitioners, male or female, for the following two positions, each tenable for six months from March 1, 1948 :—

CASUALTY OFFICER, GYNAECOLOGY and E.N.T. HOUSE SURGEON (A), including practitioners within three months of qualification who are liable for service under the National Service Acts.

HOUSE PHYSICIAN (B2), including R practitioners who hold A posts.

Salary, with full residential emoluments, at the rate of £150 per annum. Applications to be sent to the undersigned as soon as possible.—E. N. Roper, Secretary.

CHARING CROSS HOSPITAL
FULL-TIME SURGICAL SPECIALIST

Applications are invited from suitably qualified practitioners for the appointment of full-time Surgical Specialist at the Hospital's Annexe located at the Mount Vernon Hospital, Northwood, Middlesex. Salary at the rate of £1,000 per annum. The appointment is to be made in accordance with the provisions of Ministry of Health Circular 202/46 relating to ex-Service Specialists, and in the first instance will be from February 1, 1948, until the appointed day. Applications should be addressed to the House Governor, Charing Cross Hospital, Agar Street, Strand, W.C.2, to arrive not later than first post January 28, 1948.

COVENTRY AND WARWICKSHIRE HOSPITAL
Coventry
HOUSE SURGEON (A)
to the General Surgical Department, combining E.N.T. Duties

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) to the General Surgical Department combining Ear, Nose and Throat duties, including R practitioners within three months of qualification. The appointment, which is for six months, is vacant February 6, 1948. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL
RESIDENT REGISTRAR-ANAESTHETIST (B1)

Applications are invited from medical practitioners suitably qualified and experienced for the post of Resident Registrar-Anaesthetist (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £500 per annum with full residential emoluments. The appointment is for twelve months in the first instance. Applications to be addressed to the House Governor and Secretary, Coventry and Warwickshire Hospital, Coventry.

COVENTRY AND WARWICKSHIRE HOSPITAL
HOUSE SURGEON (A)

House Surgeon (A) for Fracture and Accident Wards now about to be re-opened. Salary at the rate of £200 per annum with full residential emoluments. Appointment is for six months in the first instance. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications with full details to the House Governor, Coventry and Warwickshire Hospital, Coventry.

COUNTY INFIRMARY, Carmarthen
(102 beds, including Maternity Unit)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male or female, for the post of House Physician (A), including practitioners within three months of qualification who are liable under the National Service Acts. The appointment is for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent to the undersigned.—A. W. Youngs, Chief Administrative Officer.

COUNTY MENTAL HOSPITAL
Winwick, Warrington
JUNIOR ASSISTANT MEDICAL OFFICER

Applications are invited from suitably qualified R practitioners holding B1 appointments for the post of Junior Assistant Medical Officer. Salary at present £755 per annum (of which £200 are in the form of emoluments if resident or £60 if occupying a house on the Hospital Estate) together with £50 for possession of the D.P.M., and cost-of-living bonus (half bonus only in cash if resident). Applications addressed to the Medical Superintendent to be received not later than 9 a.m. on Saturday, January 31, 1948.

CONNAUGHT HOSPITAL, E.17
(Voluntary Hospital, 120 beds)
HOUSE SURGEON (B2)

Applications are invited from registered practitioners (male) for the appointment of House Surgeon (B2), vacant now. Practitioners who now hold A posts may apply. Salary will be at the rate of £200 per annum, with board residence. Applications should be sent, immediately to R. Halton Harrison, General Secretary.

CHORLEY AND DISTRICT HOSPITAL
Lancashire
HOUSE SURGEON (B2)

House Surgeon (B2) required. Position vacant February 11. Salary £300 per annum, with full residential emoluments. Practitioners who hold A posts are invited to apply. The appointment will be for six months. Applications to be sent to the undersigned.—H. Hill, Secretary-Superintendent.

DR. BARNARDO'S CHILDREN'S HOSPITAL
Village Homes, Barkingside, Essex
HOUSE PHYSICIAN (A)

Applications are invited from registered women practitioners for the post of House Physician (A). The vacancy will occur early in February. Salary at the rate of £200 per annum with full residential emoluments. Applications should be sent to the Chief Medical Officer, Dr. Barnardo's Homes, Stepney Causeway, London, E.1.

DISTRICT INFIRMARY, Ashton-under-Lyne
(Normal capacity, 200 beds)

Applications are invited for the following positions, viz :—

RESIDENT ANAESTHETIST AND HOUSE SURGEON (B2), including R practitioners who hold A posts. Salary £250, plus certain fees. The hospital is recognized for the D.A. diploma in anaesthetics.

CASUALTY OFFICER (B2), including R practitioners who hold A posts. Salary £200.

HOUSE PHYSICIAN (A), with some surgical duties, including practitioners within three months of qualification who are liable under the National Service Acts. Salary £200.

Full residential emoluments in each case. If held by R practitioners, appointments will be limited to six months. Apply at once to Frank Oliver, General Superintendent.

DEVON MENTAL HOSPITAL
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) (male), who must be legally qualified and registered and under 35 years of age. Salary £455 per annum, rising by £25 per annum to £555, with cost-of-living bonus at present £59 16s. An additional £50 per annum will be paid when the D.P.M. is obtained. Board, apartments, laundry and attendance in addition valued at £150 per annum. The appointment is subject to the provisions of the Asylums Officers Superannuation Act, 1909. Suitably qualified practitioners holding B2 posts, also those holding B1 posts and ineligible for H.M. Forces may apply. Applications should be addressed to the Medical Superintendent, Devon Mental Hospital, Exminster, near Exeter, Devon.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the above appointment from medical practitioners, including R practitioners who hold B2 appointments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The post, vacant January 26, is for six months (with the option of a further six months), and will carry a salary of £300 per annum, rising to £350 after six months, with full residential emoluments. Applications should be sent at once to the undersigned.—G. W. Beckwith, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DERBYSHIRE ROYAL INFIRMARY
Derby (339 beds)
CASUALTY OFFICER (A)
Orthopaedic and Accident Service

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the post of Casualty Officer (A), vacant immediately, six months' appointment. Salary £200 per annum, with full residential emoluments. Applications should be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DURHAM COUNTY HOSPITAL
North Road, Durham City (120 beds)
RESIDENT HOUSE PHYSICIAN (B2) (Male)

Applications are invited from registered medical practitioners for the immediate appointment of a Resident House Physician (B2) (male), including R practitioners who hold A posts. The appointment is for six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to be sent immediately to the Secretary-Superintendent.

EYE, EAR AND THROAT HOSPITAL
For Shropshire and Wales, Shrewsbury
HOUSE SURGEON (B1)
Ear, Nose and Throat Department

Applications are invited from registered medical practitioners of either sex for the post of House Surgeon (B1) in the Ear, Nose and Throat Department of this hospital. The hospital is recognized for the D.L.O. (R.C.S.) Eng. Salary £275 per annum, with full residential emoluments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Preference will be given to applicants with some experience of Otolaryngology. Applicants with specialized diploma or higher qualification will receive additional remuneration commensurate with experience. Applications should be sent to the undersigned.—C. S. Asbury, Secretary, 13a, College Hill, Shrewsbury.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, London, E.7
HONORARY ASSISTANT ORTHOPAEDIC SURGEON

The Board of Governors invites applications for the post of Honorary Assistant Orthopaedic Surgeon. Candidates must hold the diploma of Fellowship of the Royal College of Surgeons of England or Edinburgh and had experience in Orthopaedic Surgery. Candidates will be expected to send a copy of their application, and to call upon 15 members of the Honorary Staff. Applications, including the names of three referees, or accompanied by copies of three recent testimonials, should be forwarded to the undersigned as soon as possible.—Reginald Perry, Secretary-Superintendent.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, London, E.7
ORTHOPAEDIC REGISTRAR

Applications are invited for the post of Orthopaedic Registrar. The successful candidate will be expected to attend the hospital two sessions per week, and will receive an honorarium of 2½ guineas per session. Preference will be given to candidates holding the Diploma of F.R.C.S. Applications should be forwarded to the undersigned as soon as possible.—Reginald Perry, Secretary-Superintendent.

ELIZABETH GARRETT ANDERSON HOSPITAL
Euston Road, N.W.1
HOUSE PHYSICIAN

Applications are invited from registered women medical practitioners for the post of House Physician to become vacant on March 1, 1948. Appointment for six months. Salary at the rate of £100 per annum, with full residential emoluments.

HOUSE SURGEON

Applications are invited from registered women medical practitioners for the post of House Surgeon to become vacant on March 1, 1948. Appointment for six months. Salary at the rate of £100 per annum, with full residential emoluments.

Applications should be sent to the Secretary by January 30.

EBBW VALE HOSPITAL
Ebbw Vale, Mon.
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2), including R practitioners who hold A posts. The appointment will be for a period of six months. The work is predominantly surgical, and there is a full-time Resident Surgeon. Salary at the rate of £300 per annum, with full residential emoluments. Applications to the Resident Surgeon.

ESSEX COUNTY HOSPITAL, Colchester

Applications are invited for the following posts:

CASUALTY OFFICER AND HOUSE SURGEON (A) to E.N.T. Department, approved under D.L.O. arrangements. Duties commence February 11.

CASUALTY OFFICER AND HOUSE SURGEON (A) to Department of Gynaecology and Obstetrics.

Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply.

The appointments will be for six months. Salary £170 per annum and residential emoluments. Applications should be forwarded to the House Governor.

GATESHEAD MENTAL HOSPITAL
Stannington, near Morpeth, Northumberland
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1), male or female. Salary £455 per annum, annual increments £25 to £555 per annum, with an additional £50 to the holder of the D.P.M., and emoluments (board, apartments, washing and attendance) valued at £150 per annum. Variable cost-of-living bonus payable in addition, half of which is paid in cash, the other half added to the value of the emoluments. The appointment will be subject to the provisions of the Asylum Officers' Superannuation Act, 1909, and conditional on the candidate passing a medical examination, and will be terminable by one month's notice on either side. There will be an opportunity for gaining psychiatric experience in out-patient work, including Child Guidance. A small furnished flat is available. R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications, together with the names of three referees, should be sent to the Medical Superintendent as soon as possible.—J. W. Porter, Clerk to the Visiting Committee.

GENERAL HOSPITAL, Nottingham (589 beds)
SENIOR CASUALTY OFFICER (B2)
JUNIOR CASUALTY OFFICER (A)

Applications are invited for (a) Senior Casualty Officer (B2), including R practitioners who hold A posts, (b) Junior Casualty Officer (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Candidates for the senior position must have had previous experience. Salary £400 per annum. The salary for the junior position is £300 per annum. Both appointments are, in the first instance, for a period of six months. It is a large and busy Casualty Department. Applications should be sent to the undersigned as soon as possible.—Henry M. Stanley, House Governor and Secretary.

GENERAL INFIRMARY AT LEEDS
Castleford, Normanton and District Branch Hospital
(40 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the appointment of Resident Surgical Officer (B1). (There is no other resident.) Salary £175 per annum, board, residence, laundry, etc. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Applications should reach the undersigned not later than January 31.—S. Clayton Fryers, House Governor and Secretary.

GORDON HOSPITAL
for Rectal and Gastro-Intestinal Diseases
Vauxhall Bridge Road, London, S.W.1 (102 beds)
HONORARY ANAESTHETIST

The Committee of Management invite applications for the appointment of Honorary Anaesthetist from candidates holding the Diploma in Anaesthetics. Applications (four copies) should be sent to the undersigned, from whom further information may be obtained, on or before February 20, 1948.—R. E. Lawson, House Governor and Secretary.

Have you read the notice at top of page 11 ?

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GORDON HOSPITAL
for Rectal and Gastro-Intestinal Diseases
Vauxhall Bridge Road, London, S.W.1 (102 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Surgical Officer (B1) at a salary of £350 per annum with full residential emoluments. The appointment is for six months, renewable for a further six months, and will be vacant on a date to be decided between March 15 and April 1. Suitably qualified R practitioners holding B2 posts and those holding B1 posts nad ineligible for H.M. Forces may apply. Applications should be sent to the undersigned on or before February 6, 1948.—R. E. Lawson, House Governor and Secretary.

GENERAL INFIRMARY AT LEEDS
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the appointment of Resident Medical Officer (B1). Candidates must have held house appointments. Salary £250 per annum, rising to £300 per annum, if reappointed after twelve months. Board, residence, laundry, etc. in addition. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and rejected by the R.A.M.C., may apply. Applications to reach the House Governor and Secretary not later than January 31, 1948.

GENERAL HOSPITAL, Nottingham
(589 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male), including R practitioners who hold A appointments, for the appointment of a House Surgeon (B2) for the above Hospital. Duties to commence about February 10. If held by an R practitioner the appointment will be for a period of six months. Salary at the rate of £300 per annum with full residential emoluments. Applicants should be interested in Urology. Applications sent to the undersigned.—Henry M. Stanley, House Governor and Secretary.

GRIMSBY AND DISTRICT GENERAL HOSPITAL
ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Orthopaedic House Surgeon (A) with some duties for the General Surgeons, for the six months commencing February 18, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A) vacant now, including practitioners within three months of qualification who are liable for service under the National Service Acts. Salary £200 per annum with full residential emoluments. If held by an R practitioner appointment will be limited to six months. Applications to the undersigned immediately.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL
ACCIDENT SERVICE AND ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Accident Service and Orthopaedic Officer (B2). If held by an R practitioner this post will be limited to six months. Salary is at the rate of £300 per annum, with full residential emoluments. Post vacant on March 16, 1948. Applications should be sent to the undersigned.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE SURGEON (A)

Applications are invited for the post of House Surgeon (A) for duty with special departments, i.e. E.N.T., Gynaecological, etc., vacant February 6, 1948. Salary £200 per annum, with full residential emoluments. The appointment will be for six months in the first instance, but will be terminable by one month's notice on either side. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE PHYSICIAN (A)

Applications are invited for the post of House Physician (A), vacant February 16. Salary £200 per annum, with full residential emoluments. The appointment will be for six months in the first instance but will be terminable by one month's notice on either side. Practitioners within three months of qualification and liable under the National Service Acts may apply Applications to H. B. Coates, Secretary-Superintendent.

GRAYLINGWELL HOSPITAL, Chichester
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, ladies or gentlemen, for the appointment of House Physician (B2), including R practitioners who hold A appointments. The post provides special facilities in the hospital for organized tuition and practice of modern psychiatry. The salary is at the rate of £350 per annum, with full residential emoluments. The appointment will, in the first instance, be limited to a period of six months and, unless held by an R practitioner, may be extended to twelve months. Applications to be sent to the Medical Superintendent as soon as possible.

GUY'S HOSPITAL, S.E.1
ASSISTANT PHYSICIAN

Applications are invited from Service candidates and others for the appointment of Assistant Physician to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent, to whom letters of application (20 copies), together with names of three referees, should be submitted not later than January 31, 1948, and from whom any further information desired can be obtained.

GUY'S HOSPITAL, S.E.1
ASSISTANT OBSTETRIC SURGEON

Applications are invited from Service candidates and others for the appointment of Assistant Obstetric Surgeon to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent, to whom letters of application (20 copies), together with the names of three referees, should be submitted not later than January 31, 1948, and from whom any further information desired can be obtained.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)

HOUSE PHYSICIAN (B2) required to commence duty on March 8, 1948. R practitioners who now hold A posts may apply. If held by an R practitioner, appointment will be limited to six months. Salary at the rate of £150, with full residential emoluments.

RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty on April 1, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

HOUSE PHYSICIAN AND HOUSE SURGEON (B2) to the Ear, Nose, Throat and Eye Department (combined appointment). R practitioners who now hold A posts may apply. If held by an R practitioner, appointment will be limited to six months. Duties to commence April 1, 1948. Salary at the rate of £187 10s., with full residential emoluments.

HOUSE SURGEON (A) required to commence duty on March 18, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required to commence immediately. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £200, with full residential emoluments. Applications to be sent to the undersigned.—H. J. Johnson, General Superintendent and Secretary.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
HONORARY RADIOLOGIST

The Council of Management invites applications for the office of Honorary Radiologist, consequent upon the appointment of Dr. E. Rohan Williams, the present holder of the office, as Director of the Radiological Department, St. Mary's Hospital, W.2. Candidates are required to be medical practitioners engaged solely in consulting practice in this specialty and to possess a higher diploma in medical radiology. It is a condition of the appointment that attendance shall be made on at least five full half days weekly. Private practice in the department which is substantial is permitted, in accordance with regulations laid down by the Council. Applications, giving full details, with the names of three referees, must reach the undersigned not later than February 2, 1948, from whom full particulars should be obtained in the first instance.—By order of the Council of Management, Kenneth A. F. Miles, House Governor.

HOSPITAL FOR WOMEN
Soho Square, London, W.1
HONORARY CONSULTING PHYSICIAN

Applications are idvited for the Post of Honorary Consulting Physician. Applicants must be members of the Royal College of Physicians of London, and engaged only in consulting practice. Applications (6 copies) accompanied by three recent testimonials must reach the undersigned not later than two weeks after the appearance of this advertisement.—D. C. Emery, Secretary.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
CASUALTY MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, for the resident post of Casualty Medical Officer (B2) at the Out-patient Department, Bayham Street, N.W.1, vacant March 1 1948, tenable for six months. Salary £200 per annum with board, lodging and laundry. R practitioners holding A posts are invited to apply. Applications on the prescribed form with copies of three recent testimonials, to be returned to the undersigned by February 5.—Kenneth A. F. Miles, House Governor.

HARROGATE ROYAL BATH HOSPITAL AND RAWSON CONVALESCENT HOME (146 beds)
National Hospital for the Treatment of Rheumatic and Allied Diseases
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B2), vacant now, including R practitioners who hold A posts. As this hospital is recognized as having an authorized Physical Medicine Department, time spent in the above post, which affords good experience in physical medicine and orthopaedics, would count towards the qualifying twelve months for the Diploma in Physical Medicine. Salary will be at the rate of £250 per annum. The appointment will be for a period of six months. Applications should be sent to the Secretary, Royal Bath Hospital, Cornwall Road, Harrogate, immediately.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts :—

(a) **RESIDENT SURGICAL OFFICER (B1).** Previous surgical experience essential. R practitioners holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary £250 per annum:

(b) **RESIDENT JUNIOR HOUSE SURGEON (A).** In charge of Casualty, Ear, Nose and Throat, and Fracture Departments. Salary £200 per annum.

(c) **HOUSE PHYSICIAN (A).** Salary £200 per annum.

Practitioners within three months of qualification and liable to service under the National Service Acts are invited to apply.

The appointments are for (a) twelve months and (b) and (c) six months respectively. Applications should be sent to T W. Upton, Secretary.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
ANAESTHETIST

There is a vacancy on the visiting medical staff for an Anaesthetist. Applicants must be registered medical practitioners, practising solely as Anaesthetists, and must hold the Diploma in Anaesthetics ; those holding appointments as First Assistant Anaesthetists at this hospital will be permitted to apply. Applicants will be required to call upon members of the visiting medical staff and to furnish them with copies of their applications, supported by three testimonials given specially for the purpose. Further particulars and form of application, which must be returned not later than February 2, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Newcastle-upon-Tyne
RESIDENT MEDICAL OFFICER (B1)

The Board of Management invite applications for the post of Resident Medical Officer (B1). Candidates should have had both general and paediatric hospital experience. The R.M.O will be in general paediatric charge of all patients in the Hospital, and will be expected to co-operate in their treatment, under the general direction of the Honorary Physician or Surgeon concerned. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. He will be responsible for the Hospital records. Salary £400 per annum plus full residential emoluments. The appointment will be for six months. Applications to be sent to J. B. Cairncross, C.A., House Governor

HOSPITAL FOR SICK CHILDREN
Newcastle-upon-Tyne
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2) to become vacant on or about February 12, 1948, including R practitioners who hold A posts. The appointment will be for a period of six months. Salary is at the rate of £150 per annum, with full residential emoluments. Applications to be sent to J. B. Cairncross, C.A., House Governor and Secretary.

HARLOW WOOD ORTHOPAEDIC HOSPITAL
near Mansfield, Notts (355 beds)
E.M.S. and Civilian. Regional Orthopaedic Centre
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2) including R practitioners who now hold A posts. Appointment will be for a period of six months. Salary with full residential emoluments at the rate of £200 per annum. The hospital is recognized under the Government's Scheme for the Postgraduate Education of Medical Officers released from the Forces and falling within Classes I and III. Applications to be sent to the undersigned.—D. Roberts, Secretary-Superintendent.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)

Applications are invited from registered medical practitioners for the following posts:—

RESIDENT MEDICAL OFFICER (B2), vacant March 1, 1948. This appointment is for six months at a salary of £225 per annum, with full residential emoluments. R practitioners holding A posts may apply.

HOUSE SURGEON (A), vacant March 1, 1948. Salary £175 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications, with testimonials, to E. Barber, Secretary.

HARTLEPOOLS HOSPITAL
Hartlepool, Co. Durham (126 beds, including Maternity Unit)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners to the above, including practitioners within three months of qualification and who are liable under the National Service Acts. The Visiting Consultant Staff includes Aural, Gynaecological, Ophthalmic, Orthopaedic and Urological Surgeons. The establishment also includes a House Physician and an Orthopaedic-Surgical Registrar. The appointment is for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent as soon as possible to the Superintendent.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J Carless, House Governor.

HORTON GENERAL HOSPITAL Banbury, Oxon (Voluntary Hospital of 220 beds)
JUNIOR HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Junior House Surgeon (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Salary at rate of £180 per annum with full residential emoluments. Applications to Richard H. Prescott, House Governor.

KING GEORGE'S SANATORIUM FOR SAILORS
Bramshott, Liphook, Hants
(Seamen's Hospital Society)
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer (B1), now vacant. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary at the rate of £350 per annum, plus full residential emoluments. Applications to be sent to the Medical Superintendent.

KING EDWARD VII HOSPITAL, Windsor
HOUSE SURGEON (B2)
Obstetric and Gynaecological Department

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) for the Obstetric and Gynaecological Department, to become vacant on February 14, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £150 per annum, with full residential emoluments. Applications to be sent to the Secretary as soon as possible.

KING EDWARD MEMORIAL HOSPITAL
Ealing
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Physician (A), to become vacant on February 18, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. Six months' appointment. Salary at the rate of £175 per annum, with full residential emoluments. Applications, accompanied by copies of two recent testimonials, should be sent to the undersigned by February 6, 1948.—R. A. Mickelwright, House Governor.

KING'S COLLEGE HOSPITAL
Denmark Hill, S.E.5
RESIDENT OBSTETRIC OFFICER (B1)

Applications are invited for the post of Resident Obstetric Officer (B1) to the Private Patients' Maternity Wing at King's College Hospital at a salary of £350 a year. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Previous obstetrical experience is essential. Applications, together with two recent copies of testimonials, should be sent to the undersigned not later than January 31, 1948.—S. W. Barnes, House Governor.

KENT AND CANTERBURY HOSPITAL
Canterbury (226 beds)
HOUSE SURGEON (B2)

Applications are invited from male registered medical practitioners for the appointment of House Surgeon (B2), including R practitioners who now hold A posts, commencing middle of March, 1948. If held by an R practitioner the appointment will be limited to six months. The salary is £200 per annum, with full residential emoluments. Applications should be sent to the Superintendent and Secretary.

LONDON HOMOEOPATHIC HOSPITAL
(Incorporated by Royal Charter)
Great Ormond Street and Queen Square, W.C.1
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification and liable under the National Service Acts, for appointment as Resident Medical Officer (A), vacant March 1, 1948. The appointment will be for a period of twelve months, four months surgical, four months gynaecological and four months medical. Salary commencing at £180 per annum, increasing to £250 for the last four months, with full residential emoluments. Selected candidates will be required to attend a meeting of the Medical Committee for interview.—L. J. Knowles, Secretary.

LIVERPOOL AND DISTRICT HOSPITAL FOR DISEASES OF THE HEART
34, Oxford Street, Liverpool, 7
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Physician (A) to commence February 1. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to appply. Appointment will be for a period of six months. Salary at the rate of £100 per annum, with full residential emoluments. Facilities for M.D. thesis. Applications to the Secretary.

LONGTON HOSPITAL, Stoke-on-Trent, Staffs
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications to B. Pitt, Secretary.

LEIGH INFIRMARY, Lancs
General Hospital (102 beds)
HOUSE SURGEON CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon Casualty Officer (B2), vacant immediately. Salary £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications to be sent as soon as possible to B. R. Carter, Secretary-Superintendent.

LINCOLN COUNTY HOSPITAL
(Voluntary Hospital, 200 beds)
HONORARY ASSISTANT EAR, NOSE AND THROAT SURGEON

The Board of Management invites applications for the appointment of Honorary Assistant Ear, Nose and Throat Surgeon. Canvassing is strictly prohibited. Applications must be sent as soon as possible to Ronald W. Howick, Secretary-Superintendent.

LADY CHICHESTER HOSPITAL
Hove, Brighton
For the treatment of early nervous disorders of Men, Women and Children (60 beds)
JUNIOR HOUSE PHYSICIAN (B2)

Applications are invited for the post of Junior House Physician (B2) at this hospital at a salary of £175 per annum, including R practitioners who hold A appointments. Applications should be sent to the undersigned.—Percy F. Spooner, Secretary.

LONDON CHEST HOSPITAL, E.2
REGISTRAR (E.N.T. Department)

Applications are invited for the above post. Appointment is in the first instance for one year and attendance is required on Monday and Thursday afternoon. Salary £200 per annum. Applications should be sent at once to the Secretary

LEICESTER ROYAL INFIRMARY
RESIDENT ANAESTHETIST (B2)

Applications are invited for an immediate vacancy of Resident Anaesthetist (B2), appointment to end on September 30, 1948, including R practitioners who hold A posts. Salary £200 per annum. Applications should be forwarded to the House Governor and Secretary forthwith.

MANCHESTER NORTHERN HOSPITAL
(General Hospital, 116 beds)
Cheetham Hill Road, Manchester, 8
HONORARY PHYSICIAN

The Committee of Management invite applications for the post of Honorary Physician. Candidates must hold a M.D. degree or be a Fellow or Member of the Royal College of Physicians of England. Candidates are required to furnish twelve copies of their application and recent testimonials, together with diplomas and a certificate of age, to Mr. James C. Daniels, Secretary, 38, Barton Arcade, Manchester, 3, by February 18, 1948.

MANCHESTER NORTHERN HOSPITAL
(General Hospital, 116 beds)
Cheetham Hill Road, Manchester, 8
PART-TIME RADIOLOGIST

Applications are invited for the appointment of Radiologist (part-time) to commence duty in or before March, 1948. Remuneration £4 4s. per session, three sessions, each of 2½ hours a week. Applications to be sent to Mr. James C. Daniels, Secretary, 38, Barton Arcade, Manchester, 3, as soon as possible, but not later than February 2, 1948.

Have you read the notice at top of page 11?

Established 1885 **THE Medical Defence Union** MUSeum 1337

Annual Subscription £1 **MEMBERSHIP EXCEEDS 31,500** *Assets exceed £170,000*

THE cost of litigation and the damages awarded to successful litigants are steadily rising. The Union's subscription remains at its pre-war figure. Can you afford to remain outside?

SEVERAL MEMBERS have applied for assistance only to find to their discomfiture that the current subscription is unpaid; the completion of a "Banker's Order" avoids this oversight.

IMMUNITY from medico-legal actions, from slander or the receipt of accusatory letters does not exist; the Union proffers financial assistance, legal advice and defensive measures at a minimal annual cost.

EVERY active practitioner is vulnerable in a legal sense. No one can tell from what quarter an accusation may emanate calling for the skilled help, legal advice and financial protection of The Union.

Protection is also provided on special terms to Medical and Dental practitioners resident and practising overseas.
To ensure continuity of protection, Members must pay their 1948 subscription not later than January 31st.
Full particulars from the Secretary (Dr. Robert Forbes), The Medical Defence Union, Ltd., 49, Bedford Sq., London, W.C.1.

Have you read the notice at top of page 11 ?

MANSFIELD AND DISTRICT GENERAL HOSPITAL (245 beds)

Applications are invited from registered medical practitioners for the following appointments :—

ASSISTANT RESIDENT SURGICAL OFFICER (B2). Vacant March 5, 1948. Salary £300 per annum, plus residential emoluments. The appointment is for twelve months except in the case of R practitioners holding A posts when the post will be for six months only. Applicants should have held house appointments previously.

HOUSE PHYSICIAN (A). Vacant February 1, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £220 per annum, with full residential emoluments.

Applications should reach the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL (Non-Sectarian, 102 beds)
Cheetham, Manchester, 8
HONORARY SURGEON

Applications are invited for the post of Honorary Surgeon on the Staff of the above hospital. Applicants must be recognized Consultants and be Fellows of the Royal College of Surgeons of England. Applications to be submitted to the undersigned by February 28. By order of the Board of Management.—Charles D. Drake, General Superintendent.

MEMORIAL HOSPITAL
Shooters Hill, London, S.E.18
(General Hospital, 130 beds)
CASUALTY OFFICER (A)

Applications are invited for the post of Casualty Officer (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Salary £175 per annum, with full residential emoluments. Applications should be addressed to the House Governor as soon as possible.

MAIDENHEAD HOSPITAL, Berkshire (100 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2) vacant now. Salary at the rate of £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be for six months, otherwise for one year. Applications should be sent to the Superintendent-Secretary.

NORTHAMPTON GENERAL HOSPITAL
(410 beds)

Applications are invited from registered medical practitioners for the following posts :—

CASUALTY OFFICER (A)
ANAESTHETIST (A) (Post recognized for the D.A.)

Salary at the rate of £200 per annum, with full residential emoluments.

Appointments will run until September 30, 1948. Any further employment at the Hospital beyond that date will be at the rate of £225 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, in which case the appointment will be for a period of six months.

SENIOR ANAESTHETIST (B2)
(Post recognized for the D.A.)

Salary at the rate of £300 per annum, with full residential emoluments. Registered practitioners holding A posts may apply, in which case the appointment will be limited to six months.

Applications should be sent as soon as possible to the undersigned.—S. G. Hill, Superintendent.

AMENDED ADVERTISEMENT

NEWBURY DISTRICT HOSPITAL
RESIDENT SURGEON (B1)

Applications are invited for the appointment of Resident Surgeon (B1) at the above hospital. Applicants should have had surgical experience and preference will be given to applicants holding a higher surgical qualification. Salary will be at the rate of £750 per annum, plus emoluments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications should be forwarded to the undersigned immediately.—John S. Holdstock, Secretary, Newbury District Hospital, Berkshire.

NORFOLK AND NORWICH HOSPITAL
Norwich
GENERAL HOUSE SURGEON (A)

Applications are invited for the post of General House Surgeon (A). Salary £250 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent as soon as possible to F. L. Gatfield, House Governor and Secretary.

NORTH ORMESBY HOSPITAL
Middlesbrough (196 beds)

Applications are invited from registered medical practitioners for the following appointment :—

RESIDENT HOUSE SURGEON (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Salary at the rate of £150 per annum, with full residential emoluments. The appointment is for a period of six months. Applications to the Secretary-Superintendent. This is a general hospital with a busy Out-patient Department carrying four established Resident House posts.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of full-time Pathologist at the above hospital. Applicants should be exclusively engaged in the practice of Pathology, with wide training in Clinical Pathology and Morbid Anatomy. The post will be non-resident, with a commencing salary of £1,100, the successful candidate being permitted to engage in private practice, restricted to the private wing of the hospital, at present 23 beds. Applications should reach the Secretary not later than February 28, 1948.

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Gynaecologist, the Aural Surgeon, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

ORTHOPAEDIC HOSPITAL
Hartshill, Stoke-on-Trent
(78 beds, Fracture B Hospital, E.M.S.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Suitably qualified R practitioners, preferably with orthopaedic experience, holding B2 posts may apply. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £350 per annum, plus residential emoluments. Applications should be sent to the undersigned immediately.—Victor Johnson, Secretary-Superintendent.

POOLE GENERAL HOSPITAL
(Cornelin and East Dorset Hospital), Poole, Dorset
(188 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable under the National Service Acts, for the appointment of House Physician (B2) to become vacant on March 3, 1948. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £300 per annum with full residential emoluments. Applications should be sent to the undersigned.—T. S. Jackson, Secretary.

PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), vacant February 25, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent.

ROYAL VICTORIA AND COUNTY HOSPITALS
Dover (150 beds—75 Surgical)
SENIOR HOUSE SURGEON (B2)

Applications are invited immediately from registered medical practitioners (male) for the appointment of Senior House Surgeon (B2) in charge of the surgical cases, including R practitioners who hold A posts. The appointment is for six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications to the Secretary, Royal Victoria Hospital, Dover.

ROYAL BERKSHIRE HOSPITAL, Reading

Applications are invited from registered medical practitioners, male, for the following posts :—

TWO CASUALTY OFFICERS (A). Salary is at the rate of £150 per annum, with full residential emoluments. Duties will involve alternating with each other in the Casualty Department, Fracture Clinic and Accident Wards, and assisting in the treatment of all cases of traumatic origin. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL MANCHESTER CHILDREN'S HOSPITAL, Pendlebury
ASSISTANT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable under the National Service Acts for the post of Assistant Medical Officer (A), non-resident, at the Out-patient's Department, Gartside Street, Manchester. The appointment will be for a period of six months commencing March 1, 1948. Salary is at the rate of £200 per annum. The hours of duty at the Out-patients' Department are from 9 a.m. until 1 p.m. or until the work of the Department is finished. Applications, stating age, qualifications (with dates) and nationality, and accompanied by copies of three recent testimonials, should be sent to the undersigned not later than January 31, 1948. —By Order, H. Heardman, General Superintendent and Secretary.

ROYAL MANCHESTER CHILDREN'S HOSPITAL, Pendlebury
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts for the appointment of House Surgeon (A) to become vacant on March 1, 1948. The appointment is for a period of six months and the salary is at the rate of £175 per annum, with full residential emoluments. Applications, stating age, qualifications (with dates) and nationality, and accompanied by copies of three recent testimonials, to be sent to the undersigned not later than January 31, 1948.—By Order, H. Heardman, General Superintendent and Secretary.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
FIRST ASSISTANT (B1)
to the Ear, Nose and Throat Department

Applications are invited from registered medical practitioners, male or female, including medical officers recently demobilized from H.M. Forces, for the post of First Assistant to the Ear, Nose and Throat Department (B1) at the Royal Hospital Unit. Candidates must have held house appointments and had experience in Otolaryngology, and preference will be given to candidates holding the Diploma of F.R.C.S., or D.L.O. Salary will be at the rate of £650 per annum non-resident. Suitably qualified R practitioners holding B2 appointments, and also R practitioners holding B1 appointments who have been rejected by the Services are invited to apply. Applications to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL HALIFAX INFIRMARY (283 beds)

ORTHOPAEDIC REGISTRAR (B1), male (non-resident) required. Vacant immediately. Salary according to experience, but not less than £750 per annum commencing. Candidates should be well trained in Orthopaedics, and the possessor of higher qualifications will be an advantage. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2) (one post) (male). R practitioners who hold A posts may apply. Six months post, vacant January 31, 1948. Salary £250 per annum with full residential emoluments.

Applications, accompanied by copies of three recent testimonials, and the names of three referees to be sent to the Secretary as soon as possible.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
TWO HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners for the appointment of two House Surgeons (A), one now vacant, second vacant February 12, 1948. Salary in each case £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply when appointment will be for a period of six months, otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A. Stanley Brunt, General Superintendent and Secretary.

ROYAL NORTHERN HOSPITAL, Holloway, N.7
HOUSE SURGEON & CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon and Casualty Officer (B2) to become vacant on February 25, 1948, for a period of six months. R practitioners holding A posts may apply. Salary and emoluments £150 per annum with board residence and laundry. Applications should be sent to the undersigned not later than January 30, 1948.—Gilbert G. Panter, Secretary.

ROYAL NORTHERN HOSPITAL, Holloway, N.7
HOUSE PHYSICIAN AND OUT-PATIENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of House Physician and Out-Patient Medical Officer (B2) to become vacant on February 28, 1948, for a period of six months. R practitioners holding A posts may apply. Salary and emoluments £150 per annum with board, residence and laundry. Application should be sent to the undersigned not later than January 30, 1948.—Gilbert G. Panter, Secretary.

ROYAL MANCHESTER CHILDREN'S HOSPITAL
Pendlebury
RESIDENT HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of Resident House Physician (A), to become vacant on March 1, 1948. The appointment is for a period of six months and the salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned not later than February 2, 1948.—By order, H. Heardman, General Superintendent and Secretary.

ROYAL MANCHESTER CHILDREN'S HOSPITAL
Pendlebury
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the post of Resident Surgical Officer (B1). Salary £250 per annum. The appointment is for a period of six months commencing March 10, 1948. Suitably qualified R practitioners holding B2 posts may apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Applications to be sent to the undersigned not later than February 2, 1948. By Order, H. Heardman, General Superintendent and Secretary.

ROYAL MANCHESTER CHILDREN'S HOSPITAL
Pendlebury
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Resident Medical Officer. Salary £250 per annum. The appointment is for a period of six months, commencing March 16, 1948. Suitably qualified R practitioners holding B2 posts may apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Applications to be sent to the undersigned not later than February 2, 1948. By Order, H. Heardman, General Superintendent and Secretary.

ROYAL LANCASTER INFIRMARY
Lancaster (226 beds)
ORTHOPAEDIC AND CASUALTY HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of Orthopaedic and Casualty House Surgeon (B2) vacant immediately. Salary £275 per annum with full residential emoluments. R practitioners holding A posts may apply when the appointment will be limited to six months. Applications should be sent to the undersigned.—F. A. Milnes, Superintendent-Secretary.

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL
234, Great Portland Street, W.1
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2). Duties to commence February 8. Salary at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to be addressed to the House Governor not later than January 28.

ROYAL SURREY COUNTY HOSPITAL
Guildford (229 beds)
HOUSE SURGEON (A)
to Ear, Nose and Throat Department

Applications are invited for the post of House Surgeon (A) to Ear, Nose, and Throat Department from registered medical practitioners, including those within three months of qualification who are liable for service under the National Service Acts. The appointment is for six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications should reach the Secretary-Superintendent by January 31.

RADCLIFFE INFIRMARY, Oxford
JUNIOR RESIDENT PATHOLOGIST (B2)

Applications are invited for the post of Junior Resident Pathologist (B2), commencing as near as possible to February 1. Applicants should have completed one previous house appointment. The appointment will be for seven months, one month of which will be spent in training in the Pathological Department. Salary at the rate of £100 per annum. Applications, and two testimonials, should reach the undersigned within two weeks of the appearance of this notice.—A. G. E. Sanctuary, Administrator.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
HONORARY PSYCHIATRIST

The Court of Management will shortly elect an Honorary Psychiatrist. Candidates must be on the medical register and hold one of the higher qualifications. Applications should be addressed to the General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

IMPORTANT NOTICE
APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
January 20, 1948. Secretary.

REEDYFORD MEMORIAL HOSPITAL
Nelson, Lancs
RESIDENT MEDICAL OFFICER (A)
(Medical and Surgical Duties)

Applications are invited from registered medical practitioners, male or female, including those within three months of qualification and liable under the National Service Acts, for the appointment of Resident Medical Officer (Medical and Surgical duties) (A). Appointment for a period of six months. Salary at the rate of £200 per annum plus full residential emoluments. Excellent resident quarters. Applications should be sent immediately to Fred C. Parr, Secretary.

ROYAL INFIRMARY, Preston
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the post of House Surgeon (A) vacant February 14. Duties under Urological Surgeon and in Casualty Department. Six months appointment. Salary at the rate of £175 per annum with usual residential allowances. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Superintendent.

ROCHDALE INFIRMARY, Lancashire
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female), for the appointment of Resident Surgical Officer (B1). Salary £350 per annum. Suitably qualified R and W practitioners holding B2 appointments, also R practitioners holding B1 and rejected by the R.A.M.C., may apply. Applications to the Superintendent-Secretary.

SUSSEX EYE HOSPITAL, Brighton (56 beds)
JUNIOR HOUSE SURGEON (A)

Junior House Surgeon (A) required, to commence duties on March 1, 1948. The appointment will be for six months, to be followed, if satisfactory, by a further period of six months as Senior House Surgeon (B2). Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. Salary for the Junior appointment at the rate of £175 per annum. Applications should be sent to the undersigned on or before February 9.—Percy F. Spooner, Secretary-Superintendent.

ST. THOMAS'S HOSPITAL, S.E.1

Applications are invited for the following posts:—

PHYSICIAN IN THORACIC MEDICINE
PHYSICIAN TO THE DEPARTMENT OF PSYCHOLOGICAL MEDICINE

It is proposed to make the latter appointment in March or April next so that the successful candidate may take over from the present Physician on his retirement in June.

Applicants must be Fellows or Members of the Royal College of Physicians of London, and should submit twenty copies of their applications, giving details of age, experience, and qualifications with dates, and the names of three referees to whom the Hospital may write. Applications should be sent by January 29, 1948, to the Clerk of the Governors, to whom any enquiries should be addressed.

ST. MARY'S HOSPITAL, London, W.2
OBSTETRIC AND GYNAECOLOGICAL REGISTRAR (B1)

Applications are invited for the post of Obstetric and Gynaecological Registrar (B1). Candidates must be Members of the Royal College of Obstetricians and Gynaecologists, or Fellows of the Royal College of Surgeons of England, or graduates of a British University in Medicine and Surgery. Suitably qualified R practitioners now holding B2 posts may apply. R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The appointment is for a first period of twelve months as from February 25, 1948, at a salary of £400 per annum. Applications stating permanent address should reach the undersigned by January 31.—W. Parkes, House Governor.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
TEMPORARY RESIDENT ANAESTHETIST

Temporary Resident Anaesthetist required immediately pending the appointment of a full-time Anaesthetist under the terms and conditions of Ministry of Health Circular 202/46. Candidates must have had considerable experience in Anaesthetics. Salary for the temporary post minimum of £500 per annum, or according to qualifications and experience. The selected candidate, if qualified under the terms of the circular, will be fully considered for the permanent appointment. Applications should be forwarded to the undersigned forthwith.—A. E. Collins, Secretary.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the post of House Physician (A), including practitioners within three months of qualification who are liable for service under the National Service Acts, which will become vacant on February 17, 1948. If held by an R practitioner, the appointment will be limited to six months. Salary £250 per annum, with usual emoluments. Applications should be submitted to the undersigned immediately.—A. E. Collins, Secretary.

SOMERSET AND BATH MENTAL HOSPITAL
Wells, Somerset
FIRST ASSISTANT MEDICAL OFFICER (B1)
(Male) (whole-time)

Candidates must have had previous experience in Psychiatry. Salary £455 per annum, with increments of £25 to £555, plus £50 for D.P.M., £59 16s. cost-of-living bonus, and special temporary bonus) £65, also emoluments £146. (If married, quarters will be available at a rental of £46 per annum. £100 cash in lieu of other emoluments will be allowed). Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M Forces. Applications by January 30, 1948, to the Medical Superintendent.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2), vacant January 31, 1948. Salary is at the rate of £300 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications, stating age, qualifications (with dates), nationality and accompanied by copies of three recent testimonials, should be sent to the Secretary, H. F. Donald, The Infirmary, Stamford.

(Continued on page 26)

Have you read the notice at top of page 11 ?

THE MEDICAL PROTECTION SOCIETY LIMITED

Founded 1892. **Assets exceed £100,000.**

Members receive advice and assistance in all matters affecting the practice of their profession and are afforded COMPLETE INDEMNITY against costs and damages in cases undertaken on their behalf.

Subscription £1. **No entrance fee to those joining within twelve months of registration.** **Entrance fee, 10/-.**

Full Particulars from the **Secretary, VICTORY HOUSE, LEICESTER SQUARE, W.C.2.** **Gerrard 4553 and 4814.**

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To all other advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d.; or 30 words 22s.; and 3s. 6d. for each six words *or less* thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 25s. (minimum); or 24 words, 31s.; or 30 words, 37s.; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To **ALL** advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.
Telephone: Euston 2111.
Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 11

PERSONAL

WANTED, FURNISHED BED SITTING-ROOM, London or suburbs, for healthy girl student P.G., aged 16½, needing good home atmosphere. Under treatment for mild psychological disorder. Piano and facilities for practice an advantage, but not essential.—Box 7264, B.M.J.

ARMY DOCTOR, WIFE, 2 CHILDREN Desperately requires **ACCOMMODATION** within reach of Woolwich (Sidcup, Chislehurst preferred).—K. Greenwood, High Coxlease Cottage, Lyndhurst, Hants.

GLOS.—MATRON HAS VACANCIES in her exclusive Nursing Home, central heating, log fires, gardens, own produce, excellent nursing (S.R.N.) and domestic staff; private bathrooms, lounge, dining room. Fees from 10½ guineas.—Upton Grove, Tetbury.

NOTICES

ROYAL UNITED KINGDOM BENEFICENT ASSOCIATION grants **ANNUITIES** without regard to religious denomination, to gentlefolk of both sexes who are over 40 years of age, incapacitated from earning a livelihood, and whose total means do not exceed £120 per annum. Annuitants elected by votes of subscribers, or appointed by the committee. Subscriptions and legacies gratefully received. Full particulars from General Secretary, R.U.K.B.A., Dept. H., 13, Bedford Street, Strand, W.C.2.

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

EX-I.M.S. OFFICERS, CANADIAN.—Retired Canadian officers of the Indian Medical Service, in or passing through the U.K., are advised to contact the Senior Canadian Air Force Liaison Officer, 11, Hill Street, London, W.1, regarding employment in Canada with the Royal Canadian Air Force.

ROYAL COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS, 58 Queen Anne Street, London, W.1. PRIZE ESSAY.—A prize of £50, offered by a Fellow of the College, will be awarded for the best essay embodying original work or observations on the **PHYSIOLOGY OR MANAGEMENT OF THE THIRD STAGE OF LABOUR.** Essays must be typewritten and should not exceed 2,000 words. The prizewinning essay will be published in the *Journal of Obstetrics and Gynaecology of the British Empire.* Entries will be accepted from medical practitioners in the British Commonwealth, and must be submitted to the Secretary before December 31, 1948. The award will be made at the Spring meeting of the Council in 1949.

THE CLINICAL RESEARCH ASSOCIATION, LIMITED, Watergate House, 15, York Buildings, Adelphi, W.C.2, and South Road, Haywards Heath, Sussex.—A complete pathological service is provided for the medical profession, hospitals, and public health authorities. Specimens may be collected either at the Watergate House consulting rooms, the patient's house, or at a nursing home. Cardiographic, x-ray, and Basal Metabolic Investigations arranged. Telephones: Temple Bar 8993-4-5-6; Haywards Heath 576 Telegrams: "Tubercle, Rand, London."—I. Hollis, Secretary.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

APPLICATIONS ARE INVITED for a RESEARCH SCHOLARSHIP IN ORGANIC NERVOUS DISEASES tenable at the Middlesex Hospital Medical School under the direction of the Physician in charge of the Department for Nervous Diseases. Subject: Disseminated Sclerosis. Candidates must be Members of the Royal College of Physicians, and should have had previous neurological training. Salary £800 to £1,000 per annum, according to experience. The appointment is an annual one, but renewal for a further year may be considered. Applications, with names of three referees, should reach the Dean of the Middlesex Hospital Medical School, London, W.1, not later than February 21.

AUSTIN MOTOR COMPANY.—Applications are invited from medical practitioners preferably under 30 years of age for the post of **CASUALTY SURGEON** in the Health Department of this firm. The appointment is for six months, renewable up to one year. The work will be concerned largely with the treatment and rehabilitation of injured employees, in close collaboration with local hospitals, and offers an opportunity to a man studying for the F.R.C.S. Salary at the rate of £450 per annum, plus board and lodging. Apply, with names of two referees, to Chief Medical Officer, Austin Motor Company, Longbridge, Birmingham.

BEIT MEMORIAL FELLOWSHIPS FOR MEDICAL RESEARCH.—Notice is hereby given that an **ELECTION of JUNIOR FELLOWS** to begin work on October 1 will take place in July, 1948. Junior Fellowships are normally of the annual value of £600 for three years, but candidates younger than those usually elected or whose promise for Medical Research must be judged mainly on work outside that field, may be awarded a lower rate of £500 for the first two years. Candidates are asked to state whether they would be unable to accept this lower rate. Candidates must have taken a degree in a faculty of a University in the British Empire or a Medical Diploma registrable in the United Kingdom. Election to Junior Fellowships are rarely made above the age of thirty-five years. The Trustees are desirous of furthering research in Mental Diseases and in the general allotment of Fellowships will give some preference to a candidate proposing research on approved lines in that subject. Applications from candidates must be received by May 14. It is necessary for candidates to submit evidence that they can be given accommodation in the departments where they propose to work, which must be either in Great Britain or Ireland. Forms of application and all information may be obtained by letter only, addressed to: Dr. A. N. Drury, C.B.E., F.R.S., Secretary, Beit Memorial Fellowships for Medical Research, Lister Institute, Chelsea Bridge Road, London, S.W.1. For Overseas candidates, forms of application may be obtained from: The Secretary, South African Medical Council, P.O. Box 205, Pretoria, South Africa. The Secretary, Universities Commission, Box 4061, G.P.O., Sydney, Australia. The Department of Health, Wellington, New Zealand. The Canadian Medical Association, 184, College Street, Toronto, Canada.

G.P. WANTS ASSISTANT, CHIEFLY FOR PART-TIME WORK at factory of 7,000 employees. Salary £850 per annum.—"Industry," Philip Harris & Co., Edmund Street, Birmingham.

INDUSTRIAL MEDICAL OFFICER.—Applications are invited from medical practitioners with experience in industrial medicine for appointment to Medical Interviewing Committees which are being established in Sunderland and Newcastle-upon-Tyne, to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable per session of 1½ to 2½ hours £2 12s. 6d., plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Senior Medical Officer, Ministry of Health, 11, Osborne Terrace, Newcastle-upon-Tyne, 2, not later than February 7, 1948.

UNIVERSITY OF SHEFFIELD.—Applications are invited for the post of **RESEARCH ASSISTANT** in the Department of Pharmacology and Therapeutics, to carry out original investigations under the Professor, which will be mainly in the clinical field, but experience in laboratory work would be an advantage. Salary in the range of £500 to £700 per annum, according to qualifications and experience, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. Candidates must possess a medical qualification, and have had clinical experience. The successful candidate will be expected to begin duties as soon as possible. Applications (three copies), with the names and addresses of referees and, if desired, copies of testimonials, should reach the undersigned (from whom further particulars may be obtained) by February 21, 1948.—A. W. Chapman, Registrar.

UNIVERSITY OF SHEFFIELD.—Applications are invited for a post of **DEMONSTRATOR in ANATOMY,** to commence duties on April 1, 1948. Salary scale £450 in the first year, and if the appointment is renewed for second and third years, £475 and £500 respectively, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. The commencing salary on the scale will depend upon the qualifications of the successful candidate. Further particulars can be obtained from the undersigned, to whom applications (four copies), including the names and addresses of referees, and, if desired, copies of testimonials, should be sent by February 21, 1948.—A. W. Chapman, Registrar.

UNIVERSITY OF MANCHESTER.—Applications are invited for the post of full-time **PHYSICIAN-IN-CHARGE OF THE RESEARCH CLINIC AND FIELD SURVEY** to be based on the Miners' Welfare Commission's Centre at Walkden. This is a clinic for the diagnosis and treatment of rheumatic and post-traumatic disabilities, and will act as a base for the field survey. The salary is at the rate of £1,000 per annum. Applications, which must be received on or before March 6, 1948, should be sent to the Registrar, the University, Manchester, 13, from whom further particulars may be obtained.

UNIVERSITY OF LONDON.—The Senate invites applications for the **READERSHIP IN BACTERIOLOGY** tenable at St. Thomas's Hospital Medical School (salary £900 to £1,300). Applications must be received not later than February 26, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invites applications for the **READERSHIP IN SURGERY** tenable at St. Thomas's Hospital Medical School (salary £900 to £1,300). Applications must be received not later than February 19, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **READERSHIP IN PUBLIC HEALTH** tenable at the London School of Hygiene and Tropical Medicine (salary £800-£1,000-£1,200). Applications must be received not later than March 3, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

OBSTETRICS (D.Obst.R.C.O.G.). February 16 to 21. All day. West Middlesex County Hospital, Isleworth. Limited. Apply, Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

POSTAL COACHING for all Medical Examinations. Examination Successes 1901-46: M.D.Lond., 450; M.B., B.S. Lond., Final, 405; F.R.C.S.Eng., Primary, 357; F.R.C.S.Eng., Final, 282; M.R.C.P. Lond., 386; M.R.C.S., L.R.C.P., Final, 859; D.A. (1936-46), 110. F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

COURSE OF INSTRUCTION IN TROPICAL MEDICINE AND HYGIENE.—The next Course will begin on March 1, 1948, and will cover a period of five months. It is primarily designed to prepare students for the examination of the English Conjoint Board for the Diploma in Tropical Medicine and Hygiene, but students not wishing to take the Diploma are accepted for the course which includes theoretical and practical instruction in Protozoology, Helminthology, Bacteriology, Clinical Pathology and Haematology, Tropical Medicine and Surgery, Principles of Nutrition, Medical Entomology, Vital Statistics, Sanitation, and the Principles of Preventive Medicine including the prevention of specific diseases in relation to the tropics. The fee for the course is £40. Cheques should be made payable to the London School of Hygiene and Tropical Medicine. Space permitting, candidates who do not wish to take the whole course may be admitted to certain parts of it separately. The fee for short periods of instruction is £2 2s. per week. Any intending students are advised to apply for registration at once. Further information regarding the course may be obtained from the Registration Office, London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, London, W.C.1. Telephone number: Museum 3041.

Balfour Memorial Fund

A small sum is available annually for the payment or partial payment of fees for a student wishing to attend the course but unable to do so for financial reasons. In making allotments from the fund attention will be paid to: (a) proof that the candidate is, or will be, employed in an approved manner in the practice of Tropical Medicine overseas, (b) ability, and (c) financial need. Applications should be forwarded to the Dean.

CHILDREN'S DISEASES (D.C.H.). February 23 to March 6. Daily 5.30 to 7 p.m. Princess Louise Kensington Hospital. Limited. Preference to candidates for March examination. Apply, Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff; and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class 1D) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment. 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

POSTGRADUATE STUDY. Diploma in Anaesthetics; Diploma in Psychological Medicine; Diploma in Ophthalmology; Diploma in Radiology; Diploma in Laryngology; Diploma in Child Health; F.R.C.S.Eng. and all Surgical Examinations; M.R.C.P.Lond. and all Medical Examinations; M.D. Thesis of all Universities; Courses for all Qualifying Examinations. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested. Address: Secretary, Medical Correspondence College, 19, Welbeck St., London, W.1.

LECTURES

INSTITUTE OF DERMATOLOGY

St. John's Hospital for Diseases of the Skin, 5, Lisle Street, Leicester Square, W.C.2.
Telephone: Gerrard 5580

LECTURES, constituting a systematic Course in Dermatology, will be given at 5 p.m. on Tuesdays and Thursdays from October to March

SYLLABUS—WINTER SESSION—1948

1948		*Subject*	*Lecturer*
Feb. 3	Tues.	Pathological Demonstrations	DR. I. MUENDE
„ 5	Thurs.	The Seborrhoeic Dermatoses	DR. L. FORMAN
„ 10	Tues.	Diseases of the Nails	DR. H. CORSI
„ 12	Thurs.	Psychosomatic Dermatoses	DR. W. J. O'DONOVAN
„ 17	Tues.	Pathological Demonstrations	DR. I. MUENDE
„ 24	Tues.	Anomalies of Pigmentation	DR. W. N. GOLDSMITH
Mar. 2	Tues.	Pathological Demonstrations	DR. I. MUENDE
„ 4	Thurs.	Diseases of the Lips	DR. B. RUSSELL
„ 9	Tues.	Physio- and Electro-Therapy	DR. R. T. BRAIN
„ 11	Thurs.	Diseases of the Hair	DR. W. J. O'DONOVAN
„ 16	Tues.	Pathological Demonstrations	DR. I. MUENDE
„ 23	Tues.	Principles and Practice of Treatment	DR. R. M. B. MACKENNA

An Examination may be held at the end of the Course, when the CHESTERFIELD MEDAL may be awarded to the best candidate, provided the required standard is reached.

CLINICS.—Instruction will be given in the Out-Patient Department to a limited number of Post-Graduates as follows:—

Mon.,	9.45 a.m.	W. GRIFFITH	Thurs.,	9.45 a.m.	G. B. DOWLING
	1.30 p.m.	A. D. PORTER		1.30 p.m.	B. RUSSELL
Tues.,	9.45 a.m.	H. CORSI	Fri.,	9.45 a.m.	I. MUENDE (Pathologist)
	1.30 p.m.	R. M. B. MACKENNA		1.30 p.m.	G. B. MITCHELL-HEGGS
Wed.,	9.45 a.m.	F. R. BETTLEY		1.30 p.m.	R. T. BRAIN (Electro-Therapeutics)
	1.30 p.m.	J. E. M. WIGLEY		5.30 p.m.	L. FORMAN

LABORATORY.—Arrangements can be made for Classes, individual instruction or for research work. For Particulars and Fees, apply to the Dean.

FEES.—Lectures, Two Guineas per month; six months, Ten Guineas. Registered Medical Students may attend the Lectures on signing their names and giving the name of their hospital. They are not, however, allowed to attend the Clinics.

For further particulars, apply to the Dean.

J. E. M. WIGLEY, M.B., F.R.C.P.,
Dean.

EMPIRE RHEUMATISM COUNCIL

The Spring Week-end Course will be held at THE APOTHECARIES' HALL, BLACKFRIARS LANE, QUEEN VICTORIA STREET, E.C.4 (Blackfriars Tube Station), on Friday, Saturday, and Sunday, March 12, 13, and 14, 1948.

LECTURES

	FRIDAY, MARCH 12	
4.30–5.30 p.m.	Introductory Lecture	PROFESSOR L. S. P. DAVIDSON, F.R.C.P., F.R.S.E.
5.30–6.30 p.m.	Gout	G. D. KERSLEY, ESQ., F.R.C.P.
	SATURDAY, MARCH 13	
10–11 a.m.	Osteoarthritis	ERNEST FLETCHER, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Spondylitis	W. S. TEGNER, ESQ., M.R.C.P.
2–3 p.m.	Juvenile Rheumatism and Still's Disease	R. E. BONHAM-CARTER, ESQ., M.R.C.P.
3–4 p.m.	Non-Articular Rheumatism and Sciatica	W. S. C. COPEMAN, ESQ., O.B.E., F.R.C.P.
4 p.m.	Tea	
4.30–5.30 p.m.	Rheumatoid Arthritis	OSWALD SAVAGE, ESQ., O.B.E., M.R.C.P
	SUNDAY, MARCH 14	
10–11 a.m.	Physical Treatment in the Rheumatic Diseases	H. A. BURN, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Orthopaedic Aspects of the Rheumatic Diseases	W. D. COLTART, ESQ., F.R.C.S.

The fee for the course will be One Guinea, limited to 100 entries, to be received with remittance, at least one week before, by the General Secretary, Empire Rheumatism Council, Tavistock House (N), Tavistock Square, W.C.1.

PRIMARY F.R.C.S.—COURSE OF LECTURE-DEMONSTRATIONS in ANATOMY, PHYSIOLOGY, PATHOLOGY and BACTERIOLOGY, on Monday and Thursday evenings, 7.30 to 10 p.m., February 9 to June 3, 1948. Lecture room, Royal Cancer Hospital. Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

EDUCATIONAL

PATHOLOGIST, teaching staff, Medical School (London), gives **COACHING,** including practical, for Finals M.R.C.P., F.R.C.S., etc.—Box 7265, B.M.J.

THE ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE.—THE CERTIFICATE AND THE DIPLOMA IN PUBLIC HEALTH AND THE DIPLOMA IN INDUSTRIAL HEALTH.—The next **COURSE OF INSTRUCTION** for the Certificate in Public Health (C.P.H.) will commence on Tuesday, March 23, 1948, for the Preliminary Examination of the Conjoint Board of the Royal Colleges of Physicians and Surgeons. The Courses, both for the Certificate and for the Diploma in Public Health, can be taken either whole- or part-time. A Course of Instruction, part-time or whole-time, is also provided for the Diploma in Industrial Health. Part I is the same as, and commences concurrently with, the C.P.H. Course. Those already holding a Certificate in Public Health are exempt from that part. A Course for Part II (D.I.H.) commences in July, 1948. Prospectuses, enrolment forms, and full details of both may be obtained from the Secretary, 28, Portland Place, W.1. (Telephone LANgham 2731-2.)

SOCIETY OF APOTHECARIES OF LONDON.—Surgery: February 9, March 8, April 12. Medicine and Pathology: February 16, March 15, April 19. Midwifery: February 17, March 16, April 20. Mastery of Midwifery: May and November. Diploma in Industrial Health: July and December. For regulations apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

SOCIETY OF APOTHECARIES OF LONDON.—DIPLOMA IN INDUSTRIAL HEALTH.—The next Examination will begin on Monday, July 5, 1948. The following Examination will be held in December, 1948. For regulations apply Registrar, Apothecaries' Hall, Black Friars Lane, London, E.C.4.

THE COMBINED POSTGRADUATE TEACHING SCHOOL IN OBSTETRICS AND GYNAECOLOGY, D.OBST.R.C.O.G. EXAMINATION.—The following facilities are available for postgraduates intending to take the D.Obst.R.C.O.G. examination. Two weeks' attendance on the practice of Queen Charlotte's Maternity Hospital from February 9 to 22, followed by one week's general Refresher Course in Ostetrics and Gynaecology from February 23 to 28. Fee for the whole period £9 9s. Fee for Refresher Course only £5 5s. Postgraduates may also attend the practice of Queen Charlotte's Maternity Hospital for longer periods if desired, for a fee of £2 2s. a week. Limited accommodation can be provided near the hospital for a further three and a half guineas a week. Applications to the Secretary, The Combined Postgraduate Teaching School, Chelsea Hospital for Women, Dovehouse Street, Chelsea, S.W.3.

UNIVERSITY OF GLASGOW. Postgraduate Medical Education.—INTENSIVE COURSE IN SURGERY.—An intensive postgraduate course in Surgery will be conducted from April 12 to June 4, 1948. The Course will consist of clinical meetings, pathological demonstrations and lectures. Fees: 25 guineas. Since numbers will be restricted, those wishing to attend should make early application to the Director of Postgraduate Medical Education The University, Glasgow, W.2, from whom further particulars may be obtained.

ASSISTANTSHIPS

VACANT

Wanted, young married Assistant, large Panel and Private Practice, Surrey. Unfurnished house available, rent free. Salary by arrangement. Three recent testimonials please. Usual bond.—Box 7239, B.M.J.

Wanted, Assistant for mixed practice 30 miles from London. Car and Furnished House available. —Box 7279, B.M.J.

Wanted. Male Assistant, single, to live at branch surgery. Full board, attendance and car provided. Salary £55 monthly.—Dr. Silman, 123, Horton Lane, Bradford.

Wanted, Assistant, either sex, outdoor, mixed industrial practice. Salary by arrangement.—Medico, Philip Harris & Co., Edmund Street, Birmingham.

Wanted at once. Assistant with View. South Warwickshire town. Own car. Salary £800 to £1,000 according to experience. Two partners.—Box 7278, B.M.J.

Wanted, Assistant with View. Half share. 30 miles London. Rural, good panel and appts. Pleasant flat available. Obstetrical experience desirable.—Box 7197, B.M.J.

Wanted, Male Assistant, young, long term, out-door, for mixed general practice, Bristol. Must be experienced and well qualified. Commence March 1. References, usual bond. Car supplied. Salary by arrangement.—Box 7207, B.M.J.

Wanted, Part-time Assistant, mixed practice Mid-land county town. Salary £400 per annum, plus partly furnished modern house. Start immediately. —Box 7206, B.M.J.

Wanted, Assistant with View. Pleasant practice in North Wales seaside market town. Liverpool graduate with knowledge of Welsh preferred. House to rent available.—Box 7209, B.M.J.

Wanted, Assistant with early View, practice in industrial and rural area. House and car available. —Box 7240, B.M.J.

Wanted immediately, Outdoor single or married Assistant (no children) for mixed industrial practice Yorkshire. Furnished accommodation provided. Car essential. Salary £700 plus £50 car allowance. —Box 6962, B.M.J.

Wanted, Outdoor Assistant, either sex, North Worcestershire. Car desirable. Salary by arrangement.—Box 7242, B.M.J.

Wanted, Assistant, country practice East coast. Hospital facilities. Experience midwifery advantage, also interest in country people. Furnished house and car available.—Box 7268, B.M.J.

Wanted, unmarried Indoor Assistant, man or woman. Country practice, small hospital. Must own car. Experience in x-ray and anaesthetics desirable.—Box 7267, B.M.J.

Wanted, experienced Indoor male Assistant at once. English or Scottish. Home counties. Car provided.—Box 7266, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Assistant or Partner wanted at once in large mixed practice. South Durham.—Box 7296, B.M.J.

Assistant wanted, February 1, for general prac-tice, North London. Accommodation available. Good salary.—Box 7241, B.M.J.

Assistant wanted, Lancs. town, male. Flat and car available. Salary £700.—Box 7208, B.M.J.

Assistant, young male, British with View, must be keen, easily worked mixed practice, Essex, 10 miles London. Car essential.—Box 7243, B.M.J.

Assistant, preferably with View to Partnership in West Riding city. Share worth over £1,500 per annum available. Must have own car. House with garden to rent.—Box 6906, B.M.J.

Experienced Assistant for industrial practice adjoining Birmingham. Unfurnished flat. Excellent prospects for suitable man.—Box 7200, B.M.J.

Outdoor Assistant (British) required February 1, 1948, with or without View. Busy mixed practice in the North of England. Salary £850 and car provided.—Apply: Drs. Levie and Barclay, 15, Queens Terrace, Middlesbrough. Telephone 3278.

Partnership of four require Assistant with View as additional Partner. Good mixed practice in industrial town 30 miles London. One-eighth share offered in first instance. Gross receipts approx. £16,000 Houses for sale in the town.—Box 7295, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

WANTED

Wanted, Assistantship with or without View, by woman aged 29, single, public school education. Qualified London. Three years R.A.M.C. Late H.S. and Medical Registrar London Teaching Hospital. Preferably Southern Counties or in or near London. —Box 6957, B.M.J.

Wanted, Long-term Assistantship in England, by English Protestant. Ex-R.A.M.C. Hospital appointments, G.P. experience. Married, aged 31. Car-owner-driver. Unfurnished house desirable. Free May, early booking wanted.—Box 7212, B.M.J.

Wanted, Assistantship, preferably with early View, in country or seaside practice, Northern England. M.R.C.S., L.R.C.P. 1941, ex-R.A.M.C. English, aged 33, married. Own car.—Box 7215, B.M.J.

Wanted, Assistantship with or without View, or Locum. Scot, aged 30, married, no family, hospital and G.P. experience. Free April.—Box 7248, B.M.J.

Wanted, permanent Assistantship by M.B., B.Ch., B.Sc. (Wales 1943), married, ex-R.A.M.C., hospital and G.P. experience. Own car. Unfurnished accommodation essential.—Box 7244, B.M.J.

Wanted, Assistantship, Partnership or Practice by M.B., B.S. (Guy's), married, Horsham, Crawley, Haywards Heath area, but any good country practice in South considered, 13 years' hospital and G.P. experience. New car.—Box 6626, B.M.J.

Assistantship wanted: M.B., D.P.H., 32, single. Own car. Army, hospital, and G.P. experience. Available March. Midlands preferred. With or without View.—Box 7281, B.M.J.

Assistantship with View by Scot, M.B., B.Ch. (Cambridge), 31, married, two children, own car and furniture. 3 years' hospital experience. South England town preferred.—Box 7285, B.M.J.

Assistantship with early View, wanted by M.R.C.S., L.R.C.P., ex-R.N.V.R. (Barts.), 29, married, two children. Experience G.P. E.N.T. Own car and furniture.—Box 7249, B.M.J.

Assistantship wanted by M.B., Ch.B.(Ed.), aged 27, married, no children. R.N.V.R., hospital, and G.P. experience. Southern Scotland preferred.—Box 7246, B.M.J.

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Keen, energetic young British doctor, hospital and G.P. experience, fluent French, seeks Assistantship or Locum, Portsmouth, Southampton areas.—Box 7280, B.M.J.

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Doctor, aged 35, excellent references, experienced G.P. Anxious settle in rural or country town partnership West Country. Wife also doctor willing assist if or when required. Opposed to Health Act in present form.—Dr. Harris, 4, Parkdale, Wolverhampton.

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Partnership, Assistantship, early View wanted. Scot, B.Sc., M.B., Ch.B.(Glasgow), ex-R.A.F., 27, married, good references for H.S., G.P. experience. Keen, capable, businesslike. Own car, furniture. Available almost immediately.—Box 7216, B.M.J.

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Hull Royal Infirmary. Laboratory Technician (Grade B) required. Experience in Biochemistry essential. Preference given to candidates holding the Diploma of the I.M.L.T. Salary according to Joint Committee Scale. Applications, together with copies of testimonials, to be sent to the undersigned as soon as possible.—R. J. Carless, House Governor.

Jewish (mostly women) Convalescent Home, 80 bedrooms, all amenities, including electrical treatment (New Venture), require Jewish lady doctor, worldly, able assist management. Salary £1,000, bonus and suite of rooms. State age.—Box 6995, B.M.J.

WANTED

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Practices and Partnerships wanted anywhere England, Scotland, Wales. Purchasers waiting Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88 Church Street, Liverpool, 1.

Scotland. Practice wanted. Income £1,500 to £2,000. Panel 1,000 or over. Good house. Capital available Replies confidential.—Box P6922, B.M.J.

Small town or good suburban Practice, south Midlands. M.B., M.R.C.S., D.R.C.O.G., aged 28, wife M.B. Capital and references. Hospital and G.P. experience since demobilization.—Box P6920, B.M.J.

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AVAILABLE

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None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

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TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

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First Floor Consulting Room to Let. Usual amenities. Also light basement room suitable office. Apply, 6, Devonshire Place, W.1.

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1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

NURSING HOMES

Broadstairs. High class Nursing Home, delight-fully situated on sea-front. Has vacancies for medical, surgical and convalescent patients. Every comfort. Professional people especially catered for. Terms from 8 guineas. Applications to Matron, Bradstowe Nursing Home, Sea Front, Broadstairs. Phone: Broadstairs 962.

Munster-Royal Nursing Home (Kingston 0111), Teddington, within easy reach of London, has private accommodation for medical, surgical or maternity cases, and a few chronic invalids from 5½ guineas. Children for tonsillectomy specially accepted at 10 guineas inclusive, without undue delay. Reduced terms to doctors' families.

Nursing Home, run on private house lines, for chronic (not mental), convalescent, and rest cases. —Weir, Molesey 3165.

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Whistley House, Axtown Lane, Yelverton, South Devon (Tel. 149), L. B. Reeves, L.R.C.P.&S.Ed. Lovely modern residence run as first-class Nursing Home (registered) for convalescents and aged gentlefolk. Excellent cuisine. Resident doctor and wife. Further particulars on request.

FOR SALE

Nursing Home for Sale. Fully equipped, free-hold, registered for seven beds. 20 minutes from London, £6,000.—Box 7223, B.M.J.

APPOINTMENTS

(Continued from page 21)

Have you read the notice at top of page 11 ?

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant. Salary is at the rate of £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent immediately to the Secretary, H. F. Donald, The Infirmary, Stamford.

SALFORD ROYAL HOSPITAL
NON-RESIDENT PSYCHIATRIST

Applications are invited from suitably qualified medical practitioners trained in Psychiatry and in Psychotherapy for the post of non-resident Psychiatrist to attend at the hospital four sessions weekly (not exceeding one hour). Salary at the rate of £600 per annum. Applications, accompanied by copies of three testimonials or the names of three referees, should be made in writing without delay to the General Superintendent.

STRETFORD MEMORIAL HOSPITAL
Seymour Grove, Old Trafford
HONORARY PHYSICIAN

Applications are invited from suitably qualified candidates for the appointment of Honorary Physician. Applications, together with the names of three referees, should be forwarded to the undersigned not later than February 7, 1948.—W. G. Swann, Secretary.

SAMARITAN FREE HOSPITAL FOR WOMEN
Marylebone Road, N.W.1
HOSPITAL FOR WOMEN, Soho Square, W.1
TWO RESIDENT MEDICAL OFFICERS (B1)

Applications are invited for two posts of Resident Medical Officer (B1) to the above hospitals. The appointments, in each case, will be for a period of one year from April 1, 1948, and candidates will be expected to serve six months in each of the two hospitals. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £200 per annum resident. Preference will be given to duly qualified medical practitioners who intend to specialize in gynaecology and obstetrics. Applications, accompanied by two testimonials, should reach the undersigned not later than Wednesday, February 11, 1948.—D. C. Emery, Secretary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary hospital, 200 beds)
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, for post of Casualty Officer (A) vacant February 1, 1948. Salary £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be for six months. Applications to be forwarded to the Superintendent-Secretary as soon as possible.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary Hospital, 201 beds)
ANAESTHETIST

Applications are invited from ex-Service Specialists for the above whole-time appointment approved by the Ministry of Health under Circular 202/46. Candidates must hold the Diploma in Anaesthetics and be specialising in this branch of medicine. The appointment in the first instance will be for a period up to the establishment of the National Health Service and private practice will not be allowed. Salary £1,000 per annum, non-resident. Applications should be forwarded to the undersigned not later than February 21, 1948.—T. Rhodes, Superintendent-Secretary.

AMENDED ADVERTISEMENT

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary Hospital, 201 beds)
ASSISTANT RADIOLOGIST

Applications are invited from registered medical practitioners with suitable training and experience for this new whole-time appointment. Preference will be given to holders of the D.M.R.E. Salary £1,000 per annum, non-resident (no private practice in first instance). Applications should reach the undersigned not later than February 21, 1948 —T. Rhodes, Superintendent-Secretary.

SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common, S.W.4

Applications are invited from registered medical practitioners for the undermentioned appointment at present vacant.

GYNAECOLOGICAL HOUSE SURGEON (B2). (Post recognized for the M.R.C.O.G.). The appointment is for a period of six months, with salary at a rate of £100 per annum, plus full residential emoluments. Applications should be sent to the Secretary at the hospital as soon as possible.

SALISBURY GENERAL INFIRMARY (275 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A). Salary at the rate of £175 per annum, with full residential emoluments. The appointment will be for a period of six months. Applications should be sent to the Superintendent and Secretary by January 30, 1948.

TOWERS MENTAL HOSPITAL
Humberstone, Leicester
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the vacant post of House Physician (A). The appointment will be for six months in the first instance and may be renewed for another six months. Applicants who are within three months of qualification, and who are liable for service under the National Service Acts should note that the appointment will be for a period of six months only if held by a practitioner to whom these conditions apply. Salary £350 per annum together with board, lodging, and washing, valued at £150 per annum. Facilities will be available for learning methods of psychiatric treatment within the hospital, and in the Out-patient Clinics. Applications, accompanied by the names of two referees, should be sent to the Medical Superintendent as soon as possible.

TIVERTON AND DISTRICT HOSPITAL
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A), vacant mid-February, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be limited to six months. Salary at the rate of £200 per annum, with full residential emoluments. Apply Secretary.

TAUNTON AND SOMERSET HOSPITAL
Taunton, Somerset

The Committee will shortly make the following Visiting Medical Staff appointments :—

A SECOND RADIOLOGIST
AN ASSISTANT OPHTHALMIC SURGEON
A DERMATOLOGIST

Applications are invited from suitably qualified registered medical practitioners, and should be submitted by February 14, 1948, to F. J. J. Stacey, Secretary-Superintendent.

VICTORIA HOSPITAL, Blackpool (315 beds)
HOUSE SURGEON (B2) to the Surgical Unit

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) to the Surgical Unit, vacant March 12, 1948, including R practitioners who now hold A posts. The appointment is for a period of six months and the salary is at the rate of £200 per annum, with full residential emoluments, plus £150 per annum in the case of the successful applicant being a medical officer released from H.M. Forces who desires postgraduate education and rehabilitation as recommended by the Ministry of Health. The post is recognized for the F.R.C.S. Examination. Applications, stating age, qualifications with date, nationality and present post, and accompanied by copies of three recent testimonials, should be sent immediately to Walter R. Smith, General Superintendent.

WEST HERTS HOSPITAL, Hemel Hempstead
ASSISTANT SURGEON (Part-time)

Applications are invited from registered medical practitioners who are Masters in Surgery of a University within the British Commonwealth of Nations or Fellows of a Royal College of Surgeons for appointment of Assistant Surgeon (part-time) to the West Herts Hospital, Hemel Hempstead, at a salary of £700 per annum. Private consulting practice is allowed. The successful candidate will be required to reside within an approved distance of Hemel Hempstead. Applications, giving the names of three referees, to be submitted to the undersigned not later than Saturday, January 31, 1948.—J. Price Jones, Clerk to the Hospital.

WORKINGTON INFIRMARY (capacity 60 beds)
HOUSE SURGEON (B2) (male)

Applications are invited for the appointment of House Surgeon (B2) (male), vacant now, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications should be sent immediately to Dr. T. T. Graham, Honorary Medical Secretary.

WEST SUFFOLK GENERAL HOSPITAL
Bury St. Edmund's (335 beds)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification who are liable for service under the National Service Acts, for the following appointments :—

1. **HOUSE SURGEON (A)** with special responsibility for Ophthalmic and Orthopaedic cases, vacant immediately. Salary at the rate of £200 per annum.
2. **HOUSE ANAESTHETIST (A)**, vacant immediately. Salary £200 per annum. The hospital is recognized for the D.A.

All appointments will normally be for a period of six months. Applications should be addressed to the Secretary, E. E. Hardwicke, F.H.A.

WEST NORFOLK AND KING'S LYNN GENERAL HOSPITAL
TWO RESIDENT HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners, including practitioners who are liable to service under the National Service Acts, for the two appointments of House Surgeon (A) posts, vacant now and January 30, 1948. Appointments limited to six months in first instance. Salary £200 per annum, with full residential emoluments. Duties include charge of Surgical beds, Casualty Department and to give anaesthetics in the absence of the Hon. Anaesthetists. Applications to be sent to the House Governor and Secretary as soon as possible.

WILLESDEN GENERAL HOSPITAL
Harlesden Road, London, N.W.10
HONORARY ANAESTHETIST

The Council of Management invite applications for the post of Honorary Anaesthetist. Candidates should make one written application to the undersigned stating full particulars, including age, qualifications, experience, and the names of three referees, by February 4, 1948.—J. N. Drake, Secretary.

WESTON-SUPER-MARE GENERAL HOSPITAL (100 beds)
HOUSE SURGEON (A)

Applications are invited from medical practitioners for the appointment of House Surgeon (A). Duties to commence on February 1, 1948. Salary at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary.

WESTERN OPHTHALMIC HOSPITAL
Marylebone Road, London, N.W.1

Applications are invited from registered medical practitioners (male or female) for the following resident appointments :

SENIOR HOUSE SURGEON (B1), including R practitioners who now hold B2 posts. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Previous ophthalmic experience desirable. Salary £250 per annum.

JUNIOR HOUSE SURGEON (A), including R practitioners within three months of qualification. Salary £200 per annum.

Usual residential emoluments. The appointments are for six months from April 1, 1948. Applications should be sent not later than February 25, 1948, to Arthur E. Tyler, Secretary.

WREXHAM AND EAST DENBIGHSHIRE WAR MEMORIAL HOSPITAL
RESIDENT HOUSE SURGEON (B2)
Casualty and Fracture Department

Applications are invited from registered medical practitioners (male and female) including those holding A posts, for the six-months appointment of Resident House Surgeon (B2), Casualty and Fracture Department, to commence immediately. Salary £350 per annum, with full residential emoluments Applications to Leslie Spencer, Secretary.

WHITTINGHAM MENTAL HOSPITAL
Near Preston
HOUSE PHYSICIAN (B2)

The Committee of Visitors invite applications for the post of House Physician (B2) for a period not exceeding twelve months. Salary £300 per annum, plus full residential emoluments. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications to be received by the Medical Superintendent not later than January 28, 1948.

WINFORD ORTHOPAEDIC HOSPITAL
near Bristol
HONORARY ANAESTHETIST

Applications are invited for the post of Honorary Anaesthetist. Applications to be forwarded to the Secretary-Administrator.

Have you read the notice at top of page 11 ?

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BRITISH MEDICAL ASSOCIATION, B.M.A. House, Tavistock Square, London, W.C.1

Have you read the notice at top of page 11 ?

WILTS COUNTY MENTAL HOSPITAL Devizes
Junior Assistant MEDICAL OFFICER (A) or (B2)

Applications are invited from duly qualified medical practitioners for the post of Junior Assistant Medical Officer (A) or (B2), male, single. Commencing salary £472 10s. rising by four annual increments to £572 10s. plus war bonus of £30, together with board, furnished apartments and laundry, valued at £150. Additional payment of £50 if or when in possession of the D.P.M. For an A appointment practitioners within three months of qualification and liable to service under the National Service Acts may apply. For a B2 appointment R practitioners holding A posts may apply. If a practitioner in either of these categories is appointed the appointment will be limited to six months. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Applications to be received by the Medical Superintendent as soon as possible.

WESTMINSTER CHILDREN'S HOSPITAL
(Formerly the Infants' Hospital)
Vincent Square, London, S.W.1
HOUSE SURGEON (B2)

Applications are invited for the office of House Surgeon (B2), including R practitioners who hold A appointments. The appointment will be tenable for a period of six months at a salary of £150 per annum, with full residential emoluments. Candidates should have held a previous house appointment. Applications should be submitted to the undersigned within fourteen days of the date of publication.—Charles M. Power, House Governor and Secretary, Westminster Hospital, St. John's Gardens, London, S.W.1.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL, Watford, Herts (206 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A), vacant February 17. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M. Maskell, Administrator.

WALSALL GENERAL HOSPITAL (181 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A), vacant February. Salary £150 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Salary is at the rate specified above with full residential emoluments. Applications should be forwarded to the House Governor and Secretary.

WEST HERTS HOSPITAL
Hemel Hempstead (170 beds)
CASUALTY OFFICER AND HOUSE SURGEON (B2)

Applications are invited for the post of Casualty Officer and House Surgeon (B2), including R practitioners who hold A posts. The appointment will be for a period of six months as from February 6, 1948, and the salary £225 per annum, plus board and lodging. Applications would be considered from persons qualified less than six months, but the salary in that case would be £175 per annum. Applications should be addressed to the Clerk as soon as possible.

YORK COUNTY HOSPITAL
(222 beds)
SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of Second House Surgeon (A) with Orthopaedic duties, vacant on February 2, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL
(222 beds)
RESIDENT CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of a Resident Casualty Officer (B1), vacant on February 1, 1948. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £350 per annum with full residential emoluments. Applications should be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B1), vacant on February 1, 1948. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M Forces. The appointment is for twelve months. Salary £350 per annum, with full residential emoluments. Applications should to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

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For Nervous and Mental Disorders

President: The Most Hon. the MARQUESS OF EXETER, K.G., C.M.G., A.D.C. Medical Supt.: Thomas Tennent, M.D., F.R.C.P., D.P.H., D.P.M. This Registered Hospital is situated in 130 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or who wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in Hospital or in one of the numerous villas in grounds of the various branches can be provided.

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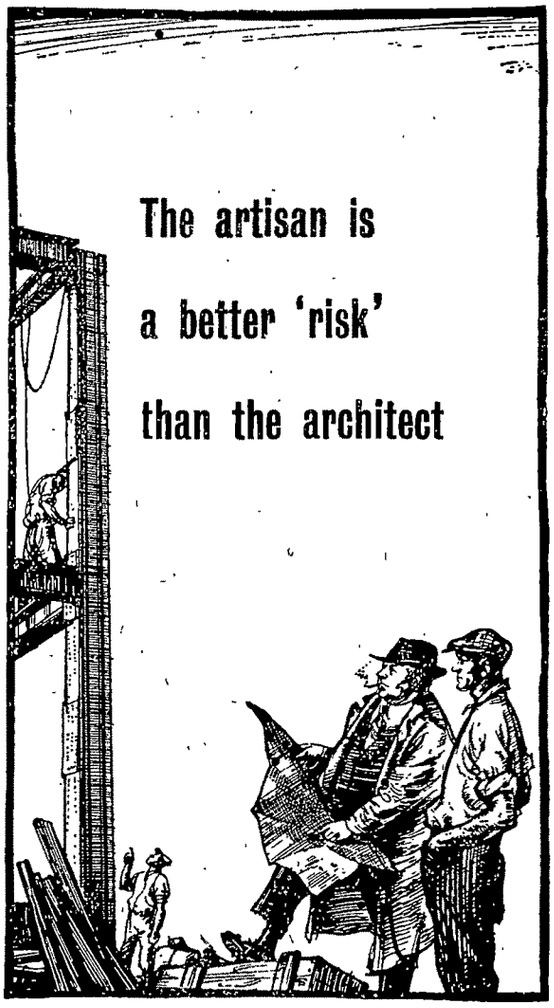
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OUR FOUNDERS AND BENEFACTORS*

BY

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In bringing our Founders and Benefactors to your notice—and it is the early benefactors I am concerned with in particular—I do so with no little trepidation. Historical documents so rarely enshrine those traits of character, demeanour, and bearing which are so essential if a lively picture is to be presented and if the recital is to be more than a mere catalogue of benefactions and achievement.

This is a difficulty I can scarcely surmount. Not that there is any lack of material; indeed, Professor A. F. Pollard, perhaps the greatest student of the period, has written: "The materials for sixteenth-century history are so vast that no one can hope to master them all in the allotted span of human life."

However much Fellows will wish to emphasize the fact that our College is a Royal foundation, all will agree that its inception was due to Thomas Linacre, one of the King's physicians. Many are the references to him and his friends in the State Papers of Henry VIII, published by the authority of His Majesty's Commission in 1830–52; but, so far as I have been able to ascertain, only one Life of Thomas Linacre has been written. The author of the biography was Dr. John Noble Johnson, a Fellow of this College, Goulstonian Lecturer, Censor and Physician to the Westminster Hospital.

Linacre's Student Days

Thomas Linacre, so far as can be ascertained, was born in Canterbury in the year 1460. He attended the school of the Monastery of Christchurch, Canterbury, then presided over by his kinsman, William Tilly of Selling. It is curious that Canterbury should have provided the early education of both our Founder, Thomas Linacre, and of our most illustrious Fellow, William Harvey; for in 1588, the year of the Armada, Harvey was entered at the King's School, the direct scion of the Christchurch Monastery School. There are good grounds for believing that this was the first school to be founded in England. When Augustine and his followers established Christian churches in England, they did not, as modern missionaries do, carry on the services of the Church in the vernacular tongue of the country, but employed the language that had been used in Rome for the last five hundred years. To make themselves understood the Latin missionaries had to come with the Latin service book in one hand and a Latin grammar in the other. Those whom they wished to convert could not profitably go to church till they had first gone to school to learn the language. So the grammar school became the necessary anteroom or vestibule to the church.

Prior Selling was one of the more famous of the priors of Canterbury and was principally responsible for the completion of the great central tower of the cathedral. It was from him that Linacre learnt his first Greek, and it would have been difficult to find a more appropriate tutor. Much is known and more is conjectured about schoolboy life in Tudor times. Whatever the boys learned or did not learn at school, it is quite clear that they acquired a fair knowledge of Latin. Grammar was regarded as the doorway to all knowledge, and the liberal arts could be approached only through the study of parts of speech—*qui nescit partes in vanum tendit ad artes*. The grammars of Donatus and Priscian usually provided the pathway to knowledge, and they have been described as the schoolmasters of Europe for a thousand years. But Priscian was being superseded by Alexander of Villedieu, the composer of a hexameter poem in 2,645 lines dealing with accidence, syntax, and prosody, the learning of which by heart must have been an intolerable nightmare to schoolboys. So widespread was the use of Donatus that the abbreviation *donet* passed into common use to signify an introductory handbook on any subject, much as we employ the word "primer." Hard as a ten-hour day was to the schoolboy, there were so many saints' days to be observed that hardly a week could have passed without one whole or half holiday. Then, too, in pre-Reformation times there were many peculiar observances. St. John Lateran's day, May 6, was kept by football, a siesta, and an interval for drinking beer, the equivalent of our modern afternoon tea—the ball, the bed, the beer (*Porta Latina pilam, pulvinar, pocula praestat*). Then on St. Nicholas's Day, Dec. 6, there were the boy-bishop celebrations. It is impossible, of course, to draw a picture of the individual boy, but we do know that when Linacre not very many years afterwards was in Italy he was chosen, because of the elegance and modesty of his manners, as the associate in study of Lorenzo de' Medici's children.

It was probably with the assistance of Prior Selling that Linacre in 1480, at the age of 20, went up to Canterbury Hall, Oxford, later incorporated into Christchurch. Here he made friends with Grocyn, a man of 36, and with William Latimer, a youth of his own age. It is not known why Linacre waited till his twentieth year before entering the University, for boys entered much younger than now, and from 14 to 16 was quite a common age. The Warden of New College had introduced Greek lectures there in 1465, and it is presumed that the three friends studied under the guidance of the lecturer, an Italian, Cornelio Vitelli by name. Eventually Grocyn, already a Fellow of New College, was to be the first Englishman to lecture on Greek in Oxford, and later, in London, to share the honour with Linacre of imparting a knowledge of Greek to one of the great figures of history—Desiderius Erasmus. When to Grocyn, Linacre, and Latimer we add the names of the two other friends—Colet, afterwards Dean of St. Paul's and founder of St. Paul's School, and Thomas More, the author of *Utopia*—we have a list of the leading scholars in England devoted to the New Learning and usually known as the English Humanists.

*The Harveian Oration (abridged), delivered before the Royal College of Physicians of London, on Oct. 18, 1947.

A Sojourn in Italy

After four years at Canterbury Hall Linacre was made a Fellow of All Souls. The following year he accompanied Prior Selling, who had been chosen by Henry VII to conduct a mission to the Vatican, to Italy. Linacre appears to have remained in Italy for six years or so, and during this time to have stayed in Bologna, Florence, Rome, and Padua. At Bologna he was introduced by Selling to Politian, the most brilliant Latin poet and scholar of the day, attached to the Platonic Academy, founded in Florence by Cosmo de' Medici. Under the Medici Florence had become the modern Athens, and learning as well as art had found a home there. It is thought that this introduction to Politian stood Linacre in good stead, for when Linacre visited Florence, Politian, whose work it was to direct the studies of the children of Lorenzo the Magnificent, is supposed to have introduced Linacre to the merchant prince. However that may be, Linacre became the recipient of the patronage of Lorenzo, living in the most brilliant court in Europe and sharing the instruction given to the two young princes Piero and Giovanni. The latter ultimately became Pope under the name of Leo X, and in after years was not unmindful of this association with Linacre.

We may be confident that Linacre's association with some of the finest scholars in Italy played no little part in forming that facility of expression, elegance of taste, and accurate skill in the classical languages for which he is famed. It has been said that by Linacre's endeavours Galen speaks better Latin in the translation that he did Greek in the original, and that Aristotle shines not more in his Attic than in his Latin garb. Unfortunately, none of his translations of Aristotle into Latin has survived.

After a year in Florence, then almost at the zenith of her splendour, Linacre made his way to Rome. Here he was befriended by Hermolaus Barbarus, one of Europe's greatest scholars and the translator of Dioscorides' *Materia Medica*. It has been suggested that it was he who may have introduced Linacre to the works of Galen and have influenced him in choosing medicine as his profession. For a charming account of this scholar may I point to the writing of a Fellow of our own College, Sir Henry Bashford, in *The Harley Street Calendar*.

Linacre next visited Venice and, possibly on the commendation of Hermolaus, made the acquaintance of another distinguished scholar. Aldus Manutius Romanus was contributing to the spread of learning by printing the classics in inexpensive octavo volumes—approximately at the price of our Everyman's Library. They were well read, for of the 24,000 copies printed of Erasmus's *Praise of Folly* only one copy has survived, and that is in an imperfect state. Books from the Aldine Press, with their distinctive device of the anchor and the dolphin on the title-page, are much sought after by collectors, distinguished as they are by a high standard of accuracy of text and by beauty of type. The type first used in the Virgil which he published in 1501, known as Aldino or to most of us as "italics," is said to have been modelled on Petrarch's handwriting. Erasmus acted for a short time as his editor and reader. It was for Aldus that Linacre began a translation from the Greek of *Proclus on the Sphere*, said to be the earliest accurate translation of a Greek writer ever made in England, but it does not appear to have been published until twelve years later.

Linacre's next move was to Padua, where he graduated M.D. with great distinction. This we learn from a reference to the event in the *Fructu ex Doctrina*, a book written by Richard Pace, Secretary of State to Henry VIII, and published in Basle in 1517.

His Return to Oxford

Returning to Oxford, which he must have found a trifle secluded after breathing the feverish atmosphere of the Renaissance in Florence and living in the most brilliant court in Europe, he found his friends Grocyn and Latimer awaiting him. They too had made a sojourn in Italy during his absence, and had attended the lectures of Politian and Chalcondylas; but whether they met him there it does not seem possible to determine. No sooner was Linacre back in Oxford than the degree of M.D. was confirmed by an act of incorporation, and it is asserted, without any convincing proof, that by a similar act of incorporation at Cambridge he became an M.D. of that University. The year 1490 seems to be the year in which he graduated in medicine. Caius claims that Linacre resided for a time in Cambridge—a statement which receives some weight from his subsequent foundation of a lectureship in medicine there.

In 1494 Linacre had to mourn the death of his old tutor and kinsman, Selling, who for twenty-two years had been Prior of the Monastery of Christchurch, Canterbury. He is said to have been the first Englishman to visit Northern Italy to study Greek. He died on the anniversary of the death of Thomas à Becket and was interred in the Martyrdom of the Cathedral, the last proof of the respect in which the brethren held the memory of their superior.

In 1499 Desiderius Erasmus arrived at Oxford. Erasmus was an entire stranger in England, brought over by Lord Mountjoy from Paris, and he did not know a word of English. He had come to England in spite of ill-health and poverty to learn Greek. This poor foreign scholar, destined to become one of the great figures of history, whom fortune had used so hardly, cast adrift upon the world without resources—for he had been robbed of his slender patrimony by dishonest guardians—found a friend in Linacre. Writing to an Englishman whose tutor he had been in Paris and who had gone to Italy to learn Greek, Erasmus says:

"Yes, you will say, but how do you like our England? Believe me that nothing in my life has ever pleased me so much. I have found the climate both pleasant and healthy; and I have met with so much kindness and so much learning, not hackneyed and trivial but deep, exact, ancient, Latin and Greek, that I am not hankering so much after Italy except just for the sake of seeing it. When I hear my Colet I seem to be listening to Plato himself. In Grocyn, who does not wonder at that compass of all knowledge? What is more acute, more profound, more keen than the judgment of Linacre? What did Nature ever create milder, sweeter, or happier than the genius of Thomas More? But why should I run through the whole list? It is marvellous how widespread and how abundant is the harvest of ancient learning which is flourishing in this country. All the more reason for your returning to it quickly."

But Erasmus, after conferring such praise, was to receive a rude shock on leaving this island. Henry VII had re-enacted an old law of Edward IV which forbade temporarily the export of gold and silver coin from England. More had assured Erasmus that as long as his money was not in English currency all would be well. Arrived at Dover, Erasmus attested that the money he was taking back had neither been earned nor been received in England, and that he was only taking back what he had brought with him into the country. The custom-house officials were adamant, and of the £20 which he had with him all but six angels (£2) was confiscated. Robbed of his money, he had perforce to stay in France instead of visiting Italy, which had been his intention. It seems very like our own year of grace!

In the year 1501 an event occurred which was to influence profoundly Linacre's future mode of life. Henry VII's

eldest son, the unfortunate Prince Arthur, was sent up to Magdalen, and Linacre was chosen as his tutor and private physician. The prince was delicate and, though only in his fifteenth year, was about to make a diplomatic marriage with a foreign princess—Catherine of Aragon. Linacre must have seen that his charge of the prince foreboded ere long the end of his Oxford life and would be likely to entail his definite committal to the practice of medicine. Five months after their marriage Prince Arthur and his wife were struck down by the sweating sickness, which proved fatal to the prince. The princess recovered and later became the first wife of her husband's brother, Henry VIII. Linacre about this time was made domestic physician to Henry VII and, leaving Oxford, moved to London, where he appears to have entered upon the regular practice of his profession. He was certainly the most erudite of those attending the sick in London, but we have no means of assessing his clinical ability apart from the fact that the most distinguished statesmen and courtiers were to be found among his patients—Wolsey, Archbishop Warham, Tunstall (Bishop of London), Foxe (Privy Seal and Bishop of Winchester), and Sir Thomas More. In 1509 he became physician to Henry VIII, and he seems to have found time to direct the studies of Reginald Pole, a future Archbishop of Canterbury, and to help Erasmus with the publication of the New Testament in the original Greek.

John Colet

A short reference must be made to another of Linacre's friends, John Colet, the son of a wealthy Lord Mayor of London, Sir Henry Colet. Colet in 1493 had gone to Paris and thence to Italy to study canon law, patristics, and Greek, and while abroad had become acquainted with the ubiquitous Erasmus. On his return to England three years later he startled Oxford in his lectures on St. Paul's Epistles. These were in almost every particular in striking contrast with the dissertations of the day. There was hardly a quotation from the Schoolmen and from the Fathers, but the Epistles were treated as straightforward letters written by a living man to his friends, which invested them with a freshness and an interest quite new to his hearers.

The field of Colet's influence was changed and in some ways widened when in 1505 he became Dean of St. Paul's. Five years later he devoted his patrimony to the foundation of St. Paul's School. Here he decided that the boys, who had to be able to read and write before being allowed to enter the school, should be taught good literature, both Latin and Greek, and that debased mediaeval Latin, "all that abusion that the later blind world brought in and which may rather be called Blotterature than Literature," should be utterly banished and excluded. Colet requested Linacre to write a Latin grammar for the use of the boys. This Linacre undertook to provide, and with great pains and the sacrifice of much time wrote a work consisting of quite a few volumes. As a school book it certainly seems to have been ill-judged, and Colet, finding it little adapted to the requirements of his pupils, put it altogether aside as too long and too learned for his "little beginners." Colet substituted some rudiments of his own composition under the title of *Paul's Accidence* which he dedicated to William Lilly, whom he had appointed as the first High Master. The book was later enlarged by Lilly and by Erasmus and others, and, finally becoming generally adopted in other English schools under the name of *Lilly's Grammar*, it formed the foundation of various Latin grammars used in England up to the middle of the last century. Canon Shirley, Head Master of the King's School, Canterbury, informs me that, though there is no actual record of what Latin grammar was used in the school in the time of Queen Elizabeth, there is little doubt that Lilly's was the grammar that William Harvey used. Colet's rejection of Linacre's book led to a break in their long-standing friendship, and in spite of the efforts of Erasmus the breach was never healed.

The year 1518 saw the foundation of the College of Physicians, at which time Linacre was 58 years of age. The meetings were held in Linacre's own house—the Stone House, as it was called—in Knightrider Street, and there they continued to be held for nearly a century. The front portion of the house, consisting of a parlour below and a chamber above to be used as a council room and library, were given to the College during Linacre's lifetime. After his death the remainder of the premises reverted to Merton College, Oxford.

Linacre's Later Years

Two years later Linacre appears to have taken priest's orders, but at the time of the foundation of the College he held the livings of Mersham and Hawkhurst, in Kent, and had been a Prebendary of Wells and a Canon of St. Stephen's Collegiate Church, Westminster. Some have suggested that he had taken deacon's orders in 1505, but it was the practice of the day to present livings to scholars even though they had never been ordained.

Within the last seven years of his life he made and published translations from Greek into Latin of no fewer than eight of Galen's works, the *De Sanitate Tuenda* and the *Methodus Medendi* being published before he retired from practice.

In 1523 Linacre received his last Court appointment, being made, with Ludovicus Vives, Latin tutor to the Princess Mary, then 5 years old, and being charged with the care of her health. He published a simple Latin grammar in English in the same year for the use of his royal pupil. This was afterwards translated into Latin by George Buchanan, the celebrated Scots scholar, who was imprisoned by the Inquisition in Portugal and who during the two years of his imprisonment, 1549–51, wrote a Latin version of the Psalms in various metres.

But perhaps the work that gave Linacre most satisfaction was the *De Emendata Structura Latina Sermonis*. This, which may be called an "Advanced Manual of Latin Prose Composition," had taken many years to prepare and was published in six volumes in 1524, the year of his death. This served to place him in the first rank of Latin scholarship of the day. It was reprinted abroad with a letter from Melancthon recommending its use in the schools of Germany.

During the last few years of his life Linacre, growing more and more infirm, suffered from calculous cystitis, from the effects of which he died on Oct. 12, 1524. Almost his last act was the foundation of three lectureships—two at Oxford and one at Cambridge. The lectures were dedicated to the glory of God and the true art of medicine, and they were to be distinguished by the name of "Lynacre's Lectures."

Robert Browning, in his *Grammarian's Funeral*, has given us the picture of an idealist scholar, and it has been suggested that his grammarian was Linacre. I borrow from Sir Henry Bashford:

"With his grammar finished, therefore, and his affairs in order—the house in Knightrider Street left to the College, and a sufficient income from the rest of his property to provide lectureships at the Universities—he may well have thought in the autumn of 1524, that it was about time for him to be going. In the background of his age he had led a full life: most of its statesmen had been his friends. And if there is just a hint, perhaps, to be found in his will of the Linacre trespassed upon by Colet—if he had somehow detected in his

niece Agnes a certain tendency to *laesa majestas*—it was only by the gentlest of posthumous rebukes that she and the world were to discover it. Her sister Margaret, he said, was to have the better of the two beds that he had bequeathed them."

Linacre was buried in old St. Paul's before the rood screen of the west door, a spot chosen by himself. His grave was marked by no memorial for more than 30 years, when John Caius, during his presidency of the College, erected a monument to his memory at his own cost. This perished when the cathedral was destroyed in the Great Fire of 1666.

Caius and Gilbert

John Caius, whose presidency extended with intervals from 1555 to 1571, set out for Italy in 1539 and studied physics at Padua under Montanus, the greatest medical teacher of the time. Caius lodged in the same house as Vesalius, the celebrated anatomist, who possibly may have fired Caius's enthusiasm in this direction, for in 1564 Caius introduced anatomies, as they were called—that is, demonstrations of dissections—into Cambridge. These demonstrations were not the first to be held in England, as they had been introduced 20 years earlier at the Barber-Surgeons' Hall in London, where Caius had lectured on anatomy. He is usually regarded as the founder of the study of anatomy in this country. He is said to have modelled his life upon the example of Linacre, and, like him, devoted much time to the collation and translation of Greek medical writers, but, unlike Linacre, he recorded the results of his own observations. These appeared in 1552 under the title of "A Boke of Counseil against the Disease commonly called the Sweate or Sweating Sickness." This is said to be the first instance of a medical book being published in English, but he afterwards republished it in Latin.

It was Caius who designed the insignia by which the President of the College should be fittingly honoured—the cushion of crimson velvet, edged with gold, placed before the President on all solemn meetings, and the caduceus, its head adorned with the arms of the College supported by four serpents, which the President carries to remind him by its material—silver—as Caius quaintly says, to govern with patience and courtesy, and by its symbols, the serpents, with judgment and wisdom. Caius is said to have foretold the very day of his own death, and to have chosen his own epitaph, *Fui Caius*, still to be seen in the Chapel of Caius College.

Dr. William Gilbert, physician to Queen Elizabeth and James I, and President of the College in 1660, published in that year a remarkable book, *De Magnete*, in which he records his experiments relative to the magnet. Gilbert may therefore be said to have introduced the method of experiment into scientific research. By his will he gave his whole library, globes, mathematical instruments, and a cabinet of minerals to the College, but with the exception of a few folios, which cannot now be identified with certainty, these seem to have perished when the College was burnt down in the Fire of London.

I am indebted to Canon F. J. Shirley, Head Master of the King's School, Canterbury, for copies of the wills of Robert Harvey and of John Harvey—both of Folkestone, William Harvey's birthplace—which I gratefully append.

"Archdeaconry Court of Canterbury. Probate records deposited at KCC Record Office, Maidstone.
"PRC 17, vol. 41 (will register), F. 112.
"23 April, 1570. I Robert Harvye of Towne of ffolkestone—Jone my wife—my house and stable lying at Estbroke—son Roger Harvye—Jone my wife to be exetrx. Witnesses:
John Redhed, John Browne, John Edwardes.
John Cadman, curate of Folkestone mentioned.
"Proved: 7 March, 1570 (-1).
"PRC 13, vol. 13 (Act book), f. 45.
"23 Feb. (1552-3). Admin. of goods of John Harvie of Folkiston' intestate; admin. to Florence widow, sworn, &c. Bound with her Thos. Baker, Jurate of Folkestone, & Hy. Hogben of same yeoman in £40.
"(It is slightly ambiguous as Baker is called *jurat.*=either *sworn* or *jurate*. I think it means he is Jurate of the Town of F.)"

In surveying this progress we become conscious of the various phases through which medical endeavour has passed. Contemporary medical practice and knowledge in Linacre's time was a confused mixture of empiricism, folklore, astrology, and magic. Such vestiges of Greek medicine as remained were often tainted, for they had come through the medium of Arabian and Syriac translations from the original Greek texts, and these in turn had been translated again into Latin and contained many inaccuracies. Hermolaus Barbarus, for instance, is reputed to have restored no fewer than two thousand passages in the works of Pliny. Linacre by his careful and accurate translations from the Greek into Latin was able to bring to the notice of his contemporaries the conclusions of Hippocrates, Aristotle, and Galen, based as they were on the simple yet valid foundation of direct observation. By the very nature of things, and to clear the stage, so to speak, he was obliged to look backwards. Caius advanced a step further. In common with Linacre he was strongly attracted to the writings of Galen, and when in Italy had spent much of his time carefully collating the manuscripts of that author, but to scholarship he added the practice of direct observation. This is seen in his devotion to practical anatomy and in his clinical observations set out in his book on the sweating sickness. Gilbert advanced further still: not content with observation, he introduced the method of experiment into scientific research. As Sir Walter Langdon-Brown has aptly said, "Linacre looked to the past for the Revival of Learning, Caius faced both ways, but Gilbert steadfastly looked forward."

THE LOCALIZATION OF DEEP PAIN

BY

J. B. HARMAN, M.D., F.R.C.P.

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This paper is concerned with the laws that determine where a deep pain is felt or, in other words, with its local sign. It is intended to show that the pain is not felt in any particular structure of the body, such as viscera or body wall, but that it is best regarded as a projection from the brain—to show in effect that the place where a pain is felt is determined as much or more by the anatomy of the cortex as by the structure of the limb or part of the body in which it seems to be. The view has indeed been hinted at from time to time, and has received a more definite statement from Lewis (1942). I believe it to be in harmony with current ideas on perception and to provide an explanation for those vexatious experiments with "novocain" block and phantom limbs.

It will not be necessary to review the many theories of the last fifty years, but since our common beliefs are still coloured by the traces they have left behind them it will be better to clear the ground by stating three propositions that may be regarded as proved. The first is that viscera can in fact be pain-sensitive. As is well known, Lennander (1902) popularized the view that they were insensitive, and this was widely held until Hurst (1911) showed that distension could cause pain in the oesophagus and rectum. Since then many other instances have been described in which

pain originated from a viscus, and it is now generally agreed that viscera may be sensitive provided a suitable stimulus is used.

The second proposition is that pains from viscera and deep structures are essentially the same. The suggestion that visceral pains were different from others rested on certain interpretations that have now lost their force. In any case the distinction became meaningless when it was shown (Lewis, 1938; Lewis and Kellgren, 1939) that phenomena which were supposed to be characteristic of visceral pain—such as dull quality, tendency to spread segmentally, associated muscular rigidity, and so on—could be produced equally well by injuring deep somatic structures. Lewis (1942) concluded that the proper distinction is between pains that come from deep structures, like viscera and ligaments, and those that come from the superficial parts, such as skin.

The third proposition is that there is only one kind of deep pain and that it is not divisible into local and referred. These two kinds were postulated to account for the fact that, whereas it could be said that stomach pains coincided with the stomach, it was obvious that angina and renal colic were felt a long way from their site of origin. Again, it was Lewis (1942) who argued that the distinction was unnecessary, for he believed that deep pain always had a spreading segmental distribution. The apparent anomaly is merely due to the anatomical accident that the heart is part of a segment that stretches down the arm, whereas the stomach and the rest of its segment are in roughly the same position.

Pain "In" and "From" a Viscus

The equivocal meaning of language has caused a confusion of thought that must be cleared up before the real problem can be seen. It has, for instance, been tacitly assumed that having a "pain in a viscus" expresses the same notion as having a "pain in a finger." Much experimental ingenuity has been expended on trying to decide whether it is possible to feel a pain in a viscus, yet no conclusions have been or, indeed, can be reached. The problem is not physiological and soluble by experiment, but philosophical and linguistic, and can be settled only by examining the meaning of words. Thus, if a man says he has a pain in his finger, the ordinary English usage is accepted and everyone knows what he means. We all know we have a finger, and we know where it is and we have felt pain in it. But a man could not say with the same meaning, "I have a pain in my Meckel's diverticulum" even if it should indeed be producing colic. For of all those who have suffered this pain there must be few who have ever heard of the organ, fewer still who know they have one, none who could know where it was lying, and all would have felt a pain that was "bigger" than the organ it was supposed to be in. Anyone who makes such a statement is not talking of his perceptions, but is making a diagnosis, assailable by evidence and argument. And he may be proved wrong. But if he said he had a pain in his belly his statement would be accepted, for it is a matter of common experience that men perceive their bellies and that most have had pains in them.

It is therefore important to bear in mind the distinction which is so often overlooked between pains that come from a part and pains that are felt in it. We believe it to be meaningless to say that a man feels a pain in an organ that he cannot perceive, and the implication that an anatomist could feel pains where the layman cannot is absurd. So we must reject any theory of deep pain that admits of its being felt at the site of origin. The problem can then be stated thus: "Where is a deep pain felt that comes from an unperceived structure?" It occurred to me that the answer might be had from persons with phantom limbs, for they have the perception of a part, yet are unencumbered by its real presence.

Referred Pains in Phantom Limbs

In subjects who had had an arm amputated a deep pain was produced by injecting 6% saline into the interspinous ligaments. The sensations of the normal arm were compared with those of the phantom.

Case 1.—J. J. H., aged 50, had a road accident in 1929 which caused loss of all power and sensation in the right arm. One year later it was amputated at the shoulder. Examined 1940. The phantom remained unchanged all these years. It is immovable and in the position in which his arm was slung before amputation. The arm and forearm appear to be half as long as normal but the hand twice as big. The whole phantom is quite clear. The hand feels as if it is being squeezed, the rest just dull and heavy. The effects of an interspinous injection were:—*Normal arm*: Stabbing and tingling sensation in middle finger and ring-finger when the needle was introduced, becoming more severe with saline. *Phantom*: Tingling in middle finger and ring-finger; the wrist feels as if it is being tightly squeezed, the elbow very slightly so.

Case 2.—F. C. Y., aged 59, had a gunshot wound of the left arm, forearm, and elbow in 1916. Amputation above the elbow was done three months later. Examined 1940. The phantom remained unchanged. It consists of hand and wrist only, placed about 12 in. (30 cm.) higher than normally. The thumb and forefinger are most distinct, the whole part being numb. There is possibly some movement. The effects of an interspinous injection were:—*Normal arm*: Sharp tingling pain in hand and elbow. No aching. "I know something is going on in it." *Phantom*: Similar sensations, but stronger, "like electricity"; distribution is in the inner and outer border of the hand and in the whole forearm, which appeared for the first time; no aching. An injection into the erector spinae muscles was given. It produced severe aching along the inner side of the stump—"rheumaticky pain like a bag of nerves"—after a few seconds a numb sensation was felt in the inner and outer border of the phantom hand, different from that in the stump and "more like the return of sensation after a very severe accident."

Case 3.—C. F. M., aged 55, had all the tendons of the right hand cut by a shell splinter during the 1914–18 war. A below-elbow amputation was performed the same night. An immediate phantom was just like a real hand. In 1932 he had a stroke and could not speak for four months. Examined 1940. The right leg and stump were still spastic, the movements of phantom thumb remaining unimpaired. Phantom now smaller than normal and nearer to stump. Injection into erector spinae at base of neck resulted as follows:—*Phantom*: Dull rheumaticky pain inside stump at the back of the forearm. Passed into phantom in the back of the knuckles and fingers as a pricking and tingling sensation, quite different from the ache in his stump.

Case 4.—G. M., aged 33, received a gunshot wound at Anzio, with immediate guillotine amputation above the elbow as P.O.W. Clear, complete phantom, still bleeding and itching; he has tried to use it on several occasions. Two months later reamputation was carried out to the shoulder. Examined in 1946. He has three shooting pains at the level of the elbow as if they were in fingers, but no fingers are felt; this appears to be the remains of his first phantom. He also has a dull aching phantom of his first amputation stump. An interspinous injection had the following effect:—*Phantom*: Gripping sensation in the elbow-joint as if something had been tied tightly round it, and there was a cramp. "I often get that feeling if I have a blow on the shoulder—it is very slight." The sensation can be imitated by squeezing the normal arm fairly firmly with the whole hand.

It will be seen that pain does spread down into the phantom, where it sometimes has the normal dull gripping quality of roughly segmental distribution. But at other times it was numb and tingling, and might not be strictly

segmental, being felt only in the elbow or wrist. These are differences from the classical deep pain, but they are not thought to be due to the conditions of the experiment, because such variations may be described by patients with normal angina. Since these experiments were undertaken, Cohen and Jones (1943) have published two remarkable cases with angina pectoris in phantom arms; the arm pain was abolished when the brachial plexus was blocked with procaine. I myself have recently seen another such patient.

Case 5.—A. C., aged 66, had a gunshot wound in 1915 through the upper left arm, which was amputated the next day. The phantom used to be a hand and elbow at a normal distance from the shoulder. The arm has now got shorter and the elbow is represented only by an occasional pain. The hand is clenched and can be opened slightly. It feels "kind of numb and is always warm." Eighteen months ago he became subject to a pain in his chest. It starts in the centre of his sternum, "like a very bad wind pain, turning over and gripping my chest." After a time it works down the arm and is like pins-and-needles in the hand. At first it came on at night in bad attacks once a month or so. It used to wake him up, and he had to stand by his bed. Now it comes on when he walks, always after a certain distance. It goes in a few minutes if he rests. He is a diabetic of ten years' standing. Arteries of limbs and optic disks normal for age. Radioscopy showed the left ventricle slightly enlarged; E.C.G. normal.

These observations prove that it is not necessary for the sufferer to possess the part in which pain is felt. It appears to be sufficient if he feels as though he has it. Now it may be that this phenomenon is merely a sensory perversion of a mutilated body. But it is hardly likely that a phantom bears no relation to normal perception of the body or that it has a special pain mechanism of its own. It will therefore be worth while to consider the hypothesis that deep pains in the intact man are also localized as it were in a phantom that corresponds with his real body. In other words, the solution of deep-pain localization will not be sought in possible changes in the peripheral body where it is felt, or the nerve tracts connected with it, but in the mechanism of body perception, which is a function of the cerebral cortex.

Phantoms and the Body Image

Head and Holmes (1911) used the term "body image" to describe the conception that a person has of his own body—of its size, shape, surface, depth, and movements—by means of which he is able to move parts of the body in relation to the whole, and the whole in relation to the environment. The body image is built up by the higher levels of the sensorium from peripheral sensations. It grows throughout life as these sensations are integrated, and it changes slowly as the real body alters its shape.

In the ordinary course of life the parts of the body are so often found where they are expected to be that it seems that their image and reality necessarily correspond.[1] But there are occasions when they do not. Thus certain hemiplegics may feel as if their arm is stretched above their head, whereas it can be seen lying by their side (van Bogaert, 1934). They have a real arm and a phantom arm separated from it. The amputee loses his real arm, but its image persists. The neuroma continues to transmit impulses that are interpreted, on the basis of previous experience, as "an arm." Parts such as the fingers and joints, of which a person is normally more conscious, tend to persist in the phantom, while the upper arm may be represented merely as a distance that the elbow is from the shoulder. When a phantom goes it disappears piecemeal, the clearer parts remaining till the last, so that in the end it may be nothing more than fingers growing from a stump (Riddoch, 1941). Conversely, cortico-thalamic lesions may cause agnososomia (Nielsen, 1938) in which the image of the right side of the body is lost but the part remains. The patient does not merely lose sensations from that side; he ceases to perceive it, and if he is shown his arm he cannot conceive that it is his. This amputation of the body image may be so severe that the patient cannot even imagine a right side either to his own body or to the world around him.

If a part is anaesthetized we find a disturbance of the relationship between the body and its image which is peculiar. A patient certainly feels the presence of a blocked arm, for he does not become incapable of conceiving such a thing as he would with agnososomia, nor is he just unaware of it as he is of his pancreas, yet it feels different to him both from a normal arm and from a phantom. An anaesthetized part is usually described as being dead or heavy, so that an arm hangs like an artificial limb from the sentient shoulder and the jaw feels like a swollen prosthesis. In fact, in some respects they cease to feel like parts of the body. This raises the question of how one distinguishes one's body from the environment—an important distinction in this connexion because it is the general experience that pain is felt only in the body and not in surrounding objects. It seems that the boundary is drawn between the body that has, or appears to have, innate sensibility and the environment, which, however much sensation may be projected into it, does not itself "feel." On the one hand we have the trunk, limbs, and phantoms; on the other, hair, clothes, and tools, which are perceived to be distinct, though, as Head and Holmes (1911) remarked, they may be incorporated into the body image. In this latter class we put also real parts of the body, such as colostomies, prolapses, and anaesthetized members, which are equivalent to the environment because they cannot feel, but are carried round with the same care and sense of ownership as a hat or stick.

Deep Pain and the Body Image

In the normal man deep pains are felt inside the body. This is consistent with the body image's property of having depth as well as surface. Although the pains are felt deeply they are confined to regions nearer one surface than another. There is a strong tendency for these regions to be in the front of the body even when the stimulus is near the back, but there is less tendency for a pain arising near the front to be referred backwards; in fact, a pain arising more or less centrally is usually referred to the back only after it has reached a certain intensity in the front. There is also a tendency for trunk pains to be referred down the limbs, and pains within the limbs to be more pronounced in the joints than in the length between. On the other hand, deep pains arising within the limbs spread back beyond their origin only if they are severe. This distribution corresponds with the more vivid parts of the body image, for the individual has a clearer consciousness of the front of his body than the back, of his limbs than his trunk, and, as phantoms show, of the joints than the segments between. An unsophisticated housewife was asked why she thought her angina was worse in her elbow than in her arm. She replied, "I suppose it is because you feel your elbow more, don't you think?"

Organic pains are sometimes distributed in an unusual way, referred to scars, or felt more intensely over significant parts such as the heart or appendix. There are also indications that pain may be diverted from its usual site to some other part that has been rendered habitually painful by another stimulus, such as gall-bladder pains that are referred to the left arm in subjects prone to angina (Jones, 1943). Those who have written much on the subject of deep pain (Head, 1894; Mackenzie, 1918; Lewis, 1942) have been forced, after expounding their views, to point out that there

are always cases of bizarre distribution which cannot be explained. It must indeed have been the experience of most physicians that patients will on occasion persist in describing pain references which do not correspond with any known mechanism. Possibly some of these will be found to depend on unsuspected peripheral lesions. But others may well be determined by some higher cerebral organization, and this may be found in variations of the body image. Such variations exist; for some people, for example, have an accurate conception of their body and are skilful in its use, while others are clumsy and uncontrolled. Further, vividness of parts may be enhanced by past events or peculiarities of temperament—the amputation phantom remains crushed and bleeding as the real part was—and studies of normal and abnormal psychology indicate the differing values that men may give to parts of their bodies. Since the body image itself can vary, some variation in pain reference would be expected.

The interpretation of procaine-block experiments in these terms is that pains are not projected to anaesthetized parts, because they are in effect equivalent to the environment Pains are always felt in what appears to the sufferer to be his own body, and even if he only knows he has a pain "somewhere" it is never somewhere outside himself. Those, however, who have tried to abolish deep pains by local analgesia have had conflicting results (Lemaire, 1926; Weiss and Davis, 1928; Rudolf and Smith, 1930; Morley, 1931; Woollard, Roberts, and Carmichael, 1932). No doubt this is partly due to the difficulty of experimenting with deep pain and to confusing it with reflex hyperaesthesia, but the unjustifiable assumption has usually been in the mind of the experimenter that the pain must be either "in the viscus" or "in the body wall." A straight answer cannot be given to a question that ignores the possibility of its being in neither. The discordant results can, however, be reconciled by the present hypothesis, for how much of a pain can be abolished will depend on how much of it is projected into the interior or surface of the body image, and on how completely these parts can be anaesthetized. It is, for example, relatively easy to abolish an anginal pain that is deep in the arm by blocking the brachial plexus. The pain that is felt near the surface of the chest can be banished or modified by anaesthetizing these parts. It may reappear in a neighbouring area, to be chased to yet another when that is blocked in its turn (Jones, 1943). This is an artificial alloaesthesia in which pain is diverted to the new site, or is noticed for the first time in it, after the most favoured part of the body image has been destroyed by anaesthesia. On the other hand, the pain that is felt deep in the chest always remains in these experiments, however many anaesthetic patches are produced on the surface. This has been interpreted as the true local pain felt in the viscus. But it is better regarded as pain persisting in the interior of the body image. The internal pain remains because the spatial perception of the chest into which it is projected is unaffected by such procaine block as is practicable. Indeed, perception of the anterior could not be abolished without anaesthetizing so much that the visceral afferents themselves would be interrupted at the same time.

The argument that deep pain spreads because it cannot be localized to the unknown region where it arises needs some elaboration, for there are parts of the body that are very accurately perceived yet give deep pain For example, the finger-joints are particularly vivid in the body image, and we are certainly aware of the position and movement of muscle masses or imbedded bones, but all of them give poorly localized deep pain. In other words, why does not pain from these parts have a local sign that approaches the accuracy of that in the skin? This question cannot of course be properly answered without understanding the mechanism of local sign in the skin itself, but it may be observed that there are various modes of perception which are not all equally important in giving local sign. Sensations such as touch are concerned with the body surface only, of which they give a very detailed map; while proprioceptive sensations are the basis of perception of body space, position, and movement. Perception of a finger-joint is a combination of both, built up from perception of its surface and knowledge of the space it encloses. But our knowledge of this space is limited to its shape and dimensions, and the map of the interior is as blank as that of the trunk. Stimuli in both are in *terra incognita*, and the pain that results has the same characteristics. Inevitably a deep pain in a finger must, if it is to remain in the body, be confined to a smaller space than a pain in the abdomen, and for this reason will give the impression of being more accurately localized. But this is a false impression, as can be seen by considering angina. The pain that spreads to the finger seems to be more accurately placed in the body than the pain in the chest, but this is not an accuracy of local sign, for the pain is felt a whole arm's length from where it arose.

Deep Pain and the Segment

In discussing the body image we have been exclusively concerned with the higher analysis of deep pain. But the region in which pain is felt must be determined to a large extent by the fixed structure of the nervous system, for otherwise all pains from unperceived organs would be felt together in the most vivid part of the body image—in the face or hand, for example. It has been recognized for fifty years (Ross, 1888) that this region was the spinal segment, and we have to inquire how it is that the sensation of pain caused by a cardiac infarct, for example, becomes segmental and spreads to the arm. This radiation was originally supposed to occur in the cord, because this is where the sensory nerves from the whole segment are first grouped together. Although there is some interconnexion here, as reflex rigidity and hyperaesthesia show, it is difficult to imagine any possible mechanism at this level, and certainly none has been demonstrated (Lewis, 1942). Even in the last century (Sherrington, 1898) it was shown that local sign of superficial sensations must be a function of the brain, for it certainly was not an inherent quality of any sensory nerve. Thus burning a finger sets up impulses characteristic of pain alone, and not of "pain from a finger." The assigning of a place to the crude sensation depends on the integration of other sensory impulses and on the fixed structure of the sensorium where it occurs If the same holds good for deep pain one would expect to find some evidence of segmental anatomy in the cortex to account for this type of spread. Such is the case, for recent work with fine methods of cortical analysis proves that "the body surface is projected dermatome by dermatome upon the post-central gyrus. The serial order is that of the dorsal nerve roots except that the cervical segments appear in the reverse order" (Fulton, 1943). Most of the work has been done on primates and has been concerned with superficial sensation and movement, but there is every reason to believe that the general style of cortical architecture is the same in man, and that it applies to deep pain also. The segmental spread of deep pain may then be regarded as nothing but a sign of activity at a certain level of the nervous system. We can say what that level is from the symptoms, just as we can diagnose the site of a lesion from the type of palsy or fit it produces. The segmental disturbance does not occur at the highest sensory level, for the segment does not exist in the body image—no man perceives his segments in the way that he is aware of his hand or mouth. So perhaps it is not surprising that pains are rarely

left filling such a meaningless territory as this, but are modified in the way that has been noted until they correspond with the body as the sufferer perceives it.

Summary

Deep pain, unlike superficial sensation, comes from parts of the body that are unperceived and to which, it is argued, no sensation can be localized. All sensations are normally felt somewhere, and deep pain must therefore be an alloaesthesia. It is suggested that these "pains from nowhere" are projected into the perceived parts of the body. They have a segmental basis derived from the fixed structures of the cortex. Their locality is further defined within these crude limits according to the individual characteristics of the body image. The sensation of deep pain does not depend on any peripheral change in the part where it is felt. But its location does depend on the normal stimuli coming from the part, for without these the place would remain unperceived.

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THE PRE-ERYTHROCYTIC STAGE OF MAMMALIAN MALARIA

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Since the discovery of the part played by the mosquito in the transmission of malaria there has remained a gap in our knowledge of the cycle of events. This has been our complete ignorance of what happens to the sporozoites injected by the mosquito during the period between its bite and the appearance of erythrocytic parasites in the circulating blood. Schaudinn's (1902) observation of the sporozoite entering a red cell has never been repeated and has long been suspect, and the most generally held theory of recent years has been that some form of development takes place in the internal organs—probably in the reticulo-endothelial system—before the parasites enter the red cells of the circulation at the end of the incubation period. This interval may be considered to be a period of about ten days.

The curtain was first really lifted in the case of avian malaria when James and Tate (1937) described the exo-erythrocytic cycle in *Plasmodium gallinaceum*, but the developments following the introduction of sporozoites by the mosquito remained a mystery. The next step was the discovery by Mudrow (1940) and Shortt, Menon, and Iyer (1940) of developmental forms of *P. gallinaceum* in the incubation period; these were schizogony forms in reticulo-endothelial cells. Reichenow and Mudrow (1943) next gave a detailed description of the forms found during the incubation period in infections with *P. relictum*, and Huff and Coulston (1944) independently described in even greater detail the course of events in *P. gallinaceum*.

All this work led to the belief that some parallel development must take place in the case of mammalian (including human) malaria, but all attempts to demonstrate this proved unsuccessful. Efforts to discover the incubation period stage of mammalian malaria—i.e., the hypothetical pre-erythrocytic stage—were given a stimulus by the work of Fairley (1945) at Cairns, Australia, during the recent world war. Fairley and his co-workers showed that during the biting act of the malaria-infected mosquito, and for about half an hour afterwards, blood inoculated from the bitten person into a volunteer produced an infection. After this period and until the appearance of the parasites in the circulating blood even large quantities of blood from the volunteer produced no infection in another individual.

From these results and others obtained in the field of chemotherapy—for example, Davey (1946)—it was evident that shortly after the introduction of sporozoites they disappear from the circulation and the further development during the incubation period takes place in some protected site outside the general circulation.

Hitherto there has been little to support this hypothesis in the form of actual findings in mammalian malaria. Raffaele (1937) described bodies found in smears of human bone marrow and considered by him to represent stages in the development of sporozoites. Somewhat similar observations have been made by other workers in this field up to the present date, but none of these have been confirmed or have even received much support.

Large-scale experiments with *P. cynomolgi* carried out by the Mammalian Malaria Inquiry under the Director, Central Research Institute, Kasauli (1946), and similar investigations by Huff and Coulston (1947), have yielded negative results.

In the Department of Parasitology at the London School of Hygiene and Tropical Medicine investigations to discover the pre-erythrocytic stage of *P. cynomolgi* in the rhesus monkey have been in progress since 1945, and the most recent experiments have at last resulted in the discovery of this stage, as briefly reported by Shortt and Garnham (1948).

Description of Experiment

We do not propose to give the details of all our work, but will confine ourselves to a description of our most recent successful experiment. More than 1,000 *Anopheles maculipennis atroparvus* bred in the laboratory were fed on a monkey showing mature gametocytes in the peripheral blood. The mosquitoes were subsequently fed on another infected monkey and were given a third feed on the original animal. The interval between the first and third feeds was eleven days. The mosquitoes were maintained at 26° C. in a relative humidity of approximately 80%.

Ten days after the last infective feed 20 mosquitoes were dissected and without exception proved infected, most of them with extremely numerous sporozoites in the glands.

On that day the survivors, 576 in number, were given the opportunity to feed upon a clean rhesus monkey ; over 500 did so. The entire batch of mosquitoes was then ground up in a mortar in 10 ml. of heparinized monkey plasma diluted with normal saline solution. Half the suspension was inoculated intraperitoneally into the same monkey and the other half into the thigh muscles of both sides. The suspension showed an average of 5 sporozoites per field of the 1/12 oil-immersion objective.

The monkey was sacrificed seven days later and a very complete necropsy was conducted.

The tissues given in the list which follows were taken for examination either in smears or in sections, or both : Spleen, liver, kidney, suprarenal gland, pancreas, small

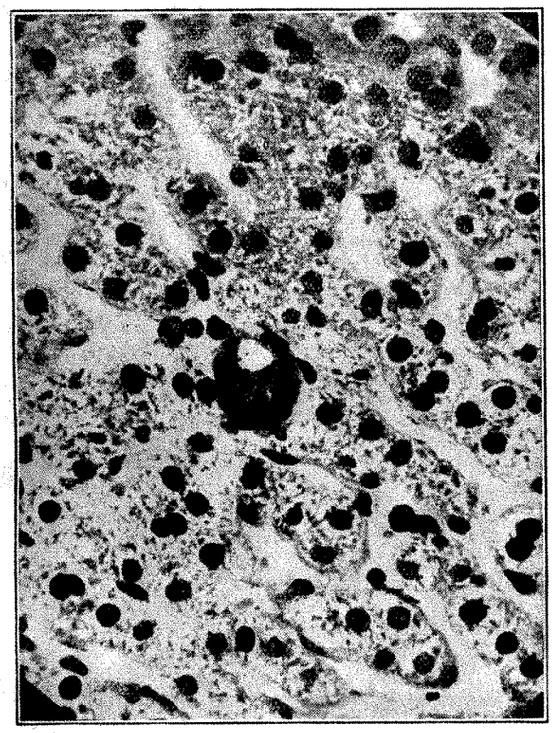

FIG. 1.—Section of liver showing schizont of *P. cynomolgi*, containing well-marked vacuole. Mod. Giemsa stain (×500).

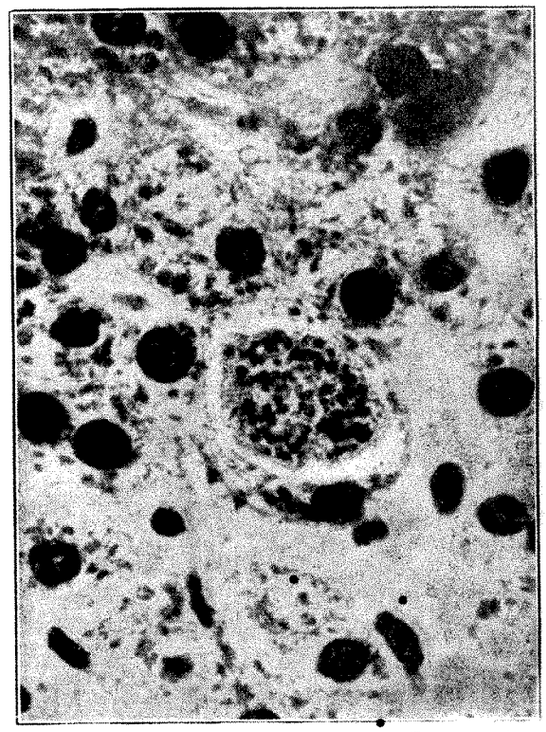

FIG. 2.—Section of liver showing schizont of *P. cynomolgi*, with numerous masses of chromatin. Mod. Giemsa stain (×1,000).

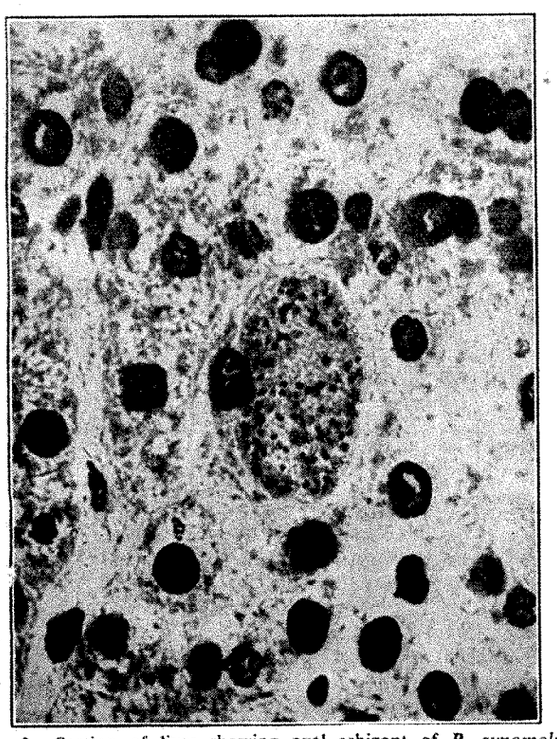

FIG. 3.—Section of liver showing oval schizont of *P. cynomolgi*. Mod. Giemsa stain (×1,000).

FIG. 4.—Schizont of *P. cynomolgi* found in an "impression smear" of liver. Giemsa stain (×1,000).

intestine, lymph glands from various parts of the abdomen, aorta, inferior vena cava, peritoneal exudate, peritoneum, lungs, heart, thoracic glands, bone marrow, brain, leg muscles, stretch preparations of pia mater and omentum.

The fixatives used were Zenker, Carnoy, Flemming, and 10% formol-saline. Suspensions in citrated saline of the following tissues, in the amounts stated, were inoculated into clean monkeys both intraperitoneally and intramuscularly in each case: liver, 10 ml.; spleen, 8 ml.; brain, 7 ml.; lung, 12 ml.; kidney, 8 ml.; peritoneal fluid, 4 ml.; and heart blood, 7 ml. All the monkeys have remained negative for a month.

The slides of material were stained with haematoxylin and eosin or Giemsa, using the modification of McNamara's stain described by Shortt and Cooper (in the press). The latter unquestionably gives the most brilliant results, and the description given below applies to parasites stained by that method.

Pre-erythrocytic Stage on Seventh Day of Incubation Period

Up to the time of writing we have not had the opportunity of examining thoroughly all the tissues taken, but a rapid survey has resulted in the finding of parasites in the liver only. In a section of the liver examined with the 2/3 objective, small areas of blue colour and ovoid shape are seen very thinly scattered throughout the section (Fig. 1). In one typical section with an area of 90 sq. mm. there were 36 such areas. The ovoid shape is not invariable, and some parasites may show minor indentations, whilst in a few cases actual blunt pseudopodic arms exist. The parasites measured an average of 26μ in the longest diameter, but larger forms up to 30μ or more occur.

When examined under high power these blue areas are seen to be plasmodial masses undergoing schizogony (Figs. 2 and 3). The cytoplasm stains a cobalt blue and has an opaque semi-reticulated appearance, while the particles of chromatin stain a magenta colour. In the majority of the parasites there is no evident condensation of cytoplasm around the chromatin masses, but in a few cases in sections cut at 2μ thickness there is a distinct indication of this process which would result in the formation of merozoites. We have seen parasites in the circulating blood on the ninth day after infection; it is therefore evident that merozoite production must have taken place about the eighth day and the forms described above would be the first stages in the process. For the same reason we conclude that the majority of the forms in the liver are nearly mature and at the stage immediately preceding merozoite formation.

In a considerable number of schizonts there appear one, two, or even multiple vacuoles (Fig. 1) with sharply cut outlines. These tend to be smaller the more numerous they are. It should be mentioned that at no stage is any pigment to be seen in the parasite.

It is very difficult to be certain of the number of particles of chromatin present, especially if the counting is performed on serial sections, because parts of the same fragment may be counted twice, and for this reason we have based our estimate on schizonts seen in an impression smear (Fig. 4). The number was estimated to be between 200 and 300 in a single schizont.

As regards the relationship of the parasite to the liver tissue we do not at present feel inclined to be dogmatic, and a final opinion can be formed only when younger stages of the parasite have been examined. The general impression gained by us, however, is that the parasites are originally contained in the parenchyma cells, and this opinion is strengthened by the appearance in sections stained by Gömöri's stain to show the reticular fibres. In a monkey sacrificed on the sixth day the parasites in the liver exhibited few, if any, differences from the seventh day forms.

Discussion

The importance of this discovery lies in the fact that the resemblance of *P. cynomolgi* to *P. vivax* of human malaria is so close that the findings here described will almost certainly be applicable to the human parasite and, therefore, that the liver is the most likely site for the human pre-erythrocytic forms.

Until we have seen the earlier pre-erythrocytic stages of *P. cynomolgi* we feel that we are hardly in a position to discuss the relationship of the forms found by us to comparable stages of other pigment-producing blood parasites. On the other hand it may be noted that there is a superficial resemblance between the liver schizonts of *P. cynomolgi* and the tissue phase of *P. gallinaceum*, where, however, the merozoites would appear to be more numerous. There is an even closer resemblance to the early exo-erythrocytic stage of *Hepatocystes* (*Plasmodium*) *kochi* (Garnham, in press), although it must be remembered that the fully developed stage of the latter in the liver measures 2 mm. in diameter—i.e., at least 80 times the size of the mature *P. cynomolgi* schizont.

The failure hitherto to find pre-erythrocytic stages of mammalian malaria may be attributed to certain factors: (*a*) the dilution factor, which necessitates an enormous dosage of sporozoites if the developmental forms are to be readily found; (*b*) examination of smears has been more intensive than of sections; in smears the parasites are less readily found. The fact that exo-erythrocytic forms had not been found in mammalian malaria may be due to their possibly evanescent nature. It seems likely that the majority, at least, disappear with the establishment of the erythrocytic cycle.

We wish to acknowledge the great help we received in this investigation from our laboratory staff. Mr. W. Cooper with his great technical skill and experience has been invaluable and was ably seconded by Mr. E. Blackie, while Miss J. Stedman gave valuable assistance in mosquito technique. We are also indebted to Mr. W. Alves, B.A., for assistance in the critical necropsy on the first monkey in which we found pre-erythrocytic forms.

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Nurses, medical auxiliaries, and certain other hospital or allied workers are excepted from the Control of Engagement Order, 1947. Hospitals and employing authorities may therefore advertise for and engage such staff without reference to the Ministry of Labour and National Service. Those excepted include the following: State-registered nurses, student nurses, health visitors, midwives, and certain unqualified persons on nursing duties, such as nursing auxiliaries. Domestic workers in hospitals are covered by the Order, under which hospital domestic work is regarded as essential work. Full details are contained in the Ministry of Health circular 1/48, dated Jan. 15.

THE ROLE OF TRICHLORETHYLENE IN GENERAL ANAESTHESIA

BY

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Although it is well over five years since trichlorethylene was first introduced as an important anaesthetic (Hewer, 1942), it still remains as much a suspected and misused drug in some quarters as it is appreciated as a useful agent in others. Although the object of this paper is briefly to review and estimate the position of this anaesthetic in present-day practice, there is little that can be added to the excellent article by Enderby (1944) on the use and abuse of trichlorethylene. It is not intended here to touch on the most important function of trichlorethylene as an analgesic.

Safety

No one can disagree that safety is the first consideration with regard to any anaesthetic. Trichlorethylene (as "trilene") has been employed at Hill End Hospital since January, 1940. During this time it has been used on over 40,000 occasions, of which about a third were for induction and about two-thirds for both induction and maintenance of anaesthesia. The drug was administered in most cases by means of the Boyle semi-closed apparatus. We have never experienced any fatalities or incidents of collapse that could even remotely implicate trichlorethylene. Cases reported as primary cardiac failure have come from Haworth and Duff (1943), but it is difficult to be definite that this condition was the cause of the deaths. A more recent case that has been brought to our notice is even less conclusive. Trichlorethylene has now been employed so extensively that if it at all shared the dangers of chloroform, as some anaesthetists believe, several unequivocal cases would surely have come to light.

Toxic Effects

Cardiac.—Arrhythmias as described by Enderby (1944) occur in about 5% of cases. They do not arise in any particular type of case or operation, and their cause is obvious in neither the patient nor the administration. The occurrence of arrhythmias under trichlorethylene anaesthesia, as with cyclopropane, has not shown itself as a dangerous condition in the cases in our experience. These arrhythmias have, indeed, never produced any untoward effect on the patients, and we have never been deterred from making use of trichlorethylene for all cases, save those with a pre-established arrhythmia or history thereof. We have often employed the drug for thyrotoxic patients presenting no history of auricular fibrillation, and have found no abnormal effect on the cardiac rhythm. Most arrhythmias are transient, especially if occurring early in the administration, and call for nothing more than the assurance of an adequate oxygen supply to the patient. Should the disorder persist the trichlorethylene is discontinued, with the substitution of ether if necessary.

Respiratory.—Tachypnoea is very common, and can be produced to some degree in almost every case anaesthetized with trichlorethylene. The increase in the respiratory rate is caused by the action of the drug on the pulmonary stretch receptors (Whitteridge and Bülbring, 1946), which accounts for both the rapidity with which the condition occurs and the speed with which it can be abolished by withdrawal of the drug. The only means of combating an established tachypnoea is the abandonment of the administration of trichlorethylene. If the maintenance is continued solely by gas and oxygen it will often be found that the anaesthesia remains satisfactory. This is no doubt due to the low volatility of trichlorethylene and its consequent low rate of excretion—two factors that can be turned from a potential disadvantage to a real advantage, in that the drug may in all cases be discontinued early in the administration, the amount already given maintaining the anaesthesia. Tachypnoea can be avoided by so administering the anaesthetic that not more than a trace of trichlorethylene—1 dr. (3.5 ml.) an hour—need be given for any length of time. A narcosis must first be established by means of thiopentone, ether, or any other suitable agent, after which trichlorethylene can be employed with a 20% mixture of oxygen in gas for maintenance. There is no doubt that the secret of a successful trichlorethylene administration lies in the employment of only small quantities of the drug.

Metabolic.—Acetonuria occurs quite often after trichlorethylene (Hewer, 1943), as with all local and general anaesthetics (Schulze, 1924). The toxic effect of the drug on the liver has recently been investigated by means of the cephalin-cholesterol flocculation test (Armstrong, 1947) and found to be both transient and less than that of ether.

Bleeding.—Complaints have been voiced by some surgeons that trichlorethylene causes more bleeding than ether. We consider that these complaints, which are not uncommon when either a new anaesthetic or a new anaesthetist is introduced, are unfounded except when a pronounced tachypnoea is occurring.

Palsies.—Three to four years ago reports of cranial-nerve palsies following trichlorethylene anaesthesia appeared in the literature. Hewer (1943) reports three cases that were obviously due to gross contamination of the anaesthetic liquid. Humphrey and McClelland (1944) report 13 cases, of which two were anaesthetized with trichlorethylene in the closed-circuit apparatus, the remainder receiving cyclopropane or ether from the same apparatus. They consider the lesions were probably due to the toxic effect of dichloracetylene formed from trichlorethylene in the soda-lime canister. McAuley (1943) reports three cases of bilateral trigeminal anaesthesia following the administration of trichlorethylene on the closed-circuit system. The case reported by Enderby (1944) also received the drug by means of this type of apparatus; while Carden (1944) reports two cases—one of which was anaesthetized with trichlorethylene in the closed system, the other receiving cyclopropane by means of a similar apparatus immediately after a trichlorethylene anaesthetic had been given. Carden points out the great importance of the composition of the soda-lime. The unfortunate sequelae occurred after the employment of a brand of soda-lime that contained nine times as much sodium hydroxide as the usual preparation, as well as proving itself more hygroscopic and generating more heat when in use. It would perhaps be fairer to lay the blame for these nerve lesions on the soda-lime than on the anaesthetic. We have never experienced any such complications of trichlorethylene anaesthesia, although we have eschewed the use of the closed system with this drug since 1943.

Practical Advantages and Disadvantages

As already stated, trichlorethylene has a high analgesic value and a low rate of excretion, which properties permit small quantities of the drug to be used and allow its complete withdrawal early in the anaesthesia. Once narcosis has been established gas-and-oxygen anaesthesia can be administered, reinforced with trichlorethylene given in this way. The drug is non-inflammable, only slightly irritant, inexpensive, and possesses a pleasant smell. Recovery time is short if it is properly administered, and

there is no doubt that post-anaesthetic vomiting is infrequent. Vomiting is certainly less common than after ether anaesthesia, when the patient's recovery is in addition often attended with the unpleasant taste and smell of the anaesthetic.

Trichlorethylene does not produce good muscular relaxation and should never be employed with this object. Its low volatility demands some form of apparatus for its administration, the simplest being the Marrett type of inhaler, while it appears unwise to employ the drug in the closed-circuit machine. It is unsuitable for the maintenance of anaesthesia for children and in intrathoracic surgery, owing to the ease with which a severe tachypnoea is produced in both cases.

Uses

The three ways in which the agent may be used in modern anaesthetic practice are as follows.

Induction.—The non-irritant properties of trichlorethylene stamp it as an excellent anaesthetic for this purpose. Much larger amounts of the drug may be given for this short period than should be administered for the maintenance of anaesthesia. Endotracheal tubes can be conveniently passed "blind" after the establishment of narcosis with thiopentone, followed by the inhalation of about six breaths of a mixture containing N_2O, O_2, trichlorethylene, and CO_2.

Maintenance.—Trichlorethylene may be usefully employed as outlined above for all cases not requiring profound muscular relaxation. This embraces almost all operations outside the peritoneal cavity, and includes the bulk of neurosurgical, orthopaedic, ear-nose-and-throat, and ophthalmic practice.

Maintenance with Curare.—We have found trichlorethylene an excellent drug to use with curare for abdominal operations, and consider it preferable to ether, cyclopropane, or repeated doses of thiopentone (Ostlere, 1947). The anaesthesia is exactly the same as for cases not requiring muscular relaxation, curare being added intravenously when necessary.

Summary

A report is made of 40,000 administrations of trichlorethylene unattended by any fatality implicating the anaesthetic. The reported toxic effects of the drug are discussed, as well as its practical advantages and disadvantages. The three ways in which trichlorethylene may be used in modern anaesthetic practice are briefly described.

I am much indebted to Dr. C. Langton Hewer for his permission to publish this paper and for his assistance and encouragement during its preparation.

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Addressing the Pharmaceutical Society of Great Britain on "Modern Knowledge of Protein Structure and its Pharmaceutical Significance," Dr. Adrien Albert said that Ernest Gale, of Cambridge, had shown that Gram-positive organisms, especially the cocci which depend on an external source of glutamic acid for the synthesis of the proteins, were prevented by penicillin from taking up this substance from the surrounding medium. He had also shown that organisms which become resistant to penicillin have learnt to synthesize their own glutamic acid.

HOMOLOGOUS SERUM JAUNDICE

BY

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AND

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The following case history is reported to remind clinicians of the importance of considering homologous serum jaundice whenever a patient shows clinical signs of hepatitis.

Case History

A primipara aged 19 was admitted to Southmead Hospital because of an abscess in the right breast. On admission she was seen to be jaundiced. The jaundice was said to have been present for 14 days. Its onset was accompanied by nausea and anorexia and had been preceded by diarrhoea and lassitude for three days. The stools had been pale and the urine dark. A diagnosis had been made at home of "catarrhal jaundice."

When admitted the patient's temperature was 101° F. (38.3° C.), pulse 100, and respirations 20. Definite jaundice was present, and the liver was just palpable and tender. The stools were bulky and pale; the urine was dark and contained bile. Laboratory investigations agreed with a clinical diagnosis of hepatitis (blood count, mild hypochromic anaemia, reticulocytes 1%; van den Bergh reaction, biphasic; serum bilirubin, 1.9 mg. per 100 ml.; serum alkaline phosphatase, 22.8 units). The pyrexia subsided in 48 hours after incision and penicillin, and on a high-protein and high-carbohydrate diet the patient made a steady recovery. Her urine became free from bile 15 days after admission. The patient had been feeding a neighbour's baby as well as her own. Neither baby showed signs of jaundice.

Comments

It was discovered that because of a post-partum haemorrhage the patient had received a transfusion of two bottles of plasma and one bottle of group O Rh-negative blood 79 days before the onset of the jaundice. The relatively high incidence of hepatitis following plasma transfusions (5–10%) would make it seem probable, therefore, that this was a case of homologous serum jaundice.

Fortunately this patient made a complete recovery; but fatal cases have been reported (*British Medical Journal*, 1946, **2**, 423), and the incidence of this complication following plasma or serum transfusions is great enough to constitute a grave deterrent to the transfusion of these fluids except for the express purpose of saving life.

The agent responsible for the hepatitis is thought to be carried by certain batches of plasma only. Batches at present issued may contain 500 or more bottles, and to minimize the risks of patients developing homologous serum jaundice following a plasma transfusion it is necessary that all remaining bottles of possible infective batches should be withdrawn from circulation as soon as a batch is suspected of carrying the infecting agent. The probability that this patient's jaundice was connected with the plasma transfusion had been overlooked by her doctor, and it seems likely that no more would have been heard of her jaundice had not the breast abscess supervened to bring her into hospital. It is possible that other cases of homologous serum jaundice are being missed in the same way, and we would stress the need to inquire into a history of a plasma, serum, or blood transfusion during the previous six months whenever a patient shows signs suggestive of hepatitis. Details of cases with a transfusion history should be brought to the notice of the regional blood transfusion officer so that these officers in all other regions may be informed of the serial number of the offending batch or batches and may take steps to withdraw from

hospital stores all remaining bottles. We are reminded, of course, of the great importance of clearly and accurately recording in the patient's notes the batch numbers of all transfusion fluids given, for without a record of these numbers it is not possible to detect and withdraw from circulation the infected batches.

We are indebted to Dr. F. J. W. Lewis for the laboratory investigations.

HOMOLOGOUS SERUM JAUNDICE IN INFANCY

BY

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AND

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The indications for intravenous plasma therapy in paediatric practice are many. Since plasma possesses all the therapeutic properties of whole blood, except those conferred by the red cells, it is especially indicated in shock with haemoconcentration and in hypoproteinaemia. In practice it is widely employed in the treatment of such conditions as burns and severe gastro-intestinal affections.

Despite its widespread use, the complications and sequelae of plasma therapy in infancy are surprisingly uncommon; homologous serum jaundice, for example, appears to be extremely rare. We have been able to discover only one possible case in the literature (Scheinberg *et al.*, 1947), though another more fully substantiated case, following not plasma but blood transfusion in an infant, has recently been described (Bruyn, 1947). In later childhood, however, jaundice has followed the use of convalescent serum in several instances (Propert, 1938; Beeson *et al.*, 1944), while in adults it is a common complication of plasma therapy (*British Medical Journal*, 1946, 2, 423), occurring in 7.3% of cases in one large series (Spurling *et al.*, 1946). Various explanations may be advanced for the relatively low frequency of occurrence in infancy: a temporary passive immunity to the causative virus may be present at this period of life, hepatitis may occur but remain symptomless, or jaundice in infants may fail to be correlated with previous transfusion treatment. The history of the recognition of the condition in adults suggests that the last possibility is not unlikely to prove correct. For this reason two cases of fatal homologous serum jaundice occurring in infants are recorded, together with an inquiry to determine the incidence of this sequel after transfusion with reconstituted dried plasma.

Case 1

T. B., a male child who had never been inoculated or vaccinated, had had no illness until the age of 7 months. He was then admitted to hospital with bronchopneumonia. He was treated with sulphathiazole and recovered from the pneumonia, but before discharge developed diarrhoea and vomiting. With these he became so severely dehydrated that he was treated with intravenous fluids, including reconstituted pooled plasma (120 ml. on each of two occasions, with an interval of six days), and subsequently made an uneventful recovery.

Four months later, at the age of 1 year, he was admitted to another hospital. He had been sleepy and jaundiced for two days. He had not vomited, though his appetite was poor, and his motions had been pale. On examination he was jaundiced and comatose. The pupils were pin-point but reacted to light. There was no neck rigidity. The liver was palpable one finger-breadth below the costal margin. His temperature was 98.4° F. (36.9° C.) on admission, but later in the illness it rose to 102° F. (38.9° C.). Coma continued for two days, and convulsive movements occurred occasionally. The child died after four days' illness.

The interval between the first infusion of plasma and the onset of jaundice was 122 days.

Necropsy Findings.—A post-mortem examination was carried out 60 hours after death. The child appeared plump and was moderately jaundiced. There were no haemorrhages on the body surface. Abnormal findings were as follows. *Lungs:* A small number of recent haemorrhages had occurred into the parenchyma posteriorly on both sides. The *spleen* was slightly enlarged (weight, 25 g.), and on section the pulp was firm and the surface flat. *Small intestine:* Peyer's patches appeared hyperaemic but were not ulcerated. The *kidneys* were very pale, but histological study showed no change in architecture. The *gall-gladder* contained some rather pale bile which was easily expressed into the duodenum. The *liver* showed some post-mortem hypostases. It was of normal size (weight, 350 g.), and the surface was smooth and pale yellow in colour. On section the liver tissue was firm, appeared extremely fatty, and was slightly jaundiced. No haemorrhages were seen. The bile ducts were not dilated.

Histology.—Unfortunately, post-mortem changes obscured the histological picture, but despite the short history of illness there was subacute hepatic necrosis with a lymphocytic cellular infiltration around the portal areas. The number of recognizable liver cells was greatly reduced, and most of the survivors contained fat vacuoles. The bile ducts were unaffected; they were not dilated, and contained no bile thrombi. A frozen section confirmed the impression that all the surviving liver cells were heavily laden with fat.

Case 2

S. J., a female child, had had no illnesses until she was 11 weeks old, when she developed diarrhoea and vomiting, and was admitted to hospital. She was severely dehydrated, and was at once given intravenous saline and dextrose with 200 ml. of reconstituted pooled plasma. She recovered and was discharged well after two weeks. Six weeks later she began to pass frequent stools. After five days her urine was noticed to be bright yellow and she started vomiting. Next day she became jaundiced and was readmitted to hospital. On admission she was slightly jaundiced, but well nourished and not dehydrated. No other abnormality was noted. Two days later she had two convulsions and vomited some blood. Next day the convulsions became more severe and frequent, and she died.

The interval between the infusion of plasma and the onset of jaundice was 63 days.

Necropsy Findings.—A post-mortem examination was carried out three hours after death. The infant appeared well nourished, and there was slight jaundice with some cyanosis. No superficial haemorrhages were seen. Abnormal findings were as follows. In the *lungs* a small number of subpleural haemorrhages were present, and there were some small foci of collapse but no consolidation. The *spleen* was dark red in colour, and was enlarged to three times the normal size; histologically it showed only venous congestion. The *liver* was smaller than normal, with a smooth mottled yellow surface.

Histology.—Sections from the left and right lobes of the liver showed a uniform degree of subacute necrosis. There was almost complete disappearance of the columns of liver cells, only a few islands of extremely fatty liver cells surviving in places. The liver sinusoids were intact and there did not seem to be any gross haemorrhages. The material between the sinusoids consisted of amorphous debris, with a cellular infiltration composed partly of polymorphonuclear leucocytes but chiefly of mononuclear cells. There was some early bile-duct proliferation, but no evidence of obstruction of any of the bile ducts.

Comment

The diagnosis of homologous serum jaundice in these two cases seems reasonably certain. The intervals between

the administration of plasma and the occurrence of jaundice (122 days and 63 days, respectively) fall within the accepted limits. There was no history of contact with patients suffering from infective hepatitis. Unfortunately, it proved impossible to trace other patients who had been treated with reconstituted plasma from the batches used in these two cases. Histologically the picture was the usual one of subacute hepatic necrosis.

An attempt was made to ascertain the incidence of homologous serum jaundice in babies treated with plasma intravenously. Of 39 babies under 18 months old treated with reconstituted dried pooled plasma 26 survived the initial illness; among these were the two cases described above. Questionaries were sent to the parents of the remaining 24 after an interval of six months or more; 17 replies were received, and no further cases of jaundice were brought to light. Unfortunately, on the available material, only a small and entirely inadequate series of control cases could be investigated. Of 18 babies in the same age group as those previously described, and treated during the same period with whole blood or saline intravenously, 12 survived. Questionaries were sent to their parents, but only five replies were received. Among these there was no report of the occurrence of jaundice.

Summary

Two fatal cases of homologous serum jaundice in infancy are described. One child developed jaundice 63 days after plasma infusion, and died at the age of 5 months, after a short illness characterized by vomiting and convulsions. The other child was 1 year old when jaundice developed 122 days after infusion; he died after four days' illness, having been comatose for two days.

No other cases of jaundice could be traced in 17 babies who had also been treated with intravenous plasma, or in five babies treated with intravenous saline or whole blood.

It seems possible that homologous serum jaundice in infancy may go unrecognized, just as it did until recently in adults, because of the long incubation period. The present investigation into incidence, though inadequate, is reported in the hope that it will stimulate further reviews based on the systematic follow-up of cases treated with plasma; by this means more substantial evidence of the real incidence of homologous serum jaundice in infancy may become available.

We are indebted to Prof. C. Bruce Perry for permission to record these cases and for his continued interest and encouragement. To Prof. T. F. Hewer our thanks are due for the necropsy reports.

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The *1946 Year Book of General Therapeutics, November, 1945, to August, 1946*, edited by Oscar W. Bethea (Year Book Publishers, Chicago, $3.75; H. K. Lewis, London, 21s.) is a well-selected summary of current medical literature and gives a concise and balanced review of recent progress in therapeutics. The summaries include accounts of some of the newer sulphonamides likely to be useful in diseases of the colon, advances in the use of penicillin and streptomycin, the treatment of barbiturate poisoning with amphetamine, and recent experience with "benadryl" in allergic disorders. It is interesting to note that with the advent of newer influenza vaccines (A and B viruses) patients no longer prefer the risk of disease to the unpleasantness of prophylaxis. The *Year Book* is easy to read, well indexed, and enlivened by pithy editorial footnotes.

Medical Memoranda

Traumatic Delayed Rupture of the Gall-bladder in a Child Aged 9

Traumatic rupture of the gall-bladder is an injury of considerable rarity. Usually it is found in association with other abdominal injuries, these being of such a nature as to overshadow the biliary lesion. The following case, though not unique, is thought to be of sufficient interest to warrant recording.

CASE REPORT

A boy aged 9 years was admitted to hospital on July 29, 1946. Two days before admission he fell while attempting to jump from a stationary railway truck on to the embankment. He was unconscious for about half an hour, after which he was removed to a local hospital, where he regained consciousness. His condition was then one of mild shock, accompanied by vomiting. He was complaining of vague abdominal pain, and slight abdominal rigidity was present. The usual measures to combat shock resulted in marked improvement in his general condition, which remained satisfactory until the following evening, when he again complained of vague abdominal pain. On this account, and in view of the probability of laparotomy being necessary, he was transferred to a larger hospital.

On examination the child did not appear shocked and lay quite at ease while being examined. Abdominal distension was not present, but on palpating the abdomen there was generalized tenderness, maximal over the upper part of the right rectus muscle. Rigidity and "rebound tenderness" were absent, and there was no evidence of free fluid in the abdomen. On rectal examination the boy complained of pain about the umbilicus; otherwise nothing abnormal was detected. The pulse rate was 110 and the temperature 98° F. (36.7° C.). A tentative diagnosis of retroperitoneal haematoma was made.

Throughout the next two days his general condition remained excellent, the pulse being about 100 and the temperature varying between 98° and 100° F. (36.7° and 37.8° C.). This low-grade pyrexia was taken to indicate absorption from a retroperitoneal haematoma, and signs of peritonitis were still absent.

On July 31 the boy's condition suddenly deteriorated. He complained of severe abdominal pain and signs of shock were evident. He vomited three times within half an hour, the vomitus consisting of white frothy material. Abdominal examination revealed rigidity of the right rectus muscle and dullness of the right flank. Laparotomy was now considered necessary.

Operation.—The abdomen was entered by the right paramedian route. About 17 oz. (480 ml.) of bile-stained fluid was present in the peritoneal cavity. This fluid was removed, and on exploring the abdomen a hole measuring about 1/4 in. (6 mm.) in length was found in the fundus of the gall-bladder. Signs of inflammation were not evident in the organ, and although the edges of the hole were discoloured the perforation appeared to be of recent origin. There was no lymph exudate or any evidence of adhesions to surrounding structures. The small bowel was slightly dilated but otherwise normal. Drainage of the gall-bladder was effected through the hole by means of a fine rubber tube, and that of the associated area by a "cigarette" drain. The abdomen was closed around these drains.

No organisms were seen on microscopical examination of smear preparations, and culture of the bile-stained fluid from the abdomen showed no bacterial growth.

Routine post-operative measures were employed to combat shock, and within twelve hours the patient's general condition was satisfactory. Convalescence was uninterrupted and the child was discharged well after twenty-one days.

In the opening remarks I inferred that this case was not unique. Two similar cases are recorded—one by Siegel (1909) and a second by Hicks (1944). The latter case was one of perforation of the gall-bladder in a child aged 3 years; in the former, perforation occurred eight days after injury and was explained as being a distension gangrene due to secondary infection when the cystic duct became occluded with blood clot.

I should like to express my thanks to Mr. Matthew White for his permission to record this case.

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Reviews

BIOCHEMICAL BOUNDARIES

Vitamins and Hormones. Vol. IV. Edited by Robert S. Harris and Kenneth V. Thimann. (Pp. 406. $6.80.) New York: Academic Press Inc. 1946.

Annual Review of Biochemistry. Vol. XVI. Editor, J. Murray Luck; Associate editors, Hubert S. Loring and Gordon Mackinney. (Pp. 740. 36s.) California: Stanford University P.O. Annual Reviews, Inc. London: H. K. Lewis and Co.

These volumes are excellent specimens of the survey work—conducted along two somewhat different approaches—done by our American colleagues in so many fields, and in few so effectively as in biochemistry with its many adjacent scientific territories, from pathology to organic chemistry, from animal nutrition to marine bacteriology, from endocrinology to chemotherapy. So useful are the series to which these two volumes are the latest additions that they arouse once more the gravest misgiving about the present indiscriminate slashing at book imports imposed under the banner of crisis economy and dollar savings. The unprotected scientific worker who cannot have such books on more or less permanent loan from his institution or a public library (and the number who can are negligible) is irretrievably handicapped in the pursuit of his own immediate researches, and the results of his work and their practical application may be forestalled by those who are not obstructed by unimaginative measures of pseudo-economy. Such measures must have a directly adverse effect on the "export drive," which the scientific worker's sacrifices are designed to further.

For example, can the agricultural biochemist concerned with problems of milk production remain ignorant of Houssay's survey of "The Thyroid and Diabetes," or Reineke's of "Thyroactive Iodinated Proteins" (*Vitamins and Hormones, IV*)? How can the physician—a contributor to national health and therefore to morale and output—wishing to study research on blood dyscrasias fail to profit by reading T. D. Spies's review of "The Use of Pteroylglutamic Acid in Clinical Studies" (*Annual Review*, XVI) or Pfiffner and Hogan's article on "The Newer Hematopoietic Factors of the Vitamin B Complex"? The answer to these questions must be as obvious to every research worker as it is apparently obscure to an administration still effectively blind to the value of scientific research.

These volumes maintain the high standards we have come to expect of them. It is a pleasure to note that the *Annual Review*, nearly 60 pages longer than the 1946 volume, maintains its partly international character and that British authorities have contributed three out of the 25 chapters; the remainder, apart from one Canadian and one Swedish contribution, all come from the U.S.A. The authors of these 25 chapters cover every aspect of biochemistry with a great array of concise and carefully classified information based on the most recently published papers in every part of the world. Most of the 31 authors are on university staffs, but six are working in independent research institutions and five in industry. As before, the editors have chosen with tact and discrimination, and the contributors have fully justified their selection.

Vitamins and Hormones maintains equally well its somewhat different, and much younger, tradition. The physical, if not the spiritual, descendant of the pre-war *Ergebnisse der Vitamin und Hormonforschungen*, of which only two volumes ever appeared, it has now settled well into its stride. Biochemical and endocrinological topics are considered in a more detailed and more critical manner than in the *Annual Review*; thus a smaller number of subjects can be covered annually, so that a more cunning and discriminatory selection has to be made. And very well made it is again. Though choice of the most practical review in this volume—at any rate from the point of view of applied medicine—must be between F. W. Clements's "Manifestations of Nutritional Deficiency in Infants" and Roy Hertz's short account of the "Effect of B Vitamins on the Endocrinological Aspects of Reproduction," the laboratory worker may be more interested in Sidney A. Thayer's "Methods of Bioassay of Animal Hormones," a fairly complete survey, albeit in some places rather superficial. Readers in every branch of medical science, however, should make it a duty to read—and for the discriminating it will become a pleasure to re-read—the masterly and fascinating essay by Howard A. Schneider, of the Rockefeller Institute, on "Nutrition and Resistance to Infection; the Strategic Situation." It is as pretty a piece of scientific writing, as cogent a piece of constructive logical thinking, as has come my way for many a long year.

A. L. BACHARACH.

SEXUAL PERVERSION

Sinn und Gehalt der Sexuellen Perversionen. By M. Boss. (Pp. 130. 12 Swiss francs.) Berne: Medizinischer Verlag Hans Huber. 1947.

The main part of this small book on the meaning and idea of the sexual perversions consists of eight full case histories each describing the personality of a pervert, his development, and symptoms. The history of these patients, some of whom had been treated on analytical lines, and the interpretation of their lifelong conflicts are fine psychological and biographical writing by a humane and understanding physician. Boss's argument is a battle on two fronts: against Freud's explanation of perversions as regression to a childish stage of sex development, and against the view of certain Continental writers who judge perverse behaviour as depraved and degraded substitutes for a broken sex life. In contrast Boss points to the positive human values hidden even under absurd deviations of erotic fulfilment; only if we recognize these values can we hope to understand the patient and help him towards normality. Boss's ideas represent an important development in analytical psychopathology. Unfortunately they are cloaked in the heavy language of "existentialism," which seems to resist transcription into plain English.

W. MAYER-GROSS.

SIXTEENTH-CENTURY PROPHYLAXIS

Una Epidemia de Peste Bubonica en el Siglo XVI. By Dr. Don Jose Viñes Ibarrola. (Pp. 133. No price given.) Pamplona: Editorial Aramburu. 1947.

The Chief Health Officer of Navarra has a triple object in describing this epidemic of bubonic plague in the sixteenth century. He uses many contemporary documents from the municipal archives of Pampeluna to show that this outbreak was not associated with an epizootic, that the chain of infection was patient, fomite, flea, healthy person, and that the lack of bacteriological knowledge did not prevent Joan de Lortia, with his 42 years' experience of plague, from introducing measures as effective as those taken against typhus before the use of D.D.T.

Dr. Ibarrola gives an intimate picture of domestic conditions in a European city of 30,000 inhabitants in 1599 and shows how the control of plague in Pampeluna was a local achievement, for, whereas its morbidity there was 1.14%, that of the epidemic at Santander (1596) was 45.93%. This success was due not only to the rapid organization of a complete plan of control under an experienced staff which included doctors, nurses, disinfectors, undertakers, and guards, but to the recognition, so rare for the period, that here was no visitation of divine wrath but a contagious disease which could be traced to individuals and fomites. Preventive measures included a daily muster of the entire population, notification of the sick and their immediate examination and isolation, isolation and quarantine of all contacts, boiling all suspected clothing, terminal disinfection, sanitary inspection of houses and streets, supervised disinfection of houses, destruction of bedding by fire, burying excreta and dressings under lime, and even the isolation of drinking-vessels. There is no reference to dead rats, and the available statistics of topographical and familial incidence, together with details of incubation periods, all support the opinion that the rat took no part in this epidemic. The author considers that, even after the arrival in Europe of *R. norwegicus* in 1727, many epidemics have occurred without the intermediation of that animal and that far too much attention has been given to this mode of spread. The absence of detailed references seriously diminishes the value of this book.

J. J. KEEVIL.

RECENT PAEDIATRICS

The 1946 Year Book of Pediatrics. Edited by Isaac A. Abt, D.Sc., M.D., with the collaboration of Arthur F. Abt, M.D. (Pp. 464; illustrated. $3.75 or 21s.) Chicago: The Year Book Publishers Inc. London: H. K. Lewis and Co. 1946.

Once again the two Professors Abt, of Chicago, have reviewed the literature to produce the *1946 Year Book of Pediatrics.* Welcome signs suggest that more European publications are available, and there is a gratifying number of abstracts based on papers in the British *Archives of Disease in Childhood.* The authors of one Dutch paper quoted discuss what are termed "pontile tumours": surely the more usual topographical adjective is "pontine." But it must in fairness be said that random sampling has revealed no other obvious errors. Streptomycin is briefly mentioned in the official statement issued by the special committee of the National Research Council and referred to in other sections for its use in tuberculous meningitis and as a urinary antiseptic. The illustrations have been carefully chosen and most have been well reproduced. As usual, the editorial comments are a valuable part of the book, and there is a good subject-index. The now familiar "quiz" of twenty questions on the cover proved too difficult for one reader at least to obtain a pass mark, which indicates, among other things, the vast amount of new paediatric literature being published each year.

A. MONCRIEFF.

ATOMIC ENERGY

Atomic Energy. By R. R. Nimmo, M.Sc., Ph.D. (Pp. 201; 45 figures. 9s. 6d.) London: Pilot Press. 1947.

What is Atomic Energy? By K. Mendelssohn, M.A., Ph.D., F.Inst.P. (Pp. 180; 37 figures. 6s.) London: Sigma Books. 1947.

Atomic energy is an intrinsically difficult subject and one which cannot be understood in any serious sense without some effort of apprehension. On the other hand, it is not only of obvious and general importance, but of particular interest to medical and biological science because of the increased supplies of radioactive materials which are already becoming available and the health problems to which it gives rise in peace and to an infinitely greater extent perhaps in war. There is also the natural interest of all scientific workers that research should not be allowed to suffer from other considerations. Any book which can help the doctor in a first approach to these problems is therefore to be welcomed. The writers of each of these volumes is a professional physicist, and the choice between them must be largely dictated by the amount of effort which the individual reader is willing to make.

Dr. Nimmo's book is the more substantial of the two, and has been planned on the basis that all frills and inessentials are sternly avoided. The result is that the educated reader who begins at the beginning and reads steadily and carefully to the end, stopping occasionally to think and to undertake a little personal exercise, will emerge with some genuine understanding of the sequence of discovery which led to the release of atomic energy, as well as practical methods of research, and will be left with a reasonably solid foundation on to which further reading can usefully be grafted. On the other hand, there is little titivation, for both writing and illustration are utilitarian and restricted to the purpose of the book.

Dr. Mendelssohn is also serious in his intention, but offers more by way of bait. Stylistically, Nimmo's opening statement that "in the middle ages the transmutation of metals was widely accepted as a possibility" is paralleled by the more flamboyant, "Since the dawn of history man's mind has contemplated the variety of materials which surround him and which have played an ever increasing part in his daily life." Pictorially, the illustrations are rather of the kind favoured as "visual aids." In addition, he has somewhat less space at his disposal. The result, as might be expected, is a book which offers less reward for correspondingly less expenditure of energy. Both books are good of their kind, and the choice between them must depend on the time and manner of reading. In a train or after a long day's work one might prefer Mendelssohn; in the study and under more favourable conditions, Nimmo.

A. W. HASLETT.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

Hearing Aids. By Hallowell Davis *et al.* (Pp. 197. 11s. 6d.) London: Geoffrey Cumberlege. 1947.

An account of experiments carried out in the U.S.A. to determine a suitable design for hearing-aids.

A Handbook for the Diagnosis of Cancer of the Uterus by the Use of Vaginal Smears. By Olive Gates, M.D., and Shields Warren, M.D. (Pp. not numbered. 22s.) London: Geoffrey Cumberlege. 1947.

Profusely illustrated with photomicrographs.

The Conquest of Brain Mysteries. By George Bankoff, M.D., F.R.C.S. (Pp. 174. 6s.) London: Macdonald. 1947.

Psychology and psychiatry for the layman.

La Rage. By P. Remlinger and J. Bailly. (Pp. 193. 350 francs.) Paris: Librairie Maloine. 1947.

A monograph, including historical details, on rabies.

Contribution à l'Etude Physique, Physiologique, et Clinique de l'Electro-Choc. By Marcel Lapipe and Jaques Rondepierre. 2nd ed. (Pp. 374. 380 francs.) Paris: Librairie Maloine. 1947.

A general account of electric convulsion therapy based on the authors' experience.

Le Médecin à la Recherche d'une Doctrine. By Dr. L. A. Rousseau and Jean Tétau. (Pp. 190. 153 francs.) Paris: Librairie Maloine. 1947.

Essays on the art of medicine.

Homéopathie. By J. Tétau. 2nd ed. (Pp. 202. 200 francs.) Paris: Librairie Maloine. 1947.

A manual of homoeopathic therapy.

Synopsis of Neuropsychiatry. By Lowell S. Selling, M.D., Ph.D., Dr.P.H., F.A.C.P. 2nd ed. (Pp. 561. 32s. 6d.) London: Henry Kimpton. 1947.

A summarized account of neurology and psychiatry.

Recherches sur la Sclérose en Plaques. By M. Laignel-Lavastine and N. T. Koressios. 3rd ed. (Pp. 511. 850 francs.) Paris: Librairie Maloine. 1947.

An investigation into disseminated sclerosis, with many case histories.

Textbook of Embryology. By H. E. Hordan, M.A., Ph.D., Sc.D., and J. E. Kindred, M.A., Ph.D. 5th ed. (Pp. 613. No price.) New York and London: D. Appleton-Century. 1948.

Intended primarily for medical students.

Energametrie. By Gabriel Bidou. (Pp. 102. 250 francs.) Paris: Librairie Maloine. 1947.

A monograph on the measurement of work done by the human subject.

Gynécologie Médicale. By J. E. Marcel and Maurice Fabre. (Pp. 733. 2,140 francs, paper covers; 2,540 francs, cardboard covers.) Paris: Librairie Maloine. 1947.

A textbook of gynaecology.

Gardiner's Handbook of Skin Diseases. Revised by John Kinnear, O.B.E., T.D., M.D., M.R.C.P., D.L. 5th ed. (Pp. 250. 15s.) Edinburgh: E. and S. Livingstone. 1948.

A manual with many illustrations for students and general practitioners.

The Essentials of Modern Surgery. Edited by R. M. Handfield-Jones, *M.C.*, M.S., F.R.C.S., and A. E. Porritt, C.B.E., M.A., M.Ch., F.R.C.S. 3rd ed. (Pp. 1,256. 50s.) Edinburgh: E. and S. Livingstone. 1948.

A textbook of clinical surgery intended primarily for students and general practitioners.

Textbook of General Surgery. By Warren H. Cole, M.D., F.A.C.S., and Robert Elman, M.D., F.A.C.S. 5th ed. (Pp. 1,160. $11.00.) New York and London: D. Appleton-Century. 1948.

A textbook for student and general practitioner.

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THE RIGHT TO ATTACK

"Don't be impudent" was the reply given by Mr. Bevan on Dec. 3 to a sensible question quietly put to him by a member of the Negotiating Committee who is still an independent practitioner. When asked another question on compensation Mr. Bevan said the Committee should be careful not to drive him too far on the question of compensation, because the profession had no real right to it. And towards the end of the meeting he said that if there were not enough practitioners in the Service two years after the appointed day there would be a "sharp diminution" in the capitation fee. We are not drawing attention to these facts in order to score off Mr. Bevan or to stir up partisan prejudice against him. These incidents were, it is true, uncomfortable examples of his intransigence. But what is important is the danger to medicine illustrated by the present Minister's behaviour. We do not stress this because the vehicle of the behaviour is Mr. Bevan; after all, he won't be Minister of Health for ever; in fact, if the present Government has a renewed lease of life in the next election Mr. Bevan may well be a candidate for much higher office than that of Minister of Health. The danger lies in the all-powerful control of the medical profession by any political office-holder, in the nationalization of medicine, in the subordination of medical men to the State machine. If a Minister can treat independent members of a learned profession in the way described when he is supposed to be negotiating with them, what treatment may professional representatives at some future date expect to receive at the hands of an ambitious politician who has complete control over all aspects of medical life—who owns all the hospitals, all the practices, employs all medical men and women, and who can alter their lives and livelihoods by the issue of Orders and Regulations? The doctrinaire theorist, seeing nothing but the supposed virtues of plans and planning, devises State schemes attractive in their apparent simplicity, and satisfying to an obsessional demand for administrative tidiness. The doctrinaire talks about the State as if it embodied all the wisdom and virtue that very few individual men have ever possessed; and with the decay of the old faiths the State is now worshipped as a god and as a god whose principal attribute is power. The doctrinaire, sincere but woolly-headed idealist, forgets that the State is a group of politicians holding power, forgets that a State Medical Service means a Service organized and controlled by an administrative Department at the head of which is a politician who uses his office primarily as a method of pursuing political ends.

We have always believed, and have said so, that Mr. Bevan has wished to provide the country with improved medical services. We have hitherto believed him when he said that in doing this he genuinely wished to secure the co-operation of the medical men and women of this country—or at least of the majority of them, for there will always be a minority dissatisfied with whatever happens. We may continue to believe that Mr. Bevan wishes to provide this country with improved medical services, though we may have grave doubts whether his Act provides a real opportunity for doing this. But we begin to doubt his assertion that he desires the co-operation of the medical profession, because—to use a current vulgarism—he seems in recent months to have leaned over backwards to avoid obtaining this. Mr. Bevan the politician has got the better of Mr. Bevan the Minister of Health.

The keynote to his present tune was sounded by the *Tribune*. If Mr. Bevan was to give way to a "reactionary profession" he would desert the sacred cause of socialism—would endanger, may we suggest, his place at the head of the keep-left movement. In his letter to the three Presidents in January of last year he opened the door for negotiations on the Act, and it was clear to him, as to everyone else, that those negotiations were for the purpose of amending the Act, as the last plebiscite said "No" to negotiations on Regulations. The negotiations started by Mr. Bevan between the officers of the Ministry of Health and the Negotiating Committee and its various subcommittees were rendered farcical by Mr. Bevan's conduct of the final discussion on Dec. 2 and 3. He chose the method of humiliation, not of conciliation. The Committee might with justice have addressed to Mr. Bevan these words of Benjamin Franklin, "Those who would give up essential liberty to purchase a little temporary safety deserve neither liberty nor safety"—to borrow from a forthright editorial in the current issue of the *Medical Press*.

We should not, however, allow ourselves to become too indignant about the way we have been treated by one man—even though that one man is given by the National Health Service Act supreme and absolute authority over medical men and women. As doctors we can allow for the explosiveness of a fervent character. But the whole episode has this one important lesson which as a profession we must take to heart and mind—the dangers of monopolistic control in the hands of one man over the whole of the medical profession. In a leading article nearly four years ago[1] we drew attention to the views of some of the planners of medicine and the forces behind them. In a pamphlet on the National Health Service White Paper the Communist Party then stated: "The Government's proposals have been published after a very great deal of pressure from the Labour and Communist Parties, Co-operative Organizations and Trade Unions, and health workers' organizations, such as the Socialist Medical Association." "Control," the Communist pamphlet stated, "will be in the hands of the State and local authorities . . . and standards will be laid down." P.E.P., in its commentary

[1] *British Medical Journal*, 1944, 2, 47.

on the same White Paper, put in a nutshell the real case against a State Medical Service in these words:

> "Much will depend upon the attitude of the Treasury, the effectiveness of the Central Health Services Council, the personality of the Minister, the alertness of his officials, and the political complexion of Parliament."

We agree with P.E.P. that much—far too much—will depend upon these key features in the National Health Service, and think it would be deplorable if the medical profession and the public were ever to be placed in a position of dependence upon these things. Our esteemed contemporary, the *Lancet*, does its best to support the Minister in its advocacy of the National Health Service Act. While we respect the sincerity with which its views are sustained we believe we are not doing it an injustice in detecting in its columns the same doctrinaire worship of State power that is the modern fashion. A Minister, the *Lancet* writes, "must hold powers of negative direction . . . and we have never been persuaded that the exercise of these powers would ever involve any substantial hardship." In comparing the opposition of the medical profession with the opposition to the building of new towns the *Lancet* observes that the result of such opposition is "that no new town can ever be built unless *ruthless authority* is exerted" (our italics). "Ruthless authority" is a less euphemistic expression than "compulsory co-operation." And the *Lancet* says this, apparently with approval: "If the profession cannot find itself ways to prevent grossly unfair certification by a proportion of its members some subsequent Government may indeed feel obliged to safeguard these funds [public funds] by changing capitation fees into salaries." Because some men offend, all men are to be treated as if they were offenders—a curious argument. Is this the real reason why Mr. Bevan insists upon the new Health Service starting on July 5 although he is not yet ready with plans for the building and setting up of his key structure for the general practitioner service—namely, health centres—and is this the real reason for the universal basic salary?

The plebiscite form is to-day being posted to all practitioners in Britain. The B.M.A. Council and the I.A.C. have expressed their attitude to the Act in its present form in short statements published elsewhere in this *Journal*. Their joint view is that the Act as it stands is harmful to medicine. The Council of the Royal College of Surgeons passed the following resolution last week:

> The Council of the Royal College of Surgeons of England, while believing that every member of the profession must act according to his conscience in deciding whether to accept service under the National Health Service Act, is of opinion that fellows and members of the College should do all in their power to maintain the unity of the profession in its endeavour to attain the highest ideals of service.

This call for unity could not have been more timely. General practitioners have been uneasy about the attempts of Mr. Bevan to divide the consultants against them. Mr. Bevan provided in his Act a special and favoured place for the teaching hospitals. Last month he offered consultants an assurance that seemed to be financially tempting—for example, by suggesting that he would set aside in State hospitals beds with no ceiling on fees. It is therefore encouraging that the honorary consultant staff of the London Hospital—the largest teaching hospital in London—should pass unanimously the two following resolutions at a meeting of the London Hospital Medical Council on Jan. 21:

> (1) that in the view of this Council no step which leads towards whole-time State salaried medical service would be in the best interests of the community;
>
> (2) that in the opinion of this Council consultants and specialists should not take service under the new Health Act until agreement has been reached with the profession as a whole.

On Jan. 26 the medical staff of St. George's Hospital disapproved of the present Act by 28 votes to 1, and by 25 votes to 4 agreed to abide by the majority decision in the plebiscite. On Jan. 21 the Faculty of the Bristol Royal Hospital, the registrars included, discussed the National Health Service Act. A secret ballot was held: out of the 60 medical men present, 56 voted not to take part in the Service under the Act; only 2 voted for service, and 2 remained undecided. The Council of the Royal College of Surgeons has asked for unity. Three important teaching hospitals by resolution have paved the way, and should encourage those who may still be undecided or fearful.

Those who still fear that to say No is to oppose the will of the majority should take heart from a recent statement of the Lord President of the Council, Mr. Herbert Morrison[2]:

> "Particularly would I add the right to attack and go for the Government of the day. That, perhaps, is the biggest single test of democracy. To go for the Government of the day is a sacred British possession. Any Government which tries to take that from you is a danger and a menace, and you had better get rid of it."

Mr. Morrison and Mr. Bevan have both reminded us of our right to individual and collective opposition. Every doctor in the country should now follow the dictate of his conscience in answering the questions on the plebiscite form.

[2] *News Chronicle*, Jan. 16, 1948.

CENSORSHIP

The word "freedom," like the word "democracy," has become so abused that what it stands for in these days is becoming lost sight of. But the coin is still there, even though its image and superscription have been rubbed away by rough usage. It does not mean the abuse of liberty called licence, but it does—at least so we like to believe—still mean freedom of assembly, freedom of publication, and freedom to say Yes or No to questions put by free men to each other. These three freedoms are now being called in question. A short time ago the medical officers of one of His Majesty's armed Forces wanted to hold a meeting to discuss the National Health Service Act and to hear the views of medical men not members of that Force. They were forbidden to hold this meeting and were

not allowed to listen to dangerous thoughts. A county medical officer of health recently instructed the public health officers on his staff not to take part or vote in a meeting held in their area to discuss the National Health Service Act. They were present but had to sit in enforced silence. These public health officers, so instructed, could not follow the example of the Willesden nurses who were instructed by the Medical Officer of Health for Willesden to join a trade union. The nurses resigned, and presumably had some safeguard in that there was an alternative open to them—to work elsewhere. It is intolerable that this sort of thing can happen in a country that in the past has set an example to the world in its fight for the essential freedoms of Western civilization, and which has just emerged, battered but victorious, from a war fought to preserve the freedoms won in the past.

We see in the above two examples denial of freedom of assembly, denial of freedom to vote according to conscience. The third threat has been the subject of correspondence in this *Journal* started in our issue of Dec. 27 by a letter from Mr. Johnston Abraham, followed by a letter by Mr. R. F. West, Chairman of the Medical Group of the Publishers Association. Distinguished medical men take up the theme in this week's correspondence columns. Mr. Johnston Abraham was, because of his experience with the Ministry of Education, anxious about the future publication of books written by medical men who, if working wholetime in the new National Health Service, will be State servants. "The whole idea of such a censorship in civil life is inimical to freedom of thought." Mr. West drew attention to the following reply given by the Financial Secretary to the Treasury to a question asked in the House of Commons on Nov. 6 by Mr. Isaac J. Pitman.

> A Crown servant must obtain the consent of the head of his Department for the publication of any work the subject matter of which is connected with his official duties or those of other public servants. . . . I understand that no rules have yet been made for employees of the new bodies set up under the National Health Service Act.

The question of censorship is as important as any of the present points of conflict between the Ministry and the profession about the National Health Service Act. If the necessary majority of Noes is obtained to justify collective opposition to Mr. Bevan's Act, and if negotiations are reopened to secure amendments to that Act, it will be imperative to see that some amendment is put in with regard to publication of books and of articles and letters in the medical press, whatever assurances the Minister of Health may yet give on this matter.

It is a common experience of the Editor of this *Journal* to be asked by medical men employed by local authorities to publish letters under a pseudonym. Assistant M.Os.H. and deputy superintendents of hospitals have said in covering letters that if their legitimate criticisms are published over their name their security in the service would be threatened and their chances of promotion diminish to vanishing-point. The Editor, though reluctant to publish anonymous letters, has always met these requests. In a leading article in 1943[1] we drew attention to the fact that no medical man in the service of the L.C.C. could submit for publication a scientific article or a letter without the permission of the Chief Medical Officer of the L.C.C. The L.C.C. subsequently amended its Standing Orders so as to allow medical men in its service to submit scientific articles without seeking the permission of the Chief Medical Officer, but at the same time so worded the new Order as to disallow the submission of letters or articles on other professional matters without such permission.

The Minister of Health has already secured in the Act freedom to withhold the report of the Central Health Services Council if it is in the public interest to do so. The public, of course, will have no opportunity of knowing whether or not it was in its interest to withhold publication. With more and more medical men employed wholetime in a State Medical Service, with, in fact, all the doctors receiving their remuneration from the public funds controlled by the Treasury, what freedom to publish not only scientific articles but articles on a whole range of professional matters will the medical employee of the State be likely to have? The correspondence columns of the *B.M.J.*, the open forum for the medical man to discuss fearlessly what he thinks about any aspect of professional work and life, will be filled with anonymous contributions, written by men who will not dare call their names their own. These fears may sound fanciful now, but if we passively allow our freedoms to be filched from us one by one, freedom of opinion and freedom of publication will disappear with the rest—in the public interest, no doubt, as interpreted by the owners of the State machine.

[1] *British Medical Journal*, 1943, 1, 323.

JUVENILE DELINQUENCY

The large increase in juvenile delinquency during the war and post-war years has once again drawn attention to this problem. Indeed it has been said that the vast majority not only of adult criminals but also of the unproductive and antisocial members of the community—the "drones" and "spivs" of whom we hear so much—come from the ranks of those who during childhood and adolescence were already recognized as incipient delinquents. Public opinion has now advanced well beyond the stage in which it was supposed that the only cure for the young offender was a strong dose of physical punishment. Educational and medical experts are agreed that each case needs individual study and an appropriately adapted treatment, in short, that the problem is to be solved only by a scientific approach.

British psychologists led the way in the scientific study of delinquency. The simple device of the control-group together with more objective methods of testing and assessing qualities of intelligence, temperament, and character helped to show that delinquency itself is not a simple clinical entity but a superficial symptom with a highly variable and complex causation—the resultant in most instances of a number of factors whose nature may differ widely from one case to another. The studies of Burt at Liverpool and in London were followed by the investigations of Healy and his colleagues in America, and the

essential causes of juvenile delinquency are now fairly well established. Most urgently needed are similar investigations into the efficacy of different methods of treatment as judged by the after-histories of cases of various types. Apart from a small number of follow-up inquiries carried out on delinquent cases first coming under observation in L.C.C. schools, comparatively little research of this kind has so far been undertaken in this country. Reports on the later careers of youths discharged from Home Office schools and other institutions are generally too vague and too meagre to yield a basis for practical measures. The obvious method, adopted in the London inquiries, is to follow the recognized statistical principles for calculating life tables and for determining survival rates or immunity rates after specified forms of treatment. In the London cases it was found that of persons "exposed to risk" during equal periods (15 years) as high a proportion as 40% succumbed among those who had been treated psychologically, either at child-guidance centres or elsewhere, while between 50 and 60% could be regarded as successes. Among cases of equal gravity that had received no special study or treatment the spontaneous recovery rate was just over 40%.

The same method of analysis has been employed on a far larger scale in an inquiry undertaken by the State Institute of Human Genetics in Sweden.[1] The material analysed consisted of cases recorded in the files of the Malmö Child Welfare Board over a period of 37 years —from 1903 to 1940. More than 2,300 children were divided into four main groups: children who had been brought before the juvenile court; children who had been found so delinquent that special measures were required for their correction; children who had come from bad homes and were guilty of some minor delinquency only; and non-delinquent children who had been removed from bad homes solely for preventive purposes. The last served as the control group. The after-history of each case was traced to the beginning of 1944. The requisite information was obtained from foster homes, welfare committees, the penal register, the police gazette, and all other relevant sources that were accessible. The investigation was mainly concerned with the "social prognosis" for such cases after the child reached adult life. The results have been expressed by calculating the "annual risk" and the "total risk" in regard to criminality, drunkenness, vagrancy, or the receipt of public assistance. The outlook in relation to crime, as might be anticipated, was worst for the court cases and for those removed for serious delinquency. In these two groups the frequency of criminal offences in later life was nearly twice as great as among those who had been removed from their homes as a protective measure only. On the other hand the incidence of vagrancy and appeals for poor relief differed but little from group to group. Vagrancy, in fact, was reported most often in the case of youths who had been transferred from poor or unsatisfactory homes to residential institutions.

The report goes on to observe that "if we are to understand the problem of delinquency, it is not enough to examine the different manifestations of delinquency; we must investigate the actual conditions under which the delinquents have grown up—particularly the conditions in the child's own home." Further information was therefore sought on the financial and social position of the family, the number of children in the household, and its general emotional and moral atmosphere; alcoholism, death or separation of the parents, illegitimacy of the child, and frequent changes in care or control were all noted. It was found that the children coming from homes in which the parents were drunkards or criminals were "especially liable to commit crime when grown up, or to turn into ne'er-do-wells and vagrants, requiring public assistance." On the other hand, no significant differences were found on comparing the after-histories of illegitimate children or children from broken homes with those of legitimate children coming from normal homes. Nor apparently did the child's own intelligence yield any definite indications of the probability of future relapses.

The material did not lend itself to any intensive study of the comparative merits of different modes of treatment. So far as could be discovered, neither the age at which the children were taken charge of nor the period of detention had any discernible influence on their later careers. The most significant feature for future prognosis was the type and frequency of the offences committed by the child when first brought under official notice. The whole investigation is one of the most extensive and elaborate within its own particular field, and might well serve as a model for inquiries into what is likely to prove an important branch of social medicine—namely, the statistical analysis of the life histories of different sections of the population judged from the standpoint of civic efficiency and mental health.

[1] Otterström, E., *Acta paediatr., Stockh.*, 1946, **33**, Suppt. 5.

EXO-ERYTHROCYTIC FORMS OF MALARIA PARASITE

In the communication by Shortt, Garnham, and Malamos which we publish on p. 192 evidence of a convincing nature is at last brought forward that the cycle of development of the malaria parasite in the mammal is exactly analogous to that occuring in birds. The exo-erythrocytic forms in avian malaria were first described by James and Tate[1] in 1937 in association with *Plasmodium gallinaceum* in chickens: later Reichenow and Mudrow[2] showed that similar forms are to be found in *Plasmodium relictum* in the canary. Reichenow and Mudrow[3] also described bodies in the endothelial cells in association with another avian infection, *Plasmodium praecox*, while Garnham[4] similarly found bodies highly suggestive of an exo-erythrocytic stage in the life history of *Hepatocystes* (*Plasmodium*) *kochi*.

That an exo-erythrocytic form must occur in association with human malarial infections seemed certain both from attempts at transmission of human malaria, from chemotherapeutic experiments, and from the fact that when human beings are infected both with *Plasmodium falciparum* and *P. vivax* the growth of *P. falciparum* successfully interferes with the further development of *P. vivax*, which finds difficulty in appearing in the blood so long as the body

[1] James, S. P., and Tate, P., *Nature*, 1937, **139**, 545.
[2] Reichenow, E., and Mudrow, L., *Dtsch. Tropenmed. Z.*, 1943, **47**, 289.
[3] Reichenow, E., and Mudrow, L., *Arch. Protistenkunde*, 1946, **97**, 101.
[4] Garnham, P. C. C., *Trans. roy. Soc. trop. Med. Hyg.*, 1947, **40**, 719.

is infected with *P. falciparum*, an instance of interference, a phenomenon well known in connexion with viruses. The demonstration of an exo-erythrocytic stage in a malaria parasite of the monkey will facilitate the search for such a stage in falciparum and vivax malarias of man and will serve to intensify the search for chemotherapeutic drugs which can act specifically on this exo-erythrocytic stage. If this stage can be successfully destroyed it will mean that the infection can be totally eradicated before it gives rise to any symptoms of ill-health.

INFECTIVE HEPATITIS AND POLIOMYELITIS IN FAMILIES

Two recent American papers on the epidemiology of infective hepatitis and poliomyelitis record intensive studies of affected families. Kunkel and Hoagland[1] investigated a New York family in which during five months nine out of the ten children suffered from infective hepatitis. Three had frank jaundice; in the other six the diagnosis was made on the symptomatology, aided in some cases by finding spider angiomas on the neck, shoulders, or arms, and also by biochemical tests. The tests used were the three which previous experience in the Rockefeller Hospital had shown to be the most reliable—namely, plasma bilirubin, bromsulphthalein retention, and thymol turbidity. The thymol turbidity test was of special value in confirming the diagnosis after recovery.

Infection was probably introduced into the family in October, 1945, by an elder brother who had a mild illness while on leave from a naval base where cases of infective hepatitis were occurring. Three children fell ill between Nov. 13 and 25, one on Dec. 22, four between Jan. 12 and 24, and one on Feb. 8—a series typical of the disease. There was gross overcrowding of the family's sleeping quarters, and the authors conclude that the mode of spread was by contact. In view of the demonstration by British and American workers that the infective agent is present in faeces they assume that faecal transmission was involved. The epidemiological evidence hardly justifies this assumption, particularly in the light of the known importance of dormitory overcrowding for the spread of meningococci from the pharynx.

The family investigated by Zintek[2] was one of a group in Denver, Colorado, selected for a weekly collection of throat washings and faeces because one or more members had been in close contact with a case of poliomyelitis. No virus was detected in specimens collected on July 11 from the parents, from two sons aged 9 and 8, and from a daughter aged 6. On July 15 the 8-year-old boy fell ill with an abortive attack of poliomyelitis; on July 19 the elder boy developed poliomyelitis, going on to paralysis; and on July 20 the girl showed symptoms of an abortive attack. Throat washings from the parents on July 20 yielded no virus, but specimens of their stools inoculated into rhesus monkeys produced paralysis with histological lesions typical of poliomyelitis. Positive results were also obtained with throat washings taken on the same day from the boy and girl who had abortive attacks and with a stool specimen from the boy. Tests of stools from these children and from the father were again positive on Aug. 9, but were negative in the case of the mother. The failure to demonstrate the virus in a paralytic case eight days before the onset of illness and in two abortive cases four and nine days, respectively, before the onset contrasts with other cases in which the virus has been found 19 days[3] and 12 days[4] before onset. Despite the fact that the three children had been direct daily contacts of two cases, the infection of all five members of the family in so short a period seemed to the author to indicate a simultaneous exposure to some extra-human factor in the environment or consumption of a common vehicle. A less probable explanation was that infection had been introduced by one of them and had then spread in the family.

More studies of this sort, although they demand much field and laboratory work, seem to offer the only hope of understanding why multiple cases of poliomyelitis in families are relatively rare, and why they occur within a few days of one another, being apparently parallel cases and not serial infections as is the case with infective hepatitis.

1 *New Engl. J. Med.*, 1947, **236**, 891.
2 *Amer. J. Hyg.*, 1947, **46**, 248.
3 Brown, G. C., Francis, T., and Pearson, H. E., ibid., 1945, **41**, 188.
4 Gear, J. H. S., and Mundel, B., *S. Afr. med. J.*, 1946, **20**, 106.

MENSTRUAL TOXIN

Among the abundance of superstition and folk-lore attached to the phenomenon of menstruation from prebiblical times there has always been a popular belief that the menstrual function allowed a periodic discharge of some noxious substance which if retained could be harmful to the organism. This concept is not now approved, but Smith[1] and Smith[2] have recently summarized work which they have been carrying out over the last eight years on "menstrual toxin." They have demonstrated that the menstrual discharge contains an atypical euglobulin derived from the endometrium during the last stages of its regression. It is a tissue-damaging agent which acts apparently by virtue of its vasoconstrictive properties. It is also fibrinolytic, and immunological studies have identified it with "necrosin," a toxic factor found by Menkin[3] in inflammatory pleural exudate in dogs. Moreover, the pseudoglobulin fractions of this exudate and of menstrual discharge will neutralize the effects of the toxic euglobulin fractions. Smith and Smith point out that the identification of a product of endometrial breakdown with a protein released by cellular injury may indicate that tissue katabolism from various causes may release such a toxin. This in turn suggests a common pathogenesis for such conditions as traumatic shock, the crush syndrome, the toxaemia following burns, and possibly also the toxaemias of pregnancy—particularly concealed accidental haemorrhage. The varying clinical pictures may be due to variations in the amount of toxin produced, and the duration and circumstances of its action.

The toxaemias of pregnancy are involved in this theory, because further research has revealed that there is present in the blood of menstruating women, of women in labour, and of women with pregnancy toxaemia a euglobulin fraction with fibrinolytic activity and a pseudoglobulin fraction with a counteraction. These properties are absent from the blood of women during normal pregnancy and in the intervals between periods. Smith and Smith suggest that in menstruation, labour, and toxaemia these substances result from tissue breakdown consequent on the withdrawal of hormonal support. It follows that there may be a relationship between the constitutional and local disturbances that sometimes accompany menstruation and the production of a menstrual toxin which causes a degree of vascular damage. This damage is said to be similar in character to that seen in the endometrium itself immediately before the onset of menstruation. Clinically, it has been observed that menstrual molimina are less marked in anovular cycles, when, according to Smith and Smith, the menstrual flow contains less toxin than in ovular cycles. Similarly, the state of

1 *Amer. J. Obstet. Gynec.*, 1947, **54**, 212.
2 Ibid., 1947, **54**, 201.
3 *Arch. Path.*, 1945, **39**, 28.

pre-menstrual tension may be ascribed to a prolonged absorption of the toxin from a secretory endometrium, and the spasm of primary dysmenorrhoea to an exaggerated local effect of the toxin.

Smith and Smith point out that the finding of a fibrinolysin and of a protective pseudoglobulin in the blood in pregnancy toxaemia serves as a reminder that menstruation and toxaemia present other similarities, such as a tendency to water retention, a withdrawal of oestrogen and progesterone, and clinical improvement when the uterus empties itself of its contents. They contend that menstrual toxin is the precipitating cause of toxaemia, and they have accordingly started clinical trials to determine the value of protective pseudoglobulin in the treatment of pre-eclampsia. Meanwhile they report four cases of spasmodic dysmenorrhoea successfully treated by injections of pseudoglobulin obtained from such human exudates as ascitic fluid. In addition to subjective relief, a progressive diminution of circulating fibrinolysin was demonstrated in three of the cases after the injections. If these findings are confirmed and the protective pseudoglobulin can be prepared in sufficient and concentrated amounts, not only the less important menstrual molimina may be prevented, but also more serious conditions such as menstrual migraine and epilepsy. Further reports on the progress of these clinical trials will be awaited with interest. Smith and Smith, however, are considering an even wider application of their work, realizing that in theory toxic protein katabolites may arise from damaged tissues anywhere in the body and that therefore treatment of the resultant clinical syndromes with protective pseudoglobulin may prove of value in a large number of conditions.

HEALTH OF THE PRISON POPULATION

The prison population is increasing. In 1944 the daily average number of people in prison was about 13,000; this figure has risen steadily until in July, 1947, it stood at 17,300. It is now higher than it has ever been since before the war of 1914–18. Among women the daily average has fallen and now stands at about 1,000. There has been a marked decrease in drunkenness, or at all events a marked diminution in the number of women sent to prison for that offence. On the other hand, the number of women sentenced for brothel-keeping and for cruelty to or neglect of children has risen steeply. The borstal population seems to have stabilized itself at about 3,200. Young males found guilty of indictable offences and sentenced have increased by 50% since the pre-war years, and young females by an even higher proportion.

The annual report of the Prison Commissioners[1] concerns 28 local prisons, 5 convict establishments, and 13 borstals. When the figures were compiled 11 prisoners were in for life (commuted death penalty), and 22 were serving terms of twenty years. Some prisons seem to be overcrowded. Thus at Wormwood Scrubs the number of cells available for ordinary prisoners is 974 and the daily average population 982; at Bedford 118 cells hold on the average 132 prisoners; at Norwich 137 cells contain 157 prisoners. The exclusion of accommodation for special classes of patients, such as those suffering from venereal diseases or from certain skin complaints, and those segregated for punishment, may go some way to explain the difference, but it does look as though the housing situation in the country generally is reflected in its gaols. During 1946, the year under review, restraint had to be applied to 78 male and 8 female prisoners, and corporal punishment for gross personal violence to prison officers was ordered in 16 cases, but in 5 was not confirmed by the Home Office. The net annual average cost of a prisoner is £140, and of a borstal inmate £176. Whether this takes into account any economic value of a prisoner's work is not clear. The chief employment in local and convict prisons remains the making of mailbags, but in borstals a larger number of males are engaged on agricultural and building work.

Deaths in prison during the year numbered 55, of which 19 were due to executions, and 2 were suicides. The daily average number of sick prisoners treated in hospital was 838, and out of hospital 1,306. The total number certified insane (apart from those found guilty but insane, or insane on arraignment) was 79. Increasing use is made of temporary release to civil hospitals for medical and especially for surgical treatment; 257 prisoners were so released during the year. At Wormwood Scrubs there is a surgical unit which deals with non-urgent surgical cases from London and provincial hospitals. Wormwood Scrubs has, too, a psychiatric unit with a 10-bed ward, and another unit has been developed at Wakefield to deal with cases arising in the North of England. At Holloway—the women's prison—a psychological unit has been formed which helps in the allocation of girls for appropriate borstal training.

Experience has shown that however well qualified as a psychiatrist a medical man may be when he joins the prison service it is some years before he becomes of full use. The criminal aspects of psychiatry can be learned only in prison. For example, cases of schizophrenia commonly seen in prison are not of the type most suitable for insulin therapy, though some cases requiring insulin treatment are transferred from prison to a London mental hospital. For such therapy the patient should be of good previous personality, and the symptoms should be of recent development. In the cases seen in prison as a rule the personality is poor and the symptoms have developed slowly. The need for a general all-round experience in the prison medical officer is emphasized. The amount of ordinary medical and surgical treatment required in prisons is quite considerable, and psychiatric work is not the major part of the prison medical officer's job.

The question of the psychopathic personality is receiving attention. Three main types are recognized in prison: the aggressive psychopath, the inadequate psychopath, and the ethical aberrant personality. The last-named might properly be certified as a moral defective; the difficulty is in proving that symptoms existed before the age of 18, which is necessary for certification under the Mental Deficiency Acts. Certification would provide for the segregation of a group of social misfits, and would afford facilities for rehabilitation treatment over a long period in special clinics.

The epileptic state appears in a very small proportion of prison cases, apparently in only about 0.4% of the average prison population. The treatment of epileptics in prison is said to present no great difficulty. Many of them respond well to the usual drugs, but there are difficulties about their disposal on release. Not all epileptics go to prison for a crime committed in the pre- or post-epileptic state, and their crime has often no connexion with their disease. A colony for epileptics who have a criminal record and need institutional treatment is suggested. During the year covered by the report a medical adviser was added to the staff of the Home Office, and Dr. J. C. W. Methven, while remaining a Prison Commissioner, was appointed to this post. He advises the Commissioners on medical policy and exercises general supervision over the medical service in prisons and borstals.

[1] *Report of the Commissioners of Prisons and Directors of Convict Prisons for the Year 1946.* Cmd. 7271. London: H.M. Stationery Office. 2s. 6d. net.

TO EVERY MEMBER OF THE MEDICAL PROFESSION

STATEMENT BY THE B.M.A. COUNCIL

At its meeting on Jan. 21, the last before the plebiscite is held, the Council of the British Medical Association issued the following statement:

We are now on the eve of a decision of the profoundest importance to the public and to the medical profession. For years the British Medical Association has been working for the extension, improvement, and consolidation of the country's health services, publishing its constructive proposals in a series of reports. It is now confronted with an Act of Parliament directed to the establishment of a comprehensive health service but embodying forms of organization which are in conflict with the principles of the profession. The conflict is based on the profession's conviction that the Act leads unmistakably towards a whole-time State medical service, and that such a service would be harmful to medicine. This conviction is strengthened by the knowledge that the Act of 1946 is in the hands of those who profess as their objective a whole-time salaried State medical service.

We have sought a number of changes, some of principle, some of detail. The answer has been a refusal to modify one word of the Act. The Council recognizes that some points of the profession's case make a stronger appeal to some members of the profession than to others. But it firmly believes that, viewed as a whole, the Act in its present form is in conflict with the best interests of the community and the profession.

After years of discussion the time has come for the profession to translate words into action. The issue is one not of money or compensation but of the intellectual freedom and integrity of a great profession. The Council of the Association will abide by the result of the plebiscite, as defined on the plebiscite form. It would be lacking in its duty, however, if it did not make abundantly clear to every member of the profession its carefully considered and determined view that the profession should not take service under the Act in its present form.

TO EVERY INSURANCE PRACTITIONER

STATEMENT BY THE INSURANCE ACTS COMMITTEE

The following statement was drawn up by the I.A.C. at its meeting on Jan. 15:

The Insurance Acts Committee, which represents every insurance practitioner in the country, owes it to its constituents to make abundantly plain exactly where it stands on the grave issue which now confronts insurance practitioners, as it does other members of the profession. Fully conscious of all the implications, the Committee condemns the National Health Service Act, 1946, in its present form as contrary to the best interests of the public and of medicine, and advises insurance practitioners firmly to reject it in the forthcoming plebiscite.

A Bibliography of Infantile Paralysis 1789–1944, which is edited by Dr. Morris Fishbein and published at Philadelphia by J. B. Lippincott (price £4 10s.), is a valuable publication already well known to students of poliomyelitis. It has been prepared under the direction of the National Foundation for Infantile Paralysis. The volume consists of a list of all medical references to the disease published since 1789, with a brief abstract of most of the papers and a carefully compiled index of both subjects and authors. Supplements to the list are issued once a month. The book is admirably produced and has already proved to be a most helpful work of reference to those interested in the disease.

THE N.H.S. ACT: SOME PRACTICAL QUESTIONS

THE COUNCIL'S ANSWERS

We print below some of the practical and personal questions which individual members of the profession have put to the Association at meetings and by letter, together with the answers given by the Council of the B.M.A.

General Practitioners

Q. (1).—*I am opposed to the Act and intend so to vote. What risk do I run of losing compensation if the fight is unsuccessful?*

A.—If a sufficient number of general practitioners stand out, the fight will not be unsuccessful. General practitioners will be advised not to enter the Service *only* if the number of them opposed to joining is sufficient to secure successful opposition. Only if 13,000 or more general practitioners agree to stay outside and continue so to agree will the Association advise all general practitioners to stay outside. As a result the Minister may postpone the appointed day. If he does not, he will be unable to provide a comprehensive service. Whatever final settlement follows, the Association will insist on a non-victimization clause covering, *inter alia*, capital values. If a sufficient number of all general practitioners stand firm, all will retain their capital value.

Q. (2).—*There may be practitioners who vote for staying outside but who subsequently join. Is this not a real danger?*

A.—The Association will keep itself informed of the practitioners who enter, or apply to enter, the Service before the appointed day. It will advise general practitioners to stay outside only if the number not signing is sufficient to ensure success.

Q. (3).—*I do not wish or intend to join the Service. I am doubtful of the views of my neighbour and competitor. If he joins, whatever the outcome, I shall lose in income. What assistance is available to me?*

A.—If the plebiscite returns justify the Association in advising general practitioners not to enter the Service, there will be taken steps to bind general practitioners in small groups one to another to sustain resistance. But this will not ensure that no one will lose income under any circumstances. Financial aid will be available to meet hardship incurred in carrying out the Association's advice, particularly hardship arising out of commitments entered into, such as interest on loans, insurance premiums, and school fees.

Q. (4).—*Assuming the necessary majority against undertaking service and that, despite the profession's opposition, the appointed day is adhered to, how will general medical services be provided for the people, bearing in mind that National Health Insurance will come to an end?*

A.—(1) There will be too few doctors inside the Service to enable the Government to provide the promised service. It will be for the Government to meet the criticisms of the people when—as they may believe—they will be paying for a service which is not there. Incidentally, only 10d. of the social security contribution will go towards health services.

(2) General practitioners will make their services available to the public on a fee-paying basis. Their position will be that they are willing to enter a suitable comprehensive service but they are unwilling to accept the Act in its present form. They will be receiving no money from the Government and they will look to their patients for payment for the services they render.

(3) Clearly, the Government cannot allow such a situation to continue.

Q. (5).—*I qualified two years ago. Although I dislike the Act I cannot help being attracted by the notion that a practice will be made available to me on application. Is this the position?*

A.—Not exactly. To-day practices pass from one practitioner to another by the process of introduction with or

without a preliminary assistantship. Under the Act this will not happen. You will make application to start a practice, or to succeed to a practice, in a particular area.

If your application to start a practice is granted you will in effect "squat" as you would to-day, the difference being that you will receive £300 a year.

If you succeed to a death vacancy, or to a vacancy arising from unforeseen retirement, it is probable that by the time your appointment is made and you take up practice in the area the income will be very much less than it was when the vacancy occurred.

If you are appointed to a partnership the situation is likely to be better, though it is fairly certain that partnerships as we know them will not continue under the new order.

Q. (6).—*Is opposition to the Act opposition to Parliament?*

A.—No. The Act specifically provides and the Minister has affirmed that the doctor is free to apply or not to apply to join the Service. The Minister has stated further:

"Every doctor will have to decide for himself when the proper time comes whether or not he should take part in the new Service, and the profession as a whole will be free to determine their views on the Service when they know what it is to be."

This is precisely what the profession is now proceeding to do.

Q. (7).—*I am in a partnership of three based on a partnership agreement entered into eleven years ago. Will the agreement continue to be operative after the appointed day?*

A.—The Minister says that all partnership agreements in all their clauses will continue to operate just as if there had been no Act. Our legal advisers say the Minister is wrong, so far as those clauses which provide for sale and purchase of goodwill are concerned, adding that such is the ambiguity that there should be amendment of the relative sections of the Act *before* the appointed day. In short, no one yet knows the answer, and the Minister is going to set up a legal committee to investigate.

Q. (8).—*Does the remuneration conform to the recommendations of the Spens Committee?*

A.—It is doubtful whether the remuneration proposed conforms to the Spens Report in the middle ranges of income and certain that it does not conform in the higher ranges. But the Minister's proposals for remuneration are irrelevant to the main issues. Whatever the form of service, the Association will insist that the recommendations of the Spens Committee, accepted by both the Government and the profession, are accurately translated into terms of remuneration.

Q. (9).—*I am hoping to retire shortly. If I join the Service in order to obtain compensation and retire, when is it likely I shall be paid my compensation?*

A.—Compensation cannot be paid to any practitioner until the regulations for the apportionment of the global sum have been devised and until every claim has been made and approved. Only then would it be possible to apportion the global sum among those entitled to share in it. Inevitably this will take a considerable time: it may be as long as two or three years.

Q. (10).—*Does a restrictive clause binding an assistant not to practise within a certain radius of his former principal for a certain time remain in force after the appointed day?*

A.—Yes.

Q. (11).—*Among the conditions governing the loan on my practice there is one which says that I shall not without consent take any action which would affect the security of the lender. Can I vote against accepting service?*

A.—Yes. A vote against accepting service does not mean resignation from National Health Insurance. That comes to an end automatically on the appointed day under the National Insurance Act, 1946. It is most unlikely that any consent which a practitioner might have to obtain from the lender would be withheld to any course of action decided on by a majority of the profession.

Consultants and Specialists

Q. (12).—*I am a consultant on the staff of a voluntary hospital and also in private consulting practice. I am opposed to the Act. If the plebiscite returns justify opposition, what shall I be called upon to do?*

A.—You, like all consultants on the staffs of voluntary hospitals, will be advised to continue with your hospital work and to refrain from signing any contract proffered by the Regional or Teaching Hospital Board. It is very unlikely that permanent contracts will be proffered in the next few months, although interim contracts may be offered. The Specialist Spens Committee is not likely to report for some months; until it has reported and the Government has considered its report it will be impossible to offer consultants effective contracts.

Voluntary Hospital Medical Officers
(from Junior House-man to R.M.O. or Registrar)

Q. (13).—*What are the implications to me of voting against undertaking service under the Act in its present form?*

A.—You will be advised to continue with your work as if no dispute were in operation, renewing appointments or taking new appointments in the hospital field if necessary. All that is asked of you is that you should not enter the field of conflict, that is, that you should not enter the Service as a general practitioner or as a consultant or specialist until the conflict is over.

Whole-time Local Authority Officers of all kinds, including Public Health and Hospital Officers, Consultants, and Residents

Q. (14).—*I am opposed to the Act. What action do I take?*

A.—You will be advised to continue with your work, even if this involves entering into new contracts with new employing bodies to which you are automatically transferred. You will be asked not to enter the field of general practice, or to enter into contracts as part-time consultants and specialists with regional and teaching hospital boards.

Q. (15).—*I am a whole-time officer of a mental hospital. Do I answer all three questions of the plebiscite? If the plebiscite returns justify opposition, what am I expected to do?*

A.—If you are of consultant status you will classify yourself as such and answer all three questions. If you are not of consultant status you will classify yourself as a whole-time local authority (special hospital) officer and answer question A only. But whichever your classification you will not be asked to discontinue your present work or to refrain from entering into contract with the regional board to which you may be automatically transferred. All that is asked of you is that you should refrain from entering the field of conflict as a general practitioner or part-time consultant.

General

Q. (16).—*I am not a consultant or a general practitioner or a hospital officer. I am opposed to the Act. What action do I take?*

A.—You will express your opposition to the Act in answer to question A of the plebiscite. You will not be asked to reply to questions B or C. What will be asked of you is that you should not enter the field of conflict as a general practitioner or as a consultant.

Non-victimization Clause

Q. (17).—*Will the Association insist on a non-victimization clause in any final settlement?*

A.—Yes. In any final settlement the Association will insist on a non-victimization clause covering all sections of the profession.

THE DAY OF DECISION

A LAYMAN'S OPINION

BY

COLM BROGAN

Medical men and women naturally judge the present conflict principally on professional grounds. The present issue may be wider, and it may therefore be useful to look at it through the eyes of a layman, of a potential patient the present Act is designed to help. We have therefore invited Mr. Colm Brogan to state his views on the impact of the Act on the public.

By the eve of the poll which is to settle the future of the medical profession, some facts had become clear beyond argument. There is now no doctor left who does not realize that the present offer of the Minister of Health is an invitation to take the first and irrevocable step towards a full-time, full-salaried State medical service. It is now equally clear that an overwhelming majority of doctors are opposed to the scheme. However they vote, they have already exposed their minds. If they vote for the scheme they will have voted, under duress, against their judgment and professional conscience.

It is vital to their own interest and to the interest of the community at large that they should vote against the scheme in a majority so overwhelmingly large as to represent the true finding of their instinct and their judgment. Their own interests demand an emphatic rejection. If the scheme as proposed by the Minister is put into operation, independent practice will cease to be possible, except for a handful of doctors, within a measurable term of years. That is what the Minister foresees and what the Minister intends.

The destruction of private practice would have a damaging effect on the standing of all doctors, including those who are already in the public service. These have been known to complain of niggardly treatment and niggling interference, but whatever inconveniences they suffer from now are small compared with what is in store for them if private practice should disappear. Do doctors in public employment fully realize that all their professional standards, including the financial, are maintained by the outside pressure of independent practice? The "never-ending audacity of elected persons" is curbed, to some extent, by the fact that the employed doctor can walk out and set up for himself if the conditions of his employment should prove unbearably vexatious. The position of the teaching profession carries an instructive lesson for doctors. The standing of teachers under the State is in every respect inferior to the standing of doctors, for the simple reason that few teachers can walk out of public employment without walking out of their profession. As a result, teachers are subject to restrictions, indignities, and modes of interference which doctors have not yet learned to tolerate. But, once the area of private practice is reduced to insignificance, the hard lesson will begin. They will learn while they earn.

But the personal welfare of doctors is of public interest only in so far as the contentment of all important workers is socially desirable; and there is no room for an outsider to advise them on their own interest. The standard of medical service is a vital consideration for everyone, but here again doctors are better able than any layman to estimate the inevitable deterioration of standards under a State monopoly and to judge the full force of such a grimly monitory phrase as "lax certification." There can be few doctors who imagine that their professional integrity will be easily preserved when they must advise and prescribe with one eye on the patient and one on the state of the public funds.

No layman has anything useful to say on those aspects of the controversy which are specially understood by doctors, but there is a wider aspect which directly and vitally affects the whole public and on which it may not be impertinent for a layman to write. For a full generation we have watched a steady extension of State power. The necessities of war greatly assisted the development of the omniscient, omnipotent, and omnicompetent State, but the development has increased in rapidity since the end of the war, because it has the authority of a truly monstrous political philosophy.

That philosophy makes use of high-sounding phrases, "the will of the people," "the will of the majority," "the sovereignty of Parliament," but these phrases thinly cover an abyss of tyranny, for they mean that a man must surrender his private conscience at the command of a majority.

The liberties of Britain were not won by majority decision, or by accepting the sovereignty of Parliament over all persons and in all causes. Religious toleration was won by lonely men who sought exile or met their death rather than submit their conscience to the sovereignty of the State. The trade unions gathered their first strength by defying the sovereignty of Parliaments which sinned against natural justice by denying to working-men their right to combine. The Tolpuddle Martyrs were martyrs to State sovereignty. Liberty is won by the few, and is held by the many. When did it become a rule of British life that the sense of right must abdicate and the cry for justice be silenced before the majesty of a majority decision?

It must be said that the philosophy of majority totalitarianism has some singular advocates. It is advocated by men who had a record of highly combative conscientious objection during the first Great War, and by a few who were equally careful of their conscience during the second. There is a Minister in the present Government who must still remember how he chose to appear before a conscientious objectors' tribunal, although he suffered from a disability which made it totally certain that he would not be called upon to serve. It was not enough for him that the sovereign will of the majority had exempted him from service: he insisted on formally rejecting the sovereignty of that will.

There are other Ministers of the Crown who still count it as virtue that they thwarted Parliament by putting an end to intervention in Russia. They achieved this end by strikes and the threat of strikes. One of them, who still likes to recall that campaign, has a soft spot in his heart for manly independence, which tempted him to say a good word for the Grimethorpe strikers. Admitting that they were rather awkwardly stubborn, he was yet pleased to see that the spirit of vigorous independence still flourished in the land. If the doctors show vigorous independence in the plebiscite, we shall wait to hear a chuckle of approval from the same Minister. We may have to wait some time.

It must be said that the Minister of Health has not formally claimed that the sovereign will of Parliament suppresses the private conscience of the doctor. Indeed, for a long time he was careful to assure the doctors that they were free to enter the service or stay out, as they chose. But, as the critical day drew near and the mind of the doctors was unmistakably shown, Mr. Bevan issued a reminder that Parliament was still sovereign, and his broad hint became an outright declaration in the mouths of his supporters. Indignant totalitarians positively bellowed their rage in the *Daily Herald* and the *Sunday Pictorial*. They cried "Havoc" and "Treason" because the doctors showed an inclination to disagree with Mr. Bevan, whose own career of docile conformity surely entitled him to a better response.

It would be interesting to know how the totalitarians square their principles with their practice, for they have gone very far at times in condoning affronts to Parliament. They have kept a silent tongue over strikes which were conducted in open defiance of a law which they themselves had renewed, and they are rather fond of talking about what the organized workers will or will not stand, without reference to Parliamentary sovereignty. The trade unionist may steal the horse, while the doctor may not look over the hedge. Is it possible that the sovereignty of Parliament is another name for the dictatorship of her proletariat?

In fact, the doctors have not so much as hinted at any defiance of the sovereignty of Parliament. If the sale of practices becomes illegal, they will not break the law. When hospitals are seized by the State, they will not strike against that seizure. If a minority of doctors choose to serve the State their colleagues will accept and respect that decision. All they claim is the right to choose an option which the same sovereign Parliament has allowed to them, a right which would still be theirs even if Parliament denied it. It is said that Louis XIV once ordered a Minister to do something which was against his conscience. When the Minister refused, Louis said, "But I, your

King, can command you." The Minister replied, "No. You can command me to do this, or resign. I resign." Louis accepted the justice of this answer, but he, after all, was only an absolute monarch.

The importance of the plebiscite to the general public is this —that it gives the first gleam of hope that we may all live to see liberty recapture lost ground. The advance of authoritarianism has been almost completely unchecked, for the resistance has been individualistic and unorganized. Now, for the first time, the authoritarians are meeting a well-armed enemy in prepared positions. If the doctors have the will to join issue, the battle is already won. If the majority is sufficiently emphatic, the Minister will not be merely defeated; he will be routed, and the doctors will not have to suffer even a temporary inconvenience. There will be a new Minister of Health and a new approach to the problem. It must be remembered that a politician's claim on the respect of his colleagues is largely dependent on his powers of persuasion, his skill in turning awkward corners. If Mr. Bevan's offer is overwhelmingly rejected, even those who regard the rejection with grief and rage will admit, and even insist, that the fault was largely Mr. Bevan's. That will be easier than admitting that the scheme is profoundly wrong. A more plausible politician will take over negotiations, knowing that his own reputation is dependent on success. The doctors have literally nothing to fear, so long as they are true to themselves and to each other.

What is likely to happen on the national scale has already been most instructively rehearsed on the local scale. Although the authoritarians have not lost a big engagement, they did suffer a check in one skirmish, and that, significantly enough, was a medical skirmish. The nurses and doctors of Willesden told the Council that they would seek other employment rather than accept the forcible baptism of trade union membership. Finding that the closed shop carried the uncomfortable corollary of a closed hospital, the Council climbed down as hastily as a small boy getting down from a forbidden wall. But that was not all. Prominent Ministers and trade unionists vied with each other in making clucking noises of disapproval at Willesden Council. Willesden had really gone too far: doctors and nurses must not be interfered with. There will be much clucking at Mr. Bevan if he loses the vote.

There was great public relief at the Willesden decision, a general feeling that an almost intolerable thing had at last met with a check. If the doctors of Britain stand as firm on the national issue, the whole social atmosphere will be lightened and cleansed.

It has fallen to the doctors to meet and break the authoritarian demand. They have not asked for this responsibility and they have not welcomed it, but the layman may well be thankful that it is the doctors who have been called upon to fight liberty's Battle of the Marne, because they have all the means of conclusive victory, if they have the will. Far more depends on this than the future of medical practice. The future of personal liberty is in the balance. The doctors can strike a blow that will not only free themselves but will give hope of freedom to us all.

That is why the plebiscite is a matter of the gravest national concern. Our liberties are still large, but they are contracting, and an evil idea is gaining dominance. Now is the time to reject and refute the idea. Doctors have not sought this fight, but they cannot now avoid it, and they have the decisive weapon in their hands. Let them strike home for all of us.

It may be that doctors feel the public has shown little sympathy and understanding, but they have one infallible means of enlisting sympathy and provoking interest—throw out the scheme. The public will conclude, and rightly conclude, that the doctors must have a solid case because they gave a solid vote. The vote will rouse a general and startled interest, and the issue of private conscience against public policy will be clear for all to see.

It is certain that a small number of doctors will vote for acceptance of Mr. Bevan's conditions because they honestly agree with Mr. Bevan that the Minister should be the master of medicine. There are fewer doctors now who are ready to welcome a State service than there were two years ago, but some remain, and their opinion must be respected because it is honestly their own. They vote "Yes" from conviction. That is respectable. Others may vote "Yes" because they fear the consequences of voting "No." They vote from calculation. That, at least, is understandable.

But to vote "Yes" in a spirit of meek submission to the common will is scarcely respectable and scarcely understandable. To submit your moral and professional judgment to a majority vote is to give away the command of your conscience and accept, in exchange, an insignificant holding in the rule of your own soul. Those who are tempted to this abdication might reflect on the verdict passed, one hundred years ago, by a Frenchman on his fellow countrymen. The average French citizen was then much exhilarated by his share in the irresistible authority of the sovereign mass. Looking in the mirror, said the critic, a Frenchman flatters himself that he sees one-twenty-seven-millionth of a tyrant. But he forgets that he sees all of a slave.

If the men and women of the British medical profession remember the rightness of their cause and the practical strength of their position their vote will shake the air like a sudden shot of cannon. Men will rediscover that they have no wish to be any part of a tyrant, and no need to be any part of a slave. For the first time the invasion of liberty will have been met by something better than compromise, concession, and pleading. But we can expect the first shot of national deliverance only if the answer is nearly unanimous and fully determined. There are few doctors who do not know in their hearts and minds what answer they must give to the demand that they accept State service and dependence. But the answer must be firm and it must be final. It is, No. Not now. Not ever.

MEDICAL PRACTICES COMMITTEE

In a letter to the Secretary of the Negotiating Committee from the Minister of Health the Minister has notified his intention shortly to set up the Medical Practices Committee under Section 34 of the National Health Service Act, 1946. We publish below this letter, a reply from the Secretary of the Negotiating Committee, and the subsequent correspondence.

Ministry of Health,
Whitehall, S.W.1.
Jan. 2, 1948.

SIR,

Medical Practices Committee

I am directed by the Minister of Health to state that as part of the preparatory work which must be carried out to make the National Health Service ready by July 5 next he proposed shortly to take steps to set up the Medical Practices Committee under Section 34 of the National Health Service Act, 1946. The Act provides that the Committee shall consist of a chairman who shall be a medical practitioner, and eight other members, of whom six shall be medical practitioners: of these six medical practitioners, at least five shall be persons actively engaged in medical practice.

The chairman and members are to be appointed by the Minister after consultation with such organizations as he may recognize as representative of the medical profession, and the Minister would accordingly be glad to receive any views the Negotiating Committee may wish to express on the following proposals.

The Minister proposes that the normal period of office of members of the Committee should be three years, members being eligible for reappointment, but that the first chairman and two of the other eight original members should be appointed for a period ending on March 31, 1950, three of the remaining members retiring on March 31, 1951, and the rest on March 31, 1952.

It is anticipated that in the first instance the chairman and some, at least, of the members will probably need to give nearly full time to the work, but that the work is likely to diminish later on. It is therefore proposed that the remuneration of the chairman at the outset should be £2,000 a year, subject to review if and when the work diminishes, but that he should not be debarred from also undertaking private work if he wishes. The other members would be remunerated at the rate

of seven guineas a day. Travelling expenses and subsistence allowance on the same rates as are payable in the Civil Service would be payable in addition.

Of the medical members the Minister considers that one at least might have experience in Wales.

As regards the two non-medical members, the Minister suggests that one might be a barrister or solicitor of experience and the other a non-professional member of an Executive Council.

The Minister would be glad to receive any suggestions from the Negotiating Committee as to the names of persons who might be included by him in his consideration of suitable membership for the Medical Practices Committee.

It will be helpful if any suggestions or observations which the Negotiating Committee may wish to make could reach the Minister as soon as possible, and in any case not later than Jan. 21, 1948.

I am, Sir, your obedient servant,
D. RUSSELL-SMITH.

B.M.A. House, W.C.1.
Jan. 10, 1948.

DEAR SIR,

I refer to Miss Russell-Smith's letter of Jan. 2. Following its meeting with the Minister, the Negotiating Committee decided to refer the Minister's reply to its constituent bodies and not to meet until those replies were available. As the Minister is aware, steps are being taken to ascertain, by plebiscite and otherwise, the views of the profession as a whole on the issue of service or no service, and it would be improper for the Negotiating Committee to respond at this stage to the invitation to comment on the Minister's proposals for the Medical Practices Committee or to put forward the names of suitable practitioners for membership. Not until the profession has determined its attitude to the Service as a whole will it be possible for the Negotiating Committee to consider putting forward such observations and suggestions, its action then depending upon the character of the profession's decision on the larger issue.

Yours faithfully,
CHARLES HILL,
Secretary.

Ministry of Health,
Whitehall, S.W.1.
Jan. 16, 1948.

DEAR SIR,

The Minister asks me to refer to your letter of Jan. 10 and to say that he notes that the Negotiating Committee are unwilling to join him in the consultation which he has offered regarding the choice of medical members for the Medical Practices Committee. If, at any time before he has completed the constitution of this Committee in accordance with the Act, the Negotiating Committee wish to offer any suggestions he will, of course, still be happy to consider them.

Yours faithfully,
J. M. K. HAWTON.

B.M.A. House, W.C.1.
Jan. 23, 1948.

DEAR SIR,

I refer to Mr. Hawton's letter of Jan. 16 in which it is stated that the Minister "notes that the Negotiating Committee are unwilling to join him in the consultation which he has offered regarding the choice of medical members for the Medical Practices Committee." Mr. Hawton's reply and these words in particular suggest that the invitation to the Negotiating Committee to nominate medical members of the Medical Practices Committee was sent at a time when it was perfectly clear that the Negotiating Committee could not comply in order to relieve the Minister of the legal obligation placed on him by the Act to consult the medical profession.

The Minister and his advisers were fully aware that when the letter of Jan. 2 was sent, the profession was in process of deciding its attitude to the Service as a whole and that the Negotiating Committee could not possibly compromise itself and the profession by nominating medical members for a body the need for which is one of the subjects of dispute. Having received the only answer which could in the circumstances be given, the Minister now accuses the Negotiating Committee of unwillingness to join him in consultation and to hint that he proposes to proceed to appoint the Committee without such consultation.

The matter—and the method employed—is of such importance that it is proposed to publish the correspondence.

Yours faithfully,
CHARLES HILL,
Secretary.

Ministry of Health,
Whitehall, S.W.1.
Jan. 26, 1948.

DEAR SIR,

The Minister asks me to refer to your letter of Jan. 23.

It is the Minister's clear responsibility to carry out the decisions of Parliament and to bring the National Health Service Act into operation. To do that in proper time requires the setting up, stage by stage, of the various administrative and other bodies for which the Act provides. The stage at which the Medical Practices Committee needs to be considered having arrived, the Minister offered the profession's Negotiating Committee the opportunity of consultation, as he would himself prefer—and has often made clear—to act throughout in the closest consultation with the profession. While he notes that the Negotiating Committee felt unable to join him in consultation in this instance, it remains his wish and intention to continue to offer the opportunity at all similar stages in the preparation of the new service.

The Minister has, of course, no objection whatever to your publishing this correspondence, including the present letter.

Yours faithfully,
J. M. K. HAWTON.

THERAPEUTIC SOCIAL CLUBS

AN ADVENTURE IN SOCIAL PSYCHIATRY

A meeting organized by the Institute of Social Psychiatry was held in London on Jan. 14 to further the idea of therapeutic social clubs for patients both in and out of mental hospitals.

Dr. E. B. Strauss, who presided, said that of the "big three" in medical psychology it was Adler who paid most attention to man's relation to his neighbour. Freud and Jung were more concerned with his internal harmony and integration. Psychotic patients were disoriented in time and space, but what was not so usually recognized was that any form of emotional or mental disturbance caused disorientation in a third dimension—that of the community. The therapeutic social club was one of several devices intended to counteract this. Among patients in mental hospitals, in addition to the disorder for which they were admitted, there tended to develop an "asylum psychosis," as a result of which they felt that they had sunk in the social scale and did not belong to the community.

Dr. J. Bierer, director of the Institute of Social Psychiatry, said that experience of therapeutic social clubs now extended over a period of nine years. He spoke in particular of the club started at Runwell Hospital in 1938–9. Many problems had to be faced in the establishment of such a club—how to combine freedom of action and self-government, including the mixing of the sexes, with existing regulations, traditions, and responsibilities. If patients were put in charge there was, of course, the risk of an aggressive patient taking possession of and misusing the club for the exploitation of his aggressive instincts. On the other hand, if a psychiatrist or nurse were in complete charge the patient would feel that he had no say in the matter at all. The best solution was to let the patients have charge of the club, the nursing and other staff attending by invitation, but to have honorary members, including the medical superintendent, the matron, and the psychiatrist.

In the club of which he spoke a few marriages of members had taken place and had been surprisingly successful. Two friendships had to be interfered with in order that they might not develop into a more serious alliance—one concerned an epileptic and the other a patient with multiple sclerosis—but in the majority of cases there was no reason to suppose that any harm would follow, either from the eugenic or the human point of view. Conditions in the club approximated more or

less to everyday life. The majority of patients behaved more naturally in the club, and this made it possible to use it for diagnostic purposes. A second club was established in the institution for chronic and deteriorated patients, and gave them some opportunity to exercise initiative.

One difficulty was that patients got so accustomed to active social life in the hospital that they missed it after discharge, and this led to the formation of extra-mural clubs. This idea underwent a large extension when they were confronted with the large number of asocial, solitary, and retiring people attending out-patient departments. In forming such extra-mural clubs it was important to avoid any stigma, and therefore the club premises were away from hospitals and the name of the club was non-indicative. In most of the clubs friends and relatives were also members; some of these were potential patients, and thus the club was of assistance in prophylaxis.

Dr. Donald Blair, deputy physician-superintendent at St. Bernard's Hospital, gave some practical directions on the starting, management, and financing of a club. The maximum number of members, he thought, should be between forty and fifty. It was important to have a nucleus of patients of reasonably high intelligence and initiative, and the regular attendance of the psychiatrist at club functions was of the utmost importance. These functions should include discussions, lectures, dances, and dramatic presentations. Therapeutic measures should be confined to talks to patients with proper encouragement and suggestions.

Other short addresses were given by Miss K. Thompson, social therapist at Runwell Hospital, Dr. Noel Harris, Dr. Doris Odlum, and Dr. Maxwell Jones, and much interest was shown in the discussion which followed.

Reports of Societies

MANAGEMENT OF UTERINE INERTIA

At a meeting of the Section of Obstetrics and Gynaecology of the Royal Society of Medicine on Jan. 16, with Mr. A. J. McNAIR presiding, the subject for discussion was the management of uterine inertia in the first stage of labour.

Mr. D. M. STERN said that uterine inertia might be said to occur when the contractions of the uterus during labour were shorter, less frequent, or weaker than normal. Normal labour might be assumed to last up to twenty-four hours, and prolonged labour was anything beyond that time. The first group of causes of uterine inertia in the first stage might be described as a badly fitting presenting part, including abnormalities of the foetus and the birth canal, and also, of course, placenta praevia. The second group of causes might be described as fear—not a surprising thing when women were educated to expect that labour would be painful. Less common causes included hormonal ones, of which little was known, excessive multiparity, drugs and poisons, accidental antepartum haemorrhage, and, of course, a full bladder or bowel. He did not agree that general debility was a cause; on the whole, debilitated patients had a rather more rapid labour than normal. Treatment was principally the correction of the abnormal presentation and reassurance of the patient.

In an analysis of 23,000 cases during the period 1936–46 labour was found to have lasted for more than 24 hours in 4,854, or 21%. Among these were a fair number of women who had previously had one or two confinements, but generally the proportion of primiparae was found to increase among the groups which had the longest labours. There was little increase in trauma with length of labour, and maternal mortality was not noticeably increased. The foetal mortality rate was unaltered if the labour extended only over three days, but it went up roughly to double if labour reached the fourth day, and fourfold if it reached the fifth day. In the course of these years 500 of the mothers who were admitted had lost their babies in their previous confinements, and in 28 cases this was attributed to inertia, but among these 28 all the second labours were spontaneous, except one which was prolonged and resulted in stillbirth.

Three Types of Primary Inertia

Prof. H. J. DREW SMYTHE described three main types of primary uterine inertia. The first was characterized by ineffectual pains from the beginning of labour, everything else being normal. Such pains might continue for three days, and the cervix did not dilate nor did the membranes rupture; real contraction or retraction of the uterine muscle was absent. The second was the clonic uterus, exemplified by the patient who from the beginning of labour had strong contractions, but in spite of these the cervix did not dilate and the membranes frequently ruptured early, with foetal and maternal distress. A posterior presentation, with which this delay in dilatation of the cervix was often associated, added to the difficulties. This form of primary inertia was found most often in the "male" type of patient. The third type of primary uterine inertia was associated with fear. Patients of this type from the very first pain shouted for the doctor to deliver them and became more and more hysterical, so that instead of relaxing they contracted against the uterus as much as possible. These cases were not common in hospital practice but were extremely common in private practice, and, he regretted to say, among doctors' wives.

In patients of the first of these types, if sedatives were given, the ineffectualness of the uterine contractions was prolonged. Sedatives should not be given during the day, but the patients should be ensured sleep at night, preferably with morphine. Rupture of the membranes in the first stage of labour was the danger with these patients. The thing to do was to get the patient on to full dilatation, which might take one, two, or more days, and when this was reached and the head was fairly down they should be delivered by forceps. Special care must be taken in the third stage of these labours, because then the same kind of inertia might be experienced. He never allowed the placenta to remain in the uterus for more than two hours. Definite shock was associated with longer retention of the placenta.

Patients of the second type, in whom the uterus went on contracting and the cervix failed to dilate, did require sedatives. The question whether there was foetal or maternal distress which demanded delivery of the patient depended entirely on how far the cervix was dilated. If it was not dilated up to half there were two choices—caesarean section or incisions of the cervix. Of the latter he had no experience. If the cervix was more than half dilated it responded well in some of these cases to further manual dilatation.

In the third type of patient in whom the inhibitory mechanism was an emotional one, namely, fear, treatment must start in the antenatal period. It was important that so far as possible the patient should be under the same doctor during the whole period of pregnancy and parturition. Her condition was partly due to entering a strange environment and coming under different medical care when labour was imminent. With the anxious patient reliance must be placed during the first stage of labour on fairly strong sedatives. Often one was more or less compelled to use the forceps on these patients owing to pressure from their families. The alternative was to give them the old "twilight sleep," but this prolonged labour and might tip the balance against the child. Secondary uterine inertia during the first stage of labour was almost certainly due to disproportion, which demanded operative intervention.

Points in Treatment

Mr. J. V. O'SULLIVAN said that he took inertia to mean the prolongation of the first stage of labour over thirty hours. The classification might be into primary and secondary, primary where the cause of the weak pains was not known, and secondary in those cases in which the cause could be found. Everybody agreed that post-maturity and endocrine imbalance gave rise to inertia, and so did interference with the polarity of the uterus. He had never been able to understand how the uterus, which appeared to be one organ, could contract in the upper part and relax in the lower, and in fact he did not believe it; he believed that the upper portion simply contracted more strongly than the lower.

Sedation was necessary at some stage in all these cases. His practice was to use drugs as far as possible only by night, and indeed to avoid all sedative drugs for as long as was reasonably

possible. He reserved morphine for those cases in which there was clonic uterine contraction and those in which the inertia was due to fear. The difficulty with morphine was that once the patient had it she would not do without it. He found a high foetal mortality in cases in which morphine had been used. He had not much faith in uterine stimulants. He believed in 2 oz. (57 ml.) of castor oil, followed by an enema and a hot bath, as a suitable stimulant on the second day.

Sepsis was a danger, and for that reason he recommended a routine vaginal culture. On the third day he put the patients on prophylactic sulphonamide, and if necessary added penicillin. The important day was the third day. After 72 hours the risk of caesarean section became rapidly less serious. On the third day he always had an *x*-ray anteroposterior and lateral view taken. Where medical treatment failed surgical measures became necessary. In cases where the cervix was two or three fingers dilated and where pains were regular (very rare cases, perhaps 3 in every 1,000) he still cut the cervix at the 9 o'clock and 3 o'clock positions. Cases which required this were those where the head was deeply engaged, the membranes ruptured, and the cervix very thin. Caesarean section in his practice had only a very limited use. In conclusion Mr. O'Sullivan quoted figures from one hospital last year with 1,739 labours; there was inertia in 100, among which spontaneous delivery took place in 35, forceps delivery in 51, the cervix was cut in 7, and 3 caesarean sections were done. He quoted an old admonition which seemed specially applicable to inertia: "In all cases we seek to determine not what the woman can endure, but what she can accomplish."

Prevention of Inertia

Prof. W. C. W. NIXON said that in many obstetric clinics labour lasting longer than 48 hours was put into the category of uterine inertia. Whether such a statistical compilation was useful was open to doubt. Prof. Nixon showed some tables illustrating the incidence of uterine inertia among the cases at University College Hospital. Prolonged labour (over 48 hours) was recorded in 7.6% of the cases during the two years 1946–7. About three-fourths of the women delivered themselves. Was it possible to prevent uterine inertia? Although Mr. Stern had shown that it was not entirely a condition restricted to primiparae, yet on the whole it might be taken as such. Prophylaxis should start early in pregnancy and should be continued into the delivery period. Encouragement, sympathy, and the administration of the proper sedative at the proper time would do much to allay fear and to inhibit its effect on the dilatation of the cervix. Active movement in the early part of the first stage should be encouraged. Attention must be paid to fluid control and the condition of the patient. Among the established cases of uterine inertia the most anxiety was caused by those in which the contractions were feeble and the cervix remained stationary at two to three fingers' dilatation.

On the assumption that it was on the parasympathetic side that help was needed, in a recent case at University College Hospital where labour had been in progress for 52 hours, and the membranes had been ruptured for the same length of time, prostigmin was tried. Bundle contractions were slightly increased, though only temporarily, and the dilatation of the os remained the same, namely, three fingers. This patient weighed nearly 95 kg., and had put on nearly 18 kg. in the last six months of her pregnancy. There was so much distension of the distal colon that only a small area on the right side of the uterus could be palpated. Although the foetal heart could not be heard caesarean section was done and a live baby delivered. All that the prostigmin did was to reduce the blood pressure, the systolic from 172 to 128, the diastolic from 104 to 78 mm. Hg. The only complication in the puerperium was a urinary tract infection.

The haphazard use of pituitary extract was to be condemned, but there were cases of uterine inertia in which it could be given provided there was no disproportion, that the woman was not of excessive parity, and that there was no malpresentation. Prof. Nixon demonstrated an improved instrument, devised in Budapest, for measuring uterine tone. The instrument made it possible to determine in which cases pituitary could be given with safety. If the tracings of the uterine contractions showed the uterus to be in a state of hypertonus, then obviously it was inadvisable to give pituitary extract. The reason why this drug had fallen into such disrepute was because cases had not been selected properly. When hypotonic inertia was shown it was quite safe to give the drug, and the effect of the first injection was to be seen in a few minutes.

In discussing surgical procedures Prof. Nixon said that when labour was allowed to be so protracted that there was excessive clonic distension with the drawing up of the bladder almost to the umbilicus he made it a rule to terminate the case by caesarean section. Much harm had resulted from the teaching that the delivery, if the membranes had been ruptured, must at all costs be by the vagina. Unnecessary vaginal mutilation, predisposing as it did to infection, had resulted from the adoption of this inflexible attitude in obstetric practice. He had never yet regretted doing a caesarean section for cases of protracted labour, but in some cases he wished he had not shown so much zeal for vaginal delivery.

General Discussion

Dr. ALECK W. BOURNE said that he entirely supported Prof. Nixon in what he had said about the use of pituitary extract. It should not be given in any circumstances in which there might be mechanical difficulty in labour. With regard to manual dilatation of the cervix, it was worth bearing in mind that there might be as the hours passed no apparent increase in size, but there was an increase in softness, and, for example, even though one had failed to dilate manually at 8 a.m., one might find six hours later that, while the cervix was no bigger, the fingers would open it up perfectly easily. If the head was fairly well down and the cervix was pressed over the head there was no place for caesarean section. Incision of the cervix would never enable it immediately to dilate because the constricting power of the cervix was in the ring.

Dr. GRANTLY DICK READ said that in his view there were three types of uterine inertia. The first was found in the women who went into apparently definite labour and stayed there, starting with weak regular contractions, prolonged into severe and painful contractions, coming on a fortnight or three weeks before the baby was expected to be born. These patients got a tender and sensitive uterus. The contractions caused distress to the mother, not to the baby, in his experience. These cases were not true labour at all. When, later on, normal labour did begin the women knew the difference at once. They would say, "Now that is different; now I am in labour." In nearly every such case, on investigation, an anxiety state was disclosed. The second type included those whose labour lasted from 36 to 50 hours, with weak contractions, though not distressing to patients who had been told how to conduct their labours, nor causing distress to the child. It would be found in most of these cases that there was some psychological factor working towards neuromuscular imbalance. The third type had a good labour until about three fingers dilatation of the cervix, and then there was an emotional storm, many women giving way entirely to the emotional state.

Treatment was to give fluids, to give rest, but, above all, to give confidence. There should be no hurry, no disturbance, but an atmosphere of complete calm. Sleep must be induced, particularly at night; exercise during the day was better than lying in bed. One of the greatest evils in obstetrics was the impatient attendant. If after three days there was no evidence of labour he suggested that the mind of the patient be investigated as well as the pelvic mechanism.

Mr. JOHN HOWKINS related particulars of a private case in which epidural anaesthesia was employed. This was a patient whom he had "conditioned according to the best Grantly Dick Read technique," and she went into a good labour. Then epidural anaesthesia was given, the anaesthetist, against his advice, giving her 45 ml. This led to an intractable primary uterine inertia—or really a secondary inertia, for the prime cause was the anaesthesia. Eventually she was delivered by the vaginal route. Unlike Mr. O'Sullivan, he was convinced that the uterus was two muscles differently innervated, one presumably by the parasympathetic, and the other by the sympathetic.

Two of the opening speakers made brief replies.

Correspondence

Censorship

SIR,—The letters from Mr. J. Johnston Abraham (Dec. 27, 1947, p. 1053) and from Mr. R. F. West (Jan. 10, p. 69) draw attention to what is one of the great dangers in any State medical service: the fettering of free expression of opinion. The strength of medical practice in Britain has been the doctor–patient relationship. The patient knows his doctor as a man. He knows his wife, his children, his dog, his car, his way of life. He chooses him when he is ill because he trusts him as a man. He comes to him for his opinion and his help, believing that the opinion will be honestly given and the help the best he can provide. Were he to think, or even to suspect, that he was being handed out the stock doctrines of authority, or given the treatment enjoined in the latest circular from headquarters, he would lose this belief.

We have passed through a long period in which truth has been at a discount and honesty an unpopular virtue. Speakers and writers have uttered advisedly rather than freely. They have said what they were told to say, what they felt they ought to say, what they were afraid they might-cause-alarm-and-despondency-and-let-the-side-down by not saying, rather than what they passionately desired to say. We want truth and freedom to walk among us again. How many enjoy them to-day?

Men who enlist in a service lose the right to publish as they like. Those who work for the Medical Research Council must submit to a benevolent guidance. Servants of Government departments must express opinions that fit the policy of the moment. Experts who are asked to report must suppress their report if its findings fail to confirm the views of the Minister who asked for it. Ration-analyses, health statistics, nutrition surveys, all fall obediently into line with the propaganda programme. Are potatoes plentiful?—they are magnificent food. Are they scarce?—they are starchy rubbish.

Medicine can advance only while the right to speak and publish freely is open to all medical men; while the small man working without a research grant or the help of a well-equipped laboratory can put forward his humble thesis with as much right to be heard as the hall-marked and salaried professor; while new ideas gain ground because they are backed by facts and not because they are backed by authority, and old ones disappear because they are disproved and replaced by something better, and not because they are suppressed.

Magna est veritas et praevalebit. Will it after the appointed day?—I am, etc.,

London, W.1. HENEAGE OGILVIE.

SIR,—My attention has been drawn to the letters of Mr. Johnston Abraham (Dec. 27, 1947, p. 1053), and Mr. R. F. West (Jan. 10, p. 69). Their insistence that the medical press must at all times and at all costs be kept free from official interference is one which appeals to my heart and one which specially concerns tropical medicine. To this subject workers of all nations have contributed, and for this development unfettered and unbiased criticism has been most necessary. On many occasions when official views have been promulgated—as, for instance, in the manner of transmission of yellow fever, malaria, cholera, or plague—they have proved erroneous. Therefore I cannot imagine any Government in this country being so foolhardy as to press for a muzzling of medical publications, and if there is any tendency to do so we must fight.—I am, etc.,

London, W.1. PHILIP MANSON-BAHR.

SIR,—Among those called upon to vote in the plebiscite are medical men who devote most or all of their time to research. One point which has been discussed in your correspondence columns (Mr. J. Johnston Abraham, Dec. 27, 1947, p. 1053; Mr. R. F. West, Jan. 10, p. 69) concerns them directly and vitally. This is freedom of publication. In the absence of specific assurance, which does not seem to have been given, there will be a natural fear that this freedom will be endangered by the operations of the new Health Act.

Other points at issue between the Minister and the profession may not concern the research worker so directly; nevertheless, the freedom and the conditions conducive to good work which he enjoys depend upon the maintenance of the freedom of the profession as a whole. If we as research workers feel that the refusal of the Minister to grant the desired concessions does threaten that freedom, then it is our duty to place ourselves alongside our colleagues who are in practice and return a decided "No."—I am, etc.,

London, W.C.1 J. A. FRASER ROBERTS.

SIR,—Mr. J. Johnston Abraham's letter (Dec. 27, 1947, p. 1053) raised questions of such fundamental importance to medical education that I expected his challenging communication would be followed by correspondence from those better qualified than myself to express their views. The absence of this, combined with a belief that Mr. Johnston Abraham sounded a note that, if not heeded by the profession, may lose us one of our birthrights, causes me to call attention to the fact that, except in the case of medical literature issued by, or on behalf of, the Ministry, the Ministry of Health, while sponsoring a complete health service for the nation, has not established a single priority for medical literature in the important matters of delivery of paper from the mills, printing, or bookbinding. Consequently medical students' textbooks take their turn for paper, printing, and binding with manuals on greyhound racing and "How to Play Poker."

As yet, none of the priority Government publications are designed for the use of medical students, but one must presume that in due course trainees for a Civil Service will be issued with official handbooks. While I am open to conviction, after a critical examination of Government medical publications, I have formed the opinion that the Ministry of Health's official student textbooks, if and when they are available, are not so likely to appeal to medical students as those compiled and produced by private enterprise. In my view something is lacking in the official publications; they fail to reveal the spirit of an unfettered Aesculapius striving to pass on the torch of knowledge for the good of mankind and the advancement of the profession. Undoubtedly it is the censorship which Mr. Johnston Abraham deplores that tends to stultify these and other communications that emanate from the pens of medical writers who must obtain official permission to write.—I am, etc.,

London, W.1. HAMILTON BAILEY.

SIR,—I entirely agree with the remarks of Mr. R. F. West (Jan. 10, p. 69).

While serving during the war, as M.O. to an Ordnance Depot, I had occasion to write to *B.M.J.* a report of what I considered to be an unusual case of idiosyncrasy to strychnine. I soon discovered that it was not as easy as all that. It had to go through the usual channels. First the C.O. (R.A.O.C.) had to peruse the report, and on his profound knowledge of medicine, acquired as a business executive, allowed it to go through to the A.D.M.S. He in his turn allowed it to go through to the D.D.M.S., who after a considerable delay passed the document as fit for publication.

I take it that this procedure was necessary to protect the Editor of *B.M.J.*, who must have been considered to be incapable of deciding whether this sinister report would have been of use to the enemy.—I am, etc.,

London, E.9. P. R. SAVILLE.

A Decisive No

SIR,—To one who has followed this controversy as anxiously and closely as I have done, ending up with the masterly analysis of the situation by our Secretary on Dec. 31 and attendance in the gallery at the S.R.M., there will be no difficulty in answering the plebiscite. But I am well aware that there are many doctors who have no time, or no inclination, for study of the complicated issues which have been raised, especially by the astute appeal made by the Minister. I therefore offer what I think is a legitimate simplification of the problem which will face all recipients of the plebiscite.

In a body so large as ours it is impossible to attain unanimity on any point, but on one point we have approached it so nearly as makes no matter. To those who are doctors first and

politicians after, a whole-time salaried service is hateful. Well, look at the following facts: (1) The policy of the Labour Party *is* to have such a service. It has never been disguised. But Mr. Bevan as a strategist realizes that sapping is his policy and not a frontal attack. (2) He therefore enacts that any doctor entering the Service must (*a*) sell his practice to the State, and (*b*) accept a basic salary, the amount of which can be varied at the will of the Minister. The rest is easy. The "ripening" process is entirely in his hands. It seems to me to follow logically that if we are still against a whole-time salaried service the answer is a decisive "No." But for the sake of our credit as consistent people let it *be* decisive. If it is not, then for heaven's sake let us stop talking of our "principles."

I am still sufficient of an optimist, even in these fantastic days, to believe that the answer will show that "surely in vain the net is spread in the sight of any bird"—a remark made in the book of Job, who was as patient under provocation as our Negotiating Committee seems to have been.—I am, etc.,

London, S.W.7. ALFRED COX.

Twelve Reasons for "No"

SIR,—There are at least twelve reasons why we should vote against entering into contracts under the National Health Service in its present form.

1. If we do not look after our own interests no one else will do so for us.
2. Those who may be inclined to approve the Act on the grounds that, in their opinion, the terms offered are acceptable should reflect how much better those terms will become if we reject the Minister's offer now with a united voice and subsequently negotiate our own terms.
3. If the general practitioners allow their goodwill to be filched from them the last vestige of medical independence will go.
4. If they once accept even the theory of basic salary the same thing is likely to occur.
5. The remuneration proposed for general practitioners is arbitrarily determined by Ministerial regulation, and once we enter such a service our incomes are entirely within the Minister's power.
6. The consultants and specialists do not yet know what their remuneration is likely to be.
7. At present a Public Health Officer can seek employment under another local authority if he is not satisfied with his position. In the National Health Service terms and conditions of service will be uniform throughout the country, so there will be no advantage in moving.
8. It will undoubtedly redound to the benefit of the public if the Act is amended to ensure professional independence and freedom.
9. I am quite sure the public can rely on getting a square deal from a free profession. I am equally sure the profession cannot rely on getting a square deal from a politician.
10. Not a single one of the principles enunciated by the Negotiating Committee has been conceded by the Minister.
11. The Minister's reply to the Negotiating Committee is full of misleading statements and leaves the question of partnership agreements in a complete legal fog.
12. The Minister's reply states the Act will be amended as it is found wanting. It has already been found wanting in respect of partnership agreements and yet remains unamended.—I am, etc.,

Harrow. J. B. WRATHALL ROWE.

No—and Why

SIR,—On Dec. 15 last I was informed in a letter from the local insurance committee that I may use only drugs in their list, or appendix, when treating insured patients. I may not therefore use, for instance, penicillin tulle gras. On Jan. 15 I received from the regional petroleum office exactly half of the amount of petrol for which I had applied, although the signed log that I enclosed with my application clearly showed the amount of petrol that I use each month. Just two examples of bureaucracy, and just two more reasons why I shall vote "No."—I am, etc.,

Kirkbymoorside. RICHARD N. THEAKSTON.

No

SIR,—I had not intended to add to the many letters *re* the Health Service Act, but I have been stung into so doing by a happening to-day. Obviously the only line of action surely to prevent the surrender of Medicine to Socialist doctrine is to say "No, take it away," to the Act as it stands. What will happen after saying "No" one cannot say, and I was in some doubt as to whether the B.M.A. had thought of all eventualities. After listening to Dr. Hill at the local B.M.A. meeting I was in doubt no longer, and could see clearly how "No" could be sustained, how it would gain its end, and both the personal and general likely course of events. The case for "No" is unassailable compared with "Yes." It is dangerous even to *think* "Yes," for this leads to confusion of thought and *inability to see* that "No" can, and must, be sustained whatever happens. Yet immediately after the meeting I was flabbergasted to find an intelligent fellow doctor (not a G.P.) toying with the "Yes" attitude from personal considerations, and apparently unable to see how a united "No" could be consistent with continuance of his employment, etc. I assessed him as a nitwit on this, told him so, and tried to explain what Dr. Hill had just explained with complete clarity! Are there many nitwits?—I am, etc.,

Birkenhead. A. M. FRASER.

Medical Students Say No

SIR,—I am amazed how little consideration has been given to the opinions of to-morrow's doctors. We medical students must stand by and watch others decide our future. We place all our hope in the good sense of those who are to vote in a few days' time. Let them remember that it is not merely their own private interests which are at stake, but the freedom of thousands of would-be doctors who have no say in the matter at all. If doctors accept the State Medical Service as it stands, with its many good points but several entirely unacceptable ones, they will condemn us to a life of State service which we had not bargained for when we took up medicine. If they do but stand firm, they can insist on a form of service which they would not be ashamed to hand on to us.—I am, etc.,

Cambridge. PETER LYNE.

SIR,—May we—medical students—take up some of the valuable space in your *Journal*? On reading some of the letters printed in your correspondence columns one feels that their authors are chiefly afraid of the attitude of the young newly qualified doctors towards the National Health Service Act. We can only say that from our small experience of our fellow students, including many who have qualified during the last eighteen months or so, we do not believe that the majority of the younger members of the profession are so attracted by the present form of the Act as your correspondents fear.

Dr. Dan E. Davies, in his letter in your issue of Jan. 10 (p. 70), scorns the stated first principle for which the profession stands, or rather he refutes its sincerity. He declares that it really ought to read, "The medical profession *in its own interest* is opposed to," etc. He declares that our interests are purely selfish in opposing the Act. But how does this agree with the statements made by the Minister and all those who support the Act, when they say that in fact the Act is a good thing for the doctors as they will be financially better off and their "working conditions" will be much better? If our interests are selfish and the Act is to our benefit, why then do we oppose it?

As has been pointed out in your columns hitherto, the Lord Chancellor said, during the third reading of the Bill in the House of Lords, that the success of all their Socialist schemes—particularly their National Insurance scheme—depended upon satisfactory control of certification. Apparently they do not trust doctors to be honest in certification. We are selfish! We cannot be trusted! Altogether we're a pretty roguish lot! Let us for a moment agree with these people in their estimation of doctors, and see how this unmoral profession is going to fit into their National Service. There can be no doubt that the system of remuneration, with a basic salary proposed by the Minister, is but a step towards a full-time, wholly salaried service. This has been admitted by the Minister and others,

and announced in the official Socialist programme. And when this is so, when our income does not depend upon the numbers and satisfaction of our patients, we could not hope to gain anything by taking the extra care which differentiates the treatment given by a good doctor and that given by an indifferent doctor. Why should we, then, who have no real interest in our patients, give ourselves coronary thromboses by working a bit too hard? True, the State could sack the bad doctor who really wasn't doing his job, but what would it do with the whole host of indifferent doctors who would certainly not make the Service such a wonderful thing as the Minister apparently would wish? (Indeed, the excellence of the new Service is his only interest!) If the doctors are such a shocking lot, would it not be better to ensure their good work by giving them the inducement of capitation fees rather than a fixed salary? This would be the logical course for the Minister to take.

If the members of the medical profession are as the Lord Chancellor and others of the Socialist Party and Dr. Davies seem to believe, reactionary, Conservative, true-blue, worthless money-grubbers, then heaven help the patients under the form of Health Service at present envisaged in the Act!

Perhaps we may be young and innocent, and do not know the ways of the big bad world; but, though we do not believe that doctors are all saints any more than any other section of the community, we do believe that by far the majority of the medical profession are sincere in their concern for the welfare of their patients and in their desire for a good and comprehensive Health Service available to all. And we do believe (as we know do many of our fellow students—especially after a closer study of the Act and its implications and the Minister's type of negotiations during the last twelve to eighteen months) that the Act in its present form will *not* provide the improved Health Service that we wish to see in this country; and that the clear duty of every medical practitioner, in the name of everything that the medical profession holds sacred, is to refuse to have anything to do with the National Health Service Act in its present form.—We are, etc.,

PETER J. STEVENS. M. OKELL.
J. E. KEEN. F. WILKINS.
West Bromwich. P. A. CROWTHER.

Treasury Control

SIR,—As it is clear that many doctors, including apparently all those belonging to the Medical Practitioners' Union, have not yet read or digested the new Health Service Act, may I repeat the gist of some remarks I tried to make at the Special Representative Meeting?

The trouble with this Health Act is that it ties up medicine with financial insurance benefits, and this makes it a gigantic financial gamble, especially as sickness absence, in spite of the five-day week, which has reduced it, is still much higher than the Government estimates allow for. This being so, the last word is not, as commonly thought, with the Minister but with the Treasury, for Section 75 (3) of the Act clearly states: "Any power conferred on the Minister by this Act to make regulations shall, if the Treasury so direct, not be exercisable except in conjunction with the Treasury." We all know that it is the regulations even more than the framework of the Act that will decide what sort of service it is to be, and this is the clearest possible warning that Treasury control will be the dominating factor, as indeed we have most of us known it will be if the funds are to remain solvent. When, therefore, the Minister writes that the doctor "is left to look after his patients in his own way and to the best of his clinical ability. He is not 'under orders,'" and again. "There is no reason whatever why . . . the professional independence of the doctor should be affected by a switch-over from private fees to public funds," he is writing a demonstrable untruth, for even if Mr. Bevan should wish it he has no power to enforce it.

When the present spendthrift policy is changed, as it will have to change if the country is to survive, it is clear that the strongest possible pressure will be exerted on doctors to cut down prescribing, certification, and everything that goes with clinical freedom and individual judgment. Medicine will be a State monopoly (and medicine touches minds and souls as well as bodies), and this Act makes Treasury control the final arbiter. The choice will be "submit, or change your job." How clinical freedom is to be maintained in a State health service is a difficult question, but this Act provides that the question should never arise. Treasury control—i.e., financial considerations—will settle the matter, and there is no appeal.

I also drew attention to Section 43, which gives the Minister power to do or dispense with practically anything in areas where he considers the services inadequate. This is Mr. Bevan's provision to break any "doctors' strike," being sure that, whatever happens, the doctors will not let their patients suffer medically. Section 43 states: "If the Minister is satisfied . . . as respects any area . . . that for any . . . reason any considerable number of persons in any such area . . . are not receiving satisfactory services under the arrangements in force under this Part of this Act, he may authorize the Executive Council to make such other arrangements as he may approve, or may himself make other arrangements and may dispense with any of the requirements or regulations made under this Part of this Act so far as appears to him to be necessary to meet exceptional circumstances and enable such arrangements to be made." This provision goes far beyond the Trades Disputes Act and should make any trade unionist blush with shame. The two sections I have quoted should also frighten patients, as well as doctors who might be tempted to accept the Minister's blandishments at face value. Together they make this so-called social security measure one of the most retrograde pieces of legislation passed for a century. They are far more fundamental for medical practice than any of the details discussed by the Negotiating Committee, and amendments to secure their repeal or to introduce proper safeguards should most certainly be introduced before doctors think of accepting service under the Act.

A Minister who with Hitlerian cunning and honeyed words inserted such a dagger blow at professional and personal freedom should be disowned by any Government that claims to represent the people. In their opposition to this Act the doctors are not fighting to exploit the patients but to protect them, and with Treasury control they will need some protecting.—I am, etc.,

Winsford, Cheshire. W. N. LEAK.

The Fight

SIR,—We believe we represent many of the junior hospital doctors. We understand that those serving whole-time appointments at voluntary hospitals will be asked to vote with the consultants and general practitioners in implementing their "No" votes (if so they be) by an undertaking not to accept service under the Act as it stands. This group, which comprises registrars (including those with ex-Service grants) and residents, forms a considerable number, and their decision generally may well influence considerably the extent of the majority against the Service. For this reason we urgently request information on the following points, as we believe it may help to clarify the issue for many in our position.

In the event of a majority of "Noes" from consultants, G.P.s (including at least 13,000 of the latter), and residents, those of us who have pledged our support will be asked to refuse to accept service.

(1) Will this be binding if our particular group (the residents) is in a minority, even though there is an overall majority?

(2) Though we are all to continue our medical work we may find this difficult for several reasons. We shall be working in a hospital owned by the Minister and we shall be the only group of doctors with no possible source of income (except possibly for a small payment from the fighting fund). It is unlikely that the Minister will pay us unless we are prepared to join his Service, and he will not allow us the freedom of a token strike. In spite of current opinion to the contrary, he may well offer us terms and conditions of service on July 5, either temporary or permanent. If he cannot start the general scheme, he may well attempt to save face by starting the hospital service. Either we resign our jobs and starve, and the patients in hospital will be left to nature and the nursing staff (admittedly this is quite adequate in the majority of cases), or a sufficient number of us stay, who can staff the hospitals while the rest remain unemployed and fulfilling no useful opposition to the Act. It is useless for us to make local agreements because the

hospitals in all areas must carry on. Which of these alternatives shall we be asked by the B.M.A. to pursue?

(3) Those whose appointments come to an end in midsummer will be automatically debarred from applying for any other hospital appointment in the country. This will apply to many residents whose appointments are limited to six months.

(4) What will be the effect on those at present working in teaching hospitals? They will be to some extent autonomous. Will this autonomy extend to allowing continuation of work (with or without pay) to those who do not sign on the Minister's dotted line?

Though, unlike the G.P.s, we have no capital at stake and therefore less to lose, we find that we are in a peculiar position, and we should be grateful for a more informative statement on the practical measures before signing the second and third questions in the plebiscite. At present many of us feel that this will be like signing a blank cheque to the B.M.A. (admittedly the alternative will be one to the Minister). We should be grateful if you, Sir, could provide this information.

We are opposed to the principles of the Act and we should like to do all in our power to resist it, but some of us have families to support, which we find almost impossible to do at the moment on very restricted incomes. We also think that an assurance that the B.M.A. (when they are in a position to state their terms) will press for better pay for us will give greater confidence to many of our friends. There are many who just cannot survive indefinitely on present salaries, and they feel that in the past insufficient support has been given them. All we desire is that many valuable votes to enhance the cause of freedom shall not be lost through want of clarity.—We are, etc.,

F. J. FLINT.
R. S. WEETCH.
A. J. BAILEY.
E. A. BROOMHEAD.
R. W. TEMPLE.

Sheffield.

** The Secretary of the B.M.A. comments: If the situation described in this letter arises, voluntary hospital medical officers will be advised to continue with their work as if no dispute were in operation; renewing appointments or taking new appointments in the hospital field if necessary. They will simply be asked not to enter the field of conflict—that is, that they should not enter the Service as a general practitioner or as a consultant or specialist until the conflict is over.—ED., *B.M.J.*

A Sufficiency of State Hospitals?

SIR,—As a physician who has served a municipal hospital for a number of years I hope I may be forgiven if I insert a few platitudinous observations. There has been some attempt in the past to represent the municipal doctor as an apathetic creature tied up in red tape and complacent in these curious bonds. In point of fact many of us have long been striving actively to meet demands which will be increased when the National Health Service comes into being and so cannot but foresee the increasing difficulties which will then be encountered.

These difficulties, met even in a live, supple, and efficient organization, include: (1) Insufficient beds to meet all the demands made throughout the year for the treatment of seriously ill patients. (2) The housing in hospital beds of infirm and homeless, but not sick, old persons, with consequent increase of difficulty 1. (3) The use of a number of wards, quite inadequate for the district, for cases of pulmonary tuberculosis who would be more conveniently treated elsewhere. (4) An insufficient number of nurses and orderlies to keep all the hospital wards open, further increasing difficulty 1. (5) An insufficient number of domestic staff and cleaners, which further aggravates difficulty 4.

When I consider these shortages of hospitals, hospital personnel, sanatoria, and of homes for the aged I do not forget that they probably occur much less severely in this progressive and wealthy county than in many other places. I do not inquire what possible shortcomings of a similar type there may be in the organization of the service outside the hospitals, but I hope that in these days of national poverty the general public is not being led to expect something expensive and valuable which will neither be in existence this July nor for a long time afterwards.

We all look eagerly forward to the completion of a full hospital service throughout the length and breadth of the land, but can we now be assured that we shall soon see the end of the building difficulties which have so long balked those who would otherwise have built more hospitals and homes? Can we also be sure that there are available sufficient and suitable recruits for the nursing and domestic staffs just waiting to be attracted into the service by the ideal conditions of employment in State hospitals? But if both the "bricks and mortar" and the staffs are not assured, then surely we are contemplating a premature start of the scheme, and it is, at present, unjust to offer it to the public as a National Health Service.—I am, etc.,

Edgware, Middlesex. G. H. JENNINGS.

Payment of Hospital Staff

SIR,—It is somewhat disingenuous for the Dean of University College Hospital Medical School to suggest (Jan. 10, p. 71) that the acceptance of salaries at this moment (part-time or not) by the honorary medical staff of his hospital, post-dated to January, 1947, has nothing to do with the imminence of a State medical service. At the meeting of the Marylebone Division I did not criticize them for so doing: I merely gave that hospital, among others, as an example of what was happening, and asked whether the B.M.A. (several leading members of Council were present) advised that this example should be followed by other hospital staffs. Nobody answered my question, but I cannot help thinking that if the honorary staffs of our leading hospitals had refused to contemplate accepting part-time salaries at this juncture it would have set a good example and helped to keep our profession united.—I am, etc.,

London, W.1. R. SCOTT STEVENSON.

Unity of Profession

SIR,—The Minister's reaction to a plebiscite majority against accepting service will furnish a useful yardstick of his sincerity towards the general public. He states that he is actuated in the ultimate resort solely by his concern as responsible Minister of the Crown in the welfare of the men, women, and children whose care he undertakes (through the profession) and who are wholly dependent on that care. If his concern is sincere then by no stretch of his political imagination could he envisage an efficient service manned by resentful personnel forced by circumstances, chiefly financial, to become unwilling participants. Greater men than Aneurin Bevan have attempted and failed to enslave free peoples, and I am convinced that this would-be dictator will fail to enslave the profession.

The issue now confronting each individual is whether he wants to decline or accept participation in a whole-time State salaried service, whether he is prepared to stand by or reject the well-considered and matured advice of the Council of the B.M.A. If a majority of the profession shows at the plebiscite that it wishes to participate, we, the antagonists, will throw in our lot with it and hope for the best, but should the state of affairs be reversed I would appeal to the minority to stand by the majority vote. Such unity is absolutely essential. I would also exhort those contemplating accepting service, or those who may be wavering, to think carefully on the main issue once again. Loyalty to the majority vote and to the Council's advice should be an honourable duty. Self-interest, especially thoughts of financial gain, must be eliminated. The retention of freedom for patient and doctor ought to be the dominant consideration.—I am, etc.,

Burbage, Leics. CHARLES O'DONOVAN.

Strong Position

SIR,—In your leading article of Jan. 10 (p. 53) occur the words: "The medical profession is in a strong position and should be more conscious of that fact." Personally, I would state the case more emphatically and say our position is not only strong but can become unassailable if we choose to make it so. United, we are all-powerful. We have only to decide if we are justified in applying such power. Some might hesitate to use it arbitrarily, but I think the vast majority must

feel so sure of the justice of our case—which is nothing less than safeguarding our profession from utter serfdom and degradation—that the end justifies the means. Standing together, we have absolute power and the Minister is helpless. On the other hand, if we work the Act we hand this power to the Minister on a platter and deliver ourselves into bondage. Already the Minister has attempted to crack the whip while we in fact still hold it. What if we allow him to obtain a firm grip? Almost unanimously we have agreed upon certain principles regarded as absolutely essential for the future welfare of both patient and profession. These principles are *not* embodied in the Act. It therefore follows automatically that the profession must condemn the Act. Are we to be so misguided as to work an Act we have no choice but to condemn?

The position is simple. We know the Act is bad; we know we have the power to prevent it ever coming into force; and we know also we can compel an amended Act embodying our principles. Then let us do so without fear, since there are signs everywhere that the doctors are rallying and will stand fast. This letter is to appeal to any in doubt. There is nothing to fear except disunity. In unity our power is absolute and victory certain.—I am, etc.,

Tiverton, Devon. R. E. J. PEMBREY.

For the Service

SIR,—In the spate of letters about the National Health Service many writers give their personal opinions as if they were the unanimous views of the profession. May I, therefore, for a start disclaim to be speaking for or expressing the views of anyone but myself. In the first place the overriding factor must be finance. I cannot afford, nor, I suspect, can more than a negligible percentage of my colleagues afford, to throw away my capital assets which have been acquired through many long and anxious years of toil. Yet this is precisely what I am invited to do by the Representative Meeting of the B.M.A. Unless I have misread the Act, those who decline to enter the Service on the appointed day forfeit all claim to compensation. Let us think earnestly upon this important point.

I understand that the B.M.A. has a fighting fund. How, may I ask, will that sum compensate all the G.P.s of Great Britain for throwing away their substance for the shadow of "freedom"? Do my colleagues really mean to tell me that they are prepared to make this colossal sacrifice? On the other hand, if we enter the Service we shall be in a much stronger position to argue. You cannot carry any weight in any institution of which you are not a member. If you wish to reform it you must first join and then use your *inside* influence for its reformation. I personally intend to do all in my power to make the new Service a success, not because I think it perfect, but because it is a beginning and can only be improved and amended by discovering its faults in the ordinary everyday exercise of our profession. Faults can only be pointed out when they have been shown by experience to exist, and they can then be rectified.

Personally, I feel with the other 52% who voted that way that the abolition of the buying and selling of practices is a good thing. Nor does the basic salary of £300 distress me. On the contrary, I am glad to think that my less fortunate brethren will be helped over the stile. The abolition of the basic salary would only swell the net profits of the big practices. *Per capita* the overhead expenses of a small practice are much higher than those of a big practice.

When two protagonists get up and go for one another I never believe that either is speaking the whole truth, nor does any thinking man. I do not share the gloomy prognostications of the B.M.A., nor do I swallow all of Mr. Bevan's rosy prophecies. At the meeting of the Metropolitan Counties Branch in B.M.A. House on Jan. 7, 1948, one man who sat next to me said to me: "Under this Act everyone will become a panel patient, and we know that panel patients are never as well treated as private patients." I was horrified. Anyone who thinks so is a disgrace to our great profession and plays right into the hands of our enemies. Personally, I think my panel patients get a far better deal as I don't have to worry about expense in their case.

To sum up: Let us all join the new Service and put our best into it and make it the finest medical service ever seen. The eyes of the world are upon us. Let us cease this unseemly wrangling and show ourselves men of public spirit with our patients' (as opposed to our own vested) interests at heart.—I am, etc.,

London, E.17. ST. GEORGE B. DELISLE GRAY.

Resist Now

SIR,—If we are going to fight this megalomaniacal attempt to enslave the medical profession surely our past experience of dictators has taught us to fight with every means at our disposal, and to hit hard and often until victory is ours. To ensure a united front to the present Minister it is necessary for the B.M.A. to maintain the strong leadership which they have recently evinced, and by showing an understanding of the problems of all practitioners to bring over the waverers to our side.

Attack has always been the best mode of defence; therefore let the B.M.A. (1) insist that all medical members of executive councils, regional boards, etc., should resign *forthwith*, as suggested by Dr. Russell (Jan. 10, p. 72), and refuse to collaborate with the present Minister. (2) Counteract the Minister's inducement to the younger practitioner anxious to establish himself in practice but hindered by lack of capital, by immediately forming a fund from which money can be lent for the purpose of purchasing a practice or partnership—such money to be lent at purely nominal interest with easy method of repayment. Alternatively, establish a list of doctors who are prepared to accept payment out of income for a share in their practice. The younger man must be given his chance to vote on the Act without fear that a refusal means financial disaster to him. (3) Make it a definite part of our fight that the present Minister should be replaced by one who is more reasonable and whom the profession can trust.

It is ridiculous to ask us to fight when some of our professional brethren are already working on behalf of a scheme which we as a profession reject. Nor can one expect that the incentive of establishing a practice as held out by the Minister would fall on stony ground unless some equally attractive incentive is offered by those prepared to fight. Lip service alone is not sufficient.—I am, etc.,

Plymouth. A. S. BRADLAW.

I.M.S. and N.H.S.

SIR,—It was a condition of the granting of compensation money for loss of career to officers of the I.M.S. that should they thereafter join "a permanent and pensionable Service under the Crown" the sum paid should be refunded to the Treasury except for a resettlement grant of £500. Since arriving in this country from India in early September last I have been endeavouring to find out from the powers that be in Whitehall whether the National Health Service will come under this definition. I first approached the Commonwealth Relations Office (old India Office), under whom I still technically serve, but after a month or so they disclaimed all interest in this matter and said it rested with the Ministry of Health and the Treasury. So the Ministry of Health has been requested to give a ruling, but, in spite of being pushed by the B.M.A., by my M.P., and by myself, can produce no better answer than that "the matter is receiving attention." To-day I have requested my M.P. to ask the question on the floor of the House at the earliest opportunity, as it seems time that the matter should be made public.

Now, my point in writing this letter is to warn all brother I.M.S. officers who are similarly placed to think carefully before committing themselves, and especially their capital, to any type of practice likely to be engulfed in the belly of the State. It seems to be causing a good deal of Ministerial head-scratching to decide the point raised, and personally I have no doubt that this should be read to imply that that head has in it a plan for an eventual fully salaried and pensionable State Service such as would come under the definition in question. Straws in the wind can give much information!—I am, etc.,

Leicester Forest East. CHARLES F. GARFIT.

Years of Conscription

SIR,—"Conscripted, R.A.F.V.R." (Jan. 10, p. 7), is in a similar position to myself. I was conscripted at the age of 23 and hope to goodness that I shall be out of the Army before I am 25. I was married at the age of 23 and shall therefore draw no more than half marriage allowance all the time I am in the Army. Further, my assistant M.O. and I spend the greater part of each day trying to think of a good sound way to shed our uniforms for ever, while doctors all around us are overburdened with work. Cannot something be done to get the young doctor out of the Services before it is too late and bone-idleness sets in for ever?

I have heard older doctors say that if a State service does come in it will be because the younger doctors vote for it. Not so, because the years of "conscription for no purpose" are the soundest pieces of propaganda against any form of controlled service where individual liberty is lost. As there is no appeal to the courts I would be glad if you would allow me to sign myself

CONSCRIPTED, R.A.M.C.

The E.M.S.

SIR,—In your leading article on "Consultants and the Act" (Jan. 3, p. 17), you quote Dr. Alan Wigfield:

"Whatever may be the case we must keep before us the possibility that sooner or later a political group for the time being in power may yet seek to introduce a State Medical Service,"

and you go on to say that "Dr. Wigfield has proved to be a safe prophet." Dr. Wigfield's letter was dated Dec. 23, 1939, and his protest was considerably weakened by the fact that he commended the E.M.S. proposals as a peacetime arrangement "which must commend itself to the majority of consultants."

May I point out that Sir Ernest Graham-Little, in a letter published in *The Times* nearly three months previously—i.e., on Sept. 19, 1939—said:

"Supporters of the voluntary system—and they constitute the large majority of the medical profession—inevitably see in these arrangements (i.e., for the E.M.S.) the first step to a State Medical Service, which is one of the most conspicuous planks in the programme of a great political party. Surely the national emergency should not be used to cover an approach to so controversial a settlement as a State Medical Service?"

—I am, etc.,

Brookwood, Surrey. H. M. STANLEY TURNER.

Medical Representatives in N.H.S.

SIR,—I think it essential that provision should be made for a proportion of the medical representatives on the various boards, committees, etc., to be elected by the profession in the various areas, etc., from the central board to local committees. Only in this way can we be certain that membership of these bodies is not a matter of political opinion. All boards, etc., should be entitled to elect their own chairmen.—I am, etc.,

Monmouth. P. G. HARVEY.

Municipal Doctors and the Plebiscite

SIR,—There is one point which, in my opinion, is fundamental, and which, if not given sufficient emphasis, may adversely affect the result of the plebiscite. It is this. The numerous practitioners at present in whole-time municipal appointments—either in hospital or local government service—should be assured not only of financial help but also of the Association's active co-operation in preventing their posts being filled by other practitioners if, as a result of their undertaking not to enter the Service, they should on July 5 lose, however temporarily, their source of income.

Too often does one find practitioners holding such appointments who, although desirous of undertaking not to accept service under the Act as it now stands, are resigned to letting things go by the board—understandable, without the backing of the Association, in view of the necessity for bread-and-butter, but an attitude which could be just sufficient to destroy the unanimity of the profession's determination not to accept service under the Act as it now stands or even to sway the vote in favour of the Minister's scheme.

To ensure that such practitioners will, by their vote, agree not to implement the Act until amended the B.M.A. must stand behind them in the matters of security of tenure and of their financial commitments.—I am, etc.,

London, E.11. G. ELIZABETH KEITH.

A Binding Agreement

SIR,—I do not think that any of the fine words and rallying calls made in your correspondence columns upon the forthcoming issue facing the profession to be worth one whit unless we are prepared to back them up by a legal binding agreement signed individually by each one of us. Given a majority prepared to sign, we would then know where we stood in relation to one another. Even with a 100% plebiscite we would probably be jockeyed into another "1911."—I am, etc.,

Shoeburyness, Essex. P. M. FEA.

A Party Political Issue

SIR,—As an individual with no very pronounced political leanings, and as one who could see more good than bad in the original Beveridge Scheme, I am grateful to Mr. Bevan for making it quite beyond doubt that I shall vote "No" in the forthcoming plebiscite, for two reasons.

First, he has made a party political issue of the whole scheme. His insistence that he must be the final arbiter without right of appeal, his insistence on part-payment by basic salary, the retention of his powers of indirect direction, and his stubborn adherence to the principle of expropriation of capital values of practices on his own terms cannot be regarded as anything but the arrogant declaration of political opinion. As an individualist, I have a personal antipathy to Socialist "collectivism." I might, however, submit to its imposition with as good a grace as I could muster if I could see even one single instance of its success in the wider economic and social field of the country as a whole.

Secondly, the Minister has been—almost incredibly—careless enough to let fall the velvet glove at this stage in the matter of the right to practise midwifery. If this clause does not mean interference with the professional liberty of the doctor, what does? In this connexion I would express my unqualified agreement with Dr. D. C. Williams (Jan. 17, p. 121). I am one of the first to admit that the average newly qualified doctor is not a fully competent obstetrician, but unless he is also a fool he can always command more experienced professional advice in this country. The onus lies with the profession—with the examining bodies—for the necessary improvement in this respect, not with a politician.

May I also add my reinforcement to the views of Dr. H. J. Houghton (Jan. 17, p. 122)? If the present Government really wants to improve the amenities of the people, and particularly of those sections of the population whom it claims particularly to represent, it might well begin by assisting the profession to abolish the delays at present inseparable from hospital out-patient attendance, and the further delays, often of months, before in-patient treatment can be obtained by any but the most urgent cases. This will be problem enough in itself, but perhaps £66 million will go some way towards it.

In conclusion, may I repeat that I am not opposed to the introduction of a health service with 100% inclusion on a contributory basis. What I do oppose most strongly is such a scheme vitiated by unnecessary and vexatious political bias of no conceivable value to the persons whom the scheme purports to serve.—I am, etc.,

Chippenham, Wilts. IAN MOORE.

Organization and Liberty

SIR,—The depressing tone of Dr. F. E. S. Hatfield's letter (Jan. 17, p. 118) prompts me to make an urgent protest lest others should accept his axioms that "increasing organization can only take place at the expense of the individual's right to do what he likes," and that "the whole evolutionary process is in the direction of increasing organization." The first phrase might have been more tersely expressed in five words: "Increasing organization spells individual frustration." The second phrase would suggest that progress and "increasing organization" are synonymous terms. This pathetic fallacy

has surely been exposed by the downfall of Nazi Germany, the most highly organized State of the age, both socially and medically.

Let Dr. Hatfield, if he seeks a truly organized society, betake himself to the Prison Service and practise his medicine in an atmosphere where "increasing organization" has taken place at the expense of the individual to do what he likes; but let others of us, who value the freedom of the individual, continue to treat patients for the benefit of their health and not for the fulfilment of bureaucratic regulations. "Let us make an important contribution to this problem" by refusing to sacrifice our profession to the mercies of an ambitious doctrinaire Minister whose political theories breed the mentality that regards "rights" as personal benefits to be accepted without corresponding duties to society, and security as the height of ambition.—I am, etc.,

Weymouth. D. J. ROSS STEEN.

The Word of the Minister

SIR,—Though many doctors may not be in disagreement with Mr. Bevan on the principles over which the Negotiating Committee are making a stand, yet the Committee is undoubtedly right in asking for a 100% "No" from each section of the profession to the working of a scheme many details of which seem to depend entirely on the word of the Minister only, and in which we have no appeal beyond Caesar to the civil courts.

One is given to understand that amount and method of remuneration and terms of service (whatever they may be) can be changed overnight merely by regulation and the Minister's signature. Therefore, until these details are cut-and-dried and in black and white by Act of Parliament, so that we know where we stand in the future, it would be professional and financial suicide to put our necks into a noose which can be tightened at the will or whim of the present or any future Minister. Also the public should be told at once clearly—so that there is no doubt in their minds—that we are not fighting against the inauguration of the kind of N.H.S. which we believe would be to their advantage, but simply against the dictatorship of a single man, or Party, on medical matters about which as technicians we have reason to believe that we know best. Let Mr. Bevan decide strategy by all means, but tactics must obviously remain in the profession's own hands.—I am, etc.,

Englefield Green, Surrey. W. E. R. BRANCH.

Mr. Bevan's Attitude

SIR,—As reported in the *News Chronicle* of Jan. 14:

"Mr. F. Richards, chairman of the (Truro Council) Housing Committee, said it was a lack of courtesy on the part of the Minister (Mr. Bevan) that he should visit sites in the City without contacting his committee or housing officials. The first thing they knew about it was when they read of it in the Press. Afterwards alterations of houses were made without the Housing Committee being consulted."

Mr. Bevan's attitude to the Negotiating Committee was, I understand, in keeping with his behaviour reported above and clearly shows how he will deal with the medical profession when he has the power to do so—as he will have if we join under the conditions of the present Health Act, in which the Minister retains full power to elect chairmen of committees and ultimately to approve all members, lay and medical.

We must remember that there will be *no appeal* from any decision of the Minister or of a politically appointed tribunal of three persons consisting of a chairman (a barrister or solicitor) appointed by the Lord Chancellor, and two others appointed by Mr. Bevan himself. The only remedy is to vote "No" to service in the present Act and so defeat it, as Birmingham citizens did on Jan. 12 when their City Council proposed to extend municipal trading against the wishes of an overwhelming number of its retail traders.—I am, etc.,

Birmingham. WM. WATSON NEWTON.

Alternative Proposals

SIR,—Assuming that the present Act is rejected as completely unacceptable by a large majority and that general practitioners retain the ownership of their practices, are we ready with the best possible alternative proposals? Any medical service must be attractive to the whole community and be such that all G.P.s would be willing to take part in it, whatever type of practice they now have. The essential feature of the scheme must therefore be to give all patients the time and attention now given to private patients, and to accept no lower standards. The overcrowded waiting-rooms and hurried, overworked doctor must be no more.

The number of public patients must be severely limited and the fees raised. I suggest a limit of 1,500 and a fee of 25s. for the first 1,000 and 20s. for the next 500. In addition, midwifery should be allowed, at a fixed fee per case. With the present number of general practitioners this scheme would not provide attention for the 45 millions at once, so I suggest that at first the service should apply only to persons of 18 years and over. Later the age could be reduced until the whole population is covered, but whatever happens the numbers for each doctor must not be increased.—I am, etc.,

London, W.8. CHRISTOPHER L. CARTER.

The Public Interest

SIR,—Those who write and speak on the N.H.S. seem to have it well in the forefront of their minds that the public interest comes first; our own interests as a profession must then come second.

When a patient comes to us individually for advice we are bound first to tell him what we think best to be done; if he is unable or unwilling to follow our advice, we do not necessarily refuse to have anything more to do with him. It happens quite often in practice that satisfactory results follow the co-operation of patient and doctor in a line of treatment which may seem far from ideal to the latter. Might not a similar attitude of compromise prove helpful to both the public and the profession as a whole?

If the results of the proposed plebiscite are against us entering the National Health Service could we not take some such course as the following? We could explain our point of view to the public in the columns of the lay press and ask the public itself to signify if it would still desire us, in spite of our adverse vote, to co-operate with it in a scheme which we do not regard as being in its best interest. If the public does desire it, then we should naturally acquiesce. How far this suggestion is a practical one I do not know; but I do not think it is illogical.—I am, etc.,

Ditchling, Sussex. F. WALLACE LINTON-BOGLE.

Hours of Work

SIR,—During all the correspondence about the doctors and the medical service I have not seen a single remark about the hours doctors will be required to work. Doctors are on duty or on call 24 hours a day; most of them work a good 10 hours a day and are often up several nights a week. Miners and railwaymen do a 44-hour week, as do most other workers irrespective of their profession or trade. I think it is near time the Negotiating Committee did something about this matter. I should appreciate the views of other medical practitioners.—I am, etc.,

Cambridge. A. V. MCMASTER.

Bad Law

SIR,—Another case of Satan rebuking sin—this time Mr. Aneurin Bevan warning the doctors against their judgment being "distorted by slogans." This comes ill from one who airily dismissed the reasoned misgivings of the Negotiating Committee with the slogan: "Hard cases make bad law." Actually, the elder statesmen of the profession have patiently contested the totalitarian intransigence of the Minister in order to convince him that, in this instance, the very reverse is the case—i.e., that a bad law makes hard cases!—I am, etc.,

Epsom. A. H. GALLEY.

Money and Freedom

SIR,—Thank you for your leading article (Jan. 24, p. 153) entitled "Money and Freedom"—surely the most clear and true statement we have had. Close study will reveal, I think, that the very keystone of freedom is the retention of the goodwill of practice. Moreover, the freedom thus conferred will by no means be confined to the owners of goodwill but will be reflected throughout the profession. As a whole-time medical officer remarked to me the other day, "Your freedom is our

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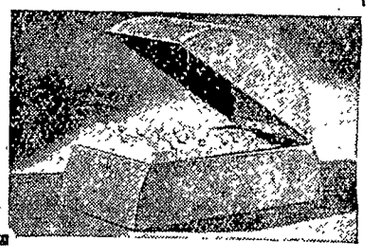

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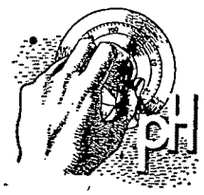

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freedom. The more free you are, the greater our negotiating power with our councils." It is not unlikely that Mr. Bevan's hidden appreciation of this truth accounts for his particular animus against the principle.—I am, etc.,

Wirksworth, Derby. E. D. BROSTER.

Vacancies in N.H.S.

SIR,—According to Section 9 of the Negotiating Committee's Memorandum (*Supplement*, Dec. 20, 1947, p. 142), it would appear that before a death vacancy can be filled the matter must be considered by (1) the Local Executive Council, (2) the Medical Practices Committee, (3) the Local Medical Committee, and that unsuccessful candidates may appeal to the Minister—as you say, a cumbersome and slow-moving business. I feel that it would be helpful to the younger members of the profession if you were to indicate the probable composition of this council and these committees.—I am, etc.,

Nettlebed, Oxon. JOHN BRUNTON.

*** The Local Executive Council consists of a chairman appointed by the Minister and 24 other members, of whom 4 are appointed by the Minister, 8 by the local health authority, 7 by the Local Medical Committee, 3 by the Local Dental Committee, and 2 by the Local Pharmaceutical Committee. The Medical Practices Committee consists of a chairman, who must be a medical practitioner, and 8 other members of whom 6 must be medical practitioners, and at least 5 of these 6 must be actively engaged in medical practice. All are appointed by the Minister. The Local Medical Committee is a committee formed in the area of an Executive Council to represent medical practitioners of that area and accepted by the Minister as representing them.—ED., *B.M.J.*

Financial Struggle

SIR,—After the recent glut of letters I do not want to add to your troubles, but I should like to stress one further very important point. What is going to be done for those medical men who, as the result of the war, are financially unable to join us in opposing this State monopoly in medicine?

I do not refer to those eligible youngish men who went for a few months at the end of the war, forced into it against their will, having sheltered themselves so far in some "indispensable" post. They lost nothing tangible, for they were not away long enough to matter. Being very careful men, they saw to it that their colleagues at home did not spare themselves on their behalf. No, I mean the real men, the faithful men—the men who gave up practices, wives, and families, etc., simply because they thought it was their duty.

Some of the elderly came back to find their practices almost disappeared. Others have recently bought practices and are just beginning to emerge from financial difficulties to be faced with the present crisis. Others, younger, are just biding their time, but cannot wait much longer on account of a wife and young family. Most of them loathe the thought of a salaried State medical service, but what is going to happen to them?

I have read the leading article entitled "Why be Fearful?" (Jan. 17, p. 104) and seen other vague references to temporary help for them. They want to know something definite and to be relieved of their anxieties. Could the B.M.A. come forward with a real scheme of concrete proposals, and let these men sleep easily at night? It will have to be done tactfully, for these men are proud men, or we should have heard much more about them.

It is due to them if we expect them to wait and come in with the rest of us. Otherwise they are going to be forced by circumstances, and against their own wills, to form one thin wedge for our dictator's purpose. That title is not bred of my emotion. It is only too true, and fits the man and his doctrines. We cannot afford to give him many wedges, and that is why I am so anxious to see some definite policy emerge now. It will be too late *after* the plebiscite.—I am, etc.,

Hampstead. H. V. DEAKIN.

Doctors' Lists in N.H.S.

SIR,—I should like to draw your attention to what seems to me to be an incomprehensible anomaly contained in the Negotiating Committee's statement to the Minister, recently circulated to all doctors. This particular point has not, so far as I know, been brought up in the correspondence in the *Journal*.

In para. 41 of its report the Negotiating Committee states: "On and after the appointed day a proportion of the population will sign on doctors' lists. Of the remainder, a proportion, varying in different areas, will sign on doctors' lists when the need arises to consult a doctor." Now it appears to me that if the last sentence be correct there will be no obligation on patients to sign on with a doctor until their first illness after the appointed day, when they will be immediately entitled to free treatment. Naturally then, knowing this, no patient will trouble to select a doctor until the first time that he needs one, for he can at any time present his card and get free treatment, without the bother of a preliminary visit merely for the purpose of registration. In other words, the doctor's list will be only gradually compiled, being made up of such persons in his district who have fallen sick and consulted him, as and when they do so.

At this rate it will take years to build up a sizable practice. The whole basis of payment by capitation is surely the fact that a large proportion of the patients insured are never ill at all for long periods. Those seeking advice soon use up more than their capitation fee's worth of the doctor's time, and one's income depends, in effect, on one's well patients.

Surely, Sir, it should be a simple administrative procedure to ensure that every member of the population selects a doctor by a given date, *before* the appointed day. They have to select a butcher and a grocer, so why not a doctor? Then, on the appointed day we shall know exactly where we stand and how much our first quarterly cheque is likely to be. Under the Negotiating Committee's arrangement it will be small or non-existent. A simple measure to ensure that patients do, in fact, get on a doctor's list would be a provision that everyone who fails to do so by the date given will not be entitled to free medical treatment for three months after he first registers with a doctor. Similarly, persons moving to a new area, or babies born, should be given a reasonable time, say one month, in which to register on a doctor's list, failing which they also may be charged fees for the first three months.

At the present time this iniquity still exists in the N.H.I. scheme. Here is a unique opportunity to end it once and for all.—I am, etc.,

Morden, Surrey. ARVID SAUDEK.

National Health Service

SIR,—At this eleventh hour, when all that our profession stands for is at stake, a brief recapitulation of events may not come amiss. The National Health Act was placed on the Statute Book by a Minister who had not the courtesy to consult those who would be primarily responsible for working it. At the ensuing plebiscite the profession showed very clearly that it disapproved most strongly of this legislation as it stands and refused to negotiate. Then, by whose mandate it is not clear, the heads of the Colleges advocated negotiations with the Minister. The profession, having already expressed its opinions in no uncertain way, made a complete and pusillanimous *volte face*, and the sorry spectacle was seen of our representatives going almost cap in hand to negotiate with a man who never had the slightest intention of conceding anything and who is relying upon his hoped-for success in regimenting the doctors to offset the dismal failure of his housing programme and preserve his political "face" at all costs.

Let us be quite clear what it is that this Mr. Bevan hopes to do. He will compel the sale to him, at a price as yet unspecified, of the goodwill of our practices, so that to sell to anyone else what we have built up by our own hard work will become a crime. His talk of "buying and selling patients" is, as he well knows, arrant nonsense, for anyone who has ever bought a practice knows very well that the patients he has "bought," both private and panel, have complete freedom to go elsewhere if they so desire.

He will tell the doctor where he may or may not set up in practice, and, what is far worse, he will decide whether a doctor shall or shall not be retained in the Service. From this decision we are told that there will be no appeal. He will attempt to make our allegiance primarily to the State and not to our patients.

Let us in heaven's name unite as never before and refuse to be cozened out of all we hold dear by specious arguments based on nothing but political expediency. Nothing less than our freedom and the freedom of those who come after us is at stake. Let us show this man, who would be our master but who is in reality our servant, that, though likened by him to fruit, we will refuse to be plucked, whether ripe or green. Let the faint hearts who fear that they will suffer financial loss if they do not answer "Yes" take courage. We hold the cards, and if we play them the Act cannot be worked and the financial loss will not arise. Let us therefore answer the plebiscite with yet another resounding "No," for only by so doing can we continue to preserve our self-respect and the traditions of a great calling in refusing to become the salaried lackeys of a demagogue.—I am, etc.,

Andover, Hants. J. LEIGH COX.

SIR,—The medical profession as a whole is far from unsympathetic towards the establishment of a national medical service, but they are (and I hope will continue to be) very much opposed to virtual dictatorship from the present or any future Minister of Health. I am one of very many medical men who willingly, and at personal loss, served their country during the war years, putting the interests of the country before those of the individual. Can Mr. Bevan not now learn to subjugate his own personal views and interests to those of his country? The medical profession have always been most unselfish in their devotion to duty and the care of the general public. Surely this generous public-spiritedness should be fostered and not smothered.

Not even a criminal is denied the right of appeal against any conviction. Is it then not an insult to the intelligence of the members of the profession that they should be expected to support a service from which the Minister of Health may dismiss them with no such right of appeal? This is surely too unreasonable for any sane person to suppose, yet Mr. Bevan seemingly thinks it possible. If Mr. Bevan can't co-operate with the profession to get the best possible service for the country, then I suggest that the present Government appoint another Minister in his place. The scheme is of too great value to the country as a whole to have it wrecked in its inception by any individual so dictatorial as the present Minister—himself proving the greatest stumbling-block in the way of a service which the profession would welcome if properly conceived.—I am, etc.,

Keith, Banffshire. J. LENNEL TAYLOR.

SIR,—I notice the letter (Jan. 17, p. 120) signed by eight doctors present at a meeting of doctors practising in "Fleet and the surrounding district." Two practise in Basingstoke. The *Medical Directory* for 1944 gives the number of doctors in Fleet, Basingstoke, Farnham, Farnborough, Camberley, and Aldershot as 135, so that we can scarcely assume that the eight are representative of the district. The same applies to most of our local meetings, where the militant opponents of the Act attend most regularly, and they in turn elect our representatives. This was demonstrated by the former plebiscite, which showed that the majority of the doctors refuse to be controlled by the militant minority.

The Act is to come into force on July 5, and plans are being carried out rapidly so that the switch-over can be done efficiently. The medical representatives have been elected upon the executive councils, and are bound in honour to work upon those councils to make the Act successful, and for that reason they should encourage their colleagues to accept service.

I have been in practice since 1904, and have welcomed the great improvements in preventive medicine. Since 1904 we have established school clinics, infant-welfare centres, antenatal and post-natal clinics, and a tuberculosis dispensary. The old Poor Law has passed, and the workhouse has changed into the municipal hospital. In the counties we have seen the development of large and efficient hospitals under the councils' authority.

On July 15, 1912, the National Health Insurance Act came into force. I remember the keen fight before the Act was passed, and, as a member of the B.M.A. Committee, how we were all pledged not to take service, and yet that did not prevent the debacle in the last days of December, 1911. Those anxious days in the beginning of January until we were released from our pledge by the B.M.A. and signed on are still vivid in my memory. I have been a member of the Panel Committee since the beginning, and their representative on the Insurance Committee since 1931, and am now vice-chairman of the Finance and General Purposes Committee, and can vouch for the cordial relations between the Insurance Committee and the medical profession.

I have been a member of the committee of the Borough of Reading Medical Society since we established it in 1911 in order to attend to the dependants of insured persons and others. In 1939 we bought a building in the centre of the town, partly rebuilt it, and have as our tenants the Reading Insurance Committee, the Berkshire Medical Society, the Reading and District Dental Service, and other bodies, in anticipation of the extension of the National Health Insurance Act.

I am convinced that this National Health Service Act will prove of great benefit to doctors and patients alike and to the country as a whole. There are certain defects over-emphasized by the opponents of the Act which can be remedied after a fair trial, when the atmosphere is more peaceful. In the meantime I shall uphold my freedom to join in July, whatever the decision of the B.M.A. may be.—I am, etc.,

Reading. S. GILFORD.

Natural Position for Childbirth

SIR,—An Englishwoman born in Hammersmith went out to Australia. She there met a Pathan from Afghanistan, a horse-dealer and camel-driver. She married him and went home with him to a place in Afghanistan just beyond Ghazni. She was his only wife, and contrary to Eastern custom she always ate with the men. Women in the East usually prepare the food and eat after the men have finished. When travelling they were in tents, but at home in a village they lived in a one-story house made of adobe (mud and straw) with a flat roof. Two rooms below and the floors were of beaten earth, the roof was flat. One room, the inner one, was the man's room; the other was for the family.

This woman was 29 when her first child was born and she had seven children. She was delivered in the native way. (She is now a fully trained midwife.) Plenty of hot water was available both day and night and was kept in tall copper jugs with spouts but no handle.

The women are very clean. They are Mohammedans and wash five times a day before prayers. They also wash even after passing urine and keep their hands very clean to knead bread, prepare meat, etc. They walk about as usual until labour pains prevent them; then a ring of twisted cloth is made for them to sit on like the roll they make to carry a basket or water pot on the head.

Three women were present with hands well washed. The expectant mother squatted on the ring of cloth supported by a woman at the back and one on either side. The one behind sat with knees apart and held the knees of the parturient woman. Women at either side held knees or arms or hands of the patient as needed. Another woman waited in front to take the baby as it emerged. There was no touching, interference, or examination of any kind before, during, or after the birth. The women just waited until the child was born. She says she saw hundreds of cases and the perineum was never torn, but she complains that the pain was like "the pains of hell which encompassed me." She remained in the same squatting position, while the woman in front, who had taken the baby as it emerged, waited until pulsation in the cord had ceased, then cut it. She left the maternal end to bleed but tied the foetal end with a bit of rag. There was no massage of the abdomen. They waited, and after two or three minutes the patient coughed and the placenta came away.

She had seven children, and with the last—a fine boy—she was quite alone, and so squatted on the ring of cloth and placed her back against a wooden support holding up the roof, and as the head emerged she "slithered off the cloth ring" on which she was squatting on to her back on the ground so as not to hurt the child. She then sat up, cut the cord herself, and the placenta came away with no trouble. She washed the baby with muslin she had boiled. Three hours later her husband brought water and soap for washing.

The Afghan women were all confined in this way, squatting on the floor. In twelve years she only saw one case of puerperal fever—a rich girl, daughter of the Governor of Ghazni, no doctor or midwife to be had—and one case of death due to locked twins, she thinks. Our informant never saw any trouble in childbirth among the Afghan or Powindah people,

no displacements of uterus, no breast abcesses, no perineal tears. These people are the ones who travel into India with horses to sell. The women ride astride, gallop about, and show off the horses' paces. I have taken snapshots of these girls in India on their horses.

The girls have their periods at 12, 13, or 14. *Then* they cover their faces and are considered unclean. But they are quite free

FIG. 1

FIG. 2

to go about and are never assaulted by men, because the father would kill him at once. Result—no illegitimate births, no courtship, no walking out. The father finds the husband for them. There is no adultery. Dancing takes place at the birth of a son (silence is considered befitting the birth of a daughter as in India). Everyone dances, the men by themselves in the street, the women by themselves in the house. These dancers are of another tribe and have a morality of their own. No man would be allowed to see a confinement. This would be considered most indecent, for "this is women's work and must be kept for them only."

I enclose photograph (Fig. 1) of a girl in the confinement position sent by Dr. Stephens, of Ilorin, Nigeria. It will be seen it is precisely the same as that depicted on an ancient Peruvian piece of pottery (Fig. 2) and the same as illustrated Plate XI in my book, *Safe Childbirth*—in fact the natural posture for childbirth as practised from prehistoric times.—I am, etc.,

London, N.W.11. KATHLEEN VAUGHAN.

Chronic Ulceration after Irradiation of Wart

SIR,—Mr. Mortimer H. Shaw's article on chronic ulceration after irradiation of plantar wart (Jan. 3, p. 11) has reminded me again to my continual surprise that patients are submitted to numerous treatments by irradiation for plantar warts. In my experience the treatment of this condition by CO_2 snow is so simple, safe, and efficient that it can be undertaken in the out-patient department or consulting-room with the greatest of ease by use of an ordinary CO_2 outfit.

The essential part of the treatment is to raise a blister between the epidermis and the true skin so that the wart is lifted up with the epidermis. At the end of a week the blister is cut away with the wart in the centre of it (with the usual aseptic precautions), and the depth of the dimple which the wart leaves in the floor of the wound gives some indication of the degree of pain it must have caused.

The snow pencil should be firmly applied over the wart for from five to seven minutes (exceptionally 10 minutes), but even in children the skin of the sole is so thick that the necessary blister will not form unless the wart and the surrounding thickened skin have been pared with a razor or sharp scalpel to a depth where the individual fronds of the wart are seen in cross-section, and on occasions even a small capillary opened in the wart. This is quite painless and requires no anaesthetic. The application of the snow varies in the amount of discomfort it causes, but even in children the treatment can be carried out without causing excessive discomfort.

A small protective dry dressing is applied with strapping, and if an adequate blister has not formed after a week the skin should be further pared down and a second application of snow made for the same period. A dry dressing is applied after cutting away the wart and blister and can be removed after a further week, when healing should be complete. The patient is fully ambulatory throughout.

As I have never known it to fail the only reason that I can think of for this simple treatment not being more generally adopted is that insufficient paring of the skin has prevented adequate blister formation, and the method and not the technique has been blamed.—I am, etc.,

Rochdale. A. M. MCMASTER.

Convulsive Properties of Thiopentone

SIR,—I feel sure many of us are grateful to Dr. R. L. Wynne (Jan. 10, p. 48) for putting forward a theory of causation of the convulsive movements and tremors that not infrequently accompany induction of anaesthesia with a barbiturate by the intravenous route. The phenomenon is also seen when hexobarbitone is used, although this drug, so far as its side-chain structure is concerned, does not so closely resemble the convulsant barbiturates cited as does thiopentone.

One feels, however, that it is not necessary to postulate a convulsant action—i.e., a stimulant effect on motor nerve cells—on the part of thiopentone to explain these manifestations. The pronator activity is especially marked in, and often confined to, the arm in which the injection is made: it seems almost a purposive effort to get the needle out of the vein, suggesting that it is a withdrawal reflex which becomes manifest when consciousness is lost. During the conscious phase the movement is suppressed either totally or almost completely.

It seems reasonable to suggest that these movements represent the second stage of anaesthesia, when the activity of lower motor centres becomes evident as a result of their release from cortical control; when these lower centres are depressed by deepening anaesthesia to stage 3 the movements cease. It is to be expected, therefore, that this phenomenon will be more commonly seen when premedication has been inadequate or ineffective and the lower motor centres are accordingly more active than in a well-sedated case. Muscular, highly trained males leading an open-air life are especially liable to fall into this group. It is not to be anticipated in such cases that a barbiturate alone will provide good relaxation at a level of anaesthesia short of severe respiratory depression. If the tremors were due to a convulsant property of thiopentone it would be expected that increasing the dose would lead to enhanced severity of the movements, but this is not the case.

A close parallel to this action of intravenous barbiturates is the so-called "stimulant" action of alcohol, where the differential depression of the highest centres leads to a phase of enhanced activity on the part of lower centres.—I am, etc.,

Barnet, Herts. C. F. SCURR.

SIR,—Those of us who make frequent use of the intravenous barbiturates must have welcomed Dr. R. L. Wynne's paper on the convulsive properties of thiopentone (Jan. 10, p. 48). The following observations may also be of interest. When dealing with Army patients I acquired the habit of giving thiopentone rapidly (0.5 g. in less than a minute and maintenance doses at a similar rate). Many of these patients showed pronation of the forearm as described by Dr. Wynne; these and other limb movements often appeared to be a response to surgical stimuli and were attributed to light narcosis. Later a sample of hexobarbitone ("evipan") was found in some German equipment, and this was used in similar dosage and rate. The results in three fit soldiers were surprising, and fully comparable to those described by Dr. Wynne as the "shudder reflex." Further injection of comparatively large doses of hexobarbitone had no effect on these movements, but the inhalation of ether vapour soon stopped them, and the operation could be started. The movements seemed to occur as a response to a surgical stimulus.

In a few similar cases hexobarbitone was given at the rate of one minute to each ml., and no "convulsions" were seen. It was then decided to try thiopentone at the rate of 20 to 30 seconds to each ml. of 5% solution, with the result that muscular contractions were no longer observed. Incidentally much less thiopentone was required for each case.

More recently, when dealing with lists containing several minor cases, an attempt was made to save time by giving an

estimated dose rapidly and continuing with nitrous oxide and oxygen, if necessary by passive ventilation. On several occasions this technique caused hiccups, which could only be stopped by adding ether. A return was made to a slower rate of injection (2.5 to 3 minutes for 0.5 to 0.7 ml. of thiopentone), and diaphragmatic spasm was no longer seen.

Statistical evidence is unfortunately lacking, but a strong clinical impression was formed that the "convulsive" effect of thiopentone is closely related to the rate of administration. It would be interesting to know at what rate Dr. Wynne gave his thiopentone, and whether in the case that he reports it was given at the same speed on each occasion.—I am, etc.,

Baguley, Cheshire. C. T. BARRY.

Orchitis of Mumps

SIR,—In the article by Dr. Desmond Laurence and Mr. Donald McGavin on the complications of mumps (Jan. 17, p. 94) decompression of the testis is, I think, too lightly dismissed. It is disappointing to see the damage done to the testes by the orchitis of mumps assessed by the degree of atrophy and sexual vigour and not on semen analysis, which would have revealed grave impairment in many of these cases. Biopsy frequently shows extensive or complete spermatogenic atrophy with no lessening of virility.—I am, etc.,

London, W.C.1. REYNOLD BOYD.

Fatal Air Embolism

SIR,—I would like to add the following case of fatal air embolism to the literature, following the case reported by Hewer and Coombs (Jan. 17, p. 97).

In October, 1946, a man fell off his bicycle in Camberwell and was admitted to hospital, where he was found to be suffering from a fracture of the right acetabulum. He was transferred to a sector hospital, where traction was applied to the femur. He was in very great pain, and further *x*-ray examination showed that a sharp piece of the acetabulum was adjacent to the bladder. It was decided to replace the fragments of the acetabulum digitally through an abdominal incision.

The man was in agony, and he was brought to the theatre in his bed on wheels under the influence of morphine gr. 1/6 (11 mg.) and atropine gr. 1/100 (0.65 mg.). Gas and oxygen were administered on the bed, and subsequently with the aid of ether and carbon dioxide blind intubation was performed. The patient was then transferred to the table and the operation commenced with the patient in Trendelenburg position. The fragments were replaced satisfactorily and the operation was uneventful until, as the peritoneum was being sutured an hour and a quarter later, the respirations ceased and the temporal pulse was no longer palpable. The face immediately became greyish-blue in colour. The table was brought to the horizontal and artificial respiration commenced in association with forced respirations through the anaesthetic bag. Adrenaline was injected intracardially without response.

Post-mortem examination revealed that the right side of the heart was bulging, and when the right auricle was incised air escaped. There was a very small quantity of pink blood in the auricle. The iliopectineal line was found to be fractured and a sharp fragment was lying under the femoral vein. This could well have been the site of the air entry when the peritoneum was pulled upon.

—I am, etc.,

Uxbridge, Middlesex. T. DAVID LAMBERT.

Digitalis in Chronic Heart Disease

SIR,—It is usual to find in acute wards digitalis applied in cases of auricular fibrillation. There it is usually given in large doses until effective blockage is achieved. In other cases of heart disease digitalis is usually omitted. This way of applying digitalis is not satisfactory in old age. The old muscle being either atrophic and brown or flabby and fibrous could never tolerate a treatment with doses used in middle age.

Cardiac failure in old age is of more complex nature. The chest condition old people suffer from, frequently termed senile pneumonia, is not due only to infective organisms. In the presence of heart failure congestive bronchitis and congestive pneumonia are prevalent. In addition long-sustained recumbency, as in fractured neck of femur or senile hemiparesis and other conditions, produces hypostasis and hypostatic pneumonia. Furthermore, oliguria caused not only by cardiac weakness and prostatic hypertrophy but also by senile paralysis of bladder and cystitis diminishes the output of urine and promotes accumulations not only of sulphonamides but of other drugs as well, and makes it necessary for us to apply what I can only call infant-doses in many cases. That is why small doses of digitalis appear to be effective in senile cardiac failure.

In cases where normally high blood pressure of old age is going down to the norm of middle age and other signs of cardiac failure supervene a very small dose of digitalis will be sufficient to correct decompensation—for instance, digitalis 1/2 gr. (32 mg.) b.d. or even a smaller dose. In cases where the systolic B.P. approaches the diastolic pressure or the diastolic pressure sinks down to 70 somewhat larger doses used will prove very effective. Only cases of infarction may be excluded there. In these cases we do not use the blocking power of digitalis—blocking the senile heart which is already in a state of disposition to blockage naturally being dangerous, although it seems to me that less danger comes from a blocked heart than from medical narcosis. With regard to life expectation, we are trying to use the inotropic action of digitalis on the heart, its direct action on the heart muscle or what is left of the muscle (a part of it substituted by fibrous tissue). The force to be applied to bring the old motor forward, without causing it to crumble down, depends entirely on the judgment of the treating physician—or otherwise, plainly spoken, the way the art is used.

There is no doubt that treating old patients involves a certain amount of chance being taken. If one loses the patient one may fear for reputation, or wastage of drugs, but one will find consolation in those many one will be able to help and sometimes to bring on their feet again—at least to overcome their crisis. One will be astounded how quick the response of old organism occurs in many instances.

We mentioned above that senile pneumonia is a term comprising conditions of a very complex nature. It is important to know that the temperaure does not give us any clue in supporting our diagnosis in old age. Old people have usually subnormal temperatures under normal conditions. A temperature of 98.4° F. (36.9° C.), which is considered to be still normal in middle-age, already indicates a rise, and the temperature of 100° F. (37.8° C.) therefore will be considered as being relatively high in senescence.

In view of this fact bacteriological examination of sputum germs, especially with regard to sensitiveness to penicillin, will be an important measure to determine severity of accompanying infection.—I am, etc.,

Carlisle. W. WEISS.

Penicillin and Blood Coagulation

SIR,—The investigations carried out by Sir Alexander Fleming and Dr. E. W. Fish (Aug. 16, 1947, p. 242) go to show that the effect of penicillin on blood is to retard coagulation. I cite the following case to request an explanation.

A boy aged 11 was brought to me on Jan. 10, 1946, for bleeding from nose and mouth. The trouble had started eight hours previously. He had been operated on elsewhere for enlarged tonsils and adenoids a week before, and at that time bleeding had ceased within a few hours. He had already received injections of calcium gluconate and "coagulen-Ciba," but with only little and temporary effect.

On examination the tonsillar bed was found to be clear, so blood was evidently coming from the adenoid area, and one could see blood oozing out from behind the soft palate. The nose was not at fault. Injections of calcium gluconate, coagulen-Ciba, and ascorbic acid were given at 10-minute intervals, with only temporary effect.

As these late bleedings are often due to secondary infections the patient was given 20,000 units of penicillin intramuscularly. Bleeding stopped within five minutes. The same dose of penicillin was repeated three-hourly until a total of 100,000 units was given. Next day, 26 hours after the first injection of penicillin, bleeding started again. As the patient had already received 100,000 units of penicillin, he was given injections of coagulen-Ciba, ascorbic acid, and vitamin K, without any effect. Bleeding gradually became profuse and alarming. Intramuscular injection of penicillin, 30,000 units, was given. It acted like magic. Gradually the bleeding became less severe and stopped entirely within 10 minutes. Injections of 20,000 units of penicillin were repeated at three-hourly intervals until a total of 400,000 units was given. There has been no recurrence of the complaint.

Now, one would like to have information on the following points: (1) Did penicillin have any direct effect on the

coagulation time of blood? (2) Or, Did it help the coagulant drugs by combating sepsis? (3) And, if so, could the effect be so rapid?—I am, etc.,

Ahmedabad (Bombay Province), Indian Union. H. M. DESAI.

Renal Function in Disease

SIR,—The *Journal* of Jan. 3 (p. 22) contains extracts from an address given by Prof. Robert Platt before a meeting of the Manchester Medical Society on Dec. 3, 1947. These extracts raise problems of considerable interest, especially to those concerned with the clinical application of fact and theory. With your permission I would put forward the following points which arise out of the published context.

1. Rose Bradford has shown that surgical removal of most of the kidney caused the remainder to secrete copious, dilute urine of low specific gravity. Prof. Platt expresses the opinion that it was inconceivable that in the circumstances the remaining nephrons should suddenly have developed tubular failure. Might it not be suggested that it was even more inconceivable that such a delicate and highly specialized system as is the nephronic system could fail to be disorganized if the whole were mutilated by the extirpation of a major part? The kidney is a vital organ, and is fashioned by Nature to act physiologically as a separate and distinct unit. The traumatic effect of such vivisectomy must be taken into consideration when assessing the function of the portion of kidney left *in situ*. Further, is it known for how long the surviving section of the kidney showed the defect in function? Was there any attempt at recovery with improved function? Or did the death of the remnant and/or the subject supervene too soon?

2. More recent investigations have shown that the filtration fraction in chronic renal disease was high, which suggested that there was in fact a high glomerular pressure. But assuming that the glomeruli are themselves involved in renal disease, one must infer that Bowman's capsules must also be involved with a corresponding disturbance of their contribution to the filtration fraction. Is it not possible that in the pathological process filtration becomes leakage, independently of pressure in the glomeruli? If the synovial membrane of a joint becomes damaged or diseased an increased amount of fluid appears in the joint cavity. Does not this suggest a raising of the filtration fraction of the synovial membrane?

3. Prof. Platt states that glycosuria was never present in chronic renal disease. Would this still be true if a patient with chronic nephritis suddenly developed diabetes? It is difficult to see why the blood should wish to give up its normal natural sugar content just because the kidneys were diseased. Are the kidneys controllers of the sugar content of the blood in health? In diabetes they do try to get rid of the excess of sugar which they regard as a waste product, and which as such it is their function to excrete.

4. Prof. Platt states that the histology of chronic nephritis showed in general that in those areas where there was tubular atrophy the glomeruli were non-functioning. Does this mean that the glomerular capillaries were occluded, and that no blood was passing through? If so, at what stage of tubular atrophy did the glomeruli cease to function, whether as filter or leak?

5. Finally as to the question of oedema in acute nephritis. Could not this be approached from the angle of obstruction to the return flow of body fluid from the tissues back into the general circulation? The vascular system is fixed in capacity; the body fluid is not only in constant circulation, but requires constant replacement from without. Hence the necessity of a free and constant overflow from the vascular system. The main overflow is situated at the kidneys. If this is obstructed, as in acute nephritis, then the return flow of fluid waste from the tissues back to the circulating system must also be obstructed, with the result that it becomes dammed up in the tissues—hence oedema—or is this altogether too simple?

—I am, etc.,

New Buckenham, Norfolk. R. G. BLAIR.

Varicocele of Canal of Nuck in Pregnancy

SIR,—As I can find no mention of this condition in any of my textbooks, it seems to me that this case may be of interest.

In September last I saw an expectant mother, 2 para, aged 34, then 5 months pregnant, with a left inguinal hernia, soft and easily reducible, about as large as a pigeon's egg. There were three possible times to deal with this—at once, post partum, or when the child was viable. I discarded the first for fear of miscarriage, and the second because of the necessary interruption of the child's upbringing, and decided to operate at the 36th week.

On Dec. 30 I operated and found that the hernia was a large varicocele intimately surrounding the round ligament in the canal of Nuck. I ligated both ends and removed the mass, closing the inguinal ring in the usual way. Within 12 hours the patient was in labour, and she delivered herself of a 7¾ lb. (3.5 kg.) baby quite normally.

To my great surprise, she was quite unconscious of any discomfort in the operation wound throughout labour, except when I grasped the fundus uteri during the third stage. Puerperium was quite uneventful. I was very much struck by the complete absence of any discomfort at the inguinal ring during the violent expulsive efforts of labour, and also by the prompt oxytocic effect, presumably of interfering with the round ligament.

I am now speculating whether the varicocele was a temporary result of pregnancy which would have spontaneously cured itself after delivery, or if I did in fact do the correct thing.—I am, etc.,

Sherborne, Dorset. RICHMOND MCINTOSH.

Intravenous Alimentation

SIR,—Dr. H. E. Magee is to be congratulated on his very lucid article (Jan. 3, p. 4) on this very important subject. In my own work on this subject (*Med. Pr.*, 1947, **217**, 497) I have confirmed most of the points made by Dr. Magee. I have had considerable clinical experience in the use of intravenous amino-acid mixtures—all made in America—and I can confirm that nitrogen balance can be restored readily in conditions where nitrogen loss is considerable—e.g., in trauma, after operations, and in infections.

Reactions in my series do not appear to occur in more than 1% of cases treated, a figure which compares favourably with transfusions of whole blood or plasma.

Thrombosis has occurred where more than 1 litre has been given into one vein only, but I have had no trouble where I adopted the American technique of giving large amounts in divided doses into several veins—not more than 300–500 ml. being given into any one vein. It must not be forgotten however, that amino-acid mixtures are by their very nature excellent culture media, and particular care must be taken to avoid contamination, and the intravenous technique must be as aseptic as possible.

Most commercial preparations contain pyrogens, and it is advisable to have batches of the solution tested for these before use. There can be no doubt that an appreciation that ten of the amino-acids are essential—that is, not replaceable by any of the other amino-acids—is fundamental in this form of therapeutics.

I would therefore suggest that we abandon the present method of saying that so many grammes of protein are required by a patient in any given condition. After all, many proteins do not contain all the essential amino-acids, or the amounts contained are so small as to be of no value. Finally, it would seem that certain specific conditions—e.g., hepatic failure—require larger quantities of amino-acids, such as methionine, than do normal healthy individuals.

What is required, in my view, is an authoritative statement on the total amino-acid requirements of any given patient rather than the total protein. Perhaps it may be possible in the near future to supplement this information with a table giving the total daily requirements of each essential amino-acid in health and disease. With this information in our hands we have available one of the most important therapeutic advances made in recent years.—I am, etc.,

Southport. JOHN H. HANNAN.

A Sign of Carcinoma

SIR,—The very useful manœuvre which Mr. A. Dickson Wright describes (Jan. 3, p. 27) has been in use for some time. It is described by Auchincloss in Nelson's *Surgery*. In the same place is described another method of accentuating some of the physical signs in the breast. The patient is made to kneel with the arms forward on a support. The breasts then fall into a pendulous position, so that the relations between the tumour and the chest wall are clearly demonstrable. Some breasts may be transilluminated with advantage in this position. I have found both the manœuvres most informative and have often regretted that they were not taught to me when a student.—I am, etc.,

Hull. J. CLAPHAM COATES.

REFERENCE

Auchincloss, Hugh. *Nelson's Loose Leaf Surgery*, Vol. 4, p. 871, New York.

Leprosy and its Problems

SIR,—Dr. Niels Dungal's letter (Oct. 18, 1947, p. 631) raises the question as to whether other insects besides cockroaches may transmit the disease and suggests that lice and fleas are more likely to be the instruments of transmission than any other. It is quite possible that different insects may be the vectors in different parts of the world—i.e., acting as true intermediate hosts, in which a stage of development takes place rendering the bacilli infective to man.

Ehlers, Bourret, and Wirth investigated lice and fleas in 1911 without coming to any definite conclusion. Flies, ticks, bugs, mosquitoes, scabies (acarus) have all been examined as possible direct carriers of infection, but I do not think that any attention was paid to the possibility of any of the insects acting as true intermediate hosts, and certainly no inoculation experiments of infected faeces of insects into man were carried out. I am of opinion that such experiments are the only means by which the mystery of transmission will be solved.

Cockroaches date from carboniferous times and existed all over the world, the climate being hot and moist. The species *lapponica* was the most common variety in Europe in the sixteenth century and dwelt in woods and thickets, and is still found in the mountains of Norway and Switzerland as high as shrubs extend, and when sheltered by human dwellings can endure the extreme cold of the most northern parts of Europe (Miall and Denny). Is it not possible that cockroaches have existed all along in Iceland?—I am, etc.,

Nairobi, Kenya. BERNARD MOISER.

A Suggested Hospital Unit

SIR,—Having read with interest the correspondence concerning the plans suggested by Mr. H. J. McCurrich (Nov. 22, 1947, p. 832), and in particular his letter in the *Journal* of Jan. 10 (p. 77) in which he mentions the contradictory advice which he has received "from persons of no experience," I feel that I may usefully draw attention to the services provided by the Central Bureau of Hospital Information, in conjunction with the British Hospitals Association.

For more than a quarter of a century the Bureau has collected and disseminated information and opinions bearing on every aspect of hospital administration, design, and equipment, and its services—with those of its honorary advisers—have always been available to anyone interested in such problems, both in this country and overseas. As an instance of its work before the war, the Building Centre Hospitals Committee was set up jointly with the Building Centre, Ltd., and in due course published schedules of requirements in the planning of hospitals which could be filled in by any hospital authority who wished to give information to architects engaged to prepare plans. This committee had perforce to lapse at the outbreak of war, but collaboration with the Building Centre has continued.

A more recent development, at the instigation of the British Hospitals Association, has been the setting up of an Advisory Committee on Hospital Equipment within the organization of the British Standards Institution. The work of this committee is likely to assume considerable importance from the point of view of hospital design as the range of equipment for which specifications are made is widened to embrace the larger types of fixture.

I do not wish to suggest that Mr. McCurrich would necessarily find within the compass of the Bureau itself all the information for which he has been looking, for the Bureau has never claimed to be self-sufficient. It may well be, however, that it could give guidance as to where authoritative information might be found if not in its own possession, since it remains in a unique position to correlate the opinions of those interested in hospital problems to-day.—I am, etc.,

Central Bureau of Hospital Information, 52, Green Street, London, W.1. J. P. WETENHALL, Director.

Asthma and the Inhaler

SIR,—An asthmatic since infancy, I have been using a broncho-vydrin type of inhalant daily for about ten years. Not being able to see my bronchial mucosa, I am not worried by its possible thickness or the inactivity of its cilia. I am, however, able to carry out a full day's work and in winter to sleep under the pillows instead of on them. I am also much less troubled by bronchitis than I used to be. Although ephedrine sprays may be, as Dr. Clement Francis (Jan. 10, p. 76) states, less harmful, I find them also much less effective. Normal saline would probably be even more gentle with bronchial mucosa. If my life has been shortened by using adrenaline sprays, at least I shall have had more hours of useful activity on earth than I should otherwise have had.

To the patient the advantages of this form of therapy are: (*a*) Saving of doctors' fee; (*b*) there is no dreaded injection; (*c*) there are no side-reactions comparable with systemic adrenaline injections, and work may be resumed forthwith; (*d*) there is no malaise and dyspepsia, so often associated with ephedrine administered by mouth.

The disadvantages to the doctor are: (*a*) Loss of fees; (*b*) as with all asthma remedies, the effect is not the same with all patients; (*c*) when an acute attack is fully developed, the method is uncertain and dosage unregulated. I think that bed, warmth, hot drinks (especially tea and coffee), and injections of adrenaline or preparations of suprarenal and pituitary are then a safer and more reliable system of treatment. (*d*) In the presence of acute bronchitis the solution seems unable to pass the barrier of mucus and is usually ineffective.

I consider that any asthmatic should be given the opportunity to try out this method. He should be instructed never to wait for an attack to develop, when overdosage without relief may well be possible, but to use his spray for two or three minutes as soon as he is aware of the aura of an impending attack. If he fails to abort the attack, the patient should not continue with the spray, but send for his doctor. In deference to the rhinologists and because it is wasteful, the inhalation should never be made through the nose.—I am, etc.

Ewell, Surrey. PAUL WINGATE.

Radiological Evidence of Age

SIR,—The Palcor News Agency of Nov. 26, 1947, reports from Jerusalem that a youth found guilty of exploding a train was established to be over eighteen by an Army radiologist, thus making him liable to the death sentence. When his parents challenged the age and produced a recently issued birth certificate, the court queried it. The father of the accused said that until his son's capture he had not required a certificate. It was only when the aged man who had circumcised the boy on May 1, 1930, could be produced that it was established that the boy was only 17½ years of age and so not liable to the death penalty.

This case, if correctly reported, raises the serious issue of the reliability of radiological evidence of age. One wonders whether the majority of radiologists would care or dare to fix an age with certainty within six months, and, if so, on what evidence. From my knowledge of radiology I think most radiologists would hesitate to be exact even within a year. It seems that this important question has received no publicity in this country and it should not be allowed to pass without comment from the profession.—I am, etc.,

Urmston, Lancs. BERNARD SANDLER.

Test of Death

SIR,—On reading the abstract of "Les signes de la mort absolue" (Daniel and Daniel, *Avenir méd.*, 1946, 71–5) in *Abstracts of World Medicine*, December, 1947, I was reminded of a simple procedure which I used to employ in clinical work as a confirmatory test of absolute death.

I observed that the retinal vessels took on, after death, a curious appearance. The blood column was broken up into segments of varying length, each segment ending quite abruptly and separated from the next segment by a well-defined gap. The extent of this disintegration of the blood column varied from case to case. This sign was never present when other signs of life were in evidence, and was often obtained within a very short time of their disappearance.

I am not aware that this sign has been described; it certainly does not seem to be generally taught. My series was too short to form a definite opinion, but I had the impression that the test might prove useful.—I am, etc.,

Sealand, Cheshire. E. A. HARRIS.

Treatment of Rheumatoid Arthritis

SIR,—In connexion with my article on the above subject, published in the *Journal* of Aug. 16, 1947 (p. 252), I have received various inquiries, some of them through the correspondence columns of the *Journal*, and some of them direct. Several correspondents ask me about the necessity of blood typing. My answer is that blood typing is absolutely necessary. Moreover, cross-typing must also be carried out in order to exclude sub-groups and particularly the Rh factor, especially if the transfusion is repeated.

Other correspondents ask me for an explanation of the astonishing phenomenon that a pregnant woman's blood is able to cure some cases of rheumatoid arthritis. I purposely refrained from giving an explanation. I do not believe in guesses which are not based on positive facts. But I have, of course, pondered the problem, and my first idea—which I think must occur to everyone—was that the effect of the blood should be attributed to the multiplication of hormones during pregnancy. Everything, however, seems to contradict this hypothesis. Hormones given in a peroral and parenteral way have not achieved any result, even in strong doses; this disappointment must, I think, have been experienced by everyone. Besides, the effect of pregnant blood is not similar to the effect of the hormone. The effect of all hormones hitherto used for medical purposes has been ephemeral; it lasts only so long as the hormones circulate in the organism. When the hormones have been destroyed or excreted by the organism, which occurs very soon, their effect also ceases, and the symptoms of the disease recur. Pregnant blood, on the other hand, when its effect is favourable, starts a process of recovery which continues even if the dose is not repeated. To find an analogy, we should compare its effects rather with those of the immunization sera; and if we look for a hypothesis, I think it more probable that the foetus and its attachments create, as antigens, such antibodies in the mother's body as are able to counteract the causative agents or toxin of rheumatoid arthritis. We know of analogies for this—i.e., the Rh factor or the Weil-Felix reaction. From this point of view the globulin content of the pregnant blood should be examined.

As regards the possibility of shock, it is difficult to give a categoric answer. I can at any rate state that in my own practice I have found that pregnant blood can be effective without causing fever.—I am, etc.,

Budapest. IMRE BARSI.

Penile Carcinoma

SIR,—With regard to this controversy, is it necessary to bring in "mixed bacterial flora of the prepuce"? In spite of our ignorance of the causes of cancer we do know that syphilis is a predisposing cause in certain situations—e.g., the tongue. The commonest site for a primary chancre in the male is the prepuce, the spirochaetes gaining entry in an abrasion or tear; that in the female is the cervix. In the circumcised the delicate mucous membrane of the glans is replaced by stratified epithelium, which is much less liable to abrasions, therefore to infection and becoming a source of infection.—I am, etc.,

Dumfries. A. P. BERTWISTLE.

SIR,—We must get back to the fundamental facts raised by Mr. W. Sampson Handley (Nov. 22, 1947, p. 841). We either accept his contention that circumcision in the male will greatly reduce the incidence of carcinoma of the cervix, in which case we must support his plea for operation of the prepuce, or we do not, in which case evidence to the contrary should be produced. So far, his conclusions have not been seriously challenged. It is on the type of operation to be performed that I dared to differ from so distinguished a surgeon. I confess I have had no experience of fenestration operations on the prepuce of the infant, but suggest that if anything requires to be done in that region then there is a simple operation which has stood the test of time—i.e., "ritual" circumcision.

As regards the history of the operation, a slight correction requires to be made in the statement that "Abraham learnt its advantages from his Arabian wife Zipporah, who circumcised their son." Zipporah, wife of Moses, lived in a later epoch and only circumcised her son on the threat of Divine wrath. The Covenant, that in the future all males were to be circumcised on the eighth day of life, was made with Abraham, who underwent the operation at the same time as his son Ishmael. Abraham was then 99 years old (the science of geriatrics seems to have arisen later with King David and his two hot "water-bottles") and Ishmael 13 (hence, presumably, the Arab custom of circumcising at that age). The operation, therefore, may be said to have been practised by the Jews, without interruption, from the time of Abraham to the present day. I did not say they originated it but merely suggested that an element of proficiency must by now have crept into the proceedings.—I am, etc.,

London, W.1. DAVID PREISKEL.

SIR,—In the original annotation (Nov. 1, 1947, p. 699) which started this correspondence the statement is made that "circumcision and personal hygiene are the only two prophylactic methods which are likely to reduce the incidence of carcinoma of the penis."

Most of your correspondents have advocated the first method, but surely the simpler and more aesthetically correct method is to insist on personal cleanliness. Every mother should be shown by her medical attendant how to retract the prepuce and cleanse the glans and sulci of her infant son; the son in turn being instructed by his mother. Personal cleanliness in this direction is surely just as important as brushing the teeth or washing the ears, and I have never yet heard the suggestion that the cure for dirty ears is amputation.—I am, etc.,

Ilkley, Yorks. R. JOHN GOURLAY.

D.D.T. as an Anthelmintic

SIR,—In your issue of Nov. 15, 1947 (p. 805), there is a query and a reply on the subject of D.D.T. as an anthelmintic. Some time ago I thought of the possible use of D.D.T. in treating helminth infestations and conducted a short trial of its use in patients showing ova of roundworm, hookworm, or whipworm in their stools.

I had no data available concerning the toxicity of D.D.T. in milligrammes per kilo of body weight, so after various calculations I decided on using a dose of 1 gr. (65 mg.) of pure D.D.T. powder. To test the safety of this dose I took two treatments myself first, using 2 gr. (0.13 g.) as the dose. The only symptoms arising from the D.D.T. were very slight nausea and a mild warm sensation in the epigastrium lasting about three hours and commencing about an hour after ingestion of the powder. No delayed effects were noticed.

Only patients whose stools showed heavy infestations were chosen for treatment, and all were adults, some male and some female. The following routine was employed: (1) At 20.00 hours the previous night sodii sulph. 1/2 oz. (15 g.) was given and no further food allowed. (2) At 06.00 hours D.D.T. pure, gr. 1 (65 mg.) with gr. 5 (0.32 g.) kaolin were given in a gelatin capsule. (3) At 08.00 another dose of sodii sulph. 1/2 oz. (15 g.) was given. (4) After the bowels had worked well, food was allowed. (5) The patient was kept in hospital for forty-eight hours after the treatment. (6) While in hospital all the patients' stools were collected and examined carefully for worms, the number being tabulated. (7) Two weeks later a further stool examination was done.

Results were disappointing. In a small series no roundworms or whipworms other than an odd one purged out were recovered, but with hookworm (all *A. duodenale*) death of worms did occur. However, eradication of the hookworm infestation did not occur and follow-up stool examinations were always positive. Speaking generally, I would say the effect of D.D.T. was approximately about a half to three-quarters that of tetrachlorethylene if estimations of such vagueness are permitted.

On the grounds of these early indications that D.D.T. was no good in the eradication of roundworms and whipworms, that where hookworm was concerned it was inferior to one of the cheapest effective anthelmintics, and bearing in mind the dangerous nature of the substance being used, I did not extend the experiment on more scientific lines.

If anyone else has had any experience of the therapeutic use of D.D.T. internally, I would welcome their comments on my investigations.—I am, etc.,

Kuala Belait, Borneo. K. F. D. SWEETMAN.

The Lazy Eye

SIR,—I would like to answer Mr. S. Blackes accusation (Jan. 10, p. 77) that the School Ophthalmic Service is essentially curative. Admittedly this is so in many parts of the country, but in Devon the preventive side is considered the most important. For the past ten years the Devon County Council has entrusted the Ophthalmic Service to the care of two full-time ophthalmic surgeons under the County Medical Officer. There is complete liaison between the Maternity and Child Welfare Department and the School Ophthalmic Service, and infants are seen and followed through their pre-school and school years.

Any infants suspected, even remotely, of eye defect by medical officer, health visitor, or parents are referred to the ophthalmic surgeon for full examination, and having once been referred they become the responsibility of the ophthalmic department. In this way congenital defects, squints, errors of refraction, particularly high degrees of anisometropia, are treated at an early age and the development of amblyopia prevented.

On attaining school age every child in every school has a visual acuity test every year, the most important group being that of the school entrants, who, though they are not conversant with letters, are tested by other reliable and scientific methods. Any child not attaining the standard of 6/6 in each eye separately is referred for ophthalmic examination, through which it is possible to find visual defects early so that treatment can be instituted before it is too late to be effective.

Naturally many cases referred are found to have no ophthalmic defects at all, but the principle is maintained that it is better to examine the normal than miss the defective.—I am, etc.,

Exeter. MARGARET L. FOXWELL.

The Dangers of Going to Bed

SIR,—Dr. R. A. J. Asher's article on "The Dangers of Going to Bed" (Dec. 13, 1947, p. 967) prompts me to record the following case.

Some five years ago a middle-aged female patient was transferred to me by another surgeon who had performed a cholecystectomy on her two weeks previously. Since operation she had had a persistent, profuse biliary fistula and clay-coloured stools. I operated on her about a week later and found that the common hepatic duct had been completely divided where it emerged from the liver, the right and left hepatic ducts having united intrahepatically. A bougie was passed down the duct into the duodenum without obstruction. The divided ends were sutured together round the upper limb of a T-tube, which was inserted into the common bile duct.

About three weeks after this operation, when the amount of bile draining externally was slight, the tube was removed. Thereafter the bile loss became copious and the stools almost clay-coloured. When this had persisted for a further three weeks and the patient's condition was deteriorating, I considered that it was necessary to repair the leak, but the ward sister appealed to me to allow her to try getting the patient out of bed. I did not think this would have any effect on the fistula, but agreed that it would at least be good for "morale" in view of the impending third operation. However, within forty-eight hours of her starting to get up the fistula was dry and the stools normal. Further recovery was uneventful.

In my opinion the complete healing of the duct was prevented by being constantly bathed in a pool of bile which collected while the patient was lying in bed. Since this lesson I have not postponed getting-up choledochostomy cases until the wound was dry, and have found that this earlier ambulation accelerated complete healing of the duct.—I am, etc.,

Edinburgh. J. P. PHILP.

SIR,—Regarded as a jocose article Dr. R. A. J. Asher's contribution (Dec. 13, 1947, p. 967) makes thoroughly enjoyable reading. "Look," he says, "at a patient lying long in bed. . . . The blood clotting in his veins, the lime draining from his bones, the scybala stacking up in his colon, the flesh rotting from his seat, the urine leaking from his distended bladder, and the spirit evaporating from his soul." It is a picture worthy of Edgar Allan Poe. But Dr. Asher is pulling our legs just here: "It is not as bad as all that" really, "and rest is essential in the management of many illnesses" he admits. Under the heading "respiratory system" I suggest going even one better than Dr. Asher, and advise that the tuberculous patient with haemoptysis should *never* go to bed, because nearly all fatal pulmonary haemorrhages occur when the patient is at rest.

Dr. Bruce Williamson (Jan 3, p. 26) still further enlarges on the dangers of treatment by rest. He tells us that for cases of rheumatic fever "in bygone days months in bed was considered sound practice, *with mitral stenosis as the inevitable end-result*" (the italics are mine). I am not supporting too-prolonged treatment by rest after rheumatic fever, but I would like to know what scientific evidence he can adduce by way of proof that it was the rest in bed that was answerable for the mitral stenosis. To say that it is the inevitable result is putting it strongly. Can't he think of just one case out of the whole lot that escaped mitral stenosis? He also says: "If we wish to *stenose*" (again my italics) "any part of the body immobilization is the accepted procedure." Then, if we immobilize a fracture are we "stenosing" it?

Nearly fifty years ago—in those "bygone days"—it often seemed to me, as a medical student at hospital in London, that just the rest in bed was more than half the battle, especially with hard-worked East End housewives, who had never known before what real rest meant, and what it felt like to be for once waited upon, instead of doing everything oneself. But it is the evils of *over*dose (Dr. Asher's italics) with bed that Dr. Asher is tilting against, and I have little doubt Dr. Asher would agree with me here.—I am, etc.,

Southborough, Kent. E. WEATHERHEAD.

Prickly Heat: A Simple Remedy

SIR,—With reference to Dr. C. J. Wilson's letter on the above subject (Jan. 10, p. 76) describing the use of perchloride of mercury, 1 in 500, I use a rather similar treatment which I find very effective. The following lotion is used: Biniodide of mercury and spirit, 1 in 1,000, 1 oz. (28.4 ml.), diluted with an equal quantity of water, with the addition of menthol, 10 gr. (0.65 g.). This lotion is dabbed on the affected parts after bathing and allowed to dry. A little menthol powder is then dusted on to the area. This treatment gives a marked "hot and cold" sensation which lasts about 10 minutes. One or two applications are usually sufficient to clear the condition. As a precaution I warn patients to test the treatment on a small area first before treating the whole area. Also, if they find that the lotion causes too much "burning," they may dilute the lotion with an equal part of water. I should be interested to hear the results of any cases treated with "benadryl."—I am, etc.,

Accra, Gold Coast. M. P. BROWNE.

Aetiology of Prickly Heat

SIR,—In support of Dr. C. J. Wilson's letter (Jan. 10, p. 76) regarding the use of a solution of perchloride of mercury, 1 in 500, applied locally in the treatment of prickly heat, may I confirm his findings by my own observations in the use of this drug when treating cases amongst Service personnel in Assam during the late war? In the Surma Valley area of Assam there is during the monsoon period a high incidence of prickly heat amongst Europeans, and it was on the advice of a doctor of long residence in the district that I commenced treating cases with perchloride of mercury. In most cases this treatment led to a rapid cure comparable with the findings of Dr. Wilson. No other treatment was so effective, and it would appear that mercury when applied to the skin is a specific for this complaint.

The aetiology still remains obscure, but the fact that mercury appears so effective in treatment suggests that a mercury-sensitive organism—probably a fungus—is the cause. I would be interested to know whether research has been conducted on these lines and whether a predominating organism of this type has been isolated: obviously secondary infection with pyogenic organisms occurs. That a few isolated cases fail to respond to the above treatment suggests more than one aetiological factor.

The following observations are noted: (1) The incidence of prickly heat varied directly with the atmospheric humidity. (2) Whilst high temperatures favoured the condition—i.e., over 90° F. (32.2° C.) shade temperature—the incidence showed a direct relation to the humidity rather than the temperature. (3) Europeans who habitually wore no clothing apart from a loose-fitting pair of shorts during daytime were less affected. (4) The wearing of silk or closely woven cotton garments favoured the condition. (5) Loose-fitting "aertex" garments of the bush-shirt type, frequently changed, appeared to be the

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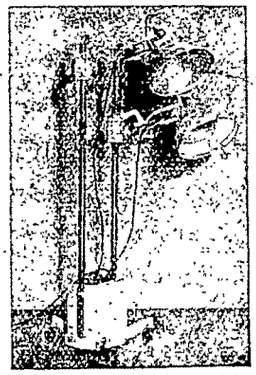

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ideal clothing. (6) Medicated dusting powders, etc., whilst of some use in alleviating the irritation, had no curative value.—I am, etc.,

Bishopsteignton, S. Devon. W. F. WALTON.

True Hermaphroditism

SIR,—In reply to Dr. J. R. Edisbury (Dec. 27, 1947, p. 1056), may I refer him to my *Hermaphroditos: The Human Intersex* (second edition, Heinemann, 1946), embodying my Thomas Vicary lecture of 1941? I endeavoured to demonstrate in this work that "true hermaphroditism" cannot be accepted in humans in the light of recent biological work and that this erroneous conception had infiltrated into our science from the daemonology of the ancient Eastern people, repeated naively by the Renaissance teratologists, and accepted uncritically by writers of more modern textbooks.

Only in certain lower animals is true hermaphroditism seen, but these are double animals consisting of a male and female united. They result embryologically from a parallel development of masculinizing and feminizing sex-formative genetic impulses. In higher animals sexes have separated, and in these "gonochorists" hermaphroditism is a contradiction in terms.

Such animals and man are genetically either males (XY) or females (XX), but through certain experimental conditions feminization of a genetic male or masculinization of a genetic female can be obtained. This sex reversal shows according to experimental conditions three degrees. In the first degree the intersexualization bears only on the morpho-psychological characters. In a second degree the genital organs and tract are involved. In a third degree the gonads themselves partially submit to the intersexualizing process. This corresponds to the three forms of human intersexuals. Genetic males may show feminization only of their morpho-psychological sexual features (morpho-psychological androgynoidism); others proceed to feminization of the genital organs and tract (genital androgynoidism), and others show partial feminization also of their gonads (gonadal androgynoidism). The same applies to masculinized women, or gynandroids.

Morpho-psychological androgynoidism and gynandroidism are designated feminism or virilism. Genital androgynoidism and gynandroidism are designated with the barbaric clumsy terms male or female pseudo-hermaphroditism. Gonadal androgynoidism and gynandroidism are included in "true hermaphroditism." Thus, true hermaphrodites are simply genetic males or females in whom the intersexualizing process has progressed up to the gonads. The term "true hermaphroditism," which reminds us of old daemonology, should be discarded—but daemonology dies hard.—I am, etc.,

London, W.1. A. P. CAWADIAS.

Medical Treatment of a Sprinter

SIR,—My attention has been drawn in recent weeks to the anxiety caused by a report published in the *Evening News* (Sports Edition, Oct. 27, 1947), wherein appear my comments on the treatment of an injury sustained by Macdonald Bailey, the international sportsman, at the White City on Aug. 3, 1947. On that occasion Macdonald Bailey collapsed on the running track and was found to have injured certain muscles of the thigh.

I examined Macdonald Bailey some weeks later and understood from him that the injury had not been seen by a specialist for ten weeks and that he, Macdonald Bailey, did not realize the true nature of the injury.

My comments, referred to above, were based on this information. However, from information subsequently placed before me by professional colleagues who were then responsible for the care and treatment of Macdonald Bailey consequent upon receipt of this injury, it seems clear that the runner did receive, on return to his Air Force unit, a full medical examination by the medical officer concerned and also, within a short space, by a specialist attached to the Royal Air Force Medical Service.

I now desire to make it clear that my comments were not inteded to impute, to those responsible for the care and treatment of Macdonald Bailey at the material time, any lack of professional care, and if such an interpretation has been placed upon my words as reported, then I regret it.—I am, etc.,

London, W.1. C. R. WOODARD.

POINTS FROM LETTERS

All Resign

Dr. W. C. COLVILLE (Rowrah, Cumberland) writes: As a younger member my bias is in favour of the Act, perhaps because I stand to lose much less materially than my older well-established colleagues. After all, as has been said, we are living under a quiet revolution. I admit, Service medicine did make my faith falter with regard to regimentation. Mr. Bevan's attitude has also shaken my faith. . . . Have we any constructive suggestions? We should certainly all abide by the majority result on the plebiscite. . . . If there is an overwhelming majority all concerned should resign from the N.H.I. in April next and let the public know why the doctors are resigning. That would leave private practice only, just as in the good old days—payment for work done—and give the public three months to help the Minister of Health to come to his senses as far as negotiation is concerned. Strong words need strong action as well. If the Act is to be amended I make the following additional suggestions. Night work should receive additional remuneration. This will act as a material palliative. It will also open the way for a rota system, for the doctor on night call will get extra payment for his night shift.

If the capitation system is to succeed, the public should be charged —e.g., as a fine—if they have been living in the area for over six weeks and yet haven't got themselves on a doctor's list. There is nothing more exasperating than a panel patient rolling up with his card the first time he is ill and yet he has been living in the area for months. . . .

N.H.S. and Reality

Drs. C. E. BIGGER and DOROTHY L. BIGGER (Birmingham) write: (1) Those thousands who never go near a doctor now because the chemist is cheaper will be able to get their bottle of aspirins, etc., from the doctor—free. (2) The mother of every baby in the country will come to the doctor for syrup of figs or milk of magnesia—free. (3) Those who now attend the welfare clinic will get their own doctor's advice—free. (4) Doctors will have to get a permit before they can do midwifery. If they are foolish enough to do so, they will find that every pregnant woman in the district will elect to have a doctor, even for her eighth—free. (5) There will only be the same number of doctors to do three or four times the work. What chance will the patient who is genuinely ill have of getting a better service when the doctor is swamped by the "Something for Nothing" brigade?

Trying the N.H.S.

Dr. T. MILLER (Trimdon Station, Co. Durham) writes: On reading Dr. William Parker's letter (Jan. 17, p. 119) I had a feeling of indignation. "The Minister states he is not prepared to alter the Act before the new Service has been tested . . ." So Dr. Parker wishes to have it tried out in N. Ireland. Does Dr. Parker know that N. Ireland will have a new service of its own which I think would be welcomed by the majority of doctors here? . . . After all, the people of N. Ireland have their own government capable of forming a Health Bill in accordance with the wish of the people. . . .

Penile Carcinoma

Mr. W. SAMPSON HANDLEY writes: Dr. I. Gottlieb (Jan. 10, p. 79) quite rightly sends me to the bottom of the class in Biblical history. Zipporah was the wife of Moses, not of Abraham, and I am indebted to Dr. Gottlieb for his courteous correction of my error. I think, however, that my main conclusion remains unaffected. Circumcision is specifically Jewish only as a ceremonial rite. As a hygienic practice many races inhabiting hot climates had independently realized its advantages.

Post-operative Scar

Dr. R. S. CAREY (Brislington, Bristol) writes: Having recently undergone a major abdominal operation involving a long vertical scar, I would like to suggest to surgeons that such cases should be nursed, where possible, with the spine in an overextended position for the first few days. In the usual sitting-up position the abdominal wall tends to crumple, with the result that the healing scar is from one to two inches shorter than it should be. Stretching this after the patient is allowed to get up is a painful proceeding and inevitably delays full ability to stand erect. Incidentally, the extended position gives more room in the thorax and should aid in preventing hypostasis in the lungs.

Under the National Health Service Act the property of hospitals will be transferred to the Minister of Health on the appointed day. A circular has therefore been sent from the Ministry of Health to voluntary teaching hospitals requesting a return listing all the properties and interests specified in the circular, irrespective of their destination on the appointed day.

Obituary

Dr. FREDERICK JOHN CARLYLE JOHNSTONE died in King's College Hospital, London, on Dec. 20, 1947, at the age of 54. He had been flown to England from Kenya only a few weeks previously, and to his colleagues and friends there the news that he was seriously ill and might not recover had come as a shock. Dr. Johnstone was born in 1893 in Melrose, where his father was the medical superintendent of one of the largest mental hospitals in Scotland. He was educated at St. Mary's School, Melrose; at Edinburgh Academy; and at the University of Edinburgh, where he graduated M.B., Ch.B. in 1916, proceeding M.D. in 1920 and taking the D.P.H. in the same year. He obtained the Liverpool D.T.M. in 1924. On the outbreak of war in 1914 he received a commission in the Royal Field Artillery, with which he served as a combatant officer in France and Salonika till 1916, when he was recalled to complete his medical studies. On graduating he was appointed to the R.A.M.C. and sailed towards the end of that year for East Africa, where he served until the end of the war, being mentioned in Van Deventer's dispatches. He also took part in the Turkana Expedition of 1918–19. He went out to Kenya as a medical officer early in 1921. He was promoted senior health officer in 1926, and deputy director of medical services in 1933, serving in the Kenya Medical Department until 1944, when he was transferred to the Gold Coast on promotion to the post of D.M.S. in that colony. Invalided from the Colonial Medical Service about a year later he returned to Kenya, free at last to make farming, which had always been his hobby, his life's work. Throughout his service in Kenya, Johnstone was an outstanding personality, and though his contributions to medical literature were few, his contribution to medical thought on the health problems of Kenya was large. He inspired and influenced not only his medical friends but his colleagues in the administration. On arrival in Kenya he was posted to the large native reserve of Central Kavirondo in the Nyanza Province, where, as he had no hospital, he was almost continuously on safari. He gained the confidence of the Luo people to a remarkable degree, and on his own initiative was responsible for what was probably the first biological survey of a native tribe ever carried out in East Africa. The data which he then obtained were of inestimable value and provided for the first time a sound basis for the formulation of policies for the promotion of the people's health in the native reserves and, indeed, outside them. He was also a pioneer in the matter of improved African housing and was responsible for the erection of the first model village buildings in Kenya. Johnstone was a first-class administrator, an excellent judge and manager of men, and the most loyal of colleagues. Apart altogether from his efficiency and enthusiasm in the field of public health, he will long be remembered for his bluff heartiness, his hospitality, his cheery friendliness, and his most eagerly proffered helpfulness wherever help was required. To his family we offer our sympathy in their great loss—A. R. P.

Dr. HERBERT RAMSDEN, of Saddleworth, Yorks, died on Dec. 23, 1947, aged 82 years, after a short illness. He received his medical education at Owens College, qualifying L.S.A., M.R.C.S., and L.R.C.P. in 1889. He graduated M.B., B.Ch. at Manchester in 1890, and took the London M.B. in 1892, proceeding M.D. in 1894. In 1899 he obtained the D.P.H. After serving as house-physician at Manchester Royal Infirmary he joined his father, Dr. W. H. F. Ramsden, in medical practice in Saddleworth. He was medical officer of health for the urban district of Saddleworth for thirty-four years, and was also certifying factory surgeon and medical officer for the Post Office for many years. He was always keenly interested in the work of the St. John Ambulance Association, of which he was an honorary life member. He was also a member of the British Medical Association for forty-three years. In spite of the heavy work of a busy and scattered practice his interests were not confined to medicine. He had been J.P. for many years and was a member of the Manchester Literary and Philosophical Society. A keen botanist, he also took the greatest interest in the study of molecular physics.—W. P. B. S.

Dr. HAROLD WILLIAM LATHAM died suddenly, at the age of 61, on Dec. 28 at his home in London, N.7. He was the last surviving member of a family of seven brothers who were all doctors. A student at the London Hospital, he qualified in 1913 and was in general practice at Hemingford Road in West Islington for over thirty-four years. He had been a member of the British Medical Association for many years and was chairman of the City Division in 1926–7.

Dr. WILLIAM RIDDOCK MCLINDEN died on Jan. 3 at his home in Oldham at the age of 53. He was born in Glasgow and educated at Glasgow University, where he graduated M.B., Ch.B. in 1918. Immediately after qualifying he served in the R.A.M.C. in Italy and was honoured by the Italian Government for his services. After demobilization he practised for a short time in Scotland and finally settled in Oldham in 1922. He was first of all the assistant and later the partner of Dr. Low, and took over the practice when his principal retired just before the recent war. At the same time Dr. McLinden became the examining factory surgeon for Oldham East. During the war he was medical officer to one of the first-aid posts, and afterwards his failing health made it necessary for him to give up part of the practice and devote himself only to those patients who were within easy reach of his home in Ripponden Road. At the time of his death he was president-elect of the Oldham Medical Society and he had been secretary of the Local Medical and Panel Committees. He was also an active member of the British Medical Association. Dr. McLinden had many hobbies, and he was particularly fond of gardening and of music. He was of a retiring disposition, but during his long period of general practice in Oldham he made many friends, all of whom mourn his death and extend their sympathies to his widow and his daughter.—W. B.

Dr. JOHN MCMILLAN died at his home in Shotts, Lanarkshire, on Jan. 4 at the age of 78. He was a student of Glasgow University, where he graduated M.B., Ch.B. in 1899. He saw service in the Boer War and held two assistantships before settling in Shotts in 1902. Ten years later he was appointed visiting physician to Shotts Sanatorium. His wife, who died in 1944, was matron of the hospital for eight years before their marriage. In the 1914–18 war Dr. McMillan served on the recruiting board at Motherwell, and during the recent war acted as its chairman. He was chairman of the County of Lanark Panel Committee for over ten years and a J.P. for the county. He had been an active member of the British Medical Association for many years and was chairman of the Lanarkshire Division in 1940–1. He retired in 1942 after forty years in general practice in Shotts.

J. A. M. H. writes: I wish to pay a tribute to the memory of Dr. John McMillan. He was of the old school, and relied more on his five senses than on modern instruments and laboratory methods. He had a strong constitution, and thought nothing of doing eighty visits a day in addition to his surgeries. In the early days he spent many hours, mostly at night, at confinements, often assisted only by the woman next door. His scanty leisure hours were devoted to gardening and reading. He was a good raconteur and had many an interesting tale to relate, especially of his experiences as a civil surgeon in the Boer War. Dr. McMillan was a man of high character, but with decided views. In close association with him during the past twenty-six years, I do not remember ever hearing him say ill of anyone. In my mind's eye I can see him yet, standing at the high desk in his surgery prescribing to his patients not only medicine but also sound advice in his customary calm, capable, and cautious manner.

Dr. ALEXANDER BENHAM STICH died from coronary thrombosis on Jan. 6 at the Kent County Hospital. Dr. Stich, who was 59, was educated at Paisley Grammar School and Barbour Academy. He graduated B.Sc. at Glasgow University, and for a few years acted as chief chemist to a firm of brewers. He went back to the University in 1913 and took the M.B., Ch.B. in 1918. He acted as a house-surgeon at the Royal Maternity Hospital in Glasgow, and later as R.M.O. at Smithson Asylum, Greenock. He then went into general practice in Co. Durham, in partnership with Dr. N. Davie. He remained there for sixteen years, during which time he took an active interest in the work of the British Medical Association. He was chairman of the Gateshead Division in 1929; a representative at annual representative meetings for ten years; and he also served on the Panel Committee for more than fourteen years, finally as vice-chairman. He was later in practice at Spray Hill, Lamberhurst, Kent, retiring only in 1947 when ill-health made it impossible for him to continue.

Dr. WILLIAM CHARLES WATSON GLENNY died on Jan. 7 at his home at Warrenpoint, Co. Down, at the age of 72, following a prolonged illness. He was the eldest son of the late Rev. Robert Edmund Glenny, Rector of Clonallon, Warrenpoint, and was educated at St. Bee's School, Westmorland, and the College of Surgeons, Dublin. He served in the South African War and wrote a book about it, and was a captain in the R.A.M.C. in the 1914–18 war. About the beginning of the

century he went into private practice at Omeath, Co. Louth, where he was a J.P. for the county, and later went to reside in Warrenpoint, on the other side of Carlingford Lough, where he received a similar honour. He held high office in the Masonic Order, and in the Church of Ireland. Dr. Glenny was well-known and loved throughout the countryside for his unsparing care of those who sought his help, help often given while he himself was suffering acute pain. Unable to get about in his later years, he retired in 1939, and was succeeded by his nephew, Dr. Rex Glenny. He is survived by his widow and four brothers, one of whom is a surgeon in Singapore, and three sisters.—R. G.

Dr. FRANCIS WILLIAM CHANDLER died in a nursing home in Sidmouth, at the age of 79, on Jan. 7. As a student at University College Hospital he was well known as a boxer, and before graduating in 1908 he travelled abroad for some years. He sailed before the mast round Cape Horn, and he spent some time as a cowboy in America. He went into general practice in Woodseats, near Sheffield, in 1911, and there he remained until his retirement in 1945.

Dr. JOSEPH BARCROFT ANDERSON died in Dublin on Jan. 10. He was educated at Trinity College, Dublin, and at Guy's Hospital, graduating in 1892 and proceeding M.D. in 1897. He took the Cambridge D.P.H. in 1901, and he was also a barrister-at-law. Dr. Anderson went out to South Africa to take up a Government appointment in 1901. He was an advocate in the Supreme Court of the Cape Province Division of the Union of South Africa, and he represented the South African Branches on the Council of the British Medical Association in 1925–8, during which time he also served on the Dominions Committee. Towards the end of his life Dr. Anderson became increasingly interested in the study of Hebrew, Greek, and Assyrian, all of which languages he used in a commentary on the Old Testament which he was preparing. It was largely in order to further his knowledge of Assyrian cuneiform characters that he returned to this country in 1947 so that he might work at the British Museum.

Dr. JOHN LEWIS THOMAS died recently at his home in Brynmawr, Breconshire, at the age of 85. Even when he had reached his eightieth year Dr. Thomas was able to deputize for some of his former medical colleagues in order that they might have a holiday. For the last few years he had been confined to bed and had suffered much discomfort and pain, but bore it patiently and courageously. His father was one of the pioneers of local government in Breconshire during the last century, and Dr. Thomas was the first pupil to be enrolled at Lewis School, Pengam. From there he went to the University College of Wales, Aberystwyth, winning at the early age of 15 one of the first exhibitions to the College. From Aberystwyth he went to St. Bartholomew's Hospital, where he qualified in 1887. The first permanent post Dr. Thomas had was with the International Navigation Colliery, Blaengarw. In those days the colliery doctor received little assistance in dealing with his problems. There was no local hospital in which serious injuries could be treated. The doctor had to be a capable surgeon, a skilled obstetrician, and a well-informed physician if he was to gain the confidence of his patients and keep it. That Dr. Thomas achieved this in full measure was proved by the high testimony paid to his services when he left Blaengarw to become M.O.H. to the Brynmawr, Nantyglo and Blaina Urban District Councils and to continue general practice in his home town. In 1912 Dr. Thomas proceeded M.D. at the University of Durham. From 1914 to 1931 he was one of the physicians of the Welsh National Memorial Association. Dr. Thomas was a capable doctor and a great personality. Up to the last few months of his life he was a constant reader of the most recent medical volumes and was conversant with modern movements in surgery and medicine. But he combined thoroughness with versatility and was a first-rate clinician. He was in advance of the majority of his colleagues in appreciating the importance of social and industrial conditions in preventive medicine. Throughout his life he was a voluminous reader of current literature, history, and books on religious subjects. His friends will long treasure memories of many of his talks, especially when he was in a reminiscent mood. Like his father, he used words sparingly, his phrases were picturesque, and a kindly humour pervaded his talk. He published some delightful sketches of the quaint personalities who lived in the Brynmawr district when he was young. After many years of happiness together, his wife, Mary, died a few years ago. Her great charm and unfailing generosity endeared her to many friends and to large numbers of her husband's patients.—E. O. L.

Medico-Legal

CONTRACEPTIVES AND CONSUMMATION

[FROM OUR MEDICO-LEGAL CORRESPONDENT]

Up to 1857 the usual procedure for obtaining a declaration of nullity of a marriage was to bring suit before the Ecclesiastical Courts, and a decree could be obtained on proof of incapacity of one of the partners to consummate the marriage. The jurisdiction of these courts was taken over under the Matrimonial Causes Act, 1857, by the High Court, and this Act provided that the principles applied by the former courts should still be observed in such cases. In 1913 it was decided by Sir Samuel Evans in the case of *Dickinson* v. *Dickinson* that the wilful and persistent refusal of a wife to consummate the marriage was sufficient ground for a declaration of nullity, but this decision was overruled by the Court of Appeal in the case of *Napier* v. *Napier* on the ground that this would be going beyond the limits allowed in the Ecclesiastical Courts. It was felt, however, that the position was unsatisfactory, and the Royal Commission on Divorce, presided over by Lord Gorell, recommended in 1912 that such wilful refusal ought to be allowed as a ground for annulment of the marriage. It was not until 1937 that this recommendation was given legal effect in the Matrimonial Causes Act of that year—the "Herbert Act."

The question of the use of contraceptives was raised in several unreported cases in the Divorce Court during the next few years. In one such case (mentioned by Mr. William Latey in the course of an address to the Medico-Legal Society[1]) heard in 1941 a husband petitioned for nullity on the ground that his wife insisted on his using a sheath, which he did against his own inclinations. Mr. Justice Langton was disposed to grant a decree of nullity on these grounds, but felt bound to accept the wife's evidence that there had in fact been complete intercourse without any contraceptive. Four years later the same plea was raised in the case of *Cowen* v. *Cowen*, when the Court of Appeal decided that insistence by one partner on the use of contraceptives against the wish of the other partner defeated one of the fundamental purposes of marriage—namely, the procreation of children—and hence afforded proper grounds for a declaration of nullity for non-consummation of marriage.

This decision has now been declared wrong in law by the House of Lords in the case of *Baxter* v. *Baxter*. In this case the husband petitioned for a decree of nullity on the ground that his wife insisted, against his will, on the use of a contraceptive; he declared that during the ten years of their married life he had persistently pleaded in vain for the abandonment of this device. His petition failed in the court of first instance, which was not satisfied that he had not in fact acquiesced, albeit unwillingly, in this practice. In the Court of Appeal a similar result followed. Both these courts were, of course, bound by the decision in *Cowen* v. *Cowen* to give the desired relief to the husband if he had been able to establish his plea of non-acquiescence, but they came to the conclusion that a reluctant acquiescence was nevertheless an acquiescence, and so disentitled him to a decree.

The House of Lords, with that refreshing habit it has so often displayed of going straight to the root of the matter, examined the nature of the marriage contract, and decided that the procreation of children was not in fact an essential part of that contract—indeed, in many marriages there can be no possibility of offspring. The Lord Chancellor quoted with approval the words used by Lord Stair in his *Institutions*, published in 1681:

"So then it is not the consent to marry; as it relateth to the procreation of children, that is requisite; for it may consist, though the woman be far beyond that date; but it is the consent, whereby ariseth the conjugal society which may have the conjunction of bodies as well as of minds; as the general end of the constitution of marriage is the solace and satisfaction of man."

The Lord Chancellor recalled that long before the passing of the Herbert Act in 1937 the practice of contraception had become widespread and that young married people often had

recourse to birth control clinics for advice on the founding of a family. When, therefore, the legislature passed that Act, including its references to consummation, it must be presumed that Parliament had it in mind that contraceptives were in common use by married persons. It would therefore not be proper to hold that a marriage had not been consummated merely on the ground that such intercourse as had taken place had involved the use of such appliances.

This decision appears to have caused some perturbation, as judged by a number of letters to the Press in which the fear is expressed that it detracts from the sanctity of the marriage contract in this Christian country. The procreation of children is certainly given prominence in the Prayer Book as one of the chief aims of marriage, but—as has been pointed out by more than one correspondent—the Prayer Book is concerned with theology rather than law. Perhaps a more cogent criticism is that if the parties enter matrimony with the avowed desire to have children, and one partner then refuses to do so, there is a breach of contract, which ought by rights to imply a release of the other partner from any obligations involved in the marriage. However, this would no doubt have the effect of reducing marriage simply to an affair in which the partners are alone concerned, whereas of course it must always be more than this—the State is vitally concerned, too, in a contract which normally has such far-reaching social consequences.

[1] *Med.-Leg. Criminol. Rev.*, 1946, **14**, 52.
[2] *Times Law Report*, Dec. 17, 1947.

Medical Notes in Parliament

THE APPOINTED DAY

The Minister of National Insurance, Mr. James Griffiths, has made two orders under the National Insurance Act, 1946, and the National Insurance (Industrial Injuries) Act, 1946, which fix the "appointed day" on which both Acts come into operation. In each case the orders were made on Jan. 13, laid before Parliament on Jan. 20, and came into operation on Jan. 23. The appointed day for all purposes of both Acts will be "the fifth day of July, 1948." The new National Insurance Scheme will thus come fully into operation on July 5, and the present National Health, Unemployment Insurance, Contributory Pensions, and Workmen's Compensation Acts will at the same time be repealed. An Order-in-Council made on Jan. 26 also prescribes July 5 as the "appointed day" for the National Health Service Act, 1946.

The 4,000 Limit

On Jan. 20 Sir ERNEST GRAHAM-LITTLE asked whether Mr. Bevan knew that the average number of panel patients on an individual doctor's list under the conditions of the National Insurance Act was 1,000 and the regulation limit 2,500; that his proposal circulated to all medical practitioners that the number of patients allowed to any one doctor under the Act could be expanded to 4,000, while the practitioner was also allowed to take private practice, would make it impossible to give any proper attention to patients; and what consultations he had before making this proposal.

Mr. BEVAN said the figures quoted did not include dependants of insured people or private practice. Sir Ernest would be reassured to know that the figure of 4,000 was accepted by the Negotiating Committee of the profession.

U.S. and Canadian Qualifications

Asked on Jan. 21 to what extent or under what circumstances colonial medical practitioners trained in the U.S.A. and Canada could not practise in British colonies, Mr. REES-WILLIAMS replied that most Colonies followed the practice of the General Medical Council of the United Kingdom with regard to the registration of qualifications obtained in the U.S.A. and Canada. Certain Canadian qualifications were registrable by the General Medical Council, but there was no reciprocity between the U.S.A. and the United Kingdom, and no U.S.A. qualifications were registrable. There was provision in the legislation of some Colonies for the registration of qualifications other than those registrable by the General Medical Council of the United Kingdom. The Secretary of State for the Colonies knew no reason why Colonial Governments generally should not continue to follow the practice of the General Medical Council, but he was considering, in consultation with the Governments concerned, the possibility of special temporary arrangements being made to permit the registration of doctors who, because of the war, studied in North America instead of in the United Kingdom, provided that their qualifications were satisfactory. Mr. Rees-Williams added that it was as important for the public in the Colonies to be protected as for the public in the United Kingdom.

Obstetric Analgesia.—On Jan. 22 Mr. SORENSEN asked for the approximate cost of simple analgesic apparatus as compared with other apparatus for a similar purpose and to what extent specialists in his department had considered the respective merits of different methods of whole or partial anaesthesia in confinement. Mr. BEVAN said he was not clear what comparison Mr. Sorensen had in mind. Portable apparatus approved for use by midwives cost £20 to £25. Midwives used apparatus and methods approved by the Central Midwives Board on the advice of the Royal College of Obstetricians and Gynaecologists. Production and distribution of apparatus were satisfactory, and 220 institutions had been approved for training.

Blood Donors.—Colonel STODDARD-SCOTT, on Jan. 22, asserted that many hospitals found it increasingly difficult to obtain blood donors for blood transfusion services. Mr. BEVAN said that apart from isolated cases he was not aware that hospitals experienced difficulty in meeting their needs. In the first three quarters of 1947 the estimated effective strength of donor panels rose by nearly 40%, from 267,000 to 369,000, and the response of donors to calls rose from 36% to 41%.

Patients Going Abroad.—Sir WALDRON SMITHERS reported on Jan. 22 that British tuberculous patients in sanatoria abroad were required to submit two doctors' certificates, a full-size *x*-ray plate, and the sum of four guineas every three months in order to apply for funds to continue their treatment. Mr. BEVAN said he was not aware of these difficulties, but would look into the position.

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

Wing Commander R. H. Winfield, D.F.C., A.F.C., M.B., B.Ch., R.A.F., will deliver a course of three lectures on "Some Effects of Polar Conditions on Man" in the Scott Polar Research Institute of the University on Fridays, Jan. 30 and Feb. 13 and 27, at 5 p.m. The lectures are intended primarily for medical students but are open to all who are interested. Admission is by ticket, which may be obtained, without fee, from the institute.

UNIVERSITY OF ST. ANDREWS

The following candidates have been approved at the examination indicated:

M.B., CH.B.—M. S. Boyd, Herta Braunova, I. A. Campbell, Margaret E. Dougall, W. B. M. Howie, I. R. Lindsay, E. M. Little, R. A. Maxwell, Rose G. Soutter, Moyra R. Treasure, J. E. H. Tullis.

UNIVERSITY OF GLASGOW

At a ceremony of graduation held on Jan. 10 the following medical degrees were conferred:

M.D.—[1]T. N. Fraser, [1]W. A. Parker, [2]A. H. Imrie, [3]N. R. Cowan, [3]T. N. Cowie, [3]W. P. D. Logan, [3]Eileen S. M. Wybar, J. Berkeley, R. J. Gourlay, D. N. Ross.

M.B., CH.B.—Joan M. S. Armstrong, J. B. Brennan, A. G. Chryssides, A. D. Craig, M. B. L. Craigmyle, J. M. Cuthill, D. E. Donald, J. A. Fergusson, A. A. Garven, I. MacD. Hall, J. Harper, J. S. H. Inglis, J. W. Junor, R. Kelly, Margaret M. Kerr, D. G. Landells, A. McCawley, K. McCreath, A. McDonald, R. L. McGhie, R. W. L. McLeish, M. C. Macnaughton, R. Mathieson, F. W. Meichen, Elizabeth McG. Miller, Mary S. Mowat, Christine L. H. Noble, J. P. Ommer, D. H. Paterson, I. T. Patrick, J. J. Pollock, D. C. T. Rankin, J. A. W. Reid, J. F. Robertson, J. W. Scott, M. Shearer, Joan M. S. Silver, D. A. Smith, Jean M. Struthers, D. R. H. Urquhart, J. G. Walker, H. W. E. White, Joan A. S. Wilson.

[1] With honours. [2] With high commendation. [3] With commendation.

UNIVERSITY OF LONDON

Bruce Arnold Dunbar Stocker, M.D., has been appointed Demonstrator in the Department of Bacteriology of the London School of Hygiene and Tropical Medicine.

The following candidates have been approved at the examinations indicated:

M.S.—*Branch III (Ophthalmology)*: P. B. Banaji, J. H. Dobree.
PH.D. (Faculty of Medicine).—R. H. Thorp.

UNIVERSITY OF WALES

The following candidates at the Welsh National School of Medicine have satisfied the examiners at the examination indicated:

D.P.H.—E. B. Meyrick, E. C. Powell, I. M. Watkin.

QUEEN'S UNIVERSITY, BELFAST

Alan Carruth Stevenson, M.D., M.R.C.P., D.P.H., Reader in Public Health in the University of London at the London School of Hygiene and Tropical Medicine, has been appointed to the newly created Chair of Social and Preventive Medicine in Queen's University.

John Edgar Morison, M.D., lecturer in morbid anatomy, has been appointed Lecturer in Pathology.

At a Graduation Ceremony held on Dec. 19, 1947, the following medical degrees were conferred:

M.D.—[1]G. T. C. Hamilton, [2]R. F. L. Logan, [2]Agnes J. A. Maybin, A. S. Boyd, W. G. F. Gibson, D. G. F. Harriman, J. Lightbody, Joan B. T. Logan, T. C. T. McFetridge, Kathleen G. McKee, I. B. Millar, T. S. Wilson.

M.B., B.CH., B.A.O.—[3]Iris Y. B. Hamilton, [2]Helen A. Lynas, [3]J. McKelvey, G. H. I. Anderson, F. S. Black, Wilmert F. I. Brown, Gladys M. Caskey, A. S. Clenaghan, S. J. Cupples, K. E. Donnan, Harriet E. Faris, J. K. Fulton, N. E. Gordon, W. J. Gourley, T. M. Hanna, T. P. Herriott, G. Hinds, T. O'H. Johnston, J. C. Keenan, D. B. Kerr, E. W. Knox, J. Kyle, J. N. Lewis, L. McArdle, J. G. McAuley, S. S. McCann, R. R. McCrea, E. P. McGrath, J. A. McNeilly, M. J. G. MacSorley, S. Mercer, R. J. Millar, T. J. M. Monteith, A. Mulholland, J. F. Mullan, Mary C. T. Mullan, T. J. M. Myles, E. J. E. Parker, B. J. Reubin, Frances L. J. Robinson, H. G. I. Shanks, H. W. H. Shepperd, H. H. Sloan, R. Stinson, E. J. Thompson, I. D. Thompson, Irene M. Thompson, J. J. Tomb, G. H. Williamson.

[1] With high commendation. [2] With commendation. [3] With second-class honours.

ROYAL COLLEGE OF PHYSICIANS OF LONDON

The Oliver-Sharpey Lectures will be delivered by Dr. J. F. Wilkinson, F.R.C.P., before the Royal College of Physicians of London (Pall Mall East, S.W.) on Tuesday and Thursday, March 9 and 11, at 5 p.m. His subject is "Concerning Megalocytic Anaemias."

ROYAL COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS

At a meeting of the Council held at the College House on Jan. 24, with the President, Mr. William Gilliatt, in the chair, W. A. Dafoe was admitted to the Fellowship, and S. J. Aptekar, S. Bender, Elisabeth McCallum, and Dorothy M. Satur were admitted to the Membership of the College.

The following candidates were elected to the Membership of the College: S. G. Aitken, S. C. Anderson, I. C. Barne, W. Barr, F. Benjamin, Margaret E. M. Boulton, J. M. Bowen, J. C. McC. Browne, E. C. Bryant, J. T. Burrowes, R. W. Burslem, Agnes U. Campbell, A. W. Chester, J. Crawford, L. A. Cruttenden, P. C. Denham, J. Dunlop, S. Evans, J. F. Foulkes, D. C. Galloway, S. F. Hans, Betty Hargreaves, J. R. Hassard, Rosa Hertz, J. B. Hurll, P. S. Jaikaran, Mary S. Jolly, E. W. Jones, M. M. Kriseman, Sylvia Lerer, Una G. Lister, Florence P. Logan, J. T. Louw, S. D. Loxton, Silvia C. Lucas, D. S. Matthews, A. M. Michalowsky, N. V. Mody, Cecilia M. Murray, G. S. Musgrove, M. J. D. Noble, K. Pasricha, R. G. Patel, A. E. Perera, P. T. Por, R. W. K. Purser, T. F. Redman, O. A. Schmidt, F. Shaw, B. H. Sheares, D. M. Sheppard, B. S. Surti, D. A. Thomson, J. G. Thurston, S. N. Upadhyay.

Medical News

N.H.S. Act Regulations

On Jan. 20 the Minister of Health laid before Parliament regulations under the N.H.S. Act governing the functions of the Regional Hospital Boards, Hospital Management Committees, and Boards of Governors of teaching hospitals. Thus the regulations confer on Regional Hospital Boards powers to enable them to guide and control the planning, conduct, and development of the services in their area; on Hospital Management Committees powers for the administration of the hospitals and services under their control; and on Boards of Governors powers for the administration of the teaching hospitals and the services provided in connexion with them. Other subjects on which the Minister has issued regulations include superannuation and the amendment of the Acts concerned with mental deficiency and mental treatment.

To Lecture in Stockholm

Dr. G. L. Brown, Director of the Physiological Department at the National Institute of Medical Research, will leave on Feb. 6 for a fortnight's visit to Sweden and Denmark under the auspices of the British Council. He will lecture on neuro-muscular transmission.

British Council Official's New Post

Dr. N. Howard Jones has resigned from the directorship of the Medical Department of the British Council and the editorship of the *British Medical Bulletin* on appointment as Chief Medical Editor to the World Health Organization (Interim Commission). The Medical Department responsibilities undertaken by Dr. Howard Jones will be temporarily assumed by the following: Directorship of the Medical Department: Dr. Margaret Suttill; Editorship of the *British Medical Bulletin*: Dr. A. Dewar Duff. During the past two years Dr. Howard Jones has combined with his other duties that of the administration of the Science Group of Departments. This responsibility will temporarily devolve upon Mr. H. R. Mills, M.Sc.

Psychiatrist Visits Scandinavia

Dr. J. R. Rees, Physician to the Tavistock Clinic and Consulting Psychiatrist to the Army, is paying a short visit to Denmark and Sweden. He will speak at meetings of the Danish Psychiatric Society and Mental Hygiene Society, both in Copenhagen. His visit is in connexion with the forthcoming International Congress on Mental Health, whose organization is entertaining him. He is travelling under the auspices of the British Council.

Leverhulme Research Fellowships

Applications are invited for Fellowships and Grants in aid of research, which are intended for senior workers who are prevented by routine duties or pressure of work from carrying out research. They are limited to British-born subjects normally resident in the United Kingdom, but in exceptional circumstances the Trustees may waive the condition as to residence. The Trustees are also prepared to consider applications from groups of workers engaged upon co-operative programmes of research, particularly from those engaged upon long-distance programmes or in institutions in which the normal facilities for research have been curtailed by the war. The duration of the awards will not normally extend over more than two years or less than three months, and the amount will depend on the nature of the research and the circumstances of the applicant. Forms of application may be obtained from the secretary, Dr. L. Haden Guest, *M.C.*, M.P., Leverhulme Research Fellowships, 7, Bedford Row, London, W.C.1. Applications must be received by March 1; awards will be announced in July and will date from Sept. 1, 1948.

Royal Medical Foundation of Epsom College

The Conjoint Committee of Epsom College will award in May an annuity of £34 to a spinster daughter of a duly registered medical practitioner. Candidates must not be less than 65 years of age and their annual income must not exceed £120, irrespective of help received from the Royal Medical Benevolent Fund. Forms of application may be had from the secretary's office, Epsom College, Surrey, and must be returned by April 17.

Bovine Tuberculosis

Under Section 20 of the Agricultural Act, 1937, the Ministry of Agriculture and Fisheries was empowered to pay cattle owners to help them eradicate bovine tuberculosis. His powers under the Act expire on Sept. 30 of this year, and therefore a Bill known as the Animals Bill has been introduced to extend the conditions of the Act for another ten years. The annual expenditure incurred is roughly estimated at £2,500,000.

Visit of Czechoslovak Doctors

Eighty Czechoslovak doctors will visit British hospitals this year to study the latest medical and surgical methods. The scheme, which has been devised through informal conversations between the Ministers of Health of Britain and Czechoslovakia, provides for the doctors' coming in succession, each spending two or three months here.

Viking Fund Award

R. E. G. Armattoe, L.R.C.P.&S.Ed., director of the Lomeshie Research Centre for Anthropology and Race Biology, in Londonderry, who has just returned from a scientific tour of Swedish centres, has been granted a Viking Fund award of some $3,000 to enable him to undertake a field trip to West Africa this year.

Freedom of Kendal

Theodore Howard Somervell, M.B., F.R.C.S., is to receive the Freedom of Kendal.

Micro-organism Collection

The Report of the British Commonwealth Scientific Official Conference recommends the establishment of an organization to be known as the British Commonwealth Collections of Micro-organisms. This organization should foster the maintenance of existing collections of cultures, make them more readily available, and establish new collections if necessary. A permanent committee should be set up in London to administer the organization.

Handbook of Birmingham

The *City of Birmingham Handbook*, which has just been issued by the City's Information Department, price 2s. 6d. (3s. post free), contains much within its 200-odd pages to interest those concerned with the health of the people, with chapters on public health, mental deficiency and mental hospitals, the school medical service, and the Birmingham Hospitals Centre. The handbook contains over 100 illustrations.

10% Illiterate

Ten out of every 100 recruits can neither read nor write, commented Field-Marshal Viscount Montgomery at Canterbury recently. He added that another 10% suffer from some physical disability.

Wills

Dr. Frederick Keiller Smith, late senior surgeon of Aberdeen Royal Infirmary, left £49,389. Dr. William Glasse Watson, of Cambridge, left £3,780; Dr. Douglas David Ritchie, of Northwood, Middlesex, £49,653; Dr. Vera Thompson, of West Hartlepool, £24,436; and Dr. Charles Philip Brentnall, of Manchester, £27,219.

COMING EVENTS

Paddington Medical Society

The Paddington Medical Society is holding two meetings in connexion with the plebiscite for the National Health Service Act. The first will be on Feb. 3 at 8.45 p.m., and will be attended by Dr. Welply, of the Medical Practitioners' Union. The second will be on Feb. 10 at 8.45 p.m., and will be attended by Dr. Macrae, of the British Medical Association. Both meetings are to be held at St. Mary's Hospital Board Room, Paddington.

Chadwick Public Lectures

The Chadwick Trust (204, Abbey House, Westminster, London, S.W.1) announces the following public lectures: Tuesday, Feb. 17, 2.30 p.m., at Royal Society of Tropical Medicine and Hygiene, 26, Portland Place, London, W., Prof. René Sand (Brussels), "How Medicine became Social"; Tuesday, March 16, 2.30 p.m., at Sir Edward Meyerstein Lecture Theatre, Westminster Hospital Medical School, 17, Horseferry Road, Westminster, London, S.W.1, J. R. Nicholls, D.Sc., "Adulteration of Food and Its Detection"; Thursday, April 15, 2.30 p.m., at Architectural Theatre, University College, Gower Street, London, W.C., Bossom Gift Lecture by Mr. Thomas Ritchie, "Sanitation of Buildings"; Thursday, May 13, 4 p.m., at University College, University Park, Nottingham, Sir Arthur MacNalty, "Advances in Preventive Medicine during the War of 1939–45." Admission to the lectures is free, without ticket.

International College of Surgeons

The 6th International Assembly of the International College of Surgeons will be held in Rome on May 16–23 under the Presidency of Profs. Bastianelli, Paolucci, and Dogliotti. Attendance is not limited to membership of the college. A special exhibition of ancient texts on surgery has been arranged. Information may be obtained from Dr. Max Thorek, 850, Irving Park Road, Chicago, 13.

Physical Education at Prague

The Seventh International Medical Congress of Physical Education will be held at Prague on July 1–5. The principal subjects to be discussed will be the physiology and pathology of physical education, and injuries caused by physical training. A course will take place during the festival of the Sokol Gymnastic Organization in Czechoslovakia. Inquiries should be addressed before Feb. 29 to Prof. MUDr. Jiri Kral, Praha II, Vladislavova 15, Czechoslovakia.

Conference on Psychosurgery

An international Conference on Psychosurgery will be held at Lisbon on Aug. 5, 6, and 7. Inquiries from those who wish to read papers or who might be present should be sent to Dr. E. Cunningham Dax, Netherne Hospital, Coulsdon, Surrey, immediately.

SOCIETIES AND LECTURES

Monday

ROYAL SOCIETY OF ARTS, John Adam Street, Adelphi, London, W.C.—Feb. 2, 4.30 p.m. *"The Metabolism of Fats."* Cantor Lecture by Prof. A. C. Frazer, M.D.

WESTMINSTER HOSPITAL SCHOOL OF MEDICINE: MEYERSTEIN LECTURE THEATRE, Horseferry Road, S.W.—Feb. 2, 5 p.m. Clinico-pathological demonstration. *"Subacute cor-pulmonale." "Parathérapeutic avitaminosis." "Dissemination of anaplastic scirrhous carcinoma of stomach throughout intestinal tract."* Discussion.

Tuesday

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—Feb. 3, 5 p.m. Pathological demonstrations. Dr. I. Muende.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHARMACOLOGY, Gower Street, W.C.—Feb. 3, 5.15 p.m. *"Symptomatic Drugs: Parasympathomimetics and Spasmolytics."* Mr. F. Bergel.

Wednesday

SOCIETY OF PUBLIC ANALYSTS.—At Chemical Society's Rooms, Burlington House, Piccadilly, London, W., Feb. 4, 7 p.m. *"The Micro-analytical Test for Purity in Food, with special reference to Cereals."* By Messrs. D. W. Kent-Jones, A. J. Amos, P. S. Elias, R. C. A. Bradshaw, and G. B. Thackray.

Thursday

FACULTY OF HOMOEOPATHY.—At London Homoeopathic Hospital, Great Ormond Street, W.C., Feb. 5, 5 p.m. *"Some Uses of Endocrine Therapy in Gynaecology."* Miss Edith M. Hall, M.D., F.R.C.S., F.R.C.O.G.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—Feb. 5, 5 p.m. *"The Seborrhoeic Dermatoses."* Dr. L. Forman.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, S.W.—Feb. 5, 4.30 p.m. *Neurological lecture-demonstration.* Dr. A. Feiling.

Friday

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—Feb. 6, 5 p.m. *"The Living Fabric: Growth, Movement and Sensation."* Dr. E. A. Underwood.

LONDON CHEST HOSPITAL, Victoria Park, E.—Feb. 6, 5 p.m. *"Laboratory Diagnosis of Bronchial Biopsies."* Dr. K. F. W. Hinson.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—Feb. 6, 8 p.m. *"The Enigma of Death."* Dissertation by Mr. A. Taylor.

WHIPPS CROSS HOSPITAL MEDICAL SOCIETY.—At Whipps Cross Hospital, Feb. 6, 8.30 p.m. *"Milestones in Medicine."* Dr. Donald MacIntyre.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Boal.—On Jan. 13, 1948, at 7, Winn Road, Southampton, to Elspeth, wife of Dr. R. Basil Boal, a son.

Daynes.—On Jan. 11, 1948, at Westminster Hospital, London, S.W., to Janifred (*née* Justham), wife of Dr. Guy Daynes, a son—Simon Timothy.

Martin-Jones.—On Dec. 10, 1947, at Salisbury, to Margaret, wife of Dr. J. D. Martin-Jones, a daughter—Gilian Elizabeth.

Proctor.—On Jan. 14, 1948, at St. Johnstoun's Nursing Home, to Jean (*née* Seaton), wife of H. Proctor, M.B., B.S., Craigour, Blair Atholl, Perthshire, a son.

Stevens.—On Jan. 20, 1948, at Middlesex Hospital, London, W., to Suzanne, wife of Dr. A. V. Stevens, O.B.E., M.C., M.R.C.S., a daughter.

Warren.—On Jan. 19, 1948, to Josephine Barnes, F.R.C.S., wife of Dr. H. B. S. Warren, of 46, Chester Square, London, S.W., a daughter.

MARRIAGE

Chase—Murray.—On Jan. 20, 1948, at St. John's Church, Edinburgh, Wilfrid H. Chase, M.A., B.Ch., youngest son of the Rev. and Mrs. F. A. Chase, of Cambridge, to Isobel J. Murray, M.B., Ch.B., elder daughter of Dr. and Mrs. W. P. Murray, of Edinburgh.

DEATHS

Berry.—Recently in Eire, Winslow Seymour Sterling Berry, O.B.E., M.B., B.Ch.

Forsyth.—On Jan. 16, 1948, Noel Constable Forsyth, M.D.Ed., of Malton, Yorks, aged 69.

Ghosh.—On Jan. 11, 1948, at Calcutta, Bimal Ghosh, M.B., aged 73.

Gordon.—On Dec. 31, 1947, at Monkseaton, Northumberland, John Miller Gordon, M.B., Ch.B., Surgeon Captain, R.N., retired.

Graham-Bissell.—On Jan. 23, 1948, at Inverness, Frederick Edward Graham-Bissell, L.R.C.P.&S.Ed., Lieutenant-Colonel, R.A.M.C., retired, of The Cottage, Ardersier.

Hendry.—On Jan. 17, 1948, at "Leysdown," Avenue Road, New Milton, Hants, Alexander Hendry, M.B., Ch.B., Lieutenant-Colonel, R.A.M.C.

Lloyd.—On Jan. 22, 1948, at 40, Harborne Road, Edgbaston, Birmingham, Bertram Arthur Lloyd, F.R.C.S., Emeritus Professor of Forensic Medicine, University of Birmingham, aged 63.

McMahon.—On Jan. 17, 1948, at Fairey Glen, Ridgeway, Newport, Monmouthshire, Thomas Browne McMahon, M.D.

Petrie.—On Jan. 16, 1948, John Petrie, M.B., Ch.B., of Crosslee, Strathaven, Lanarkshire, aged 47.

Ritchie-McKinlay.—Harold Victor Ritchie-McKinlay, L.R.C.P.&S.Ed.

Stainer.—On Jan. 23, 1948, at Sly Corner, Lee Common, Gt. Missenden, Bucks, Edward Stainer, M.D., F.R.C.P., aged 78.

Waters.—On Jan. 16, 1948, John Patrick Francis Waters, M.B., B.Ch., aged 65.

Wright.—On Jan. 22, 1948, at Summers, Bembridge, Isle of Wight, Dudley d'Auvergne Wright, F.R.C.S., aged 80.

No. 2

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Jan. 10.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever ..	60	3	18	2	1	56	7	34	2	1
Deaths		2	1				4	—		
Diphtheria	216	23	68	19	5	232	15	60	18	11
Deaths	3	1	—	1	—	2	—	—	—	—
Dysentery	114	17	17	1	—	87	11	14	—	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	2	—	1	—	—	3	2	—	—	—
Deaths		1					—			
Erysipelas			49	12	3			56	7	3
Deaths		—					—			
Infective enteritis or diarrhoea under 2 years				23					28	
Deaths	48	5	5	6	1	79	8	16	13	—
Measles*	3,746	226	1344	231	11	10,223	291	445	34	755
Deaths†			2	2	—	10	2	3	—	4
Ophthalmia neonatorum	56	3	13	—	—	74	5	14	—	1
Deaths										
Paratyphoid fever ..	8	—	1 (B)	—	—	4	—	1 (A)	1 (B)	—
Deaths	1	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal ..	975	70	5	5	13	1,264	100	39	2	8
Deaths (from influenza)‡	23	5	1	1	1	74	14	11	1	—
Pneumonia, primary ..			329	37				455	41	
Deaths	501	60		11	9		92			20
Polio-encephalitis, acute	6	—				2	1			
Deaths							—			
Poliomyelitis, acute ..	52	5	6	—	1	14	3	1	7	—
Deaths§	4	—					—			
Puerperal fever		3	10		1		3	14		—
Deaths										
Puerperal pyrexia‖ ..	108	7	16	—	—	142	12	20	—	—
Deaths		1					1			
Relapsing fever ..	—	—			—	—	—			—
Deaths										
Scarlet fever	1,525	104	307	21	45	1,058	81	266	19	33
Deaths†			—	—	—	1	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	3	—	1	3	—	4	—	—	2	—
Deaths	—	—	—	1	—	—	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough* ..	2,057	163	64	61	3	1,928	132	465	128	65
Deaths	6	—	—	1	—	9	—	3	2	1
Deaths (0–1 year) .. Infant mortality rate (per 1,000 live births)	435	47	55	33	14	533	62	91	55	20
Deaths (excluding stillbirths)	5,257	845	701	211	146	6,750	1177	860	290	155
Annual death rate (per 1,000 persons living)			14·6	13·2				18·9		
Live births	8,357	1268	1125	377	282	9,838	1552	1223	467	298
Annual rate per 1,000 persons living ..			22·7	23·6				24·6		
Stillbirths	225	34	28			272	47	47		
Rate per 1,000 total births (including stillborn)			24					37		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Poliomyelitis

Notifications of poliomyelitis for the week ended Jan. 17 were 47 (52) and of polio-encephalitis 2 (6). Figures for the previous week are shown in parentheses. The fall in notifications now seems to be going on very slowly, and the figures are high for this time of the year.

Discussion of Table

In *England and Wales* large decreases in the number of notifications of measles 744, scarlet fever 261, acute pneumonia 123, and paratyphoid fever 31 were recorded. The only diseases showing an increased incidence were whooping-cough 166 and dysentery 28.

Although the total notifications of measles declined the incidence in a number of counties continued to rise or remained at the level of the preceding week. The largest rises in the notifications of measles were Northumberland 48, Kent 30, and Middlesex 35; the largest falls were Durham 117, Lancashire 87, Monmouthshire 85, Sussex 65, Northamptonshire 48, and Derbyshire 58.

A small decline in the notifications of scarlet fever occurred in most areas, but only in one county was a large fall recorded, that of Lancashire 50. The incidence of acute pneumonia declined in all regions except the West Midlands and Yorkshire.

The local trends of whooping-cough fluctuated. The largest increases in incidence were Yorkshire West Riding 99, Essex 33, and London 28; the largest decreases were Lincolnshire 27, Kent 25, and Glamorganshire 25. The only change of any size in the local returns of diphtheria was an increase of 11 in Staffordshire.

Of the 8 cases of paratyphoid 7 were notified from the outbreak in Suffolk, where 12 and 21 cases were notified in the preceding two weeks. The largest rise in the incidence of dysentery was in Kent, where the cases notified rose from 4 to 19 (Tenterden R.D. 15). The other large returns of dysentery were Lancashire 20 (Liverpool C.B. 7); London 17 (Lewisham 11); Glamorganshire 13 (Pontypridd U.D. 11); Surrey 12 (Woking U.D. 8); and Yorkshire West Riding 11.

Notifications of acute poliomyelitis fell by 7. Multiple cases of poliomyelitis were notified in Gloucestershire, Bristol C.B. 3; Warwickshire, Birmingham C.B. 3; London, Kensington 2 and Lambeth 2; Cornwall, Penzance M.B. 2 and St. Germans R.D. 2; Middlesex, Ealing M.B. 2 and Heston and Isleworth M.B. 2; and Essex, East Ham C.B. 2.

In *Scotland* there was a rise in the notifications of most infectious diseases, including measles 1,181, acute primary pneumonia 45, whooping-cough 44, and diphtheria 37. Measles has reached epidemic proportions in Glasgow, where 1,206 cases were notified to the Public Health Department. Notifications of diphtheria increased throughout the country; the largest rise was 17 in Glasgow.

In *Eire* an increase was recorded in the incidence of measles 57 and diphtheria 9, while a decrease was reported for scarlet fever 21 and diarrhoea and enteritis 13. The largest returns for measles were Dublin C.B. 112; Dublin, Dun Laoghaire U.D. 27; Wicklow, Rathdrum R.D. 15.

In *Northern Ireland* the notifications of scarlet fever increased by 11 while cases of measles fell by 12. The rise in the incidence of scarlet fever was mainly due to the experience of Belfast C.B.

Quarterly Returns for Northern Ireland

The birth rate during the September quarter was 22.4 per 1,000 and was 0.7 below the average for the third quarters of the five years 1942–6. The infant mortality was 42 per 1,000 registered births and was 17 below the five years' average for the third quarters. Maternal mortality was 1.6 per 1,000 births, being 1.3 below the average for the corresponding quarters of the five preceding years. The general death rate was 9.8 per 1,000, the same as the rate for the September quarter of 1946 but 0.8 below the five years' average. Deaths under two years attributed to diarrhoea and enteritis numbered 67. Deaths from pulmonary tuberculosis were 169 and there were 48 from other forms of tuberculosis; these were 24 and 12, respectively, below the five years' average.

Week Ending January 17

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,754, whooping-cough 2,343, diphtheria 203, measles 3,304, acute pneumonia 787, cerebrospinal fever 47, acute poliomyelitis 47, dysentery 96, paratyphoid 4, and typhoid 2.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Posture in Diphtheria

Q.—*During the past three years I have seen some fifty children suffering from diphtheria in Malta, both in hospital and in their homes. I have been struck by the position commonly assumed by these patients—chest down with knees flexed, both hips unequally flexed and abducted, elbows flexed, and shoulders abducted to above 90 degrees. The face looks to the side but the patient keeps turning his head restlessly from side to side. He creeps to the corner of the bed nearest to the door or window, to which his head is directed. Has this posture been noted in the cooler climate of Britain, and, if so, is it considered to be of any therapeutic value?*

A.—The stage of the disease at which this position was observed is not mentioned, nor whether the patients were suffering from a hypertoxic form of diphtheria. The position described is one of general weakness and lethargy produced, in this disease, by toxaemia or circulatory failure. It would be assumed (*a*) by a patient in the early acute stage suffering from severe toxaemia which had been only partially neutralized by antitoxin, and (*b*) by a patient in the late second or third week suffering from circulatory failure or cardiac weakness. It should be remembered that diphtheria toxin always has a depressant effect. Hot weather would be a predisposing factor. The position has no particular therapeutic value, except that it is the position of ease, but it should be varied frequently by the nurse in order to avoid injury to the skin over pressure points.

Radon Ointment

Q.—*How is radon ointment prepared, and in what type of case is it used?*

A.—Radon is soluble in petrolatum, and radon ointment is prepared by permitting radon to dissolve in petrolatum made liquid by warming at 60° C. The steps in its preparation are in principle as follows, although the technical details are somewhat complicated: (1) Sterile petrolatum is introduced into a tooth-paste tube and the folding end sealed off. (2) A capillary tube containing somewhat more than the desired amount of radon is broken under such conditions that the molten petrolatum can absorb the radon. The conditions vary according to the apparatus used, but the proportion of the radon absorbed can be read off from a graph plotting absorption against time for the apparatus used. About 70% is absorbed in three-quarters to one hour. (3) The stopper is then screwed on to the tooth-paste tube, after the latter has been unscrewed from the capillary, and the screw joint sealed with rubber solution. The radon ointment is then ready for dispatch. The concentration ranges from 0.1 to 0.5 mc. per ml.

The use of radon ointment for treating radiation necrosis was described by Uhlmann (*Radiology*, 1942, **38**, 445). The principle is to apply the radon ointment to the area to be treated and prevent the radon from diffusing into the air by applying an airtight covering. Uhlmann used rubber or oilcloth sealed at the edges with plaster strapping for eight hours. The writer uses cellophane sealed with collodion, and leaves the ointment in place for two days. The application is repeated weekly up to ten or twelve times if necessary. In the intervals suitable bland or specific antiseptic dressings are used. The depth of radiofibrosis under the necrotic ulcer, which will depend on the technique of radiation used, determines the persistence needed in treatment to effect healing of the ulcer. The sloughing floor of the ulcer is gradually removed by the action of the radon ointment until granulation tissue appears, followed by epithelization.

It seems likely that the radon diffuses into the slough, which is as a consequence subjected to an intense alpha radiation, which acts as a cauterizing agent. The radon will diffuse through the sloughing and fibrotic tissue to tissue with a blood supply. In tissue with a blood supply, however, the radon will be carried away from the region by the blood stream and exhaled in the breath. Thus the radon ointment will cauterize only the tissue with a blood supply which is too poor to carry away the radon gas. In this way it seems likely that the radon acts as a microcautery affecting only the ischaemic tissue and leaving practically undamaged the normal tissue which it reaches.

Syringomyelia

Q.—*I have a case of syringomyelia in a man of 47, whose chief complaint is pain and rigidity in his thighs and inability to extend the knees. He has had two courses of x-ray therapy: the first led to improvement in the movement of his arms, but the second, applied lower down, has not much improved the legs. He has had physiotherapy to his legs; he has also taken pethidine, and latterly tablets containing belladonna alkaloids. These drugs have given only temporary relief. Is there anything else I could try?*

A.—No medical remedy is known which can relieve the symptoms of syringomyelia. It is possible, of course, that some of the troubles in the lower limbs may be due to spinal compression, the result of an unusually large intramedullary cavity. Should neurological testing confirm this suggestion, surgical treatment—that is, myelotomy—might lead to improvement.

Smoking and Peptic Ulcer

Q.—*A lecturer in the United States is reported to have said that any patient with gastric or duodenal ulcer should be instructed: "You must not smoke for the rest of your life." Are such unequivocal statements usual in Britain, and, if not, why not?*

A.—Clinical evidence points clearly to an aggravation of the pain of peptic ulcer by smoking. Furthermore, this is pronounced when the stomach is empty and absent when it is full. It seems probable that smoking is a factor leading to heightening of the morbid process by nicotine; no experiments have, so far as the writer knows, been carried out with the many other irritants of tobacco smoke in relation to peptic ulcer. The physician who is impressed by symptomatology will forbid smoking either entirely or, if he knows the patient to be strong-willed, will limit it to the half-hour following a meal. A lecturer who thinks that animal experiments form the road to truth will permit his ulcer patients to smoke and thus encourage relapse. See also a more general answer on the effects of tobacco (1947. **1**, 166).

Muscular Relaxation during Anaesthesia

Q.—*What is the physiological reason for muscular relaxation during surgical anaesthesia?*

A.—By "muscular relaxation during surgical anaesthesia" is meant a state in which the muscles are both toneless and quiescent, with no reflex response to strong stimuli from the operation area. In the case of abdominal operations, these stimuli include the cutting of the skin, retraction of the muscles, and handling of the peritoneum and viscera. In addition the anaesthetic may give rise to stimuli affecting the larynx. This inactivity of the muscular reflexes is produced by the effect of the general anaesthetic on various parts of the brain, chiefly the cerebral cortex and the nuclei of the cranial nerves, and on the spinal cord. In the case of certain anaesthetics—notably ether—the muscle fibres themselves are affected, their elasticity and irritability being reduced or obtunded. At any time during anaesthesia, anoxia, if present, will increase the depression of the brain and cord and further heighten the effect of the general anaesthetic.

"Prostigmin" in Rheumatoid Arthritis

Q.—*I have read glowing accounts in the lay press on the effect of prostigmin in rheumatoid arthritis. Is a trial justified? Are there any contraindications? What dosage is advised?*

A.—Prostigmin has been advocated in the treatment of rheumatoid arthritis because it relaxes muscle spasm and thus prevents painful contractures, or relieves them and so helps to correct malposition, which permits of better positions for

the application of splints. This effect is most probably due to its action on the neuromuscular junction. Overdosage may give rise to dizziness, fibrillation of the facial muscles, salivation, intestinal cramps, or bradycardia, and to lessen these effects it is usual at the same time to give atropine, which also tends of itself to relieve spasm and may be responsible for some of the effect. In the hands of the writer it has proved disappointing, and thus far evidence of any favourable effect on the progress of the disease itself is lacking, but this need not deter a trial in suitable cases. Subcutaneous administration is the most effective, but the drug is usually given orally in rheumatoid arthritis. Tablets containing 15 mg. of prostigmin bromide and also ampoules are marketed, and with each dose a tablet of atropine sulphate should be given or an equivalent amount of tincture of belladonna. A daily dose of prostigmin is generally enough, but it may be prescribed two or three times a day for short periods, or an initial dose may be given subcutaneously followed by oral administration.

Repair of Cleft Lip

Q.—*A child aged 6 had a right-sided cleft-lip repaired when she was 6 months old. The palate was not involved; the alveolus only to the extent that the second right incisor has erupted sideways. The scar is now outgrown by the surrounding tissues and distortion is taking place. What is the optimum age at which further plastic procedures should be undertaken? Will one operation be enough, or would it be better, from the final cosmetic point of view, to have a series of operations at intervals until she has reached adult life?*

A.—Some secondary trimming is nearly always indicated in cleft-lip cases. This is best postponed until the child is 10 or 12 years old. A properly designed operation at that age should give an excellent permanent result, as a good scar grows with its surroundings. If, however, the present deformity is sufficient to make the child self-conscious, repair could be undertaken at once, with the prospect of a good cosmetic result which would not require anything further.

Thyroidectomy and Urticaria

Q.—*Is there any connexion between thyroidectomy and recurrent urticaria? Two months after subtotal thyroidectomy a patient aged 30 began to develop recurrent attacks of urticarial eruptions. Is this an unusual phenomenon or not? How are the two related, and what is the best line of treatment?*

A.—This association has been described previously and is not rare. The role of the thyroid gland in urticaria has been the subject of speculation and controversy for many years, and the exact relationship is still not known. If there is clinical evidence of thyroid dysfunction, preferably confirmed by estimation of the basal metabolic rate, then appropriate therapy is indicated. If the urticaria persists search should be made for a focus of infection or a drug or food allergen, while symptomatic relief can be obtained with "benadryl" or "anthisan." Other forms of therapy such as calcium, autohaemotherapy, vitamin K, etc., may be tried.

Enuresis

Q.—(*a*) *Can ephedrine, gr. 1/4 (16 mg.), be continued indefinitely to control enuresis in a boy of 13?*

(*b*) *What types of nocturnal enuresis should be submitted to urethroscopic investigation and treatment, and is the value of the procedure generally accepted and likely to be profitable in a fair proportion of cases?*

A.—(*a*) Yes, ephedrine, gr. 1/4, may be given indefinitely to a boy of 13 years, as is often done in asthma. However, it would surely be wise to see whether a dummy tablet containing lactose would not be equally effective after some time.

(*b*) Only those cases of nocturnal enuresis which have failed to improve under the usual treatment need be submitted to cystoscopy and urethroscopy. It is in the writer's view exceptional for enuresis to be caused by a urethral or bladder lesion, but there are those who think differently and who relate the trouble to minor changes in the appearance of the posterior urethra. Enuresis is much more likely to yield to psychological treatment than to treatment of the posterior urethra.

Bad Taste during Pregnancy

Q.—*Is a persistent bad taste in the mouth common during pregnancy? In the cases I have in mind there is no oral sepsis, bronchiectasis, or alimentary disease to account for it. Excessive salivation is also present, but does not appear to affect this taste. How can this condition be relieved?*

A.—A bad taste in the mouth, like various perversions of appetite, is not uncommon in pregnancy. Such symptoms, as well as excessive salivation, nausea, and vomiting, are reactions to the pregnant state, but the mechanism whereby they arise is unknown. Achlorhydria appears to be a factor in some cases of alimentary upset. Treatment of these cases is empirical, and except for nausea and vomiting is mostly unsatisfactory. Among the remedies which might be tried in this case are:—ac. hydrochlor. dil., or alternatively various alkaline mixtures or powders; astringent mouth washes; a simple diet; attention to bowels; calcium gluconate; vitamin B complex; and belladonna or atropine. Following a previous answer to a question on ptyalism in pregnancy (1945, **1**, 543) one correspondent (1945, **2**, 414) suggested treatment with 20 drops of 25% benzyl benzoate in 90% alcohol taken in water every two hours for three doses, and then four-hourly, while another (1945, **2**, 108) had found thin slices of lemon held in the cheek successful in some cases.

Persistent Hiccup

Q.—*What treatment is suggested for persistent hiccup?*

A.—Persistent hiccup is often most resistant to treatment and when of long duration a neurological or general cause should be suspected. In some instances the disturbance is psychogenic and it often ceases while the patient eats. Inhalations of 5% carbon dioxide are often effective and many patients have obtained relief by rebreathing the contents of a paper bag. Atropine in large doses arrests the condition in others. Traction on the tongue, pressure on the eyeballs, mechanical dilatation of the oesophagus, and firm pressure on the ribs at the level of the diaphragmatic attachments have all been successful. Some experienced practitioners are firm believers in the efficacy of pineapple juice.

Taking Blood for a Wassermann Test

Q.—*In taking blood for Wassermann tests, is it adequate to rinse the dirty needle and syringe through saline and then through acetone, and can the same needle be used for the next patient?*

A.—It has been shown that repeated washing out with ether and/or spirit will not sterilize a syringe, and it is most unlikely that acetone would have any better effect. If sterilization by heat is impracticable, why use a syringe at all? In most patients, when taking blood for a Wassermann test it is enough to insert a needle into a distended vein and let the blood run into a tube. It should not be too difficult or expensive to acquire a sufficient stock of needles (which can be sterilized in batches by dry heat) so that a separate one can be used for each patient.

Ethyl Alcohol Levels

Q.—*What is the significance of ethyl alcohol in the urine? Is 0.288 g. per litre an excessive amount?*

A.—The investigation of alcohol in the urine has been found to be less satisfactory than that of alcohol in the blood. The observations of Balthazard, Gerant, and others show the concentration in the urine to be higher by a third than that of the blood. 0.288 g. per litre is not an excessive amount. It would merely indicate that alcohol had been taken and would not determine the clinical effect on the individual. The committee on tests for intoxication set up by the National Safety Council (Chicago, 1939) has published a report which states: (1) A person having a concentration of alcohol lower than 0.5 per 1,000 in weight in the blood or its equivalent in the urine, saliva, or breath would not be charged with being under the influence of alcohol. (2) A person with a blood concentration higher than 1.5 per 1,000 would be considered as being under the influence of alcohol. (3) A person having a concentration between 0.5 and 1.5 per 1,000 would be proceeded against only when the circumstances and medical examination

gave a definite confirmation that he was under the influence of alcohol. A complete review of the problem of alcoholic intoxication by Louis Truffert may be found in the *Annales de Médecin Légale*, October, 1941.

Myxoedema

Q.—*What is the explanation in a case of myxoedema, controlled by gr. 3 thyroid extract daily, of the fact that any diminution of this dose is followed by headaches. Is any other treatment indicated? In such cases can anything be done to stop the hair falling out?*

A.—The writer of this reply can only speculate on the first part of the question. Headaches are associated with overactivity of the pituitary gland, such as that following surgical excision of the ovaries, or physiological castration such as occurs at the climacteric, and abolition of the excess of pituitary gonadotrophic hormone by oestrogens causes cessation of the headaches. It is possible that the withdrawal of thyroid in myxoedema causes excessive secretion of thyrotrophic hormone and overactivity of the pituitary, which may or may not be associated with excess of follicle-stimulating hormone; the latter has been recorded after experimental thyroidectomy. Thyroid gr. 3 (0.2 g.) might be the correct dose in this case, and this could be ascertained by basal metabolism and cholesterol estimations. If less than this dose results in hair falling out, additional thyroid is the logical treatment, and oestrogens locally or generally might be an adjuvant.

NOTES AND COMMENTS

Fitness for Work in Compressed Air.—Mr. ROBERT MILNE (London, W.1) writes: In "Any Questions?" (Jan. 10, p. 85) there is a reference to fitness for work in compressed air. Whilst in agreement with the advisability of a complete medical examination, there are two points which I would like to emphasize. The hazards of work depend on the rapidity of decompression, and the pressure under which the workmen have been employed comes into the picture only because the higher the pressure the longer will decompression take. The other point is that these workmen are agreed that some men are more susceptible to "bends," etc., than are others, and this lay view is borne out by tests in the experimental chamber of Air Force candidates in this country and in America. Without assuming that decompression from two or three atmospheres is exactly the same as decompression from ascending in an aeroplane, there does seem to be a definite susceptibility in some people. If a man, therefore, were destined for work in compressed air one would suggest that, in addition to the ordinary thorough medical examination, tests be carried out in an experimental chamber. It would seem that in this way men who were unduly susceptible could be weeded out.

Constipation in an Infant.—Dr. JOAN MALLESON (London, N.W.1) writes: I am in agreement with Dr. Ann Mower White in criticizing (Jan. 3, p. 34) the advice given (Nov. 29, 1947, p. 896) to treat a constipated baby by mechanical measures. The insertion of soap sticks can cause intense pain, and an infant so treated tends to protect himself by screaming and throwing himself into opisthotonus. This "conditioning" to expect pain may have the gravest consequences in later life, and appears to be the basis of many sexual neuroses, including severe psychogenic vaginismus. Details of a number of cases are given in an article I wrote which appeared in the *Journal* of Aug. 22, 1942 (p. 213). In a series of 150 cases of vaginismus well over 35% gave, on questioning the patients' mother, some history of painful manipulation of the rectum (either for threadworms or constipation) or more rarely of the urethral or genital areas. The younger the infant at the time of the trauma the more indelible the effect appears to be. It is now understood that in infancy any part of the cloacal mucosa is intensely sensitive to pleasure and pain, so that all manipulations should obviously be reduced to a minimum. Case histories are on record where the frequent giving of rectal suppositories, or the taking of rectal temperatures, have conditioned male children to becoming passive homosexuals. It would seem, therefore, quite unjustifiable to risk disturbing an infant in these ways, and this old-fashioned nursery practice should surely be condemned.

Intractable Tinnitus.—Dr. J. FREEMAN (London, W.) writes: With reference to the question and answer on intractable tinnitus (Jan. 3, p. 34) the probability of Costen's syndrome as the cause may have been overlooked. This is the train of symptoms associated with the dysfunction of the temporo-mandibular joint resulting from a loss of molar support or disturbance of occlusal balance, bringing about a relaxation of the soft tissues in which the Eustachian tube is invested. Further, the head of the condyle intruding into the glenoid fossa involves the tympanic structures. The relaxation of soft tissues (tensor palatine muscle and upper head of the external pterygoid muscles) causes occlusion of the tube, with the classic symptoms of tinnitus. Other symptoms, not all concurrent, are trismus, glossodynia (burning tongue), and neuralgia. Several cases have been published recently in the *American Dental Journal*, and complete cures effected by construction of dentures to restore molar support—i.e., full vertical dimensions or opening of "closed bite." For patients who have their teeth occlusal splints are indicated.

Dr. C. J. SCOTT (London, E.) writes: With regard to the reply to the sufferer from intractable tinnitus (Jan. 3, p. 34), he may obtain some relief from the following treatment, which I have been using at my clinic on similar cases. The level of the tinnitus is estimated on the "puritone" audiometer, and the affected ear is subjected to this tone at an 80-decibel level for 10 minutes twice a week. After the first few treatments the tinnitus is usually relieved for a few hours, and in six to eight weeks it generally disappears. I have carried out this treatment in only a few cases, but it has been more successful than treatment by sedation. The object is to exhaust the cochlear level of irritation.

Enuresis in Young Adults.—Dr. J. K. PAMEIJER (Utrecht, Holland) writes: After reading the question and answer about enuresis in young adults (Dec. 20, 1947, p. 1016) I want to bring the following to your knowledge, as I do not agree with the hopelessness of these cases. My future father-in-law, Colonel C. van Luijt, surgeon at the Military Hospital at The Hague, successfully treated a number of ten patients during the last five years with epidural injections of 5 to 10 ml. (depending on the age) of 1% "novocain." The longest period of control is 3 years; this patient is now 20 years old. Never have more than 3 injections been given; in every case improvement was found after the first injection; enuresis never came back after the last one. Of course neurological and urological examination should be negative and the injections must be given by a surgeon. The patients concerned were met by Dr. van Luijt in his private practice, 10–20 years of age, and consulted him for appendicitis, hernia, etc. The enuresis was an accessory complaint and had been treated before by other specialists without success. This treatment is not generally known in Holland, and I could not find out about the physiological or pharmacological explanation in the medical literature. I should be obliged to hear your judgment.

British Diaries.—Prof. WILLIAM MATTHEWS (c/o 21, Palace View, Shirley, Croydon, Surrey) writes: I am compiling an annotated bibliography of British diaries. The work on printed and manuscript diaries in British and American libraries is complete; but some English scholars have suggested that I should add privately owned diaries. May I appeal to your readers, therefore, to send me the following details of any privately owned diary which seems to have scholarly or general interest: (1) the diarist's full name, dates, abode, and occupation: (2) the beginning and the end dates of the diary, and two or three lines characterizing its chief contents and interest; (3) its page length; (4) the name and address of the owner?

Books for Democratic Germany.—A number of German scientists, scholars, and artists have formed the Cultural League for Democratic Regeneration. It is a non-party organization and in great need of support from the democratic world outside Germany. The Dusseldorf branch of the Cultural League wishes to set up a research library to enable Germans to learn of the progress of science and art in all countries. Gifts of money, books, and music of a scholarly nature would be deeply appreciated. Mrs. Naomi Mitchison, Dame Sybil Thorndike, Mr. R. Vaughan Williams, and Prof. C. L. Wrenn appeal for them to be sent to the British Council for German Democracy, c/o Notable Press Limited, Bishop's Bridge Road, London, W.2, labelled Dusseldorf Research Library.

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British Medical Association

PROCEEDINGS OF COUNCIL

Wednesday, Jan. 21, 1948

A LEAD TO THE PROFESSION

A meeting of the Council of the Association was held on Jan. 21, with Dr. H. Guy Dain in the chair. Forty-six members were present.

Preliminary Business

The deaths of four former members of Council were reported, and the Chairman was authorized to forward letters of condolence to their families.

A letter was read from the Home Secretary conveying the sincere thanks of Their Majesties for the loyal and dutiful address on the occasion of the marriage of T.R.H. the Princess Elizabeth and the Duke of Edinburgh.

The Council extended its congratulations to 45 members of the Association whose names appeared in the recent Honours List.

Representatives of the Association on a number of outside bodies and delegates to forthcoming conferences were appointed.

An invitation was received from the General Secretary of the Federal Council of the B.M.A. in Australia to send a representative to the Australasian Medical Congress (B.M.A.) to be held at Perth, W.A., in August, 1948. The Council received the invitation with pleasure; the President (Sir Hugh Lett) and other members spoke of the importance of sending someone who could fully represent B.M.A. ideals, and the matter was referred to a committee to suggest a name or names to a later meeting.

The National Health Service and the Plebiscite

Dr. Dain, as chairman of the National Health Executive Committee of the Council, reported that the Special Representative Meeting had approved the form of plebiscite, and arrangements were in hand for its issue to every member of the profession at the end of the following week, and for the subsequent counting, auditing, and classification of the returns. The Hollerith system would be used for this last purpose. At the meeting of the Executive on the previous day it was decided that a letter from the Council should go out to the whole profession, giving a clear lead, to be signed by the Council members. A document called "Some Practical Questions Answered" would also be issued to every practitioner.

The letter which was proposed to be sent out was placed before the Council, and after some slight verbal amendment was adopted as follows:

To every Member of the Medical Profession:

We are now on the eve of a decision of the profoundest importance to the public and to the medical profession. For years the British Medical Association has been working for the extension, improvement, and consolidation of the country's health services, publishing its constructive proposals in a series of reports. It is now confronted with an Act of Parliament directed to the establishment of a comprehensive health service but embodying forms of organization which are in conflict with the principles of the profession. The conflict is based on the profession's conviction that the Act leads unmistakably towards a whole-time State medical service, and that such a service would be harmful to medicine. This conviction is strengthened by the knowledge that the Act of 1946 is in the hands of those who profess as their objective a whole-time salaried State medical service. We have sought a number of changes, some of principle, some of detail. The answer has been a refusal to modify one word of the Act. The Council recognizes that some points of the profession's case make a stronger appeal to some members of the profession than to others. But it firmly believes that, viewed as a whole, the Act in its present form is in conflict with the best interests of the community and the profession.

After years of discussion the time has come for the profession to translate words into action. The issue is one not of money or compensation but of the intellectual freedom and integrity of a great profession. The Council of the Association will abide by the result of the plebiscite, as defined on the plebiscite form. It would be lacking in its duty, however, if it did not make abundantly clear to every member of the profession its carefully considered and determined view that the profession should not take service under the Act in its present form.

On the question whether this should be signed by the individual members of the Council or only by the Chairman on behalf of the members, 39 voted in favour of the former course and 7 in favour of the latter. The letter was then signed by the individual members, and it was intimated that it would be sent for signature to the few members who were absent.

Discussion took place on the question of continued membership by members of the profession on Regional Hospital Boards and Local Executive Councils, and by a large majority it was resolved to recommend to the Representative Body that such members be requested to continue their membership for the present.

The Secretary stated that the first announcement of the result of the plebiscite would be made at the special meeting of Council called for Feb. 18, three days after the plebiscite had closed. The Council would publish the result and make a report to the Divisions, which would be asked to instruct representatives for the final decisions to be taken at the Representative Meeting called for March 17.

Dr. E. A. Gregg, in reporting for the Insurance Acts Committee, mentioned the lead given by that committee to insurance practitioners in the statement published in the last *Supplement* (p. 15).

The Council returned to its ordinary business. Reports from as many as thirty standing and special committees were on the agenda.

Organization

Dr. J. A. Pridham, chairman of the Organization Committee, brought forward a recommendation that approval should be given to the establishment of a Group of Otolaryngologists in the Association. A petition for the formation of such a group had been signed by 39 members engaged in that specialty. The recommendation was approved.

He also reported that the membership of the Association on Dec. 31 last stood at 57,719, as compared with 54,175 at the

corresponding date in 1946. The percentage of the working profession—that is, excluding the retired—in the United Kingdom who were members of the B.M.A. was 77.4. It was stated that the number of resignations during the period under review was below the average; such resignations as there had been were mostly due to retirement from practice, and very few arose out of disagreement with policy.

The Council approved an alteration of articles of the New South Wales Branch, the result of which was to bring the articles more into consonance with those of the parent Association.

Dr. Pridham added that his committee had given further consideration to the formation of regional consultant and specialist committees and to the establishment of a Hospitals and Specialist Services Committee in place of the existing two committees of the Association. The provisional proposals would be submitted to a meeting of representatives of the various hospital staffs associations.

Dr. H. R. Frederick, for the Welsh Committee, detailed some highly successful steps taken to reawaken interest in an inactive Division.

Consultants and Specialists

Mr. A. M. A. Moore, for the Consultants and Specialists Committee, brought forward a recommendation that steps be taken to secure the adoption of a revised scale of fees for medical referees under the Workmen's Compensation Acts. The proposed fees were in general double those now obtaining, but it was recommended that when a medical referee sat as assessor with the judge of a county court he should be paid 20 guineas a day, or 10 guineas a half-day, irrespective of the number of cases. The recommendations were agreed to.

On a further matter appearing in the report of this committee Mr. Lawrence Abel drew attention to a definition of "consultants and specialists" by the Consultant Services Committee in suggesting the factors which should govern the organization of a permanent representative machinery for these branches of the profession—namely, that the regional consultants committee should be "elected by all members of hospital staffs." Mr. Abel pointed out that the Association had never defined "consultants and specialists," and now there appeared this definition. The matter certainly wanted clearing up.

The Secretary said that the object was not to define consultant status but to secure that there was within the Association's machinery a regional committee representative of those who were in contract with Regional Hospital Boards.

Dr. S. Wand, chairman of the General Practice Committee, brought forward a revised statement of evidence on the question of the fees payable to medical witnesses in civil courts, for submission to the committees on procedure in the High Court and County Court. The statement, which had been revised in the light of observations by the Consultants and Specialists Committee, related to the minimum fees recommended for specialists appearing in court. The statement was approved.

Industrial Medical Officers

Dr. Vaughan Jones brought forward a further report from the Industrial Medicine Committee concerning the salaries of whole-time industrial medical officers. The Council had already agreed to proposals concerning the range of commencing salary for a whole-time officer and the minimum commencing salary for an assistant, but the question of scale of increment had been left undetermined. The committee felt that the system of scale of increments in the Public Health Service was not readily applicable to the case of industrial medical officers for various reasons, the first of which was that the Public Health Service was well established and the holding of the D.P.H. was a necessary criterion for entry, whereas the industrial medical service was young and the majority of industrial medical officers held no equivalent diploma. The development of the service was largely dependent upon the financial ability of private undertakings. But while the committee felt that no step should be taken which would prejudice the development and expansion of the industrial medical service, this did not mean that the officers should not look forward to regular increments and to periodical review of salary. The committee therefore made a recommendation in that sense, and this was agreed to by the Council.

The Question of Compensation for Part-time Public Assistance Medical Officers

The National Assistance Bill will enable the Minister of Health to make regulations for payment of compensation in respect of loss of employment to persons in such full-time work as may be prescribed. Part-time public assistance district medical officers whose appointments become redundant are therefore not provided for.

Dr. J. A. Ireland, chairman of the Special Committee on the National Assistance Bill, said that there were two types of appointment with which his committee was concerned, one being the permanent appointments in respect of which security of tenure was given under the Public Assistance Order, 1930, and the other the appointments nominally temporary which were of such long standing as to have taken an element of permanence. The committee's view was that officers in the former category had a particularly sound case for compensation and that those in the latter had also a claim.

The feeling of the Council with regard to the second category was that the legal difficulty that the appointments were temporary in character could not be set aside, but that those in the former category—very few in number—had a clear case. It was stated that the matter was being brought before the Parliamentary Medical Group.

Scottish Business

Dr. G. MacFeat, chairman of the Scottish Committee, brought forward a recommendation that as a temporary measure, and without prejudice to subsequent adjustment, the scale of fees for reports required by procurators fiscal which had been proposed by the Crown Office should be accepted, subject to the substitution of a fee of five guineas for the three guineas offered for a post-mortem examination.

This was agreed to.

Authority was given for the calling of a conference of representatives of Scottish Divisions previous to the Special Representative Meeting to be held in March. Dr. MacFeat said that the Scottish Act differed in some respects from the English Act, and Scottish conditions of practice had certain divergences from English, so that it was felt desirable that there should be some talk amongst Scottish representatives, especially in view of the fact that a number of them would not be able to attend the London meeting. He added that there could be no question of Scotland expressing any contrary views on matters which related to both countries.

Operation of the Coroners Acts

Dr. R. Forbes, chairman of a special committee which was appointed to review and report on the working of the Coroners Acts, with special attention to the difficulties attendant upon existing facilities for pathological examinations, the fees payable to practitioners as witnesses, and the experience of the profession in carrying out the directions of the coroner, introduced a report containing a series of recommendations. He said that at one time it looked as if the committee, which included three members nominated by the Coroners Society, would not reach agreement, but in the end it was able to present an agreed report, offering criticism of the working of the Coroners Acts and proposals for their amendment. The report also set out the obligations of practitioners with regard to coroners, which would be of considerable value to the profession, not all of whose members were fully informed on that subject. One of the recommendations, which was agreed to, was that a consultative committee—a permanent body to be called upon when required—comprising representatives of the Registrar-General, the Ministry of Health, the Home Office, the Coroners' Society, the British Medical Association, and the professional defence organizations should be established to consider generally matters affecting the duties of coroners.

Several recommendations dealt with mortuary accommodation and pathological facilities, and one of them, which laid it down that in general the local hospital mortuaries should not be used for necropsies undertaken at the request of the coroner, was objected to by Mr. Dickson Wright, who said that in general facilities at hospital mortuaries were better than at coroners' mortuaries. In answer to this objection it was pointed

out that in not a few cases the hospital itself was involved in the matter under inquiry, and that it would be desirable to have the examination conducted away from the hospital and not by the hospital pathologist. The recommendation of the committee was accepted.

Another recommendation which caused discussion turned on the necessity of furnishing a copy of the report of the examining practitioner to the practitioner last in attendance on the deceased. The recommendation of the committee was that "where the practitioner in previous attendance so requested" the report should be furnished, and some members urged that such reports should be furnished as a matter of routine. Dr. Forbes said, however, that the coroners on the committee had informed them that often it was not discoverable what practitioner was last in attendance, and that the coroners could not assume the responsibility of issuing these reports without formal request. The same consideration applied to the notification to the practitioners in previous attendance of the date, time, and place of the necropsy. The recommendation included the words "wherever practicable."

A recommendation which was agreed to by the Council on a majority vote was that in the inquest on a suicide the Press should be prohibited from publishing an account of the proceedings, and should be permitted only to publish the fact that an inquest had been held, the name and address of the deceased, and a verdict that the deceased died by his own hand.

The recommendations included a scale of fees for making examinations and giving evidence, and also proposed that the fees payable to medical practitioners should be defined not by the present cumbersome method of statute but by ministerial regulation.

All the recommendations will be submitted to the Representative Body, and Dr. Forbes undertook to indicate what should be done to ensure that they did not remain mere pious resolutions, but were followed up perhaps by the establishment of some commission to consider the amendment of the Coroners Acts.

Public Health

Dr. James Fenton introduced a report from the Public Health Committee. It was stated that an invitation from the Ministry of Health had been received and accepted to send representatives to an informal discussion with the Ministry's Midwifery Working Party on problems connected with the midwife's functions. The committee had also sent a questionary to medical officers of health of existing county welfare authorities inquiring as to their position and preference. As a result of the National Health Service Act county district councils which are at present welfare authorities will lose that status and certain medical officers of health will lose a large part of their present work. They will be asked to become for part of their time assistant medical officers of the county council, but it is felt that some of them may prefer not to accept part-time duty under the county council, and that it should be possible for them to elect to take compensation instead.

Dr. Fenton also reported that a deputation from his committee had attended a conference with representatives of the Ministry of Health and the local authorities associations to discuss the revision of the scale of fees for doctors called in by midwives. The first offer made was for a uniform 20% increase. This was refused, as was a revised offer of 30%, and the deputation intimated that the minimum which it was prepared to consider recommending the Council to accept was a 50% increase operating retrospectively from April 1, 1947, and subject to an early revaluation of the items of service in the scale. The Ministry and the local authorities' representatives had agreed to examine the 50% proposal.

Mr. R. L. Newell said that the Hospitals Committee had been considering a memorandum from two of its members on the difficulties caused by the growing demands made on hospital accommodation by subacute invalids, including elderly patients. In the view of the committee the solution of the problem was to be found in the geriatric organization proposed by the Committee on the Care and Treatment of the Elderly and Infirm, and it had invited that committee to consider what immediate steps could be taken to stimulate the authorities to act upon its recommendations.

The recommendation was brought forward from the Hospitals Committee that no further action should be taken at the present time with regard to the negotiation of a scale of salaries for junior house officers of voluntary hospitals. It was felt that in view of the danger of prejudicing the negotiations for the payment of house officers under the National Health Service it was inadvisable at this late date to formulate any such scale for the few remaining months of the period. The recommendation was agreed to.

Equal Status

General R. W. D. Leslie, for the Armed Forces Committee, reported that the resolution of the last Annual Representative Meeting affirming equality of status as between men and women doctors, including equal status in the Services, had been considered by his committee, which had found itself unable to endorse the view of the Representative Body and of the Medical Women's Federation. There was no question that women in the Services had rendered very great service, but if admission to complete equality of status with men was conceded it would involve, for instance, liability to front-line service. There could be no variation once admission to equal status was granted. He suggested as an alternative a special commission in the R.A.M.C. for women. At present women were given commissions only in the women's Forces.

Dr. Janet Aitken said that the Medical Women's Federation had always agreed that within the Service there might be limitations on what a woman was permitted to do, just as there were men doctors commissioned in the Army who, for various reasons, were not permitted oversea service. She did not see that the "front line" argument was valid as against admission to equal status in the Service itself.

The Chairman suggested that the Armed Forces Committee should arrange to discuss the subject with representatives of the Medical Women's Federation.

Special Committees

Mr. Dickson Wright, for the Film Committee, presented estimates for the setting up by the Association of a Film Library, for the establishment of which, it was considered, an initial sum of £2,000 was required. The Treasurer (Dr. Bone) took exception to the lack of detail with which the estimate was presented, and criticized the proposal for this expenditure at a time when the Association was very heavily committed in other directions. The matter was referred to the Finance Committee.

The Committee on Nutrition reported, through its vice-chairman, Dr. R. G. Gordon, that it had got to work and had appointed four subcommittees to consider different aspects of the problem—namely, basic nutritional requirements, family consumption of food, the bearing of wartime and present diet on the health of the community, and practical dietetics, including psychological aspects of the problem of nutrition.

Dr. Mary Esslemont, chairman of the Committee on Nursing, said that her committee had given preliminary consideration to the report of the Working Party set up jointly by the Ministry of Health and other Departments. There appeared to be a large measure of agreement between the views of the committee and those provisionally adopted by the British Hospitals Association and the Royal College of Nursing, and it was suggested that these views should be submitted to the Ministry in the form of a joint memorandum. The Council agreed that, subject to complete agreement between the bodies named, a joint memorandum should be produced and presented.

Dr. R. G. Gordon reported that after two years' work the Medical Curriculum Committee had completed its report—a very long document—which would be submitted to the Council at its meeting in March. The Chairman of Council said that this would probably prove to be one of the finest documents the B.M.A. had ever produced.

Dr. J. G. Thwaites, for the Committee on Psychiatry and the Law, presented a memorandum on enuresis which it was hoped to publish in the *Journal* and to circulate to Government Departments, local authorities, and other interested persons and organizations. Dr. Cockshut hoped that steps would be taken to circulate the report to all education officers,

Dr. Thwaites said that the committee's next task would be to deal with the subject of criminal law and sex offenders. A resolution which had been sent to the Council from the National Council of Women of Great Britain calling attention to the number of cases of appalling cruelty to children in which the offenders had received inadequate sentences in the courts was referred to the Psychiatry and Law Committee.

A progress report from the Health Centre Committee was made. The Committee had had before it an interim report from the Assistant Secretary (Dr. Revans), who has been making a field inquiry into the conditions of group practice.

Internal Affairs

Dr. L. D. Callander presented the report of the Building Committee, which recommended the repair and repainting of the memorial gates and the installation of fluorescent lighting in the Garden Court Wing of the Association House. The report was approved.

A superannuation scheme for the house staff of the Association was agreed to.

The Council considered a design for the coat-of-arms and seal of the Association, but the design submitted was criticized on various grounds and the subject was referred back.

A report of the Public Relations Committee was presented by Dr. Dain and approved.

Dr. O. C. Carter brought forward a recommendation from the Journal Committee that an Annual Review of Pharmacology and Chemotherapy be published by the Association, with the support of the British Pharmacological Society and in co-operation with the Scandinavian pharmacological societies, if a request to that effect was received. This was agreed to, subject to such support being forthcoming.

After mentioning that a monthly edition of the *British Medical Journal* in one or more foreign languages for circulation overseas was being considered, Dr. Carter took occasion to congratulate the Editor on the high standard maintained during the first and most difficult year of his editorship.

Dr. Janet Aitken, in moving the report of the Charities Committee, mentioned that the amount of subscriptions had increased. Unearmarked subscriptions included a legacy of £2,500 from the estate of the late Dr. C. P. Colls, which amount had been distributed equally between the Royal Medical Benevolent Fund and Epsom College. Grants to the amount of £565 had been made during the year from the Dain Testimonial Fund.

On the recommendation of the Science Committee it was agreed that the Stewart Prize be awarded to Dr. Leonard Colebrook, F.R.S., for his work on puerperal infection and its treatment with sulphonamides and his investigations into burns and their treatment.

Prof. Samson Wright was invited to be the Association's representative at the Royal Society Scientific Information Conference to be held in June and July, and Mr. A. M. A. Moore to represent the Association on the Surgical Equipment and Appliances Industrial Standards Committee of the British Standards Institution.

Dr. J. A. Pridham, reporting for the International Relations Committee, said that since the last report three B.M.A. lectures had been delivered on the Continent—in Denmark, Norway, and the Netherlands—and other lectures had been arranged. It was proposed to hold in April the first reception for foreign medical visitors who might be in London at that time.

The Council approved the Association's membership of the World Medical Federation for 1948, the subscription due being approximately £527, being 20 Swiss centimes for each member, apart from members in countries of the Empire which had separate representation in the Federation.

Dr. Pridham also presented a brief report from the committee recently set up to consider the relationship of the Association to the profession in India, Pakistan, Burma, and Ceylon. The report gave the number of branches and the membership of the Association in these various countries. The Indian Medical Association, which has a membership of 10,000, has been informed that the committee will gladly recommend the Council to enter into an arrangement for affiliation.

It was reported that 118 applications had been received in response to the advertisement for a Medical Director of the proposed British Medical Advisory Bureau. The Staffing Committee was authorized on behalf of the Council to make the appointment.

On the motion of Dr. N. E. Waterfield, for the Central Ethical Committee, a small committee was set up to consider the legal implications of counsel's opinion with regard to the powers of the Association to enforce by expulsion the view that certain conditions of employment are unacceptable.

The Council, which had assembled at 10 a.m., concluded its business at 5.15 p.m.

HEARD AT HEADQUARTERS

The Professional Man's Freedom

The new president of the Institution of Mining Engineers, Prof. J. A. S. Ritson, when he addressed the annual meeting the other day, discussed the position of the professional man in a nationalized service, and his remarks have some appositeness from the point of view of medical men. He asked whether their changed status as servants of the State (which is in fact what most mining engineers now are under the National Coal Board) was to affect their freedom to express professional opinions? They were not Civil Servants in the ordinary accepted sense of the term, but they must accept the example of that great body in loyalty to their masters. Nevertheless, they claimed their rights as professional men to express their own views so long as it was understood that their views were their own and did not implicate their employers. Prof. Ritson added that if they claimed freedom of speech and discussion for their members they must accept fully the corollary that there were limits which must be observed and duties undertaken. He thought it would be wrong at Institution meetings to challenge the nationalization of the collieries or to assail the constitution or general plans and policy of the National Coal Board.

Would medical bodies be prepared to accept a similar self-denying ordinance in respect of the Ministry of Health?

Correspondence

Married Doctors in the Services

SIR,—May I, as another young married doctor who worked with sufficient diligence to qualify and earn a living sufficient to support a wife before my twenty-fourth birthday, heartily endorse the sentiments expressed by "Conscripted, R.A.F.V.R.," in the two letters in your columns (Dec. 6, 1947, p. 113, and Jan. 10, p. 7). To conscript a married man of professional standing into the Forces and then to offer him 28s. 5d. per day is sufficiently insulting, to say nothing of the statement that this remuneration compares favourably with that of civilians of similar age and qualifications, which statement is utterly false, as a study of the "Assistantships Vacant" column of the *B.M.J.* will readily prove.

Can the B.M.A. not convince this bone-headed and nationalization-mad Government that if it insists on conscripting men into its Armed Forces then it is in duty bound to conscript their responsibilities in life along with them. Those of our profession who intend voting in favour of accepting the Government proposals regarding the State medical service would do well to ponder on the treatment and entirely negative amount of consideration given by the present Government to the members of the profession already in its clutches.—I am, etc.,

R.A.M.C.

Australian Medical Service

SIR,—Your paragraph in "Heard at Headquarters" entitled "From Down Under" (Dec. 27, 1947, p. 170), while no doubt accurate in the matter with which it deals, may convey to your readers a false impression of developments in Australian medical politics. The situation here is dominated by the fact that the Council of the B.M.A., as a result of exploratory discussions

with the Minister of Health, came to the conclusion that the Government intended the sure, even if slow, extinction of private practice. Having ascertained this fact, the Council considered that further discussions would simply amount to co-operation towards an end which it felt was in the interests of neither public nor profession. This position was revealed to the profession generally at a series of meetings of local associations, one of which I attended. At this meeting a resolution was carried unanimously to the effect that the profession could not be expected to co-operate with the Government in a policy designed to lead to the extinction of private practice, and that consequently further discussions would serve no useful purpose. I understand that similar resolutions or the same one have been carried overwhelmingly at the other meetings. The strong lead given by the Council was observed with acclamation.

While we do not anticipate that the Government will precipitately abandon its schemes, we are confident that they will "fade away," just as did the earlier proposal for an insurance scheme on the pattern of the English (really German) scheme in the face of opposition by the profession generally. If, however, the Government wants to do something, a fee-for-service scheme *with no strings of central control of either patients or doctors* might be possible.—I am, etc.,

Canberra. BRYAN W. MONAHAN.

H.M. Forces Appointments

ROYAL NAVY

Surgeon Commander N. B. de M. Greenstreet has been placed on the Retired List.

ARMY

Colonels G. P. Kidd, C.B.E., M.C., and D. G. Cheyne, C.B.E., M.C., late R.A.M.C., have retired on retired pay and have been granted the honorary rank of Brigadier.

ROYAL ARMY MEDICAL CORPS

Lieutenant-Colonel (Temporary Colonel) C. M. Marsden to be a Consultant, and has been granted the local rank of Brigadier.

Lieutenant-Colonel J. F. Shepherd, M.B.E., I.M.S., retired and re-employed in the rank of Colonel as a Consultant, has been granted the local rank of Brigadier.

Lieutenant-Colonel G. W. B. Shaw, from R.A.M.C., to be Colonel.

Major J. L. O'Neill to be Lieutenant-Colonel.

REGULAR ARMY RESERVE OF OFFICERS

ROYAL ARMY MEDICAL CORPS

Lieutenant-Colonel J. H. Ward, D.S.O., M.C., having exceeded the age limit of liability to recall has ceased to belong to the Reserve of Officers, and has been granted the honorary rank of Colonel.

TERRITORIAL ARMY

ROYAL ARMY MEDICAL CORPS

Captain R. J. V. Battle to be Major.

University of London Senior Training Corps (Medical Unit).—Lieutenant (Acting Major) I. L. MacKinnon and Lieutenant D. Slome have ceased to serve and have been transferred to the Unposted List. Lieutenant (Acting Captain) C. B. B. Downman, supernumerary for service with University of London Senior Training Corps (Medical Unit) has resigned his commission.

TERRITORIAL ARMY RESERVE OF OFFICERS: ROYAL ARMY MEDICAL CORPS

Major R. J. V. Battle, from Active List to be Major, and has been granted the honorary rank of Lieutenant-Colonel.

Major E. M. R. Frazer, T.D., from Unemployed List to be Major, and has been granted the honorary rank of Lieutenant-Colonel.

WOMEN'S FORCES

EMPLOYED WITH THE R.A.M.C.

War Substantive Captains E. Khaliq and A. L. Ashforth have relinquished their commissions and have been granted the honorary rank of Captain.

Miss E. Winton to be Captain.

ROYAL AIR FORCE

Air Commodore (Acting Air Vice-Marshal) T. J. Kelly, C.B.E., M.C., has retired and is re-employed.

Group Captain C. A. Lindup has retired on account of medical unfitness for Air Force service.

Flight-Lieutenants (Substantive) (War Substantive Squadron-Leaders) R. D. Bruce and W. D. Peock have relinquished the temporary rank of Wing Commander.

Squadron-Leader J. M. Ritchie has retired, retaining the rank of Wing Commander.

To be Squadron-Leaders (Substantive): J. P. Sewell, J. B. Ross, P. J. Macnamara, K. L. G. Nobbs, G.M., and J. A. MacCarthy, O.B.E., G.M., M.C.

D. Malloch to be Squadron-Leader (Temporary).

To be Flight-Lieutenants: J. A. B. Mounsey and C. G. White.

J. P. Sewell to be War Substantive Squadron-Leader.

To be Flight-Lieutenants (Substantive): T. J. G. Price, H. A. N. Hamersley, and S. C. Farman.

Flying Officer R. E. Woolley to be Flight-Lieutenant (Substantive).

To be Flight-Lieutenants (Temporary): P. M. Anderson, M. J. Blunt, S. Z. Hulman, N. Meller, D. Ryan, T. K. Davies, D. L. B. Farley, D. I. Jenkins, and P. F. Philip.

To be Flying Officers (Temporary): J. H. Atteridge, H. Cohen, W. A. D. Combe, J. K. Craig, D. W. J. Cullingford, A. R. Curtis, D. P. Fitzgerald, J. M. Gill, R. W. Hughes, J. D. Kerr, P. B. Kunkler, P. D. Livingstone, J. Parkyn, R. M. Powell, W. L. Sewell, G. R. B. Whitaker, D. A. Watson, D. A. B. Ashcroft, A. Benjamin, A. G. Bradford, G. K. Davies, D. M. D. Evans, F. C. B. Harvey, C. H. A. Hoy, A. G. Jessiman, P. A. W. Lea, J. J. Morland, D. Seymour, L. S. Smith, J. J. Teeuwen, P. Timmis, J. A. Turner, and A. T. Wilson.

RESERVE OF AIR FORCE OFFICERS

Squadron-Leader I. Shaw has resigned his commission, retaining the rank of Wing Commander.

V. T. Powell to be Squadron-Leader (Substantive).

ROYAL AUXILIARY AIR FORCE

The notification concerning "E. C. Cross" under the above heading in the *Supplement* of Dec. 6, 1947 (p. 135), should have read "E. C. Gross."

ROYAL AIR FORCE VOLUNTEER RESERVE

War Substantive Squadron-Leader J. Tate to be Squadron-Leader (Substantive).

Flight Lieutenant B. Haring has resigned his commission, retaining the rank of Squadron-Leader.

Flight-Lieutenant G. H. Seale has relinquished his commission on account of medical unfitness for Air Force service, retaining his rank.

Flight Lieutenant T. Bell has relinquished his commission on account of medical unfitness for Air Force service.

The following have been granted the substantive rank of Flight-Lieutenant: J. D. Abbatt, D. C. Adamson, T. L. Adamson, F. Aiberts, E. M. Allen, R. A. Allen, E. A. J. Ament, J. R. Anderson, M. M. Andrew, G. J. E. Ansell, D. Anthony, J. A. Ardis, R. A. Armstrong, E. R. Arnold, W. E. Arnold, P. W. Arundell, N. D. Ashe, R. J. Aspinall, W. H. R. Auld, G. F. Bacon, C. E. Bagg, G. M. Bailey, N. L. Bailey, K. Baker, R. A. H. Bannatyne, T. C. G. Barnes, D. N. Baron, J. Barr, H. F. McG. Bassett, R. W. Baxter, H. S. Bennett, F. M. Benton, G. E. R. Bibbings, G. L. Bickler, E. Bindman, M. Binnie, J. D. Blainey, N. N. Blaxland, J. H. Boydell, J. L. Braithwaite, A. F. Bromwich, N. Broughton, R. J. Bruce, N. F. W. Brueton, P. D. Bryant, J. Buchanan, G. N. Burns, R. Burns, D. E. St. J. Burrowes, J. H. Burt, I. Butler, A. D. Caird, J. S. Coldwell, J. A. Cameron, A. Campbell, J. D. C. Campbell, F. E. V. Cant, R. B. Carr, J. A. Chalmers, D. A. Chandler, A. D. Charnley, W. K. Christopher, H. E. Claremont, C. Clark, G. I. Clarke, J. A. Clarke, K. S. Clarkson, G. Clayton, K. D. Cochran, A. A. Cohen, E. de M. Connell, N. C. Connell, L. N. Cook, J. A. Cooney, N. Coulshed, J. G. Coxon, A. W. Craig, W. G. C. Craigen, D. S. Cramond, W. A. Crawford, J. S. Creighton, R. S. Crow, P. W. Dagger, D. G. Davidson, R. Davidson, L. D. Davidson, D. L. Davies, E. C. Davies, E. J. L. Davies, J. E. Davies, L. G. G. Davies, N. N. Davies, S. Davis, A. M. Dawson, P. S. Dearden, H. Debovitch, W. H. Dempster, E. Dillistone, R. I. Dixon, W. J. A. Dobson, T. W. G. Donohoe, A. Douglas, E. C. K. Douglas, B. Dover, A. C. Dresser, R. W. Drewer, E. F. Ducat, L. G. Duff, T. D. Duke, J. G. Duncan, S. Edelman, A. C. Edwards, D. A. W. Edwards, J. Edwards, J. H. Edworthy, R. Ellam, J. G. R. Ellis, T. Ellis, R. T. D. Emond, D. Emslie-Smith, M. Evans, T. J. Evans, R. F. Ewing, D. I. Ferguson, I. S. Ferguson, A. G. C. Findlater, J. K. Fleming, J. M. Fleming, J. J. Fleminger, D. D. Forbes, K. J. R. Ford, P. Foster, D. Fox, I. H. Foy, J. Fraser, T. M. Fraser, J. Freedman, T. T. Fulton, J. D. Galletly, J. A. Gavin, C. Gething, D. F. Gibbs, J. H. Gibson, A. W. Gilks, T. M. Glaister, J. D. Glanville, R. E. Glenn, K. L. G. Goldsmith, J. B. Good, W. H. Graham, C. W. Graham-Stewart, D. P. Greaves, B. A. J. C. Gregory, H. B. W. Greig, G. E. Griffiths, L. Griffiths, J. Hacking, F. J. Hallinan, M.B.E., J. C. Ham, W. Hamilton, E. A. Harris, W. C. Harris, L. M. Harrison, R. Harrison, T. Harvey, W. E. Hassan, A. G. Hayter, H. S. Heddle, A. C. Hill, B. R. Hillis, S. Hillman, G. L. Hindson, R. Horn, C. Hougie, C. A. Houlder, E. P. G. Houssemayne du Boulay, R. A. Houston, R. R. Houston, J. F. Hudson, A. S. Hughes, J. T. Hutchison, E. J. Innes, W. McI. S. Ironside, J. D. Jack, J. G. Jackson, R. F. Jackson, W. A. Jackson, P. G. Jagger, D. W. James (203698), D. W. James (202981), J. A. Jamieson, D. M. Jeffreys, D. C. W. Jenkins, W. J. Jenkins, E. G. Jenner, F. F. Jerichower, A. T. Johnson, W. R. Johnson, D. C. R. Jones, P. M. P. Jones, P. R. B. Jones, R. F. McN. Jones, W. K. Jones, M. C. Joseph, P. K. S. Joynson, R. Just, H. R. Kefford, A. C. Kennedy, M. M. A. Kenny, C. H. Kinder, W. N. Kingsbury, C. R. Kirkpatrick, S. J. Krister, J. D. Lacon, F. M. Lanigan-O'Keeffe, F. Latham, J. G. Latimer, W. McR. Laverie, J. Lawson, W. T. W. Lawson, W. R. Lee, D. Leigh, D. R. Levinson, L. F. Levy, D. O. Lewis, S. Lewis, D. G. Lindsay, R. Lineham, J. W. Little, R. H. Little, W. A. S. Llewellyn, G. H. Lloyd, P. S. London, K. Lowe, D. J. Lyall, D. W. R. Lyle, G. R. B. McCarter, W. R. MacCrossan, W. H. Daniel, G. McL. McGillivray, D. D. McGrath,

R. C. McGregor, K. E. McIver, I. MacKenzie, C. B. McKerrow, R. S. MacLachlan, A. H. MacLaren, W. J. MacLaren, I. C. Maclean, D. MacLeod, J. McMillan, G. R. McOwan, J. R. McPherson, R. J. McWilliam, E. W. F. Mack, T. P. Magee, A. R. Makey, H. B. Maliphant, N. B. Malleson, A. E. Malone, S. H. Manners, L. V. Martin, A. Mather, R. M. S. Matthews, M. Mattinson, J. B. Maxfield, E. V. de C. Medill, R. W. P. Mellish, I. H. Mercer, J. G. Millers, A. D. Moffat, P. R. Montgomery, J. Y. Moore, G. W. Morrison, J. A. B. Mounsey, I. S. Mudie, S. S. F. Munro, J. H. Murphy, J. D. Nelson, C. R. Neve, P. F. New, N. Newman, R. R. W. Nichols, T. C. Nicol, W. D. Nicoll, W. S. Noble, J. P. Nowlan, E. S. Odbert, A. C. F. Ogilvie, H. I. O'Hare, D. O'Kieffe, K. W. Oldham, D. W. J. O'Neill, P. R. Ormerod, A. O. Osbaldstow, A. S. Oscier, C. Ounsted, K. W. E. Paine, D. A. A. Parker, A. C. Parry, J. D. Paterson, R. F. Payne, D. R. L. Peill, M. J. Peto, J. G. Piccaver, W. A. J. Pike, T. R. E. Pilkington, A. G. Pollacchi, I. A. Porter, G. D. Powell, I. H. Pratt, A. E. Pritchard, J. M. Pugh, C. W. A. Pullan, R. J. Rabett, R. W. Rapinet, W. T. D. Ray, T. H. Redfern, G. P. Reed, P. A. Reed, J. C. Reid, D. F. Reynolds, D. Richardson-O'Keefe, J. H. Ridgwick, W. Ritchie, R. C. Robb, A. P. Roberts, C. G. Roberts, G. F. Roberts, K. I. Roberts, F. L. Robertshaw, D. F. Robertson, J. H. Robinson, J. O. Robinson, K. W. Robinson, W. E. Robinson, R. Rodger, N. Rosedale, R. A. K. Ross, T. M. Roulston, H. A. K. Rowland, C. M. Ruben, J. Rubin, J. B. Russell, and R. C. Rylance.

Flying Officers D. F. V. Brunsdon, M. F. Butler, B. L. Crystal, J. R. Dickson, E. D. Edwards, G. E. Flatman, G. L. Grant, J. R. Groves, R. J. H. Guy, M. J. Harman, C. F. Lascelles, K. Pickworth, L. Roodyn, D. E. Rowlands, J. Swale, J. V. Thurston, D. G. L. Trust, P. P. Turner, A. G. Bearn, K. W. Bolt, P. E. Brown, W. Campbell, D. A. Dawson, J. S. Dismorr, A. S. Dunn, E. Ellis, T. R. L. Finnegan, A. E. Fyfe, T. A. Harrison, H. A. Lane, J. Mackinnon, K. E. Rimmington, and A. Stewart to be Flight-Lieutenants.

Flying Officer W. G. A. Begg has relinquished his commission on account of medical unfitness for Air Force service, retaining his rank.

DENTAL BRANCH

W. D. Clarkson-Webb has been granted the substantive rank of Flight-Lieutenant.

WOMEN'S FORCES

EMPLOYED WITH THE MEDICAL BRANCH OF THE R.A.F.

Violet I. Wilson to be Flying Officer (Temporary).

COLONIAL MEDICAL SERVICE

The following appointments have been announced: N. R. E. Fendall, M.B., B.S., S. R. S. Godkin, M.R.C.S., L.R.C.P., and G. T. M. Hayes, M.B., B.Ch., Medical Officers, Kenya; J. C. McNeilly, M.B., B.Ch., Medical Officer, Tanganyika; H. W. Woolner, L.R.C.P.&S., Medical Officer, Nigeria; S. Wozniak, M.B., Ch.B., Medical Officer, Gold Coast; R. A. Wesson, M.R.C.S., Medical Officer, Fiji; C. O'Colmain, M.B., B.Ch., J. J. O'Sullivan, M.B., B.Ch., and C. H. Wood, M.R.C.S., L.R.C.P., House Doctors, General Hospital, Singapore; R. S. McElroy, M.B., B.Ch., Assistant Director of Medical Services, Kenya; R. C. Speirs, M.D., Deputy Director of Medical Services, Uganda.

Association Notices

Diary of Central Meetings

FEBRUARY

12. Thurs. **Journal Committee,** 2 p.m.

18 Wed. **Council,** 10 a.m.

Branch and Division Meetings to be Held

BATH, BRISTOL, AND SOMERSET BRANCH.—At Large Physics Lecture Theatre, the Royal Fort, Bristol University, Wednesday, Feb. 4, 8.30 p.m. Discussion to be opened by Dr. D. P. Stevenson (Assistant Secretary, B.M.A.). Plebiscite in connexion with the National Health Service. All medical practitioners and medical students in the area of the Branch are invited.

EAST HERTS DIVISION.—At County Hospital, Hertford, Thursday, Feb. 5, 9 p.m. Final Consideration to be given to the Plebiscite on the National Health Act. All medical practitioners in the area of the Division are invited.

LEWISHAM DIVISION.—At Pathological Laboratory, St. John's Hospital, Lewisham, S.E., Thursday, Feb. 5, 8.30 p.m. Demonstration by Dr. K. E. A. Hughes: Pathological Advances of Interest to the G.P.

MID-CHESHIRE DIVISION.—At Stamford Hall, Altrincham, Sunday, Feb. 8, 3 p.m. Mr. A. Lawrence Abel: The National Health Service Act and the Plebiscite. Open to all members of the medical profession.

NUNEATON AND TAMWORTH DIVISION.—At Red Lion Hotel, Atherstone, Tuesday, Feb. 3, 8.30 p.m. Lecture by Lady Florey: Progress in Knowledge of Penicillin and Other Antibiotics.

STOCKTON DIVISION.—At Stockton and Thornaby Hospital, Bowesfield Lane, Stockton-on-Tees, Monday, Feb. 2, 8.30 p.m. Dr. C. C. Ungley: Recent Advances in Anaemia.

SWANSEA DIVISION.—At Mackworth Hotel, Swansea, Thursday, Feb. 5, 7.30 p.m. Annual B.M.A. lecture by Mr. D. Charles Reade: Post-menopausal Haemorrhage.

Meetings of Branches and Divisions

DORSET DIVISION

A meeting of all practitioners in the area was held at the Old Shire Hall, Dorchester, on Jan. 11; 65 doctors were present. Dr. J. A. Pridham, Member of Council, gave a lucid and comprehensive account of the implications of the National Health Service to an enthusiastic audience. A motion pledging full support to the British Medical Association in its fight to amend the Act was carried by an overwhelming majority.

DUMFRIES AND GALLOWAY DIVISION

A meeting was held in Dumfries on Jan. 11 to discuss the Minister of Health's Memorandum on the statement of the Negotiating Committee's views on the National Health Service Act. There was a large attendance and the meeting emphatically agreed that the National Health Service Act is unacceptable to the medical profession.

GUILDFORD DIVISION

A meeting of the consultants and specialists of the Guildford Division was held on Jan. 18 to consider the National Health Service Act. A paper vote was unanimous in disapproval of the Act. There was a unanimous vote (with one abstention) against taking service under the Act, and a unanimous vote supporting the policy of the B.M.A.

The feeling of the meeting was that, though an Act which would improve the hospital service of the country would be welcome, the Act as it stands will have the opposite effect.

LINCOLN DIVISION

A General Meeting of the Division was held on Jan. 13 at the Saracen's Head Hotel, Lincoln, with Dr. A. M. Maiden in the chair. Sixty-five members and non-members were present.

After an excellent dinner the chairman announced that cheques for 49 guineas had been forwarded to the Branch Secretary, being the amount collected from the Division for the Baylis Testimonial Fund. Dr. L. S. Potter, Assistant Secretary of the B.M.A., spoke on the N.H.S. Act, and then answered many questions. A vote of thanks proposed by Dr. S. Wray and seconded by Mr. A. H. Briggs was carried with acclamation.

MID-ESSEX DIVISION

An open meeting was convened by this Division on Jan. 11, 230 medical practitioners resident in the area being notified. Sixty-nine attended, and after a free and stimulating discussion on the present state of negotiations with the Minister the following resolution was passed:

"That this meeting is definitely opposed to joining the National Health Act Service as at present constituted and made unworkable for us by the Minister's refusal in any way to negotiate in the proper sense of the word with our representatives. We, after all, will have to work this scheme and bear the brunt of all its untried innovations into the practice of medicine, and the Minister's refusal to make even the smallest concession to our views leaves us with no alternative but to refuse to work this Act."

In favour: 63. Against: 4. Abstained from voting: 2.

NORTH OF ENGLAND BRANCH

The following resolutions were passed at a meeting of consultants and specialists of Region 1, representing Newcastle-upon-Tyne, Durham, and the Counties of Northumberland, Durham, Westmorland, and Cumberland, held on Jan. 16.

(1) This meeting of consultants held at the Royal Victoria Infirmary, Newcastle-upon-Tyne, on Jan. 16, is strongly opposed to the National Health Service Act in its present form and supports the lead given by the Special Representative Meeting.

Passed by a majority of 67–1, none abstaining.

(2) This meeting of consultants further affirms its intention to support the result of the plebiscite in the event of a majority voting against accepting service under the Act.

Passed unanimously, 68 voting.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

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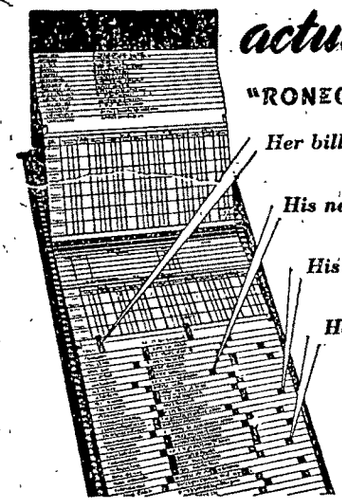

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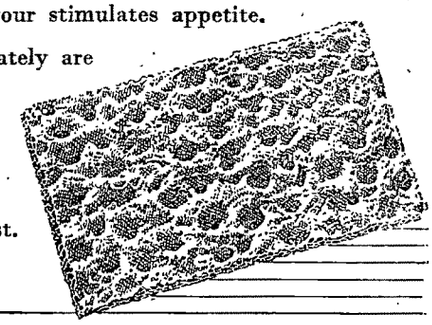

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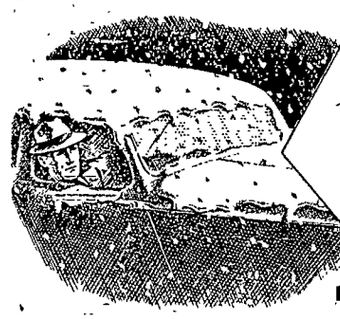

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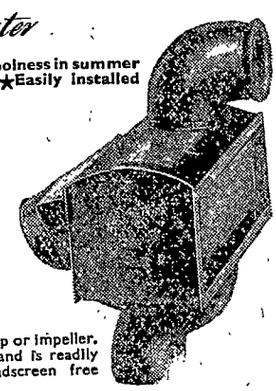

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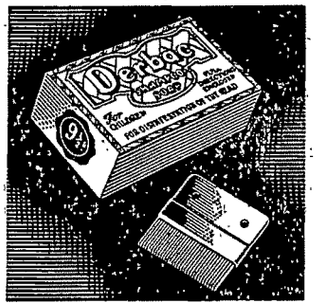

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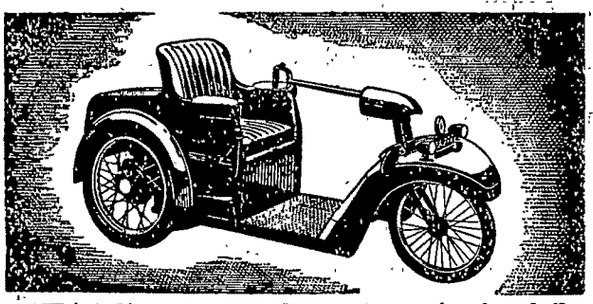

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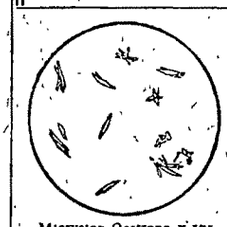

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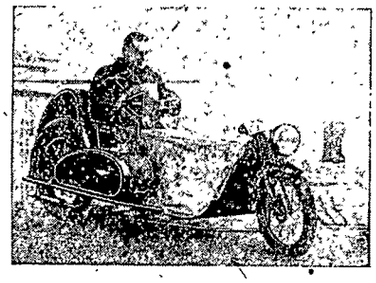

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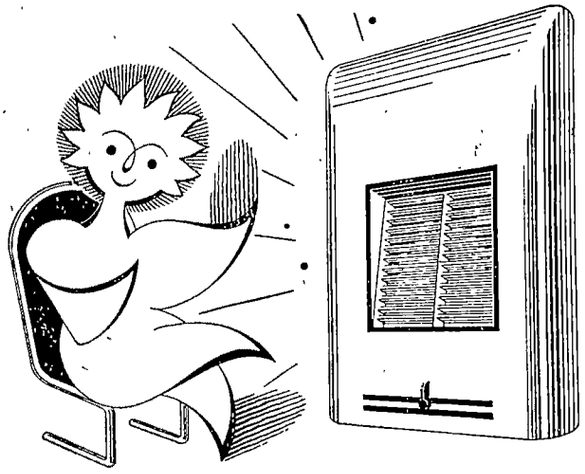

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Carmarthen
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) from candidates with previous experience of Mental Hospital work. Salary £555 by £25 to £655 per annum, with full residential emoluments valued at £156 per annum, plus £50 per annum for D.P.M. An unfurnished flat is available for a married man, in which case the salary and value of emoluments will be adjusted accordingly. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment is subject to the Asylums Officers' Superannuation Act, 1909. Applications, giving full particulars as to age, experience, and accompanied by names and addresses for reference purposes, to be sent to the Medical Superintendent.

LINCOLNSHIRE JOINT BOARD FOR THE MENTALLY DEFECTIVE
Harmston Hall Colony, near Lincoln
DEPUTY MEDICAL SUPERINTENDENT

Applications are invited for the post of Deputy Medical Superintendent of the Colony within the main Institution at Harmston, near Lincoln, and branches at Caistor, Bourne and Holbeach, providing accommodation for 945 mental defectives of all grades. Salary £750, rising to £800 by two annual increments of £25, with emoluments valued at £100. Residential accommodation for a single man only is available in Harmston Hall. Asylums and Certified Institutions (Officers Pensions) Act applies. Travelling expenses will be paid in accordance with the Board's scale. Applications, giving full particulars of training, qualifications and experience, with copies of two recent testimonials, should be received by the undersigned not later than February 14, 1948.—H. Copland, Clerk to the Joint Board, County Offices, Lincoln.

ROMFORD JOINT HOSPITAL BOARD
RUSH GREEN EMERGENCY AND ISOLATION HOSPITAL, Romford
HOUSE SURGEON (B2)

Applications are invited for the post of House Surgeon (B2) at the above hospital, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of one year. The salary is at the rate of £250 per annum plus bonus (at present £24 18s.) and emoluments. Applications with copies of two testimonials or names for reference to be sent to the Medical Superintendent, Rush Green Hospital, Romford, as soon as possible.—Ernest E. Taylor, Clerk of the Board, Clerk's Office, Rush Green Hospital, Romford.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
TEACHING HOSPITAL

The Board invites applications for the following posts:—

ASSISTANT PHYSICIAN
ASSISTANT SURGEON
ASSISTANT SURGEON to the Throat and Ear Department

Assistant Physicians are required to be graduates in medicine of a University of which the degree is recognized by the General Medical Council for registration and Fellows or Members of the Royal College of Physicians of London. Assistant Surgeons are required to be Fellows of the Royal College of Surgeons of England. An honorarium of £50 per annum is at present attached to the posts, but the conditions of service and remuneration to members of the Staff will be subject to such adjustments as may be necessary to conform with the National Health Service. Candidates should submit their applications to the undersigned, from whom all further information may be obtained. Applications, which must be received not later than Monday, February 23, 1948, will be considered in the first instance by a Special Advisory Committee representing the Hospital and the Faculty of Medicine of the University, and its recommendations will be submitted to the Board of Management of the Hospital.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
TEACHING HOSPITAL
DIRECTOR OF THE CASUALTY DEPARTMENT AND ASSISTANT SURGEON
to the Traumatic Unit—General Hospital

Applications are invited for this full-time salaried superannuable post. Candidates must be Fellows of the Royal College of Surgeons of England. Commencing salary between £1,800 and £2,000 per annum according to qualifications and experience. The Officer appointed will be in charge of the large Casualty Department of the Hospital with charge of beds and will be given the opportunity of taking part in the general emergency work of the Hospital. Candidates should submit their applications, with copies of recent testimonials, to the undersigned, from whom all further information may be obtained. Applications, which must be received not later than Monday, February, 23, will be considered in the first instance by a Special Advisory Committee representing the Hospital, and the Faculty of Medicine of the University, and its recommendations will be submitted to the Board of Management of the Hospital.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham 15.

BROCKHALL CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Langho, near Blackburn, Lancs
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) including R practitioners holding B2 and (if ineligible for H.M. Forces) those holding B1 appointments for the post of Assistant Medical Officer (B1). Salary £465 rising by annual increments of £30 to £555 per annum, with full residential emoluments valued at £200 per annum. An additional £50 per annum is payable to holders of the D.P.M. or recognized equivalent, together with the current cost-of-living bonus. There is no accommodation at present for a married man. The appointment will be pensionable and the successful applicant will be required to pass a medical examination. The Institution is modern, fully equipped and accommodates 1,996 patients, affording extensive experience in mental deficiency practice. Applications giving the usual particulars should be sent to the Medical Superintendent as soon as possible.

BLACKBURN JOINT HOSPITALS ADVISORY COMMITTEE
ASSISTANT RADIOLOGIST

Applications are invited from registered medical practitioners holding appropriate qualifications for the post of Assistant Radiologist. The post is a whole-time one with a salary of £900 per annum, rising by two annual increments of £50 to £1,000, with membership of the Federated Superannuation Scheme. The duties are diagnostic at the Blackburn and East Lancashire Royal Infirmary and Queen's Park Hospital, Blackburn, but include, at present, participation in the work of the Therapeutic Department at the Royal Infirmary. Applications, with three recent testimonials (or names for reference), should be sent as early as possible to T. Dewhurst, General Superintendent and Secretary, Royal Infirmary, Blackburn.

STAFFORDSHIRE MENTAL HOSPITALS BOARD
ST. MATTHEW'S HOSPITAL
Burntwood, near Lichfield
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Medical Officer (B1). Salary £455 per annum rising by £25 to £555 together with emoluments consisting of board, lodging, laundry and attendance valued for Superannuation purposes at £130 per annum, plus appropriate war bonus, and if holding the D.P.M. an additional £50 per annum. Appointment subject to the Asylums Officers' Superannuation Act, 1909. In the event of a married man being appointed arrangements could be made for wife to be accommodated in the flatlet, subject to financial adjustments. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Further particulars may be obtained from the Medical Superintendent, to whom applications should be sent as soon as possible.

UNIVERSITY COLLEGE HOSPITAL
Gower Street, W.C.1
ASSISTANT
in the X-ray Diagnostic Department

Applications are invited for the post of Assistant in the X-Ray Diagnostic Department at a salary of £800 per annum. The appointment will be for one year in the first instance and renewable annually. Candidates should hold a diploma in medical radiology. Applications, together with the names of three persons to whom reference may be made, should be submitted to the Secretary not later than ebruary 18, 1948.

UNIVERSITY OF BRISTOL
SURGEON to the Neuro-Surgical Unit

The University invites applications for the post of Surgeon to the Neuro-Surgical Unit who will act as Assistant and Deputy to Mr. G. L. Alexander, the Surgeon-in-Charge of the Unit. Salary £1,250 per annum, with limited private practice Applications, giving age, qualifications and experience, together with the names of not more than three referees and copies of not more than three recent testimonials, should reach the undersigned, from whom further particulars may be obtained, on or before February 20, 1948.—Winifred Shapland, Secretary and Registrar, The University, Bristol, 8.

LIVERPOOL RADIUM INSTITUTE
RESIDENT MEDICAL OFFICER (B2) (Male)

Salary £350 per annum, full residential emoluments. The position is suitable for applicants desiring to obtain experience in radiotherapy. To R practitioners appointment limited to six months. Applications should be sent to Frank Dean, F.C.I.S., Secretary-Superintendent.

CORPORATION OF GLASGOW
Public Health Department
PATHOLOGISTS

Applications are invited from duly qualified medical practitioners for the undernoted posts in the pathological services of the Corporation general hospitals.

SENIOR PATHOLOGIST. To be responsible for the pathological services of the Corporation hospitals and to be associated with the University of Glasgow teaching unit at Stobhill Hospital. Salary, £1,250 per annum, rising by annual increments of £50 to £1,500 per annum (exclusive of teaching grant of £100 per annum payable by the University of Glasgow). The appointment of Senior Pathologist will also be subject to the approval of the University Court who are willing to offer an approved candidate the title of Lecturer in Pathology.

DEPUTY PATHOLOGIST. Salary £1,000 per annum, rising by annual increments of £40 to £1,200 per annum.

ASSISTANT PATHOLOGIST AND BACTERIOLOGIST. Salary, £750 per annum rising by annual increments of £30 to £900 per annum.

The persons appointed will be required to devote their whole time to the duties of the posts. Successful candidates will be required to undergo a medical examination. The posts are superannuable and superannuation deductions at the rate of five per cent per annum will be made from the salary payable by the Corporation. Applications to be sent to the undersigned not later than February 11, 1948, in envelopes endorsed "Application for Appointment as Senior Pathologist" (or Deputy Pathologist or Assistant Pathologist and Bacteriologist, as the case may be).—William Kerr, Town Clerk, City Chambers, Glasgow.

CORPORATION OF GLASGOW
Public Health Department
CENTRAL BACTERIOLOGICAL LABORATORY
ASSISTANT BACTERIOLOGIST

Applications are invited for the whole-time appointment of a medical Assistant Bacteriologist. Some experience of bacteriology is necessary. Salary scale, £750 per annum, rising by annual increments of £30 to £900 per annum. The appointment is superannuable and the successful candidate may be required to pass a medical examination. Applications should reach the Town Clerk, City Chambers, Glasgow, in an envelope marked "Appointment—Assistant Bacteriologist," immediately.—William Kerr, Town Clerk, City Chambers, Glasgow.

ADMINISTRATIVE COUNTY OF ESSEX
TEMPORARY ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The County Council invite applications for the above-mentioned temporary appointment from registered medical practitioners with experience in maternity and child welfare and school health work. The appointment will be for a limited period and so far as can be ascertained will not be continued beyond July 5, 1948. Salary will be at a rate of not exceeding £950 a year according to experience, plus bonus and travelling expenses. Applications on forms obtainable from me and accompanied by copies of not more than three recent testimonials, which will not be returned, should be addressed to me and delivered at the County Hall, Chelmsford, as soon as practicable. Full information should also be given as to the applicant's position in relation to military service. Canvassing, directly or indirectly, is forbidden.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

BUCKS COUNTY COUNCIL
TINDAL GENERAL HOSPITAL, Aylesbury
(125 beds, Resident Medical Staff, 4)
HOUSE PHYSICIAN (A)

Applications are invited from duly registered medical practitioners (male), including those within three months of qualification who are liable under the National Service Acts, for the post of House Physician (A). The appointment is for a period of six months at a salary of £200 per annum, with full residential emoluments. The vacancy may be filled by an R practitioner now holding an A post, in which case it will rank as a B2 appointment with a salary of £250 per annum. The hospital is an Acute General Hospital with a quick turnover of patients. Applications, stating date free to commence duty, together with copies of two recent testimonials, should be submitted to the Medical Superintendent by February 12, 1948.

CITY OF LEICESTER
CITY GENERAL HOSPITAL
Gwendolen Road (550 beds)

Applications are invited from registered medical practitioners for the following appointments :—

HOUSE PHYSICIANS (A). Three vacancies for general duties. One vacancy for Paediatric Department.

HOUSE SURGEONS (A). Two vacancies. One for general surgical duties. One for general surgical and orthopaedic duties.

Salary for each post £200 per annum, with full residential emoluments.

The post of House Physician to the Paediatric Department is recognized for the D.C.H. and both posts of House Surgeon are recognized for the F.R.C.S. England.

All posts will be vacant from April 1 next except that of House Surgeon for general surgical duties, which is vacant immediately.

Practitioners within three months of qualification and eligible under the National Service Acts may apply, when appointment will be for a period of six months, otherwise will not exceed one year. Applications (on form supplied) must be submitted as soon as possible, endorsed "House Physician or House Surgeon, City General Hospital," and addressed to Dr. E. K. Macdonald, Medical Officer of Health, City Health Department, Grey Friars, Leicester.—L. McEvoy, Town Clerk.

CITY OF LIVERPOOL
CLEAVER SANATORIUM
Oldfield Road, Heswall (220 beds)
DEPUTY MEDICAL SUPERINTENDENT (B1)

Applications are invited for the appointment of full-time Resident Deputy Medical Superintendent from suitably qualified R practitioners holding B2 appointments and practitioners released from the Services. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected for Military Service Applicants should have had experience in the treatment of Tuberculosis. The person appointed will be required to assist the Medical Superintendent in the administration of the Sanatorium, training of nurses, etc., and will deputize for him when required. Salary will be at the rate of £600 per annum together with cost-of-living bonus, and residential emoluments valued at £130 per annum. The appointment will be subject to the Standing Orders of the City Council and determinable by three calendar months' notice on either side. Any fees in connection with the appointment will be handed over to the City Council. Applications should be endorsed "Deputy Medical Superintendent," and sent to the undersigned not later than Tuesday, February 10, 1948.—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool.

CITY OF PLYMOUTH
MOUNT GOLD ORTHOPAEDIC HOSPITAL
(120 beds)
Assistant RESIDENT SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B2), including suitably qualified R practitioners now holding A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be renewable for a further period of six months, terminable by one month's notice on either side at any time Salary is at the rate of £250 per annum, plus war bonus and with full residential emoluments. All other fees received by the officer must be refunded to the City Council. Married quarters are not provided. Preference will be given to applicants who have had some experience of orthopaedic and fracture work. Applications, stating age, nationality, qualifications with dates, and details of previous experience, with copies of two testimonials, should be sent to the undersigned before February 7, 1948.—T. Pelrson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF PORTSMOUTH
SAINT MARY'S HOSPITAL (1,085 beds)
JUNIOR GENERAL ASSISTANT RESIDENT MEDICAL OFFICER (A)

Applications are invited from male registered practitioners for the appointment of Junior General Assistant Resident Medical Officer (A post), including practitioners within three months of qualification, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period of twelve months. The salary is at the rate of £250 per annum, with residential emoluments valued at £150 per annum, and a temporary cost-of-living bonus at present payable at the rate of £29 18s. per annum. Applications in writing, giving full particulars of experience and stating date when available if appointed, should be sent to the Medical Officer of Health, 1, Western Parade, Southsea, not later than February 14.—V. Blanchard, Town Clerk, City Council Chambers, 1, Clarence Parade, Southsea.

CITY OF PORTSMOUTH
SAINT MARY'S HOSPITAL (1,085 beds)
RESIDENT ANAESTHETIST (A)

Applications are invited from male registered practitioners including those within three months of qualification who are liable under the National Service Acts, for the position of Resident Anaesthetist (A post) at the above hospital. The appointment is a temporary one of six months' duration and the salary is at the rate of £250 per annum, with residential emoluments valued at £150 per annum, and a cost-of-living bonus of £29 18s. Ex-Servicemen are especially invited to apply and if they are eligible for acceptance under the Oxford University Scheme for Postgraduate Education of Medical Officers released from the Forces the salary will be at the rate of £350 per annum, plus residential emoluments, as a Class 1 appointment under that scheme. The hospital is at present seeking recognition for the D.A. and there is a part-time Specialist Anaesthetist on the staff. Applications in writing stating date when available, if appointed, should be made to the Medical Officer of Health, 1, Western Parade, Southsea, not later than Saturday, February 7, 1948 —V. Blanchard, Town Clerk, City Council Chambers, 1, Clarence Parade, Southsea.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
SHOTLEY BRIDGE HOSPITAL
HOUSE SURGEON (B2)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of one House Surgeon (B2), for which R practitioners holding A posts may apply, and one House Surgeon (A), for which practitioners within three months of qualification who are liable under the National Service Acts may apply, to the Department of Thoracic Surgery, which are now vacant. These appointments are tenable for a period of six months and salary is at the rate of £250 and £200 respectively per annum, plus a cost-of-living bonus and full residential emoluments. Applications to be forwarded immediately to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
SHOTLEY BRIDGE HOSPITAL
HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners, male and female, for two House Surgeons (A) posts, which will become vacant in February, 1948. The appointments will be for a period of six months. Salary is at the rate of £200 per annum with residential emoluments and cost-of-living bonus. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.

Have you read the notice at top of page 12 ?

Have you read the notice at top of page 12 ?

CITY GENERAL HOSPITAL, Leicester
PATHOLOGIST

Applications are invited from medical practitioners for the post of Pathologist at the above-mentioned hospital. Candidates must have had considerable experience in clinical pathology, and the officer appointed, though working mainly at the City Isolation Hospital, will be under the general supervision of the Pathologist at the Area Laboratory, City General Hospital, Leicester. The post is in the Emergency Medical Service under the Ministry of Health on a salary range of £1,000 rising to £1,400 per annum payable by the Ministry of Health. This salary is assessed on a non-resident basis and will be at the rate of £100 per annum less if full board and lodging are provided. The appointment is terminable by a month's notice on either side. Full particulars of the appointment may be obtained from the Medical Officer of Health, City Health Department, Grey Friars, Leicester, to whom applications should be addressed not later than February 14, 1948.

CITY OF STOKE-ON-TRENT
CITY GENERAL HOSPITAL (1,200 beds)
APPOINTMENTS TO MEDICAL STAFF

Applications are invited from registered British medical practitioners, including R practitioners now holding A posts, for the following appointments at the above-named hospital, viz :—

HOUSE SURGEON (B2) (General)
HOUSE SURGEON (B2)
(Ear, Nose and Throat and General)
HOUSE SURGEON (B2)
(Gynaecology and Maternity)

In the event of R practitioners being appointed, the appointments will be limited to six months. Salary at the rate of £355 per annum plus full residential emoluments and bonus. Further particulars may be obtained from the Medical Superintendent (Dr. C. Gordon Lewis). Applications to be forwarded to the undersigned, as soon as possible, in envelopes endorsed "City General Hospital—Medical Staff."—Harry Taylor, Town Clerk.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE
STAINCLIFFE COUNTY HOSPITAL
Dewsbury (286 beds)
ANAESTHETIST (B1) (Resident or Non-resident)

Applications are invited from male registered medical practitioners for the whole-time appointment of Anaesthetist (B1) at the above-named hospital, which is recognized by the Examining Board for postgraduate study for the Diploma in Anaesthetics and the Diploma in Child Health. The appointment will commence on March 1, 1948. Applicants should have held house appointments and had considerable experience in the administration of anaesthetics, and possession of the Diploma in Anaesthetics will be an additional advantage. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for service in H.M. Forces. The salary, if resident, will be on the scale of £455, rising by increments of £25 to £555 per annum, with full residential emoluments and cost-of-living bonus in accordance with the County Council's scale. The commencing salary of experienced applicants will be subject to special consideration within the above scale. Applications should be forwarded to the undersigned as soon as possible.—Fraser Brockington, County Medical Officer, County Hall, Wakefield.

COUNTY AND CITY OF PERTH ROYAL INFIRMARY, Perth, Scotland
OBSTETRICIAN AND GYNAECOLOGIST

Applications are invited for the posts of male or female Senior and Junior Obstetrician and Gynaecologist to the Infirmary. The Senior post will be paid at £1,000 per annum and the holder will have the right of private practice. The Junior post will be a full-time appointment with a salary of £1,000 per annum. The successful candidates must reside in Perth. The successful candidates may be required to undergo a medical examination. Candidates must possess their F.R.C.O.G. or M.R.C.O.G. and the possession of F.R.C.S. will be considered an advantage. Thirty-six copies of applications, which should include details of age, qualifications and experience and the names and addresses of three referees to whom the Infirmary may write, should be sent by March 1, 1948, to the Secretary and Treasurer, County and City of Perth Royal Infirmary, Taymount Terrace, Perth, to whom any inquiries should be addressed.

COUNTY BOROUGH OF BARNSLEY
Public Health Department (M.O.H. Circular 202/46)
PATHOLOGIST

Non-resident whole-time Pathologist required. Salary £1,000 by £50 to £1,250 per annum, plus cost-of-living bonus. Further information and conditions are obtainable from Medical Officer of Health, Town Hall, Barnsley. Applications (no form issued) from registered medical practitioners experienced in pathology are returnable to the undersigned within fourteen days from publication hereof.—A. E. Gilfillan, Town Clerk, Town Hall, Barnsley.

COUNTY BOROUGH OF BIRKENHEAD
Department of the Medical Officer of Health
BIRKENHEAD MUNICIPAL HOSPITAL
(560 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the above post which will become vacant on February 21, 1948, including R practitioners now holding A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be for a period of twelve months. The duties attached to the post are mainly medical, and preference will be given to candidates who have had previous postgraduate medical experience in either a Municipal or Voluntary hospital.

RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the above appointment which will become vacant on February 21, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period not exceeding one year. Salary for the above appointments at the rate of £200 per annum, plus bonus and full residential emoluments. Application forms may be obtained from the Medical Officer of Health, 9, Hamilton Square, Birkenhead, to whom they should be returned as soon as possible after completion.—E. W. Tame, Town Clerk, Town Hall, Birkenhead.

COUNTY BOROUGH OF NEWPORT
ASSISTANT MEDICAL OFFICER OF HEALTH
(Female)

Applications for the above position are invited from women who are registered medical practitioners, and, preferably, possess a Diploma in Public Health. Salary is £650 per annum, rising by annual increments of £25 to a maximum of £850 per annum, plus cost-of-living bonus. The appointment, which will be whole time, will be chiefly for Maternity and Child Welfare work and the person appointed will be under the immediate supervision of the lady Medical Officer in charge of the Maternity and Child Welfare Department, but will be expected to carry out such additional duties as may be imposed by the Medical Officer of Health to whom she will be responsible. The appointed candidate will be required to pass a medical examination as to physical fitness and contribute to the Corporation Superannuation Fund. The appointment is terminable by two calendar months' notice on either side. Applications, which should be received by February 14, 1948, in candidate's own handwriting on special forms to be obtained from this office, must be sent, with copies of three testimonials, addressed to the Medical Officer of Health, Royal Chambers, Newport, Mon.

COUNTY BOROUGH OF SUNDERLAND
General Hospital
HOUSE SURGEON (A)
(Including duties in the Public Assistance Institution)

Applications are invited from registered medical practitioners, including those within three months of qualification, for the appointment of House Surgeon (A) of the General Hospital (including duties in attached Public Assistance Institution). If held by a practitioner who is liable under the Military Service Acts the appointment will be for six months, otherwise renewable at the end of that time. Salary at the rate of £200 per annum, with full residential emoluments valued for superannuation purposes at £135, plus bonus, at present £29 19s. 7d. The appointment will be subject to the rules and regulations from time to time adopted by the Council, and any fees received for work within the scope of the engagement or earned within normal working time must be paid over to the Borough Treasurer, unless given specific permission by the Council to retain them. The appointment is superannuated, is subject to passing a medical examination satisfactorily, and is determinable by one month's notice on either side. Applications should reach the undersigned not later than February 7.—G. S. McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY COUNCIL OF DURHAM
Education Department
ASSISTANT SCHOOL OCULIST

The County Education Committee invite applications from registered medical practitioners, men or women, who have had special experience in ophthalmology for appointment as Assistant School Oculist, to act under the direction of the School Medical Officer, in connexion with the examination and treatment of eye defects and diseases in children attending schools in the administrative County area. Preference will be given to candidates holding a higher qualification in ophthalmological medicine and surgery. Commencing salary £650 per annum, rising by annual increments of £25 to £850 per annum, plus bonus at the current rate. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to satisfactory medical examination. For conditions of appointment and form of application, which must be returned not later than first post on February 14, 1948, apply, enclosing stamped, addressed foolscap envelope, to the Director of Education, Shire Hall, Durham. Canvassing, directly or indirectly, is prohibited and will disqualify.—A. A. Denholm, Director of Education, Shire Hall, Durham.

COUNTY BOROUGH OF MIDDLESBROUGH
DEPUTY MEDICAL OFFICER OF HEALTH, DEPUTY SCHOOL MEDICAL OFFICER AND DEPUTY PORT MEDICAL OFFICER

Applications are invited for the appointment of Deputy Medical Officer of Health, Deputy School Medical Officer and Deputy Port Medical Officer. Applicants must be under the age of 40 and possess a Diploma in Sanitary Science, Public Health or State Medicine, and must be capable of assuming full responsibility in the Public Health Department, in the absence of the Medical Officer of Health. Previous public health administrative experience is essential, and preference will be given to candidates who have experience in infectious diseases and port health work. The salary will be in accordance with the interim revision of the Askwith memorandum—namely, £960 per annum, rising by annual increments of £50 to a maximum of £1,160, together with cost-of-living bonus. A car allowance of £50 is also payable. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Applications should reach the undersigned not later than Wednesday, February 4, 1948.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough.

COUNTY BOROUGH OF MIDDLESBROUGH
MIDDLESBROUGH GENERAL HOSPITAL
(355 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the appointment of Resident Medical Officer (B1) at the above Hospital which is an acute General Hospital. The salary is £350 per annum and most of the duties will be in the administration of anaesthetics, but the successful candidate will be required to carry out duties in the medical wards. Suitably qualified R practitioners holding B2 or B1 appointments are invited to apply. The appointment which is limited to one year is superannuable and the successful candidate will be required to pass a medical examination. Applications, giving details of qualifications and experience, should be sent not later than Wednesday, February 4, 1948, to the Medical Superintendent, Mr. E. W. Grahame, M.D., Ch.M., F.R.C.S.(E.), F.R.C.S. (Eng.), General Hospital, Ayresome Green Lane, Middlesbrough, from whom further information may be obtained.—E. C. Parr, Town Clerk.

COUNTY BOROUGH OF MIDDLESBROUGH
HEMLINGTON EMERGENCY HOSPITAL
(200 beds)
ASSISTANT RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Medical Officer (B2) at the above hospital. Duties are mainly surgical but the successful candidate will be required to assist in the administration of anaesthetics and general duties in the hospital. The salary is at the rate of £200 per annum plus cost-of-living bonus, together with full residential emoluments, and the successful candidate will be required to pass a medical examination. R practitioners who now hold A posts may apply, when the appointment will be limited to a period of six months, otherwise it will be for a period of twelve months. Applications should be sent to the Medical Officer of Health, Municipal Buildings, Middlesbrough, not later than Wednesday, February 4, 1948.—E. C. Parr, Town Clerk.

COUNTY COUNCIL OF DURHAM
Education Department
ASSISTANT SCHOOL MEDICAL OFFICER

The County Education Committee invite applications from registered medical practitioners (men and women) for appointment as Assistant School Medical Officer, to act under the direction of the School Medical Officer. Applicants must have had at least three years' experience in the practice of their profession and the possession of a diploma in public health is desirable. Married women would be eligible for appointment to the temporary staff. Commencing salary £650 per annum, rising by annual increments of £25 to a maximum of £850 per annum, plus bonus at the current rate. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to satisfactory medical examination. For conditions of appointment and form of application, which must be returned not later than the first post on February 21, 1948, apply, enclosing stamped, addressed foolscap envelope, to the Director of Education, Shire Hall, Durham. Canvassing, directly or indirectly, is prohibited and will disqualify.—A. A. Denholm, Director of Education.

COUNTY BOROUGH OF DONCASTER
ASSISTANT MEDICAL OFFICER (B1)
for Obstetrics

Applications are invited from registered medical practitioners (male or female) with previous experience in midwifery, to act as medical officer at Hamilton Annexe, Springwell House (63 midwifery beds), and to perform such other duties as may be required. The salary will be £455 per annum, rising by annual increments of £25 to £555 per annum, plus bonus, with emoluments valued at £150. The appointment is subject to three months' notice. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should be sent to me, endorsed "Assistant Medical Officer," not later than February 7, 1948.—H. S. Essenhigh, Town Clerk, Town Clerk's Office, 1, Priory Place, Doncaster.

COUNTY OF LINCOLN—PARTS OF LINDSEY
Public Health Department
COUNTY INFIRMARY, Louth
(240 beds)

Applications are invited for the following appointments vacant on March 1 :—

RESIDENT MEDICAL OFFICER (B2). Salary at the rate of £250 a year. Includes R practitioners who now hold A posts for whom appointment would be limited to six months.

RESIDENT MEDICAL OFFICER (A). Salary at the rate of £225 a year. Includes practitioners within three months of qualification and liable under the National Service Acts. Appointment is for six months.

The above appointments include full residential emoluments and applications can be received from male or female practitioners. Applications should be forwarded to the Surgeon-Superintendent, County Infirmary, Louth, Lincs., as soon as possible, without testimonials, but with names of two persons to whom reference can be made.

COUNTY BOROUGH OF ROTHERHAM
MUNICIPAL GENERAL HOSPITAL
Resident ASSISTANT MEDICAL OFFICER (A)

Applications are invited from fully registered medical practitioners, including practitioners within three months of qualification and who are liable for service under the National Service Acts, for the above appointment. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, together with full residential emoluments and a temporary cost-of-living bonus in accordance with the Council's scale. Forms of application may be obtained from the Medical Superintendent, Municipal General Hospital, Moorgate, Rotherham, and must be returned to the undersigned, endorsed "Resident Assistant Medical Officer," not later than February 5, 1948.—John S. Wall, Town Clerk, Municipal Offices, Rotherham.

COUNTY BOROUGH OF GATESHEAD
QUEEN ELIZABETH HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Applicants should have held House appointments and had surgical experience. Preference will be given to candidates holding a Diploma of F.R.C.S. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment will be subject to the requirements of the Superannuation Acts whereby the the successful candidate must pass a medical examination. The salary is at the rate of £700 per annum with full residential emoluments. Applications should be sent immediately to the Medical Superintendent.—J. W. Porter, Town Clerk, Town Hall, Gateshead, 8.

COUNTY BOROUGH OF GATESHEAD
QUEEN ELIZABETH HOSPITAL

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable under the National Service Acts, for the following resident appointments :—

TWO HOUSE SURGEONS (A). Vacant now. Salary at the rate of £250 plus bonus £59 16s. with full residential emoluments.

ONE HOUSE PHYSICIAN (A). Vacant now. Salary at the rate of £250 plus bonus £59 16s., with full residential emoluments.

If the practitioners appointed are liable under the National Service Acts the appointments will be limited to six months. Applications should be sent immediately to the Medical Superintendent.—J. W. Porter, Town Clerk, Town Hall, Gateshead, 8.

COUNTY BOROUGH OF GATESHEAD
BENSHAM GENERAL HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable under the National Service Acts, for the post of House Physician (A) to the above Hospital, vacant now. If the practitioner appointed is liable under the above Acts, the appointment will be limited to six months. Salary at the rate of £250 plus bonus £59 16s., with full residential emoluments. Applications should be sent immediately to the Medical Superintendent.—J. W. Porter, Town Clerk, Town Hall, Gateshead, 8.

CHESHIRE COUNTY COUNCIL
CLATTERBRIDGE (COUNTY) GENERAL HOSPITAL, Bebington, Wirral
Assistant RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the post of Assistant Resident Medical Officer (B2). The duties will be mainly surgical. Salary £200 per annum, plus bonus and residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications (no special forms) to be sent as soon as possible to the undersigned.—Arnold Brown, County Medical Officer, 24, Nicholas Street, Chester.

COUNTY BOROUGH OF STOCKPORT
STEPPING HILL HOSPITAL
VISITING RADIOLOGIST

Applications are invited from suitably qualified practitioners for the appointment of Visiting Radiologist at the above hospital on three sessions per week. Salary payable will be £4 4s. per session. A mileage allowance in accordance with the usual scale will be paid. Applications should be made forthwith to the Medical Officer of Health, Public Health Department, Town Hall, Stockport.

DERBYSHIRE COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited from male medical practitioners for the whole-time appointment of Assistant County Medical Officer of Health. The possession of the D.P.H. is essential, but it would be an advantage if the candidate had in addition the D.P.M. or experience in mental deficiency work. The work will be largely administrative in connection with the Public Health and School Health Services, but other duties may be assigned to the officer appointed, who will work under the direction of the County Medical Officer. The successful candidate will not be allowed to engage in private practice. Office accommodation will be provided in the Central Office. The salary is £900 rising by annual increments of £25 to £1,000 per year, plus a cost-of-living bonus which at present is £59 16s. per annum, together with a travelling allowance in accordance with the County Council's scale, which at present is as follows : Cars not exceeding 8 h.p. or 1014 c.c., £84 per annum plus 1½d. per mile ; cars exceeding 8 h.p. or 1014 c c., £96 per annum plus 1½d. per mile. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment will be terminable by three months' notice on either side. Every candidate is required to disclose in writing whether to his knowledge he is related to any member of the Council or to the Head of a Department under the Council. Canvassing of members of the Council, directly or indirectly, will be a disqualification. Applications should be submitted to the undersigned so that they are received not later than February 23, 1948. Forms of application are not provided.—J. B. S. Morgan, County Medical Officer, County Offices, Derby.

ESSEX COUNTY COUNCIL AND LEYTON BOROUGH COUNCIL
Combined appointments of
ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH AND ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified medical practitioners for the above combined appointments. Preference will be given to applicants possessing a Diploma in Public Health. The Borough is an Excepted District under the Education Act, 1944. The person appointed will be required to devote whole-time service to the combined appointments. The duties of the County Council appointment will be chiefly in relation to the School Health Service and the duties of the Borough Council appointment will include those relating to Maternity and Child Welfare and other Public Health work. As respects both appointments the person appointed will, however, be required to undertake such other duties as may be necessary. The salary attaching to the combined appointments will be at the rate of £650 a year rising by annual increments of £25 to £850 a year, plus bonus and travelling allowance as from time to time decided. The combined appointments, which will not be severable, will be held during the pleasure of the respective employing Authorities and will be determinable by the officer by not less than three months' notice in writing. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate selected for appointment will be required to pass a medical examination. Application forms may be obtained from the Clerk of the County Council, to whom they should be returned, accompanied by copies of not more than three recent testimonials, as soon as possible. Canvassing, directly or indirectly, will disqualify.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford ; D. J. Osborne, Town Clerk, Town Hall, Leyton.

HERTS COUNTY COUNCIL
HILL END HOSPITAL AND CLINIC
(Herts County Mental Hospital), St. Albans
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) to commence duty in April. Salary £575 rising by annual increments of £25 to £625, together with full residential emoluments valued at £100 per annum, and a cost-of-living bonus at present £59 16s. per annum, part of which is payable in cash. An additional £50 per annum is payable for the D.P.M. In the case of a married man, the emoluments will consist of an unfurnished house, coal, light, laundry, and garden produce. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H M. Forces. The salary is subject to a deduction of 3% under the A O.S. Act. Applications should be addressed to the Medical Director.

INVERNESS DISTRICT MENTAL HOSPITAL
SECOND ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment as Second Assistant Medical Officer (B1). Salary at the rate of £590 per annum, with board, lodging and laundry. Suitably qualified R practitioners holding B2 appointments, and those holding B1 appointments and ineligible for H M. Forces, are invited to apply. The appointment is subject to the Asylums Officers' Superannuation Act, 1909. Applications to be sent immediately to the Medical Superintendent.

GLOUCESTERSHIRE COUNTY COUNCIL
SENIOR ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The Gloucestershire County Council invite applications for the appointment of Senior Assistant County Medical Officer of Health (female) at a salary of £850 per annum, rising by four annual increments of £25 to £950 per annum, plus bonus £48, together with travelling and subsistence allowances in accordance with the county scale. Applicants must be registered medical practitioners. The possession of a Diploma in Public Health would be an advantage. The appointment will be subject to the Local Government Superannuation Act, 1937, and to a satisfactory medical report by the Council's Medical Adviser. Forms of application, with particulars of duties and conditions of appointment, may be obtained from the County Medical Officer of Health, 18, Berkeley Street, Gloucester, to whom completed applications, with copies of three recent testimonials, should be sent not later than February 9, 1948. Canvassing, directly or indirectly, will disqualify.—Guy H. Davis, Clerk of the County Council.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE SURGEON (B2) (E.N.T.)
HOUSE SURGEON (B2) (Orthopaedic)
HOUSE SURGEON (B2) (General Surgery)

Applications are invited for the above appointments from registered medical practitioners, male and female, including R practitioners who now hold A posts. The hospital is approved for the D.L.O. If held by R practitioners, the appointments will be limited to a period of six months, otherwise the successful applicants will be eligible for reappointment for a further period of six months. Salary for each appointment is at the rate of £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, February 9, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL
Ashton-under-Lyne, near Manchester
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the above appointment, including R practitioners who now hold A posts. If the successful applicant is an R practitioner, the appointment will be limited to six months, otherwise it may be renewed for a further period of six months. Salary is at the rate of £250 per annum, together with a cost-of-living bonus and full residential emoluments. The appointment is subject to medical examination and is superannuable. Forms of application may be obtained from the County Medical Officer of Health Hospital and Medical Department, County Offices Preston, to whom all applications must be forwarded not later than Monday, February 9, 1948 —R. H. Adcock, Clerk of the County Council County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL, Ormskirk, near Liverpool
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from male and female registered medical practitioners for the above appointment, which will be tenable for a period of twelve months Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M C Salary is at the rate of £350 per annum, plus cost-of-living bonus and residential emoluments The appointment is subject to medical examination and is superannuable. Full particulars and forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom applications must be returned not later than Monday, February 9, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LONDON COUNTY COUNCIL
Public Health Department
ASSISTANT PHYSICIST

Applications are invited for appointment to a position of whole-time Assistant Physicist in the hospital service. The duties will be mainly in connexion with x-ray and radium work at Hammersmith Hospital, Du Cane Road, W 12, and Lambeth Hospital, Brook Drive, S E 11. Salary £600, rising by annual increments of £35 to £775 and by a final increment of £25 to £800 a year There are no emoluments. Application forms giving further particulars and conditions of appointment and service, obtainable from the Medical Officer of Health (S.D.6), County Hall, S.E 1, returnable by February 20, 1948. Canvassing disqualifies. (49)A.

Have you read the notice at top of page 12 ?

Have you read the notice at top of page 12 ?

LONDON COUNTY COUNCIL
TWO SENIOR PHYSICIANS (Paediatrics)
TWO ASSISTANT SENIOR PHYSICIANS (Tuberculosis)

Medical practitioners required for the undermentioned whole-time positions :—

Senior Physician for Paediatrics, Archway Group of Hospitals, Highgate, N.19 ; **Senior Physician for Paediatrics,** Queen Mary's Hospital for Children, Carshalton, Surrey ; **Assistant Senior Physician for Tuberculosis (deputy to Physician Superintendent),** Colindale Hospital, The Hyde, Hendon, N.W.9 ; **Assistant Senior Physician for Tuberculosis (deputy to Physician Superintendent),** Grove Park Hospital, Lee, S.E.12.

The salary for a Senior Physician is £1,500 a year, rising by annual increments of £100 to £1,800 ; and that for an Assistant Senior Physician is £1,000 a year, rising by annual increments of £50 to £1,400. No emoluments are payable except in the case of deputy to the Medical Superintendent where an allowance at the rate of £50 a year will be granted. The officers selected for appointment as Senior Physician will be subject to the administrative direction and control of the medical superintendent, but will have full clinical responsibility for the work of their department at the hospital. Applications should be made on the prescribed forms obtainable on written application from the Medical Officer of Health (S.D.2), The County Hall, Westminster Bridge, S.E.1. The completed form should be returned by February 16, 1948. Canvassing disqualifies. (201).

LONDON COUNTY COUNCIL
MAUDSLEY HOSPITAL
(University of London), Denmark Hill, S.E.5
HOUSE PHYSICIAN (B2)

Applications are invited for post of House Physician (B2) at the Maudsley Hospital. There are five posts ; vacancies arise quarterly. R practitioners holding A posts may apply. The appointment is tenable for six months in the first instance. Salary £300 a year, plus cost-of-living addition. (£2 9s. a week is charged for board, lodging and laundry). Applications should be made for forthcoming vacancies to the Acting Medical Superintendent, Maudsley Hospital, Denmark Hill, S.E.5, before February 7, 1948. (175).

LONDON COUNTY COUNCIL
PSYCHOTHERAPIST

Applications are invited from registered medical practitioners for a position of Psychotherapist for duty at mental hospital out-patient clinics centred at general hospitals in north and west London. Salary £1,100 rising to £1,300 a year. No emoluments. Application form, returnable by February 8, 1948, obtainable from Medical Officer of Health (MHS/B), County Hall, Westminster Bridge, S.E.1. (171).

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth
SENIOR HOUSE OFFICER (B2)
Psychiatry Department

Senior House Officer (B2) required at West Middlesex County Hospital, Isleworth, for duty in Psychiatry dept. R practitioners holding A posts eligible. Mental experience desirable but not essential. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash). Board, lodging, laundry. Six to twelve months appointment (R practitioners six months only). Vacant now. Application to Medical Director of Hospital, by February, 7, 1948 (Quoting D.495, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
ASHFORD COUNTY HOSPITAL
Ashford, Middlesex
RESIDENT HOUSE PHYSICIAN (A)

Resident House Physician (A), male, required at Ashford County Hospital, Ashford, Middlesex, for cardiac, dietetic and children's wards. Registered medical practitioners within three months of qualification and liable for National Service are eligible. Salary £150 per annum, plus any temporary bonus (now £30 per annum, cash). Six months' appointment. Post vacant March 1, 1948. Applications to Medical Director of hospital by February 7, 1948 (quoting D.449, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL, Enfield, Middlesex
JUNIOR HOUSE OFFICERS (A)
(Physician and Surgeon)

Junior House Officers (A) (Physician and Surgeon) required at Chase Farm Hospital, Enfield, Middlesex, for general medical-surgical duties. Registered medical practitioners within three months of qualification and liable for National Service eligible. Salary £150 per annum, board, lodging, laundry, plus any temporary bonus (now £30 per annum, cash). Six months' appointment. Vacant March 1, 1948, and March 4, 1948, respectively. Applications to Medical Director of hospital by February 16, 1948 (quoting D.445, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
DEPUTY COUNTY MEDICAL OFFICER

Deputy County Medical Officer required. Must be medical practitioner with degree or Diploma in State Medicine or Public Health ; sound knowledge of clinical medicine and practical experience in public health administration. Established, subject to medical examination. Salary £1,200 by £60 to £1 500 per annum, plus any temporary bonus (now £60 per annum). Duties mainly administrative on central office staff under supervision and control of County Medical Officer. Whole-time, no other appointments or private practice permitted. Applications to the undersigned by February 21. Relationship to any member or officer of the Council to be disclosed. Canvassing directly or indirectly will disqualify. (Quoting D.496, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Guildhall, Westminster, S.W.1.

MIDDLESEX COUNTY COUNCIL
NORTH MIDDLESEX COUNTY HOSPITAL
Edmonton, N.18
RESIDENT SENIOR HOUSE PHYSICIAN (B2)

Resident Senior House Physician (B2) required at North Middlesex County Hospital, Edmonton, N.18. R practitioners holding A posts eligible. Salary £250 per annum, plus any temporary bonus (now £30 per annum, cash), board, lodging and laundry. Whole-time duties such as Council may require under supervision of Medical Director. Six months' appointment. Vacant February 25. Applications to Medical Director of hospital by February 5 (quoting D.448, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MANCHESTER CORPORATION
WITHINGTON HOSPITAL
(Adult, General, 1,150 beds)
(a) Resident ASSISTANT MEDICAL OFFICER (B1)
(b) ORTHOPAEDIC HOUSE OFFICER (B1)
(c) Resident Assistant SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male or female, including those in H.M. Forces, for the above-mentioned appointments at Withington Hospital. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C.

(a) Resident Assistant Medical Officer (B1). The person appointed to this post will be required to deputize for the Resident Medical Officer and to undertake some duties as House Physician. Basic salary £400 per annum plus emoluments.

(b) Orthopaedic House Officer (B1). The person appointed will be responsible, under the direction of the visiting Consultant Orthopaedic Surgeon, for all the orthopaedic work in the hospital. The post offers scope for gaining experience in manipulative surgery and in fracture cases. Basic salary £400 per annum, plus emoluments.

(c) Resident Assistant Surgical Officer (B1). Candidates must have had previous surgical experience. Basic salary £350 per annum, plus emoluments.

All appointments are subject to the Manchester Corporation conditions of service and a temporary bonus is payable in addition to the basic salary stated. Emoluments, board, residence and laundry are provided in each instance and are valued basically at £120 per annum. Each appointment is tenable for a maximum period of one year. Full information and forms of application may be obtained from the Medical Officer of Health, Hospitals Administration Section, P.O. Box 399, Town Hall, Manchester, 2, and applications for the post must be received by him not later than February 12, 1948. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

ROYAL CITY OF DUBLIN HOSPITAL
Upper Baggot Street, Dublin
VISITING GYNAECOLOGIST

A vacancy having occurred on the Visiting Surgical Staff the Medical Board invite applications, to be made not later than Friday, February 6, 1948, addressed Hon. Secretary, Medical Board.

ADDENBROOKE'S HOSPITAL, Cambridge
HOUSE PHYSICIAN (B2)
to the Radiotherapeutic Centre

Applications are invited from registered medical practitioners, male and female, for the appointment of House Physician (B2) to the Radiotherapeutic Centre, vacant on March 10, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, which is the normal period of appointment. The salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned not later than Wednesday, February 11, 1948.—J. A. Beardsall, Secretary-Superintendent.

WALSALL GENERAL HOSPITAL (181 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A), vacant February. Salary £150 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Salary is at the rate specified above with full residential emoluments. Applications should be forwarded to the House Governor and Secretary.

NOTTINGHAMSHIRE COUNTY COUNCIL
MANSFIELD WOODHOUSE AND WARSOP URBAN DISTRICT COUNCILS
JOINT MEDICAL OFFICER

The Nottinghamshire County Council and the Mansfield Woodhouse and Warsop Urban District Councils jointly invite applications from duly qualified and registered medical practitioners, including those now serving in H.M. Forces, for the joint whole-time appointment of a Medical Officer to act as: (a) Assistant Medical Officer of the County Council. (b) Medical Officer of Health of the Urban Districts of Mansfield Woodhouse and Warsop. The salary attaching to the position will be £960 by £50 to £1,160 per annum plus cost-of living bonus. The person appointed will be required to live within a radius of three miles from the Mansfield Woodhouse Post Office. Applicants must have had at least three years' professional experience since qualifying, must be conversant by experience in the duties of a Medical Officer of Health, Medical Officer for Maternity and Child Welfare and School Medical Officer and must possess a Diploma in Public Health. Experience in the examination of defective children is desirable. As regards his duties under the County Council the Officer will act under the general control and supervision of the County Medical Officer and will be required to perform such duties either as Assistant School Medical Officer or otherwise as may be from time to time prescribed. As regards his duties as Medical Officer of Health of the Urban Districts of Mansfield Woodhouse and Warsop the Officer will also be required to act as Medical Officer for Maternity and Child Welfare in the Urban Districts. The appointment is subject to superannuation and the selected candidate will accordingly be required to pass a medical examination. Forms of application and conditions of appointment may be obtained at my office and applications accompanied by copies of not more than three recent testimonials must be forwarded to me not later than February 16, 1948.—K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

NOTTINGHAMSHIRE COUNTY COUNCIL
KIRKBY-IN-ASHFIELD URBAN DISTRICT COUNCIL
JOINT MEDICAL OFFICER

The Nottinghamshire County Council and the Kirkby-in-Ashfield Urban District Council jointly invite applications from duly qualified and registered medical practitioners, including those now serving in H.M. Forces, for the joint whole-time appointment of a Medical Officer to act as:— (*a*) Assistant Medical Officer of the County Council ; (*b*) Medical Officer of Health of the Urban District of Kirkby-in-Ashfield. The salary attaching to the position will be £960 by £50 to £1,160 per annum, plus war bonus. The person appointed will be required to reside within a radius of three miles from the Council Offices, Kirkby-in-Ashfield. Applicants must have had at least three years' professional experience since qualifying, should be conversant by experience in the duties of a Medical Officer of Health and School Medical Officer and must possess a Diploma in Public Health. Experience in refraction work and the examination of defective children is desirable. As regards his duties under the County Council the officer will act under the general control and supervision of the County Medical Officer, and will be required to perform such duties, either as Assistant School Medical Officer or otherwise, as may be from time to time prescribed. As regards his duties as Medical Officer of Health of the Urban District of Kirkby-in-Ashfield, the officer will also be required to act as Medical Officer for Maternity and Child Welfare in the Urban District. The appointment is subject to superannuation and the selected candidate will accordingly be required to pass a medical examination. Forms of application and conditions of the appointment may be obtained at my office, and applications, accompanied by copies of not more than three recent testimonials, must be forwarded to me not later than February 16, 1948 —K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

SURREY COUNTY COUNCIL
ST. HELIER COUNTY HOSPITAL, Carshalton
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners now holding A posts, for the above appointment which will be for a period of six months (renewable for a further six months if the candidate appointed is not liable for service with H.M. Forces). Candidates must have had experience in a house appointment. Salary £250 per annum, plus bonus and full residential emoluments valued at £150 per annum. Applications should be sent to the Medical Superintendent of the Hospital by February 7, 1948.

SURREY COUNTY COUNCIL
ST. LUKE'S HOSPITAL, Guildford (450 beds)
ASSISTANT SURGICAL OFFICERS (A) and (B2)

Applications are invited from registered medical practitioners for the above two appointments which are for a period of six months. Salary for either post £250 per annum, plus bonus and full residential emoluments valued at £150 per annum. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply for the A post and those now holding A posts may apply for the B2 appointment. Enquiries about the posts should be made to the Medical Superintendent of the hospital, to whom applications by letter should be sent by February 14, 1948.

SURREY COUNTY COUNCIL
FARNHAM COUNTY HOSPITAL
Hale Road, Farnham (200 beds)
ST. LUKE'S HOSPITAL, Guildford (470 beds)
ASSISTANT PATHOLOGIST

Applications are invited from suitably qualified practitioners for the combined whole-time appointment of Assistant Pathologist to the above general hospitals. Candidates must have had considerable pathological experience. The holder of the post will be required to devote approximately half time to each hospital and will be in charge of the laboratory at Farnham subject to the general control of the pathologist at St. Luke's Hospital. Travelling expenses on official business will be paid. The commencing salary will be fixed according to qualifications and experience on the grade £950 by £50 to £1,150 per annum inclusive. The post is subject to the Local Government Superannuation Act, 1937, but has a tenure limited to seven years. Applications by letter stating age, qualifications and experience with a copy of not more than three recent testimonials and/or the names of three referees should be sent to the County Medical Officer, County Hall, Kingston-upon-Thames, by February 14, 1948.

SURREY COUNTY COUNCIL
SURREY COUNTY SANATORIUM
Milford (348 beds)
Resident ASSISTANT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those serving in H.M. Forces, for the above appointment, which provides good experience in modern Thoracic Surgery. Candidates must have had previous experience in a house appointment. Salary £350, £400 or £450 per annum according to qualifications and experience. Appointment is for six months renewable for a further six months. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have already completed a period of service with H.M. Forces or have been rejected for such service. Enquiries relating to the appointment should be made to the Medical Superintendent of the Sanatorium, to whom applications by letter stating present appointment should be sent by February 7, 1948.

SURREY COUNTY COUNCIL
BROOKWOOD HOSPITAL, Knaphill, near Woking
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A appointments, for the post of House Physician (B2) at the above Mental Hospital. The appointment, which provides facilities for gaining experience in Psychiatry and the modern methods of treatment, is tenable for six months in the first instance and may be renewed for a further period of six months, unless held by an R practitioner. The salary is at the rate of £350, £400 or £450 per annum according to previous experience, with full residential emoluments. Applications to be sent to the Physician Superintendent, Brookwood Hospital, Knaphill, Woking, Surrey, as soon as possible.

SURREY COUNTY COUNCIL
SURREY COUNTY SANATORIUM
Milford (348 beds approx.)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those serving with H.M. Forces, for the above appointment. Applicants must have had previous experience in house appointments. The appointment will be for six months renewable for a further six months. Salary £350, £400 or £450 per annum according to qualifications and experience, plus full residential emoluments and bonus. Suitably qualified R practitioners holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have already completed a period of service with H.M. Forces or have been rejected for such service. Applications should reach the Medical Superintendent at the Sanatorium by February 14, 1948.

BIRMINGHAM ACCIDENT HOSPITAL
Bath Row, Birmingham, 15
HOUSE SURGEON (B2)
for the Medical Research Council Burns Unit

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2) now vacant, including R practitioners who now hold A posts. The appointment will be for six months. The salary for newly qualified practitioners is at the rate of £200 per annum, with full residential emoluments. The salary for practitioners who have already held hospital appointments is at the rate of £300 per annum, with full residential emoluments.—W. George Spencer, Secretary.

BIRMINGHAM AND MIDLAND EAR AND THROAT HOSPITAL
Edmund Street, Birmingham, 3 (76 beds)
HOUSE SURGEON (A)

Applications are invited for the appointment of a House Surgeon (A). Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts appointment will be for a period of six months. Duties to commence March 15, 1948. Salary at the rate of £250 per annum with full residential emoluments. Applications should be forwarded to the undersigned immediately.—W. H. Lomas, House Governor.

STAFFORDSHIRE COUNTY COUNCIL
BRIERLEY HILL URBAN DISTRICT COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited for the joint whole-time appointment of an Assistant County Medical Officer for the Administrative County of Stafford and Medical Officer of Health of the Brierley Hill Urban District (est. population 46,190). The salary will be at the rate of £960 per annum, together with a cost-of-living bonus, and the appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to provide a motor car, the allowance for which will be in accordance with the County Council scale. Applicants must be fully qualified medical men with experience in public health duties, and must hold the Diploma of Public Health. The candidate appointed will, as regards his duties as Assistant County Medical Officer, act under the direction of the County Medical Officer of Health and will be required to perform such duties as may from time to time be prescribed. As regards his duties as District Medical Officer of Health, he will be subject to the sole control and direction of the local Sanitary Authority. The joint appointment is subject to the approval of the Ministers of Health and Education, and also, as far as the office of District Medical Officer of Health is concerned, to the provisions of the Sanitary Officers' (Outside London) Regulations, 1935. The joint appointment will be subject to three calendar months' notice in writing on either side, which, as far as the office of District Medical Officer of Health is concerned, will also be subject to the consent of the Minister of Health. The successful candidate will be required to pass a medical examination and produce his birth certificate. Forms of application may be obtained from the Clerk of the County Council and should be returned to him by the first post on February 16, 1948, together with copies of not more than three recent testimonials.—T. H. Evans, Clerk of the County Council. H. Hex, Clerk of the Brierley Hill Urban District Council, County Buildings, Stafford.

STAFFORDSHIRE COUNTY COUNCIL
STANDON HALL ORTHOPAEDIC HOSPITAL
near Eccleshall, Stafford (120 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from suitably qualified registered medical practitioners for the above-mentioned post, to become vacant shortly. The appointment, which will be subject to one calendar month's notice in writing on either side, will be for a period of one year, with salary at the rate of £455 per annum, plus full residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications must reach the undersigned by February 16, 1948.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford.

ULSTER HOSPITAL FOR CHILDREN AND WOMEN (INC.)
Haypark, Ormeau Road, Belfast, N. Ireland
HONORARY ASSISTANT SURGEON

A vacancy exists on the Honorary Medical Visiting Staff for an Honorary Assistant Surgeon. Particulars may be had from the undersigned, to whom application should be made before March 26, 1948.—A. E. Titterington, Honorary Secretary.

ASHFORD HOSPITAL, Ashford, Kent
TWO RESIDENT HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners (male) for appointment of two Resident House Surgeons (A), which become vacant immediately, including R practitioners within three months of qualification. The appointments will be for a period of six months each. Salary at the rate of £200 per annum with full residential emoluments. Applications should be sent to the Secretary, Ashford Hospital, Kent, as soon as possible.

BOSTON GENERAL HOSPITAL
Boston, Lincs (95 beds)
RESIDENT MEDICAL OFFICERS

Applications are invited from registered medical practitioners (male or female) for:—

1.—The appointment of Senior Resident Medical Officer (B2), including R practitioners who hold A appointments. Salary £250 per annum with full residential emoluments.

2.—Appointment of Junior Resident Medical Officer (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Salary £200 per annum with full residential emoluments.

If held by practitioners who are liable under these Acts, the appointments will be for a period of six months only, otherwise they may be renewed for a further period. Applications should be sent immediately to the undersigned.—B. Haines, Secretary.

BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY
(248 beds—7 Residents)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) to become vacant on March 1, 1948, including R practitioners within three months' of qualification. Salary at the rate of £175 per annum with full residential emoluments. Applications, together with three testimonials, should be sent to the undersigned.—T. Dewhurst, General Superintendent and Secretary, Royal Infirmary, Blackburn.

BURY INFIRMARY, Lancashire (161 beds)
(With post-operative unit to be opened during the next few months—190 approx.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from suitably qualified male practitioners for the above post which becomes vacant at the end of February. Possession of the Fellowship of one of the Royal Colleges will be an advantage, but applications from others (including those studying for this qualification) will be considered. The post is particularly suitable for those who are intending to take the F.R.C.S. examinations in due course, and its tenure is for one year in the beginning with the possibility of an extension for a further year. Applicants should have held a house appointment and R practitioners holding B2 posts are invited to apply. Applications from practitioners holding B1 posts can only be considered where the applicant is ineligible for H.M. Forces. Salary will not be less than £400 per annum to commence, and with full residential emoluments. Applications, stating whether married or single, to the undersigned not later than February 7.—H. Wilkinson, Superintendent.

BECKENHAM HOSPITAL, Beckenham, Kent
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A), to commence duty March 1 next. If held by a practitioner who is liable under the National Service Acts, appointment will be for a period of six months; otherwise it will be renewable, at the discretion of the Hospital, for a further period of six months. Salary is at the rate of £150 per annum, with full residential emoluments. Applications, stating age, nationality and qualifications, with full details of experience and copies of three recent testimonials, to be forwarded to the undersigned as soon as possible.—Gordon Easto, Secretary.

BRADFORD ROYAL INFIRMARY
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male, single) for the post of Resident Surgical Officer (B1), vacant March 1, 1948. Twelve months' appointment. Suitably qualified R practitioners now holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by H.M. Forces. Preference will be given to candidates holding the F.R.C.S. Diploma. Salary £450 per annum with full residential emoluments. There are 372 beds and 13 resident officers. Applications should be sent, not later than February 14, to Hy. Trusson, House Governor and Secretary.

BATTERSEA GENERAL HOSPITAL
Battersea Park, S.W.11
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the above appointment. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications, accompanied by two recent testimonials, should be sent to the Secretary of the Hospital.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £225 per annum, with full residential emoluments. Applications should be forwarded as soon as possible to C. E. Lowndes, Secretary.

BOLINGBROKE HOSPITAL,
Wandsworth Common, S.W.11
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), now vacant, including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointment is for six months, at a salary of £120 per annum with full residential emoluments. Applications should be sent as soon as possible to the Secretary-Superintendent.

BOLINGBROKE HOSPITAL
Wandsworth Common, S.W.11
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the post of House Physician (B2), becoming vacant on March 1, 1948, for a period of six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications should be sent not later than February 12, 1948, to the Secretary-Superintendent.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

BRIGHTON MUNICIPAL HOSPITAL
TWO RESIDENT ASSISTANT MEDICAL OFFICERS (B1)

Applications are invited for the following appointments from suitably qualified male practitioners. Applications from R practitioners now holding similar appointments cannot be considered unless they have been rejected by H.M. Forces. The salary scale for both posts is £350 by £25 to £400 per annum, plus full residential emoluments, commencing salary according to qualifications and experience. The appointments will not exceed one year.

RESIDENT ASSISTANT MEDICAL OFFICER (B1) (Surgical). The duties are mainly in the surgical department of the hospital, but include certain routine hospital duties as required.

RESIDENT ASSISTANT MEDICAL OFFICER (B1) (Medical). The duties are in the medical wards but include certain routine medical duties as required.

Application forms may be obtained from Dr. S. J. Firth, Medical Director, Municipal Hospital, Elm Grove, Brighton, 7.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Resident Surgical Officer (B1), vacant immediately (including R practitioners who now hold B2 posts). Applications from R practitioners who hold B1 posts cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £300 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

CHESTER ROYAL INFIRMARY
(Voluntary Hospital, 225 beds)
MEDICAL AND SURGICAL REGISTRARS (B1)
SURGICAL REGISTRAR

Full-time appointment. A higher qualification in surgery is necessary. Salary £500 per annum with full residential emoluments. Appointment for one year, renewable. Copies of three testimonials should be sent with application. To commence duties as soon as possible.

MEDICAL REGISTRAR

Full-time appointment. A higher qualification in Medicine is necessary. Salary £650 per annum, non-resident. Appointment for one year, renewable. Copies of three testimonials should be sent with application. To commence duties as soon as possible.

Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

Further particulars of all appointments may be obtained from the undersigned to whom applications should be addressed, to arrive not later than February 23.—P. R. J. Arnold, General Superintendent and Secretary, The Chester Royal Infirmary.

CHESTER ROYAL INFIRMARY
(Voluntary Hospital, 225 beds)
VISITING MEDICAL STAFF
VISITING CONSULTING PHYSICIAN

Candidates are required to hold the degree of a Doctor of Medicine of a University in the United Kingdom or Eire, or to be a Member of a Royal College of Physicians, and to engage in consultant practice only. An Honorarium of £1,000 per annum will be paid. Applications with full particulars and copies of three recent testimonials should be submitted.

VISITING DERMATOLOGIST

One Out-patient session weekly. Remuneration on a sessional basis on agreed B.M.A. Scale. Applicants should submit evidence of suitability for the appointment.

Further particulars of all appointments may be obtained from the undersigned, to whom applications should be addressed, to arrive not later than February 16.—P. R. J. Arnold, General Superintendent and Secretary, The Chester Royal Infirmary.

COVENTRY AND WARWICKSHIRE HOSPITAL
Coventry
HOUSE SURGEON (A)
to the General Surgical Department, combining E.N.T. Duties

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) to the General Surgical Department combining Ear, Nose and Throat duties, including R practitioners within three months of qualification. The appointment, which is for six months, is vacant February 6, 1948. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL
HOUSE SURGEON (A)

House Surgeon (A) for Fracture and Accident Wards now about to be re-opened. Salary at the rate of £200 per annum, with full residential emoluments. Appointment is for six months in the first instance. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications with full details to the House Governor, Coventry and Warwickshire Hospital, Coventry.

CUMBERLAND AND WESTMORLAND MENTAL HOSPITAL, Garlands, Carlisle
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the above appointment. Candidates must be registered medical practitioners and should have previous experience in mental hospital work. The commencing salary will be at the rate of £600 per annum, rising by two annual increments of £50 to £700 per annum, plus cost-of-living bonus. In addition the holder of a Diploma of Psychological Medicine will receive £50 per annum. Emoluments to the value of £150 are allowed. Married quarters are available. There would be an adjustment in the emoluments in the event of a married man being appointed. The post is subject to the provisions of the Asylum Officers' Superannuation Act, 1909. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications, accompanied by two testimonials, and the name of one referee, to be addressed to the Medical Superintendent, Garlands, Carlisle.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Resident Medical Officer (B1) for the Children's Department now re-organized as a result of the amalgamation of the Cheltenham General and Eye Hospital with the Cheltenham Hospital for Children (48 beds). Candidates should have held previous hospital appointments and have had some paediatric experience. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for a perod of at least one year, and will be at a salary of £350 a year with full residential emoluments, or at a higher appropriate rate for a candidate with special qualifications or experience. Applications should be addressed to Stanley T. Davis, Secretary-Superintendent, Cheltenham General Eye and Children's Hospital, Cheltenham.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the position of House Physician (A). Practitioners within three months of qualification and liable for service under the National Service Acts may apply, in which case the appointment will be for six months, otherwise renewable. Salary £175 per annum with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth
REGISTRAR
in the Department of Obstetrics and Gynaecology

Applications are invited from registered medical practitioners with considerable experience in Obstetrics for the full-time appointment of Registrar in the Department of Obstetrics and Gynaecology. Salary £800 per annum, with emoluments. The hospital has a Maternity Unit of 60 beds and is the main centre for the treatment of abnormal midwifery in the county. It is also the main centre for Radiotherapy in Cornwall under the South-West Joint Cancer Organization. The duties may include attendance at the Consulting Antenatal Centres already established under the Cornwall County Council as deputy for the County Obstetrician. Applications should be addressed, by February 27, 1948, to the undersigned, from whom further details may be obtained.—J. C. Field, Secretary-Superintendent.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth
REGISTRAR IN THE RADIOTHERAPY DEPT.

Applications are invited from registered medical practitioners for the full-time appointment of Registrar in the Radiotherapy Department. Salary according to experience with a minimum of £650 per annum. The hospital is the main centre for Radiotherapy in Cornwall under the South-West Joint Cancer Organization. Applications should be addressed to the undersigned, from whom further details may be obtained.—J. C. Field, Secretary-Superintendent.

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(Beds, Hospital 287, Annexe 33)
SECOND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Second Casualty Officer (A). Salary £225 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications to be sent as soon as possible to M. H. Boone, House Governor and Secretary.

CARDIFF ROYAL INFIRMARY
HOUSE SURGEON (A)
to the Fracture Department

Applications are invited from registered medical practitioners (male and female) for post of House Surgeon (A) to the Fracture Department, vacant now, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for six months. Salary is at the rate of £75 per annum with full residential emoluments. Applications should reach the undersigned as soon as possible.—Arnold Tunstall, House Governor.

COSSHAM MEMORIAL HOSPITAL
Kingswood, Bristol
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, preferably holding a higher surgical qualification or up to Fellowship standard, for the appointment of Resident Surgical Officer (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The position is tenable for twelve months from March 1, 1948, with optional extension to two years. Salary, with full residential emoluments, to be £400 per annum. Applications to be sent to the undersigned as soon as possible.—E. N. Roper, Secretary.

COSSHAM MEMORIAL HOSPITAL
Kingswood, Bristol

Applications are invited from registered medical practitioners, male or female, for the following two positions, each tenable for six months from March 1, 1948 :—

CASUALTY OFFICER, GYNAECOLOGY and E.N.T. HOUSE SURGEON (A), including practitioners within three months of qualification who are liable for service under the National Service Acts.

HOUSE PHYSICIAN (B2), including R practitioners who hold A posts.

Salary, with full residential emoluments, at the rate of £150 per annum. Applications to be sent to the undersigned as soon as possible.—E. N. Roper, Secretary.

CREWE AND DISTRICT MEMORIAL HOSPITAL
Crewe
RESIDENT HOUSE PHYSICIAN AND ANAESTHETIST (B2)

Applications are invited from registered medical practitioners for the post of Resident House Physician and Anaesthetist (B2), which becomes vacant immediately, including R practitioners who hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary from £200 to £350 per annum according to experience and qualifications. Applications should be sent together with copies of two recent testimonials to reach the undersigned within a fortnight of the publication of this advertisement.—Stanley W. Johnson, Secretary-Superintendent.

CREWE AND DISTRICT MEMORIAL HOSPITAL
REGISTRAR (B2)
for Ophthalmic Department

Applications are invited from registered medical practitioners for the appointment of Registrar (non-resident) to the Ophthalmic Dept. R practitioners who hold A posts are invited to apply, when the appointment will be for six months. Salary £200 per annum. Applications should be sent, together with the names of three referees, to reach the undersigned immediately.—Stanley W. Johnson, Secretary-Superintendent, Crewe & District Memorial Hospital, Crewe.

CARDIFF ROYAL INFIRMARY
HOUSE SURGEON (B2)
for combined post of Orthopaedic and Radiotherapy Departments

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (B2) for the combined post of Orthopaedic and Radiotherapy Departments of the Cardiff Royal Infirmary (situated at the Whitchurch Emergency Hospital, four miles from Cardiff); to become vacant immediately, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be for six months. The salary is at the rate of £200 per annum, with full residential emoluments. Applications should reach the undersigned as soon as possible—Arnold Tunstall, House Governor.

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant now. Salary at the rate of £100 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent to the undersigned immediately. The successful applicant must be a member of a Medical Defence Society.—T. H. G. Gartland, Superintendent and Secretary.

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital, 200 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Physician (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Resident, six months. Salary £150 per annum. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

CHORLEY AND DISTRICT HOSPITAL
Lancashire
HOUSE SURGEON (B2)

House Surgeon (B2) required. Position vacant February 11. Salary £300 per annum, with full residential emoluments. Practitioners who hold A posts are invited to apply. The appointment will be for six months. Applications to be sent to the undersigned.—H. Hill, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the above appointment from medical practitioners, including R practitioners who hold B2 appointments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The post, vacant immediately, is for six months (with the option of a further six months), and will carry a salary of £300 per annum, rising to £350 after six months, with full residential emoluments. Applications should be sent at once to the undersigned.—G. W. Beckwith, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DERBYSHIRE ROYAL INFIRMARY, Derby
HOUSE SURGEON (A) for Gynaecology

Applications are invited from registered medical practitioners for the post of House Surgeon (A) for Gynaecology, vacant immediately, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Recognized by R.C.O.G. Salary £200 per annum, with full residential emoluments Six months appointment. Applications should be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DERBYSHIRE ROYAL INFIRMARY
Derby (339 beds)
CASUALTY OFFICER (A)
Orthopaedic and Accident Service

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the post of Casualty Officer (A), vacant immediately, six months' appointment. Salary £200 per annum, with full residential emoluments. Applications should be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DERBYSHIRE ROYAL INFIRMARY, Derby
OPHTHALMIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the post of Ophthalmic House Surgeon (B2), vacant immediately. Previous experience desirable but not essential. Recognized for D.O.M.S. Salary £200 per annum with full residential emoluments, six months' appointment. Ex-Service medical officers eligible under Government Postgraduate Scheme may apply, when salary may be augmented. Applications should be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DERBYSHIRE ROYAL INFIRMARY, Derby

Applications are invited from registered medical practitioners for the following posts:—

HOUSE SURGEON (B2), E.N.T. and Neuro-Surgical Department, recognized for D.L.O., vacant immediately.

HOUSE SURGEON (B2), General Surgery, vacant March 1, 1948.

HOUSE SURGEON (B2), Orthopaedic and Accident Service, vacant March 9, 1948.

Salary for each post £200 per annum with full residential emoluments. Six months' appointments. Applications to be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DONCASTER ROYAL INFIRMARY (330 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), male, including R practitioners within three months of qualification. If held by an R practitioner appointment will be for a period of six months. Salary at the rate of £225 per annum, with full residential emoluments. Applications should be sent immediately, addressed to the Secretary-Superintendent.

DONCASTER ROYAL INFIRMARY (330 beds)
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners (male) for the appointment of Casualty Officer (B2). Salary £250 per annum, with full residential emoluments R practitioners holding A posts may apply, when the appointment will be limited to six months. This large industrial area offers excellent opportunities for gaining experience. Applications should be sent immediately to A. Jones, Secretary-Superintendent.

EAST SUFFOLK AND IPSWICH HOSPITAL
(389 beds)
HOUSE SURGEON TO GENERAL SURGEON (A)

Applications are invited from registered medical practitioners liable to service under the National Service Acts and within three months of qualification for the post of House Surgeon to a General Surgeon (A). Vacant February 10. Appointment will be for six months Salary at the rate of £250 per annum, with full residential emoluments—Arthur Griffiths, Secretary, The Hospital, Ipswich.

DONCASTER ROYAL INFIRMARY (330 beds)
(Recognized under the Regulations for the D.O.)
EYE AND EAR, NOSE AND THROAT HOUSE SURGEON (A) (Male)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification and liable under the National Service Acts, for an Eye and Ear, Nose and Throat House Surgeon (A) (male). The appointment will be limited to six months. Salary £225 per annum, with full residential emoluments. This large industrial area offers excellent opportunities for gaining experience. Applications should be sent immediately to A. Jones, Secretary-Superintendent.

EYE, EAR AND THROAT HOSPITAL
For Shropshire and Wales, Shrewsbury
HOUSE SURGEON (B1)
Ear, Nose and Throat Department

Applications are invited from registered medical practitioners of either sex for the post of House Surgeon (B1) in the Ear, Nose and Throat Department of this hospital. The hospital is recognized for the D.L.O. (R.C.S.) Eng. Salary £275 per annum, with full residential emoluments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Preference will be given to applicants with some experience of Otolaryngology. Applicants with specialized diploma or higher qualification will receive additional remuneration commensurate with experience. Applications should be sent to the undersigned.—C. S. Asbury, Secretary, 13a, College Hill, Shrewsbury.

EAST END MATERNITY HOSPITAL
384-398, Commercial Road, London, E.1
(Training School for Pupil Midwives)
RESIDENT OBSTETRICAL OFFICER (B2)

Applications are invited for the post of Resident Obstetrical Officer (B2) for a period of six months with possibility of extension for a further six months. Practitioners who hold B2 appointments are invited to apply. During the first three months he will act as Junior Obstetrical Officer at a salary of £200 per annum and subsequently as Senior at a salary of £350 per annum with certain private fees in addition. Applications should be forwarded immediately to the Secretary.

EVELINA HOSPITAL FOR SICK CHILDREN
Southwark Bridge Road, London, S.E.1
HOUSE SURGEON (B2)

Applications are invited for the post of House Surgeon (B2), vacant on March 1, 1948. The duty for the first two months will be in the Casualty Out-patient Department. The post is tenable for a period of six months at a salary of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply. Applications should reach the undersigned not later than Friday, February 13.—W. H. Sidnell, House Governor.

GENERAL HOSPITAL, Nottingham
(589 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male), including R practitioners who hold A appointments, for the appointment of a House Surgeon (B2) for the above Hospital. Duties to commence about February 10. If held by an R practitioner the appointment will be for a period of six months. Salary at the rate of £300 per annum with full residential emoluments. Applicants should be interested in Urology. Applications sent to the undersigned.—Henry M. Stanley, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham (589 beds)
JUNIOR CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification who are liable to service under the National Service Acts, for the appointment of Junior Casualty Officer (A) for the above hospital. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned. Duties to commence about February 24.—Henry M. Stanley, House Governor and Secretary.

GRIMSBY AND DISTRICT GENERAL HOSPITAL
ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Orthopaedic House Surgeon (A) with some duties for the General Surgeons, for the six months commencing February 18, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A), vacant now, including practitioners within three months of qualification who are liable for service under the National Service Acts. Salary £200 per annum, with full residential emoluments. If held by an R practitioner appointment will be limited to six months. Applications to the undersigned immediately.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL
ACCIDENT SERVICE AND ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Accident Service and Orthopaedic Officer (B2). If held by an R practitioner this post will be limited to six months Salary is at the rate of £300 per annum, with full residential emoluments. Post vacant on March 16, 1948. Applications should be sent to the undersigned.—H. B. Coates, Secretary-Superintendent

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE SURGEON (A)

Applications are invited for the post of House Surgeon (A) for duty with special departments, i.e. E.N.T., Gynaecological, etc., vacant February 6, 1948. Salary £200 per annum, with full residential emoluments. The appointment will be for six months in the first instance, but will be terminable by one month's notice on either side. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to H. B. Coates, Secretary-Superintendent

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE PHYSICIAN (A)

Applications are invited for the post of House Physician (A), vacant February 16. Salary £200 per annum, with full residential emoluments. The appointment will be for six months in the first instance but will be terminable by one month's notice on either side. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to H. B. Coates, Secretary-Superintendent.

GORDON HOSPITAL
for Rectal and Gastro-Intestinal Diseases
Vauxhall Bridge Road, London, S.W.1 (102 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Surgical Officer (B1) at a salary of £350 per annum, with full residential emoluments. The appointment is for six months, renewable for a further six months, and will be vacant on a date to be decided between March 15 and April 1. Suitably qualified R practitioners holding B2 posts and those holding B1 posts and ineligible for H.M. Forces may apply Applications should be sent to the undersigned on or before February 6, 1948.—R. E. Lawson, House Governor and Secretary.

GORDON HOSPITAL
for Rectal and Gastro-Intestinal Diseases
Vauxhall Bridge Road, London, S.W.1 (102 beds)
HONORARY ANAESTHETIST

The Committee of Management invite applications for the appointment of Honorary Anaesthetist from candidates holding the Diploma in Anaesthetics Applications (four copies) should be sent to the undersigned, from whom further information may be obtained, on or before February 20, 1948—R. E. Lawson, House Governor and Secretary

GRAYLINGWELL HOSPITAL, Chichester
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, ladies or gentlemen, for the appointment of House Physician (B2), including R practitioners who hold A appointments. The post provides special facilities in the hospital for organized tuition and practice of modern psychiatry. The salary is at the rate of £350 per annum, with full residential emoluments. The appointment will, in the first instance, be limited to a period of six months and, unless held by an R practitioner, may be extended to twelve months. Applications to be sent to the Medical Superintendent as soon as possible.

HARROGATE ROYAL BATH HOSPITAL AND RAWSON CONVALESCENT HOME (146 beds)
National Hospital for the Treatment of Rheumatic and Allied Diseases
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B2), vacant now, including R practitioners who hold A posts. As this hospital is recognized as having an authorized Physical Medicine Department, time spent in the above post, which affords good experience in physical medicine and orthopaedics, would count towards the qualifying twelve months for the Diploma in Physical Medicine. Salary will be at the rate of £250 per annum. The appointment will be for a period of six months Applications should be sent to the Secretary, Royal Bath Hospital, Cornwall Road, Harrogate, immediately.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required to commence immediately. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £200, with full residential emoluments Applications to be sent to the undersigned.—H. J. Johnson, General Superintendent and Secretary

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)

HOUSE PHYSICIAN (B2) required to commence duty on March 8, 1948. R practitioners who now hold A posts may apply. If held by an R practitioner, appointment will be limited to six months. Salary at the rate of £150, with full residential emoluments.

RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty on April 1, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

HOUSE PHYSICIAN AND HOUSE SURGEON (B2) to the Ear, Nose, Throat and Eye Department (combined appointment). R practitioners who now hold A posts may apply. If held by an R practitioner, appointment will be limited to six months. Duties to commence April 1, 1948. Salary at the rate of £187 10s., with full residential emoluments.

HOUSE SURGEON (A) required to commence duty on March 18, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

HORTON GENERAL HOSPITAL
Banbury, Oxon
OXFORD HOSPITAL BOARD AREA (220 beds)
RESIDENT ASSISTANT SURGEON

Applications are invited for the post of Resident Assistant Surgeon. The appointment will be, in the first instance, for one year. Candidates must hold one of the higher surgical qualifications. The Surgical Department of the Hospital is under the control of the visiting Surgeons from Oxford. Commencing salary will be at the rate of £1,000 per annum, with full residential emoluments. Should the successful candidate be married, an effort would be made to find suitable accommodation. Post is vacant from March 1, 1948. Applications to Richard H. Prescott, House Governor.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts:—

(a) **RESIDENT SURGICAL OFFICER (B1).** Previous surgical experience essential. R practitioners holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary £250 per annum.

(b) **RESIDENT JUNIOR HOUSE SURGEON (A).** In charge of Casualty, Ear, Nose and Throat, and Fracture Department. Salary £200 per annum.

(c) **HOUSE PHYSICIAN (A).** Salary £200 per annum.

Practitioners within three months of qualification and liable to service under the National Service Acts are invited to apply.

The appointments are for (a) twelve months and (b) and (c) six months respectively. Applications should be sent to T. W. Upton, Secretary.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HULL ROYAL INFIRMARY
FIRST HOUSE SURGEON (B2)

Applications are invited for the post of First House Surgeon (B2), vacant now. Suitably qualified R practitioners who now hold A2 posts may apply. Salary £200 per annum with full residential emoluments. The appointment will be for six months in the first instance, but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

HOSPITAL FOR TROPICAL DISEASES
23, Devonshire Street, London, W.1
FIRST ASSISTANT IN TROPICAL MEDICINE

The Committee of Management invites applications for the post of First Assistant in Tropical Medicine, for six months, starting from March 1, 1948, at a salary of £100 a month. Applications, stating age, qualifications and previous experience, with copies of two recent testimonials and the names of two referees, to arrive not later than February 14, must be sent to the Secretary, to whom enquiry should be made for fuller information.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)

Applications are invited from registered medical practitioners for the following posts:

RESIDENT MEDICAL OFFICER (B2) vacant March 1, 1948. This appointment is for six months at a salary of £225 per annum with full residential emoluments. R practitioners holding A2 posts may apply.

HOUSE SURGEON (A) vacant March 1, 1948. Salary £175 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications to E. Barber, Secretary.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
CASUALTY MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, for the resident post of Casualty Medical Officer (B2) at the Out-patient Department, Bayham Street, N.W.1, vacant March 1, 1948, tenable for six months. Salary £200 per annum with board, lodging and laundry. R practitioners holding A posts are invited to apply. Applications on the prescribed form with copies of three recent testimonials, to be returned to the undersigned by February 5.—Kenneth A. F. Miles, House Governor.

HOSPITAL FOR WOMEN
Soho Square, London, W.1
HONORARY CONSULTING PHYSICIAN

Applications are invited for the post of Honorary Consulting Physician. Applicants must be members of the Royal College of Physicians of London, and engaged only in consulting practice. Applications (6 copies) accompanied by three recent testimonials must reach the undersigned not later than two weeks after the appearance of this advertisement.—D. C. Emery, Secretary.

KING EDWARD MEMORIAL HOSPITAL, Ealing
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon to the Second Surgeon and the Ear, Nose and Throat Surgeons (A) to become vacant on February 1, 1948. Six months appointment. Salary at the rate of £175 per annum with full residential emoluments. Applications together with copies of two recent testimonials should be sent to the undersigned immediately.—R. A. Mickelwright, House Governor.

KING EDWARD VII HOSPITAL, Windsor
HOUSE SURGEON (B2)
Obstetric and Gynaecological Department

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) for the Obstetric and Gynaecological Department, to become vacant on February 14, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £150 per annum, with full residential emoluments. Applications to be sent to the Secretary as soon as possible.

KING EDWARD MEMORIAL HOSPITAL
Ealing
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Physician (A), to become vacant on February 18, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. Six months' appointment. Salary at the rate of £175 per annum, with full residential emoluments. Applications, accompanied by copies of two recent testimonials, should be sent to the undersigned by February 6, 1948.—R. A. Mickelwright, House Governor.

KING EDWARD MEMORIAL HOSPITAL, Ealing
CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer and Orthopaedic House Surgeon (B2) vacant now, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £250 per annum with full residential emoluments. Applications accompanied by copies of two recent testimonials should be sent to the undersigned immediately.—R. A. Mickelwright, House Governor.

LADY CHICHESTER HOSPITAL
Hove, Brighton
For the treatment of early nervous disorders of Men, Women and Children (60 beds)
JUNIOR HOUSE PHYSICIAN (B2)

Applications are invited for the post of Junior House Physician (B2) at this hospital at a salary of £175 per annum, including R practitioners who hold A appointments. Applications should be sent to the undersigned.—Percy F. Spooner, Secretary.

LEEDS JEWISH HERZL-MOSER HOSPITAL
Leopold Street, Leeds, 7
HONORARY RADIOLOGIST

Applications are invited from medical practitioners having a Diploma in Radiology for the post of Honorary Radiologist. 35 copies of applications, not necessarily printed, should be submitted to the Secretary before March 1, 1948.

KING GEORGE'S SANATORIUM FOR SAILORS
Bramshott, Liphook, Hants
(Seamen's Hospital Society)
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer (B1), now vacant. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary at the rate of £350 per annum, plus full residential emoluments. Applications to be sent to the Medical Superintendent.

LONDON CHEST HOSPITAL, E.2
REGISTRAR (E.N.T. Department)

Applications are invited for the above post. Appointment is in the first instance for one year and attendance is required on Monday and Thursday afternoon. Salary £200 per annum. Applications should be sent at once to the Secretary.

LEICESTER ROYAL INFIRMARY
RESIDENT ANAESTHETIST (B2)

Applications are invited for an immediate vacancy of Resident Anaesthetist (B2), appointment to end on September 30, 1948, including R practitioners who hold A posts. Salary £200 per annum. Applications should be forwarded to the House Governor and Secretary forthwith.

MANSFIELD AND DISTRICT GENERAL HOSPITAL (245 beds)

Applications are invited from registered medical practitioners for the following appointments:—

ASSISTANT RESIDENT SURGICAL OFFICER (B1). Vacant March 5, 1948. Salary £300 per annum, plus residential emoluments. The appointment is for twelve months. Suitably qualified R practitioners holding B2 posts may apply. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applicants should have held house appointments previously.

HOUSE PHYSICIAN (A). Vacant February 1, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £220 per annum, with full residential emoluments.

Applications should reach the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
Recognized for D.A.
ASSISTANT ANAESTHETIST (B1) (Resident)

Applications are invited from registered medical practitioners, male or female, for the post of Assistant Anaesthetist (B1) (Resident). Candidates must have had special experience in anaesthesia and if not in possession of a Diploma in Anaesthetics should be studying for such a diploma. Appointment will be for one year. Salary £375 per annum, plus residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should be sent to the House Governor and Secretary as soon as possible.

MANCHESTER ROYAL INFIRMARY

The Board of Management invite applications from registered medical practitioners, male and female, including R practitioners within three months of qualification, for the following A appointments:—

ONE HOUSE SURGEON for the Aural, Gynaecological and Dermatological Departments
ONE HOUSE SURGEON for the Orthopaedic Department

Both posts are vacant at present. Appointments are for six months, subject to the provision of the Bye-laws as to notice, etc., and the salary in each case is at the rate of £75 per annum, with residence. Applications should be sent to the Chairman of the Medical Board as soon as possible.—F. J. Cable, General Superintendent and Secretary.

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL (Non-Sectarian, 102 beds)
Cheetham, Manchester, 8
HONORARY SURGEON

Applications are invited for the post of Honorary Surgeon on the Staff of the above hospital. Applicants must be recognized Consultants and be Fellows of the Royal College of Surgeons of England. Applications to be submitted to the undersigned by February 28. By order of the Board of Management.—Charles D. Drake, General Superintendent.

MOORFIELDS WESTMINSTER AND CENTRAL EYE HOSPITAL, City Road, E.C.1
HONORARY ASSISTANT PHYSICIAN

Applications are invited for the office of Honorary Assistant Physician to the Westminster Branch of the above hospital (High Holborn). Candidates must be Fellows or Members of the Royal College of Physicians of London, and preferably had training in Neurology. Candidates are requested to send applications with copies of recent testimonials to the members of the acting Medical and Surgical Staff of the Branch, whose names and addresses can be obtained on application to the House Governor. Applications must be received by the undersigned not later than February 21, 1948.—A. J. M Tarrant, House Governor, Moorfields Westminster and Central Eye Hospital, City Road, E.C.1.

MOORFIELDS WESTMINSTER AND CENTRAL EYE HOSPITAL, City Road, E.C.1
ALLERGIST

Applications are invited for the post of Allergist. The appointment will be on a part-time basis in the initial period at any rate, and payment will be at the sessional rate for specialists recommended by the British Medical Association. Full details of the appointment, including allocation of duties, will be decided upon after consultation with the successful candidate. Applications should be addressed to the undersigned not later than February 9, 1948.—A. J. M. Tarrant, House Governor.

MOORFIELDS WESTMINSTER AND CENTRAL EYE HOSPITAL, City Road, E.C.1
ASSISTANT MEDICAL OFFICER
to the Physio-Therapy Department

Applications are invited for the above post. The appointment will necessitate two morning attendances each week and payment will be at the rate for specialists recommended by the British Medical Association. Applications should be sent to the undersigned not later than February 9, 1948.—A. J. M. Tarrant, House Governor.

MAIDENHEAD HOSPITAL, Berkshire
(100 beds)

Applications are invited from registered medical practitioners for the following vacancies :—

RESIDENT SURGICAL OFFICER (B1). Applicants should have had surgical experience and must have held house posts. Suitably qualified R practitioners holding B2 posts, those holding B1 posts who are ineligible for H.M. Forces, and demobilized medical officers are invited to apply. Salary £350 per annum with full residential emoluments.

HOUSE SURGEON (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, when the post will be for six months ; otherwise for one year. Salary £200 per annum with full residential emoluments. Applications should be sent to the Superintendent-Secretary not later than February 28, 1948.

MAIDENHEAD HOSPITAL, Berkshire (100 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2) vacant now. Salary at the rate of £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be for six months, otherwise for one year. Applications should be sent to the Superintendent-Secretary.

MANCHESTER NORTHERN HOSPITAL
(General Hospital, 116 beds)
Cheetham Hill Road, Manchester, 8
RESIDENT HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Physician (B2). Salary £150 per annum, with board and residence. The appointment is for six months from February 19, 1948. R practitioners holding A posts may apply. Applications should be sent to Mr. James C. Daniels, Secretary, 38, Barton Arcade, Manchester, 3, as soon as possible.

METROPOLITAN HOSPITAL
Kingsland Road, London, E.8
PART-TIME SURGICAL REGISTRAR

The Committee of Management invite applications for the appointment of Part-time Surgical Registrar. Candidates should hold the F.R.C.S. The successful candidate will be required to attend five sessions a week and also be on duty at alternate week-ends. He will be paid on a sessional basis at the rate of 1½ guineas a session. The candidate appointed will be required to start his duties as soon as possible. One copy of the application, together with testimonials, should be sent to the undersigned immediately.—Frank Chambers, House Governor.

METROPOLITAN HOSPITAL
Kingsland Road, London, E.8
DEPUTY RESIDENT ANAESTHETIST AND SECOND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the post of Deputy Resident Anaesthetist and Second Casualty Officer (A) (combined post). Salary will be £150 per annum, with full residential emoluments. The appointment will be for six months and practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be sent immediately to the undersigned. —Frank Chambers, House Governor.

MATERNITY HOSPITAL AT LEEDS
Hyde Terrace, Leeds, 2
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from duly qualified medical practitioners for the post of Resident Surgical Officer (B1), vacant May 1. Salary £200 per annum, with board, lodging and laundry provided. Suitably qualified R practitioners holding B2 appointments, also R practitioners holding B1 and rejected by the R.A.M.C. may apply. Applications to be sent not later than February 7, 1948, to L. W. J. Owler, Secretary-Superintendent.

MIDDLESEX HOSPITAL, W.1
ANAESTHETIST

A vacancy is hereby declared for an Anaesthetist to the hospital. Applications, together with the names of three referees, should be submitted by March 20 to the Secretary-Superintendent, from whom further particulars may be obtained.

NORTHAMPTON GENERAL HOSPITAL
(410 beds)

Applications are invited from registered medical practitioners for the following posts :—

CASUALTY OFFICER (A)
ANAESTHETIST (A) (Post recognized for the D.A.)

Salary at the rate of £200 per annum, with full residential emoluments.

Appointments will run until September 30, 1948. Any further employment at the hospital beyond that date will be at the rate of £225 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, in which case the appointment will be for a period of six months.

SENIOR ANAESTHETIST (B2)
(Post recognized for the D.A.)

Salary at the rate of £300 per annum, with full residential emoluments. Registered practitioners holding A posts may apply, in which case the appointment will be limited to six months.

Applications should be sent as soon as possible to the undersigned.—S. G. Hill, Superintendent.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of full-time Pathologist at the above hospital. Applicants should be exclusively engaged in the practice of Pathology, with wide training in Clinical Pathology and Morbid Anatomy. The post will be non-resident, with a commencing salary of £1,100, the successful candidate being permitted to engage in private practice, restricted to the private wing of the hospital, at present 23 beds. Applications should reach the Secretary not later than February 28, 1948.

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Gynaecologist, the Aural Surgeon, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRINCE OF WALES'S HOSPITAL, Plymouth
HOUSE OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of House Officer (A) post, Surgery with casualty, for duty at the Devonport Section, vacant immediately, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
RESIDENT OBSTETRICAL OFFICER (B1)

Applications are invited for the post of Resident Obstetrical Officer (B1) for the Maternity Hospital (45 beds and Ante-Natal Department), vacant now. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Preference will be given to candidates with a postgraduate Diploma in Obstetrics. Salary £300, with the usual residential emoluments. Applications should be forwarded to the Superintendent, Royal Infirmary, Preston.

PRESTON COUNTY OF LANCASTER ROYAL INFIRMARY
HOUSE PHYSICIAN (A)

Applications are invited for the appointment of House Physician (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be limited to six months. Salary at the rate of £175 per annum with usual residential emoluments. Applications should be sent to the Superintendent, Royal Infirmary, Preston.

ROYAL INFIRMARY, Preston
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the post of House Surgeon (A) vacant February 14. Duties under Urological Surgeon and in Casualty Department. Six months appointment. Salary at the rate of £175 per annum with usual residential allowances. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Superintendent.

ROYAL PORTSMOUTH HOSPITAL, Portsmouth
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (male) including R practitioners holding A posts, for the appointment of House Physician (B2) vacant on or about February 25, 1948. Salary £225 per annum, with full residential emoluments. Six months' appointment. Applications to be sent immediately to G. A. Hughes, Secretary.

PUTNEY HOSPITAL
Lower Common, S.W.15 (106 beds)
ASSISTANT SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners, (male), including R practitioners who hold A posts, for the appointment of Assistant Surgical Officer (B2) for a period of six months from March 1, 1948. Salary £450 per annum, non-resident. Applications should reach the undersigned not later than Tuesday, February 17, 1948.—A. J. Ellicott, Secretary.

PORT TALBOT AND DISTRICT GENERAL HOSPITAL (85 beds)
HOUSE SURGEON (A)

House Surgeon (A), male or female. Salary £200 per annum, full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. If held by an R practitioner, appointment will be for six months. Applications to Hon. Secretary, Medical Committee, Port Talbot & District General Hospital, Port Talbot, Glam.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
FIRST ASSISTANT (B1)
to the Ear, Nose and Throat Department

Applications are invited from registered medical practitioners, male or female, including medical officers recently demobilized from H.M. Forces, for the post of First Assistant to the Ear, Nose and Throat Department (B1) at the Royal Hospital Unit. Candidates must have held house appointments and had experience in Otolaryngology, and preference will be given to candidates holding the Diploma of the F.R.C.S., or D.L.O. Salary will be at the rate of £650 per annum non-resident. Suitably qualified R practitioners holding B2 appointments, and also R practitioners holding B1 appointments who have been rejected by the Services are invited to apply. Applications to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
THE ROYAL HOSPITAL UNIT
ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of Orthopaedic House Surgeon (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Otherwise it may be extended. Salary is at the rate of £120 per annum, with full residential emoluments. Applications and copy testimonials to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, at the Royal Hospital, Sheffield, 1.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
FIRST ASSISTANT (B1)
to the Orthopaedic Department

Applications are invited from registered medical practitioners for the post of First Assistant to the Orthopaedic Department (B1) at a salary of £650 per annum, non-resident. Recently demobilized members of H.M. Forces or practitioners holding B1 appointments who are ineligible for H.M. Forces may apply. Previous experience in Orthopaedics is desirable and preference will be given to applicants who are Fellows of the Royal College of Surgeons. Applications to be forwarded to the General Superintendent, Royal Infirmary, Sheffield.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
HONORARY PSYCHIATRIST

The Court of Management will shortly elect an Honorary Psychiatrist. Candidates must be on the medical register and hold one of the higher qualifications. Applications should be addressed to the General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROCHDALE INFIRMARY, Lancashire
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female), for the appointment of Resident Surgical Officer (B1). Salary £350 per annum. Suitably qualified R and W practitioners holding B2 appointments, also R practitioners holding B1 and rejected by the R.A.M.C., may apply. Applications to the Superintendent-Secretary.

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL
234, Great Portland Street, W.1
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2). Duties to commence as soon as possible. Salary at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to be addressed to the House Governor.

Have you read the notice at top of page 12 ?

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ROYAL UNITED HOSPITAL, Bath

Applications are invited from registered medical practitioners for the following appointments :—

HOUSE PHYSICIAN (A). Duties to commence from March 15.

HOUSE SURGEON (A), General. Duties to commence March 6.

HOUSE SURGEON (A), Gynaecology and Obstetrics. Duties to commence March 1.

Salary at rate of £150 per annum, with board, residence, etc., in each case. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointments will be for a period of six months. Applications by February 14, 1948, to J. Lawrence Means, Secretary-Superintendent.

ROYAL FREE HOSPITAL
Gray's Inn Road, London, W.C.1
OBSTETRIC AND GYNAECOLOGICAL REGISTRAR (B1)

Applications are invited from registered medical practitioners, men or women, for the appointment of Obstetric and Gynaecological Registrar (B1) at the above hospital for one year commencing April 1, 1948. Salary £400 per annum, resident. Suitably qualified practitioners holding B2 appointments are invited to apply. R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications, stating age, qualifications and accompanied by copies of three recent testimonials and a photograph, should be sent to the undersigned on or before February 20, 1948.—R. G. Heppell, A.C.A., House Governor.

ROYAL FREE HOSPITAL
Gray's Inn Road, London, W.C.1
RADIOTHERAPIST
in charge of Radiotherapy Department

Applications are invited from registered medical practitioners for the above position. Applicants should possess a Diploma in Medical Radiology and have had experience in Deep X-ray and Radium treatment. The successful candidate will be responsible for the recording and follow up of all cancer patients. The salary offered is at the rate of £1,500 per annum, plus a proportion of private fees. The appointment is for a period of five years in the first instance. Applications, together with the names of three persons to whom reference may be made should be submitted to the House Governor (from whom further particulars may be obtained) not later than February 9.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton
HONORARY PLASTIC SURGEON

The Board of Management will meet on Friday, March 5, 1948, at 3.15 p.m., for the purpose of electing an Honorary Plastic Surgeon. All candidates are required to transmit their applications and testimonials under cover to the undersigned not later than Saturday, February 21, and must hold themselves in readiness to attend the Meeting of the Board on the day of election. The Committee does not bind itself to appoint any candidate.—Percy F. Spooner, Secretary-Superintendent.

ROYAL HOSPITAL, Wolverhampton (500 beds)
Paid Specialist Appointment
Ministry of Health Circular 202/46
SUPERNUMERARY PATHOLOGIST

Applications are invited from ex-Service Specialists who have held Class III appointment for the post of Supernumerary Pathologist at the Royal Hospital, Wolverhampton. The appointment has been approved by the Ministry of Health under the above Circular, and will be for the interim period before the establishment of the National Health Service. Salary £1,000 per annum. Applications, together with copies of three references, should be sent immediately to W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch, 310 beds
SENIOR RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident Anaesthetist (B1), vacant now. The Royal Hospital is an associated hospital of the University of Birmingham. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary is at the rate of £400 per annum, with full residential emoluments, or according to experience and qualifications. The appointment will be for a period of six months.—W. Cockburn, House Governor.

ROYAL VICTORIA AND COUNTY HOSPITALS
Dover (150 beds—75 Surgical)
SENIOR HOUSE SURGEON (B2)

Applications are invited immediately from registered medical practitioners (male) for the appointment of Senior House Surgeon (B2) in charge of the surgical cases, including R practitioners who hold A posts. The appointment is for six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications to the Secretary, Royal Victoria Hospital, Dover.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch, 310 beds
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), vacant now, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts appointment will be for a period of six months. Salary is at the rate of £150 per annum, with full residential emoluments.—W. Cockburn, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading

Applications are invited from registered medical practitioners, male, for the following posts :—

TWO CASUALTY OFFICERS (A). Salary is at the rate of £150 per annum, with full residential emoluments. Duties will involve alternating with each other in the Casualty Department, Fracture Clinic and Accident Wards, and assisting in the treatment of all cases of traumatic origin. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL MANCHESTER CHILDREN'S HOSPITAL
Pendlebury
RESIDENT HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of Resident House Physician (A), to become vacant on March 1, 1948. The appointment is for a period of six months and the salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—By order, H. Heardman, General Superintendent and Secretary.

ROYAL MANCHESTER CHILDREN'S HOSPITAL
Pendlebury
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the post of Resident Surgical Officer (B1). Salary £250 per annum. The appointment is for a period of six months commencing March 10, 1948. Suitably qualified R practitioners holding B2 posts may apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Applications to be sent to the undersigned not later than February 2, 1948. By Order, H. Heardman, General Superintendent and Secretary.

ROYAL MANCHESTER CHILDREN'S HOSPITAL
Pendlebury
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Resident Medical Officer. Salary £250 per annum. The appointment is for a period of six months, commencing March 16, 1948. Suitably qualified R practitioners holding B2 posts may apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Applications to be sent to the undersigned immediately. By Order, H. Heardman, General Superintendent and Secretary.

ROYAL SUSSEX COUNTY HOSPITAL
Brighton, 7
(310 beds, 9 Resident Medical Officers)

Applications are invited from registered medical practitioners for the posts of :—

CASUALTY HOUSE SURGEON (A), vacant about the end of February.

E.N.T. HOUSE SURGEON (A), now vacant.

The appointments will be limited to six months to R practitioners. Salary at the rate of £200 per annum, with full residential emoluments. In the case of the Casualty House Surgeon, the successful candidate will, if desired, be favourably considered for one of the appointments of House Surgeon on the termination of appointment as Casualty House Surgeon. Applications should be sent to the Secretary-Superintendent, immediately.

ROYAL LIVERPOOL BABIES HOSPITAL
Woolton
RESIDENT MEDICAL OFFICER (A)

Required Resident Medical Officer (A) commencing immediately. Salary at the rate of £300 plus residential emoluments. R practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be limited to six months. Apply to the Honorary Secretary, 9, Copperas Hill, Liverpool.

YORK COUNTY HOSPITAL
(222 beds)
SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of Second House Surgeon (A) with Orthopaedic duties, vacant immediately, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

ROYAL NATIONAL THROAT, NOSE AND EAR HOSPITAL
Gray's Inn Road, W.C.1, and Golden Square, W.1
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered male practitioners, including R practitioners who hold A posts, for an appointment of House Surgeon which will become vacant on March 1, 1948. The appointment is for a period of six months, and the salary is at the rate of £150 per annum with full residential emoluments. Applications should be sent to the undersigned not later than February 5, 1948.—John H. Young, House Governor.

REEDYFORD MEMORIAL HOSPITAL
Nelson, Lancs
HONORARY CONSULTING SURGEON

Applications are invited for the appointment of Honorary Consulting Surgeon to the above hospital. Practitioners serving in H.M. Forces are invited to apply. The Honorary Surgeon appointed will be permitted to act as Consultant in private cases and would be expected to commence his duties at the hospital as from April 1, 1948. Applications should be addressed to the Secretary, Reedyford Memorial Hospital, Nelson, Lancs, not later than February 29, 1948. Envelopes to be endorsed "Honorary Surgeon."

ROYAL EYE HOSPITAL, St. George's Circus, S.E.1
JUNIOR HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of Junior House Surgeon (B2) to become vacant March 1, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be limited to six months. The salary will be at the rate of £190 per annum, with emoluments. Applications should be sent to the Secretary immediately.

ROYAL VICTORIA AND WEST HANTS HOSPITAL, Bournemouth (374 beds)
RESIDENT OBSTETRICIAN (B1)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Obstetrician (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Commencing salary £300 per annum with residential emoluments, the appointment to be for the period of one year. Applicants should have held House appointments and had good experience. Membership of the Royal College of Obstetricians and Gynaecologists will be an advantage. Applications, stating age, whether married or single, should be sent to the undersigned within seven days of this advertisement.—Gordon M. Saul, Secretary.

ROYAL HALIFAX INFIRMARY (283 beds)
CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2) (one post) (male). R practitioners who hold A posts may apply. Six months post, vacant immediately. Salary £250 per annum with full residential emoluments.

Applications, accompanied by copies of three recent testimonials, and the names of three referees to be sent to the Secretary as soon as possible.

SAMARITAN FREE HOSPITAL FOR WOMEN
Marylebone Road, N.W.1
HOSPITAL FOR WOMEN, Soho Square, W.1
TWO RESIDENT MEDICAL OFFICERS (B1)

Applications are invited for two posts of Resident Medical Officer (B1) to the above hospitals. The appointments, in each case, will be for a period of one year from April 1, 1948, and candidates will be expected to serve six months in each of the two hospitals. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £200 per annum resident. Preference will be given to duly qualified medical practitioners who intend to specialize in gynaecology and obstetrics. Applications, accompanied by two testimonials, should reach the undersigned not later than Wednesday, February 11, 1948.—D. C. Emery, Secretary.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
TEMPORARY RESIDENT ANAESTHETIST

Temporary Resident Anaesthetist required immediately pending the appointment of a full-time Anaesthetist under the terms and conditions of Ministry of Health Circular 202/46. Candidates must have had considerable experience in Anaesthetics. Salary for the temporary post minimum of £500 per annum, or according to qualifications and experience. The selected candidate, if qualified under the terms of the circular, will be fully considered for the permanent appointment. Applications should be forwarded to the undersigned forthwith.—A. E. Collins, Secretary.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the post of House Physician (A), including practitioners within three months of qualification who are liable for service under the National Service Acts, which will become vacant on February 17, 1948. If held by an R practitioner, the appointment will be limited to six months. Salary £250 per annum, with usual emoluments. Applications should be submitted to the undersigned immediately.—A. E. Collins, Secretary.

SUSSEX EYE HOSPITAL, Brighton (56 beds)
JUNIOR HOUSE SURGEON (A)

Junior House Surgeon (A) required, to commence duties on March 1, 1948. The appointment will be for six months, to be followed, if satisfactory, by a further period of six months as Senior House Surgeon (B2). Practitioners within three months of qualification who are liable under the National Service Acts are invited to apply. Salary for the Junior appointment at the rate of £175 per annum. Applications should be sent to the undersigned on or before February 9.—Percy F. Spooner, Secretary-Superintendent.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2), vacant immediately. Salary is at the rate of £300 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications, stating age, qualifications (with dates), nationality and accompanied by copies of three recent testimonials, should be sent to the Secretary, H. F. Donald, The Infirmary, Stamford.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant. Salary is at the rate of £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent immediately to the Secretary, H. F. Donald, The Infirmary, Stamford.

SOUTH EASTERN HOSPITAL FOR CHILDREN
321, Sydenham Road, S.E.26
RESIDENT MEDICAL OFFICER (B1)

Resident Medical Officer (B1) required. Preference will be given to Candidates holding the Diploma of Child Health. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Appointment for six months in the first instance, renewable for a further period of six months at the discretion of the Committee of Management. Salary £350 per annum. Applications should be forwarded to the Secretary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary hospital, 200 beds)
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, for post of Casualty Officer (A) vacant immediately. Salary £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be for six months. Applications to be forwarded to the Superintendent-Secretary as soon as possible.

AMENDED ADVERTISEMENT
ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary Hospital, 201 beds)
ASSISTANT RADIOLOGIST

Applications are invited from registered medical practitioners with suitable training and experience for this new whole-time appointment. Preference will be given to holders of the D.M.R.E. Salary £1,000 per annum, non-resident (no private practice in first instance). Applications should reach the undersigned not later than February 21, 1948. —T. Rhodes, Superintendent-Secretary.

ST. THOMAS' HOSPITAL, London, S.E.1
REFRACTIONIST

Applications are invited for the post of Refractionist for afternoon sessions. Salary is at the rate of 3 guineas per session. Applications, stating age, qualifications, with dates, details of experience, and the names and addresses of three referees to whom the Hospital may write, should be sent by February 21, 1948, to the Clerk of the Governors, to whom further enquiries should be addressed.

WOKING VICTORIA HOSPITAL
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Medical Officer (B2), vacant immediately. Salary £240 per annum, with full residential emoluments. R practitioners who hold A posts may apply, when the appointment will be limited to six months. Applications to be addressed to the Honorary Secretary.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
January 27, 1948. Secretary.

TOWERS MENTAL HOSPITAL
Humberstone, Leicester
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the vacant post of House Physician (A). The appointment will be for six months in the first instance and may be renewed for another six months. Applicants who are within three months of qualification, and who are liable for service under the National Service Acts should note that the appointment will be for a period of six months only if held by a practitioner to whom these conditions apply. Salary £350 per annum together with board, lodging, and washing, valued at £150 per annum. Facilities will be available for learning methods of psychiatric treatment within the hospital, and in the Out-patient Clinics. Applications, accompanied by the names of two referees, should be sent to the Medical Superintendent as soon as possible.

TORBAY HOSPITAL, Torquay (177 beds)

Applications are invited from registered medical practitioners, male and female, for the following posts:

HOUSE PHYSICIAN (A) for February 18 (possibly earlier).

HOUSE SURGEON (A) for February 23.

CASUALTY OFFICER (B2), with charge of cases admitted to Special Departments, for March 22.

Salaries: (A) posts at rate of £175 a year; (B2) post, £250 (six months' hospital experience necessary). Each with full residential emoluments.

Practitioners within three months of qualification and liable under the National Service Acts may apply for an A post and R practitioners holding A posts for the B2 post. Appointments are for six months. Applications to be sent to the Secretary.

WORKINGTON INFIRMARY (capacity 60 beds)
HOUSE SURGEON (B2) (male)

Applications are invited for the appointment of House Surgeon (B2) (male), vacant now, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications should be sent immediately to Dr. T. T. Graham, Honorary Medical Secretary.

TAUNTON AND SOMERSET HOSPITAL
HOUSE SURGEON
to one General Surgeon and an E.N.T. Surgeon

Applications are invited from registered medical practitioners for the post of House Surgeon to one general surgeon and an E.N.T. surgeon. A appointment, or B2 if suitable applicant. Salary £175 per annum (B2, £200 per annum), with full residential emoluments. If held by R practitioner the appointment will be for six months and is recognized by R.C.S. in connection with the resident surgical posts required of candidates for the Final Fellowship Examination. Applications to the Secretary.

VICTORIA HOSPITAL, Blackpool (315 beds)
HOUSE SURGEON (B2) to the Surgical Unit

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) to the Surgical Unit, vacant March 12, 1948, including R practitioners who now hold A posts. The appointment is for a period of six months and the salary is at the rate of £200 per annum, with full residential emoluments, plus £150 per annum in the case of the successful applicant being a medical officer released from H.M. Forces who desires postgraduate education and rehabilitation as recommended by the Ministry of Health. The post is recognized for the F.R.C.S. Examination. Applications, stating age, qualifications with date, nationality and present post, and accompanied by copies of three recent testimonials, should be sent immediately to Walter R. Smith, General Superintendent.

WESTERN OPHTHALMIC HOSPITAL
Marylebone Road, London, N.W.1

Applications are invited from registered medical practitioners (male or female) for the following resident appointments:

SENIOR HOUSE SURGEON (B1), including R practitioners who now hold B2 posts. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Previous ophthalmic experience desirable. Salary £250 per annum.

JUNIOR HOUSE SURGEON (A), including R practitioners within three months of qualification. Salary £200 per annum.

Usual residential emoluments. The appointments are for six months from April 1, 1948. Applications should be sent not later than February 25, 1948, to Arthur E. Tyler, Secretary.

WILLESDEN GENERAL HOSPITAL
Harlesden Road, London, N.W.10
HONORARY ANAESTHETIST

The Council of Management invite applications for the post of Honorary Anaesthetist. Candidates should make one written application to the undersigned stating full particulars, including age, qualifications, experience, and the names of three referees, by February 4, 1948.—J. N. Drake, Secretary.

WESTON-SUPER-MARE GENERAL HOSPITAL
(100 beds)
HOUSE SURGEON (A)

Applications are invited from medical practitioners for the appointment of House Surgeon (A). Duties to commence immediately. Salary at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary

WINGFIELD-MORRIS ORTHOPAEDIC HOSPITAL, Oxford
HOUSE SURGEON (B1)

House Surgeon, male (B1), required to commence March 1, 1948. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £200 per annum. Applications and names of three referees to Director of Orthopaedic Services as soon as possible.

WEIR HOSPITAL, Weir Road, Balham, S.W.12
HONORARY RADIOLOGIST

Applications are invited for this appointment for hospital of 30 beds with busy Outpatient Department. The appointment requires two sessions per week and carries an honorarium. Applications accompanied by testimonials or the names of three referees to be forwarded to the Secretary-Superintendent immediately.

(Continued on page 28)

Have you read the notice at top of page 12 ?

Established 1885

THE Medical Defence Union

MUSeum 1337

Annual Subscription £1 **MEMBERSHIP EXCEEDS 31,500** *Assets exceed £170,000*

Protection is essential for every practitioner engaged in any form of practice

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Square, London, W.C.1.

To ensure continuity of protection, Members must pay their 1948 subscription not later than January 31st.

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To **all other** advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d.; or 30 words 22s.; and 3s. 6d. for each six words *or less* thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 25s. (minimum); or 24 words, 31s.; or 30 words, 37s.; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To **ALL** advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.
Telephone: Euston 2111.
Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 12

PERSONAL

WANTED, REFINED HOME FOR LADY (60), requiring very slight supervision. Willing help with house work. Not an institution. Home Counties.—Box 7506, B.M.J.

WANTED FOR MISSIONARY HOSPITAL, an Oxford Vaporizer. Please write to H. W. Williams, F.R.C.S.Ed., 12, Helme Drive, Kendal, quoting price.

MR. AND MRS. MARKUS HAVE TWO HOMES for **CHILDREN** in South Devon. One is near the sea in the Torquay district. Position proved most beneficial for asthma. A second house on the Moors 1,100 ft. above sea level, overlooking woods and tors. Beneficial for slight chest cases. Doctors references showing excellent results available. Inquiries invited.—Markus, Hillaway, Stoke-in-Teignhead, Torquay, Devon. Tel.: Shaldon 22.

TO LET, PARTLY FURNISHED MODERN DETACHED HOUSE, overlooking Boxhill. Well-stocked garden, 3 bedrooms, garage, £4 10s. inclusive.—Write, Dr. Kent, The Chimes, Betchworth, Surrey.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

EX-I.M.S. OFFICERS, CANADIAN.—Retired Canadian officers of the Indian Medical Service, in or passing through the U.K., are advised to contact the Senior Canadian Air Force Liaison Officer, 11, Hill Street, London, W.1, regarding employment in Canada with the Royal Canadian Air Force.

PERCALL, The personal 24-hour Telephone service exclusive to doctors, growing with your support, £5 5s. p.a., G.P.O. licensed.—BAL 3331. 387, London Road, Mitcham.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

APPLICATIONS ARE INVITED for a RESEARCH SCHOLARSHIP IN ORGANIC NERVOUS DISEASES tenable at the Middlesex Hospital Medical School under the direction of the Physician in charge of the Department for Nervous Diseases. Subject: Disseminated Sclerosis. Candidates must be Members of the Royal College of Physicians, and should have had previous neurological training. Salary £800 to £1,000 per annum, according to experience. The appointment is an annual one, but renewal for a further year may be considered. Applications, with names of three referees, should reach the Dean of the Middlesex Hospital Medical School, London, W.1, not later than February 21.

AUSTIN MOTOR COMPANY.—Applications are invited from medical practitioners preferably under 30 years of age for the post of **CASUALTY SURGEON** in the Health Department of this firm. The appointment is for six months, renewable up to one year. The work will be concerned largely with the treatment and rehabilitation of injured employees, in close collaboration with local hospitals, and offers an opportunity to a man studying for the F.R.C.S. Salary at the rate of £450 per annum, plus board and lodging. Apply, with names of two referees, to Chief Medical Officer, Austin Motor Company, Longbridge, Birmingham.

BEIT MEMORIAL FELLOWSHIPS FOR MEDICAL RESEARCH.—Notice is hereby given that an **ELECTION of JUNIOR FELLOWS** to begin work on October 1 will take place in July, 1948. Junior Fellowships are normally of the annual value of £600 for three years, but candidates younger than those usually elected or whose promise for Medical Research must be judged mainly on work outside that field, may be awarded a lower rate of £500 for the first two years. Candidates are asked to state whether they would be unable to accept this lower rate. Candidates must have taken a degree in a faculty of a University in the British Empire or a Medical Diploma registrable in the United Kingdom. Election to Junior Fellowships are rarely made above the age of thirty-five years. The Trustees are desirous of furthering research in Mental Diseases and in the general allotment of Fellowships will give some preference to a candidate proposing research on approved lines in that subject. Applications from candidates must be received by May 14. It is necessary for candidates to submit evidence that they can be given accommodation in the departments where they propose to work, which must be either in Great Britain or Ireland. Forms of application and all information may be obtained by letter only, addressed to: Dr. A. N. Drury, C.B.E., F.R.S., Secretary, Beit Memorial Fellowships for Medical Research, Lister Institute, Chelsea Bridge Road, London, S.W.1. For Overseas candidates, forms of application may be obtained from: The Secretary, South African Medical Council, P.O. Box 205, Pretoria, South Africa. The Secretary, Universities Commission, Box 4061, G.P.O., Sydney, Australia. The Department of Health, Wellington, New Zealand. The Canadian Medical Association, 184, College Street, Toronto, Canada.

CRICHTON ROYAL FELLOWSHIPS.—The Board of Directors of the Crichton Royal have established three Fellowships for the training of specialists in psychiatry, each carrying a salary of £400 a year, plus the usual residential emoluments. The Fellowships are in addition to the ordinary staff of the hospital. The Fellow will receive training in all branches of clinical psychiatry, including work in out-patient and child guidance clinics, by the senior members of the medical staff. The Fellowships will be tenable for one year, starting from April 1, 1948, but may be prolonged for another year. Previous general hospital experience essential. Application form and syllabus are obtainable from the Physician Superintendent, Crichton Royal, Dumfries, and should be returned not later than February 17, 1948 (previous advert. gave erroneous date for applications).

UNIVERSITY OF SHEFFIELD.—Applications are invited for a post of **DEMONSTRATOR in ANATOMY,** to commence duties on April 1, 1948. Salary scale £450 in the first year, and if the appointment is renewed for second and third years, £475 and £500 respectively, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. The commencing salary on the scale will depend upon the qualifications of the successful candidate. Further particulars can be obtained from the undersigned, to whom applications (four copies), including the names and addresses of referees, and, if desired, copies of testimonials, should be sent by February 21, 1948.—A. W. Chapman, Registrar.

EXAMINING SURGEONS: FACTORIES ACT, 1937.—The following appointments as Examining Surgeons under the Factories Act, 1937, are vacant: Gargrave, in the County of York; Southall, in the County of Middlesex; Charlbury, in the County of Oxford; Warminster, in the County of Wilts.; Kirby Moorside, in the County of York. Applications, which should be received not later than February 14, 1948, should be sent to the Chief Inspector of Factories, 8, St. James's Square, London, S.W.1.

ROYAL COLLEGE OF VETERINARY SURGEONS. MEMBERSHIP DIPLOMA. Appointment of **EXAMINERS.** Applications are invited for the following vacancies for Two Panels of Examiners (Panel A—London and Edinburgh; Panel B—Dublin, Liverpool and Glasgow), viz.: **Two Examiners in** Animal Management (for all five centres). **Four Examiners in:** Chemistry and Physics, Biology (Botany and Zoology), Physiology (including Biochemistry) of the Domesticated Animals, Histology and Embryology, Anatomy of the Domesticated Animals, Pharmacology and Therapeutics, Toxicology, Pharmacy, Veterinary Hygiene, Dietetics, and Animal Husbandry, Veterinary Pathology, Veterinary Parasitology. **Six Examiners in:** Veterinary Medicine, Veterinary Surgery. Applications, accompanied by a statement of qualifications and copies of not more than three testimonials, to be submitted not later than Monday, February 24, 1948. Further particulars may be obtained on application to the undersigned.—W. G. R. Oates, Secretary, R.C.V.S., 9, Red Lion Square, London, W.C.1.

UNIVERSITY OF SHEFFIELD.—Applications are invited for the post of **RESEARCH ASSISTANT in the Department of Pharmacology and Therapeutics,** to carry out original investigations under the Professor, which will be mainly in the clinical field, but experience in laboratory work would be an advantage. Salary in the range of £500 to £700 per annum, according to qualifications and experience, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. Candidates must possess a medical qualification, and have had clinical experience. The successful candidate will be expected to begin duties as soon as possible. Applications (three copies), with the names and addresses of referees and, if desired, copies of testimonials, should reach the undersigned (from whom further particulars may be obtained) by February 21, 1948.—A. W. Chapman, Registrar.

UNIVERSITY OF MANCHESTER.—Applications are invited for the post of full-time **PHYSICIAN-IN-CHARGE OF THE RESEARCH CLINIC AND FIELD SURVEY** to be based on the Miners' Welfare Commission's Centre at Walkden. This is a clinic for the diagnosis and treatment of rheumatic and post-traumatic disabilities, and will act as a base for the field survey. The salary is at the rate of £1,000 per annum. Applications, which must be received on or before March 6, 1948, should be sent to the Registrar, the University, Manchester, 13, from whom further particulars may be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **READERSHIP IN ENTOMOLOGY** tenable at the London School of Hygiene and Tropical Medicine (salary £800 to £1,200, according to experience and qualifications). Applications must be received not later than May 3, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **READERSHIP IN PUBLIC HEALTH** tenable at the London School of Hygiene and Tropical Medicine (salary £800-£1,000-£1,200). Applications must be received not later than March 3, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—Applications are invited for RESEARCH FELLOWSHIPS founded by Imperial Chemical Industries Ltd. and tenable in the University of London and normally of the value of £600 per annum. The Fellowships will be awarded for original research in Biochemistry, Chemistry, Chemotherapy, Engineering, Metallurgy, Pharmacology, Physics and allied subjects. A Fellow will be required to take a limited part in the teaching in the Department in which he works. Fellowships will be tenable from October, 1948. Detailed Regulations and application forms can be obtained from the Academic Registrar, University of London, at the Senate House, London, W.C.1, and applications must be received at that address not later than April 30, 1948.

UNIVERSITY OF LONDON.—Applications are invited for a **RESEARCH FELLOWSHIP** founded by Turner & Newall Limited, tenable in the University and normally of the value of £600 per annum. The Fellowship will be awarded for scientific research in Engineering, Inorganic Chemistry or Physics, or in any allied science. A Fellow will be required to take a limited part in the teaching in the Department in which he works. The Fellowship will be tenable from October, 1948. Detailed Regulations and application forms can be obtained from the Academic Registrar, University of London, at the Senate House, London, W.C.1, and applications must be received at that address not later than April 30, 1948.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

CHILDREN'S DISEASES (D.C.H.). February 23 to March 6. Daily, 5.30 to 7 p.m. Princess Louise Kensington Hospital. Limited. Preference to candidates for March examination. Apply, Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment, 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

MEDICAL CORRESPONDENCE COLLEGE, 19, Welbeck Street, London, W.1, provides COACHING for all Medical Examinations, D.A., D.P.M., D.O.M.S., D.L.O., D.C.H., D.M.R.D. and D.M.R.T., M.R.C.P., F.R.C.S., M.D. thesis, and all qualifying exams. by a staff of highly qualified Tutors, Honoursmen, and Gold Medallists. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested.

THE BEDFORD PHYSICAL TRAINING COLLEGE, 37, Lansdowne Road, Bedford. Principal, Miss C. M. Read. Vice-Principals, Miss D. M. Wilkie, Miss M. V. Lace. Students are trained to become teachers of all branches of physical education. The training extends over three years, and includes educational and remedial gymnastics, games, dancing, swimming, and allied theoretical subjects. Three scholarships of £50 each are offered annually. Application forms should be obtained from the Secretary and returned to the College between April 1 and May 31 of the year previous to entry.

UNIVERSITY OF LONDON ACADEMIC DIPLOMA IN MEDICAL RADIOLOGY.—The **NEXT COURSE** for the D.M.R. (London) will commence in October, 1948. The course is suitable for candidates for the D.M.R.D. or the D.M.R.T. of the Conjoint Board. The fee will be 75 guineas for the D.M.R. course and 60 guineas for the D.M.R.D. or D.M.R.T. course. The number of vacancies is limited, and early application is advised. The closing date for applications from candidates who are not members of a Medical School of London University is May 1, 1948. Prospective candidates are informed that the regulations for the D.M.R. are now being revised and new regulations may come into force in October, 1948. Further information and application forms may be obtained from the British Postgraduate Medical Federation, Central Office, 2, Gordon Square, W.C.1, to whom should be sent all communications about this course.

LECTURES

EMPIRE RHEUMATISM COUNCIL

The Spring Week-end Course will be held at THE APOTHECARIES' HALL, BLACKFRIARS LANE, QUEEN VICTORIA STREET, E.C.4 (Blackfriars Tube Station), on Friday, Saturday, and Sunday, March 12, 13, and 14, 1948.

LECTURES

	FRIDAY, MARCH 12	
4.30–5.30 p.m.	Introductory Lecture	PROFESSOR L. S. P. DAVIDSON, F.R.C.P., F.R.S.E.
5.30–6.30 p.m.	Gout	G. D. KERSLEY, ESQ., F.R.C.P.
	SATURDAY, MARCH 13	
10–11 a.m.	Osteoarthritis	ERNEST FLETCHER, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Spondylitis	W. S. TEGNER, ESQ., M.R.C.P.
2–3 p.m.	Juvenile Rheumatism and Still's Disease	R. E. BONHAM-CARTER, ESQ., M.R.C.P.
3–4 p.m.	Non-Articular Rheumatism and Sciatica	W. S. C. COPEMAN, ESQ., O.B.E., F.R.C.P.
4 p.m.	Tea	
4.30–5.30 p.m.	Rheumatoid Arthritis	OSWALD SAVAGE, ESQ., O.B.E., M.R.C.P.
	SUNDAY, MARCH 14	
10–11 a.m.	Physical Treatment in the Rheumatic Diseases	H. A. BURT, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Orthopaedic Aspects of the Rheumatic Diseases	W. D. COLTART, ESQ., F.R.C.S.

The fee for the course will be One Guinea, limited to 100 entries, to be received with remittance, at least one week before, by the General Secretary, Empire Rheumatism Council, Tavistock House (N), Tavistock Square, W.C.1.

EDUCATIONAL

OBSTETRICS (D.OBST.R.C.O.G.). February 16 to 21. All day. West Middlesex County Hospital, Isleworth. Limited. Apply, Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

POSTAL COACHING for all Medical Examinations. Examination Successes, 1901-47; M.D.Lond., 454; M.B., B.S.Lond., Final, 436; F.R.C.S.Eng., Primary, 411; F.R.C.S.Eng., Final, 308; M.R.C.P. Lond., 427; M.R.C.S., L.R.C.P., Final, 891; D.A. (1936-47), 143; F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary,—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

UNIVERSITY OF MANCHESTER. FACULTY OF MEDICINE. DIPLOMA IN DIAGNOSTIC RADIOLOGY (R.C.P.&S. Eng.)—A course of instruction for the above Diploma will commence in mid-April 1948 and extend over eighteen months. The course is full-time, non-resident. Inclusive fee 50 guineas. Applications are invited from registered medical practitioners who fulfil the requirements as to previous medical experience laid down by the Examining Board in England (D.M.R.D. Regulations, December 1945, obtainable from the London Conjoint Board, 8-11, Queen Square, W.C.1). Further information may be obtained from the Dean of Postgraduate Medical Studies, University of Manchester, to whom all applications must be sent before February 28, 1948.

LECTURES

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—Graham Selby Wilson, Esq., M.D., will deliver the **MILROY LECTURES** on Tuesday, February 10, and Thursday, February 12, at 5 p.m. at the College. Subject: "The Public Health Laboratory Service." Any member of the medical profession admitted on presentation of card. By order of the President.—H. E. A. Boldero, Registrar.

PRIMARY F.R.C.S. COURSE OF LECTURE-DEMONSTRATIONS in ANATOMY, PHYSIOLOGY, PATHOLOGY and BACTERIOLOGY, on Monday and Thursday evenings, 7.30 to 10 p.m., February 9 to June 3. Lecture Room, Royal Cancer Hospital. Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

ASSISTANTSHIPS

VACANT

Box 5825. Assistantship now filled. Thanks to all applicants too numerous for individual replies.

Wanted, Assistant, Male, Indoor, with View if desired, North London panel and private practice, £600 per annum.—Box 7559, B.M.J.

Wanted for March 10, Outdoor Assistant, single, mixed practice South Yorkshire. Able to drive. Allowance if own car.—Box 7560, B.M.J.

Wanted urgently, Outdoor Assistant. Car owner essential. Suit newly qualified. Salary by arrangement.—Box 7561, B.M.J.

Wanted, Indoor Assistant, experienced, in large mixed practice in Eastern Suburb of London. Salary by arrangement. Good salary for reliable doctor.—Box 7564, B.M.J.

Wanted, March 1, English Male Outdoor Assistant, East Anglian country practice. Car essential. Salary and car allowance by arrangement.—Box 7565, B.M.J.

Wanted, Assistant with View. Pleasant practice in North Wales seaside market town. Liverpool graduate with knowledge of Welsh preferred. House to rent available.—Box 7209, B.M.J.

Wanted, Lady Assistant, mixed practice in Mid-lands, firm of three doctors, two assistants and two dispensers kept. Car provided. Live in. Salary by arrangement.—Box 7541, B.M.J.

Wanted. N.W. Durham. Outdoor Assistant, married, British. Free unfurnished house with garden, light, coal, etc., provided. Car necessary. Salary £650 per annum and £50 per annum car allowance, plus midwifery and other fees. Possible view. Usual bond.—Apply Box 7582, B.M.J.

Wanted, Lady Doctor Assistant in busy good-class private practice. Liverpool area. Experience G.P., Hospital and Midwifery essential. Salary £600 per annum all found. Car supplied. Further particulars write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

Wanted, Male Assistant, young, long term, out-door, must be experienced. Mixed general practice, Bristol, commencing March 1. Car supplied. Salary by arrangement. References, usual bond.—Box 7507, B.M.J.

Wanted, experienced Indoor male Assistant at once. English or Scottish. Home counties. Car provided.—Box 7266, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Assistant with View, panel and cash practice on estate, Essex, 20 miles London. Opportunities for young, keen British male with capital. House probably available.—Box 7563, B.M.J.

Assistant wanted with a View to Partnership, mixed practice near North Wales coast. Welsh speaking, dispenser kept.—Box 7585, B.M.J.

Assistant, male, wanted immediately in South Staffs. town. Salary £750-£800, plus car allowance. Prospects for a keen man.—Box 7590.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

X-ray Practice, South Coast, requires Assistant with or without View. Hospital and private practice. Diagnosis and therapy.—Box 7562, B.M.J.

WANTED

Wanted, Long-term Assistantship in England, by English Protestant. Ex-R.A.M.C. Hospital appointments, G.P. experience. Married, aged 31. Car-owner-driver. Unfurnished house desirable. Free May, early booking wanted.—Box 7212, B.M.J.

Wanted, long term Assistantship, ex-R.A.F., G.P. experience, married, three children. Unfurnished accommodation desirable. Obtaining car.—Oxenham, 31, Firs Lane, Winchmore Hill, N.21. LAB. 6070.

Wanted, Assistantship with or without View, or Locum, Scot, aged 30, married, no family, hospital and G.P. experience. Free April.—Box 7248, B.M.J.

Wanted, Assistantship, Partnership or Practice by M.B., B.S. (Guy's), married, Horsham, Crawley, Haywards Heath area, but any good country practice in South considered, 13 years' hospital and G.P. experience. New car.—Box 6626, B.M.J.

Assistantship, preferably with View, wanted by Scottish M.B., Ch.B., aged 31 years, married. Own car. Hospital, Army and G.P. experience. Accommodation essential.—Box 7567, B.M.J.

Assistantship with early View to Partnership or succession wanted by M.B., B.S., Scottish, 32, married, own car, ex-R.A.M.C. Wide hospital and G.P. experience. Country town with small hospital preferred.—Box 7543, B.M.J.

Cambridge and London Hospital Graduate posses-sing D.C.H., taking membership March, teaching hospital house posts, public health and general practice experience, male, British, aged 28, married, one child. Car and furniture owner, seeks Assistantship with view in group practice with chance of paediatrics and/or general medicine. Southern England.—Box 7566, B.M.J.

Evening Surgeries wanted, district Harrow, Middle-sex, by M.B., B.S., 29, studying for higher degree. Own car.—Box 7544, B.M.J.

Experienced M.D., pre-war private practice abroad, ex-Major R.A.M.C. (Surgical Specialist), reading for F.R.C.S., desires Part-time Work or Evening Surgeries, London.—Box 7502, B.M.J.

Woman doctor (M.B., Ch.B. 1940) available for Morning Work. Resident N.W.2.—Box 7509, B.M.J.

Irish woman graduate, age 29, single, Hospital and G.P. experience, driver, requires Assistantship, London or Southern England preferred. Free mid-February.—Box 7542, B.M.J.

St. Thomas's qualified doctor, living Worthing, desires immediate Temporary Outdoor Assistantship or Locum. Experienced child welfare. Possesses car.—Box 7508, B.M.J.

Woman M.B., Ch.B. (1939), experienced hospital, G.P., children, available Part-time Work or Surgeries. Residence, N.20.—Box 7568, B.M.J.

West Surrey, Regular Part-time Work required by Scottish graduate lady M.B., Ch.B., 1942. Hospital and G.P. experience. Able to drive, not car owner.—Box 7297, B.M.J.

LOCUMS

VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars. —British Medical Bureau, 33, Cross Street, Manchester, 2.

Wanted, reliable Locum, with car, for 8 days, February 20 to 27 inclusive. Mixed practice, Wolverhampton. Terms, 16 guineas weekly.—Box 7586, B.M.J.

Locum wanted for S.E. London practice owing to death of partner. Panel 1,500 and private. One with some experience of private practice preferred. House shortly available to suitable applicant.—Box 6936, B.M.J.

AVAILABLE

Wanted, Locum or Part-time Work or occasional Surgeries, Leicester area.—Box 7510, B.M.J.

Ex-Naval doctor, M.R.C.S., experienced hospital and G.P., would like Part-time Work, Surgeries, etc., within 20 miles Frinton, Essex, for a few weeks.—Box 7570, B.M.J.

Experienced G.P. requires Locum Engagements. Excellent testimonials. London hospital. Ch. of England. Abstainer, preferably S.E. England. Own car.—Box 7552, B.M.J.

Keen energetic doctor, 32, single, Hospital and G.P. experience, seeks Locums or Assistantship with or without View Partnership or Succession. Sussex, Surrey, Hants.—Box 7540, B.M.J.

M.B., F.R.C.S.(Ed.), late R.A.M.C., aged 32, free now for two to three months. Hospital, G.P., Surgical Locum.—Box 7569, B.M.J.

PARTNERSHIPS

OFFERED

Australia. Half-share Partnership for £850. English. Melbourne seaside suburb. Advertiser (temporarily indisposed) recently purchased death vacancy practice previously held by doctor 30 years. Two working should book £1,500 to £2,000 first year and enormous increase and scope subsequently. Most attractive house, main road frontage. Airmail substantial deposit, photo, etc. First accepted offer secures. Flat available 4 guineas weekly. Applicant should possess some early capital pending developing practice where all good things abound. Be able fly out without delay.—Doctor, 52, Fitzroy Street, St. Kilda S.2, Melbourne.

Additional Partner required in a practice in Lincolnshire. Average gross receipts for last 3 yrs. £7,000. One quarter share for disposal.—Box P7575, B.M.J.

A well qualified partner, aged 30-40 required in a good class practice in London. No panel but some industrial medicine and hotel appointments. Good scope for an able and pleasant man. Share worth about £2,000 gross. Terms to be arranged at interview. Some previous experience of general practice an advantage.—Box P7515, B.M.J.

Blackpool. Partnership half share in old estab-lished practice, private and panel. Will stand any investigation. Gross receipts 1947 £5,205. Premium 1½ years' purchase. Write, Reynolds & Branson, Ltd., Medical Agency, Leeds.

For Sale. Partnership about £1,800 per annum in London (Essex) suburb. Modern house with separate surgery and garage.—Box P7579, B.M.J.

Half Share Partnership in South Yorkshire Colliery Practice unopposed, near town. Established 24 years. No resident opposition. £3,900 per annum gross.—Box P7513, B.M.J.

Partnership. Share up to £2,000 available to right man in progressive East Anglian market town. Short preliminary assistantship.—Box 7290, B.M.J.

WANTED

Wanted, Partnership with evangelical Christian or Christian firm (share approx. £3,000) by M.D., aged 52, now in single practice. Married, three children.—Box P7514, B.M.J.

Wanted. Share/Assistantship early View, by ex-Service surgical specialist, young, married, one child. Own car, furniture, free now. Greater London, coast preferred, not essential.—Box P7576, B.M.J.

Doctor, aged 35, excellent references, experienced G.P. Anxious settle in rural or country town partnership West Country. Wife also doctor willing assist if or when required. Opposed to Health Act in present form.—Dr. Harris, 4, Parkdale, Wolverhampton.

Experienced G.P. seeks congenial Partnership in mixed practice, London, Home Counties. Ex-Major (M.B., B.S., Guy's), 32. Hospital appointments medicine, obstetrics, children, skins. Alternatively, two years' purchase offered for sound practice.—52, Hodford Road, N.W.11. Speedwell 4891.

M.D., D.R.C.O.G., ex-Army medical specialist, experienced G.P., age 34, desires Partnership or Practice, £2,500 to £3,500 in pleasant town. Good panel essential.—Box P7254, B.M.J.

MEDICAL POSTS

VACANT

Hull Royal Infirmary. Laboratory Technician (Grade B) required. Experience in Biochemistry essential. Preference given to candidates holding the Diploma of the I.M.L.T. Salary according to Joint Committee Scale. Applications, together with copies of testimonials, to be sent to the undersigned as soon as possible.—R. J. Carless, House Governor.

WANTED

Experienced D.R.C.O.G., woman, requires Ses-sional Antenatal or Infant Welfare Clinic Duties, or non-resident G.P., or Hospital Locums, London area.—Box 7511, B.M.J.

M.B., D.P.H., aged 61, married, G.P. many years, requires light Medical Post, Institution, or other light Medical Work. Married quarters or flat. Moderate salary.—Box 7512, B.M.J.

Practitioner, Harrow area, experienced general practice, industrial psychiatry, tropical medicine, requires Industrial Insurance Post, whole- or part-time.—Box 7503, B.M.J.

PRACTICES

FOR SALE

A non-panel practice with some hotel work in a good class residential part of London for sale. Accommodation occupied by vendor would be available for successor. Practice doing over £4,000 and increasing. Premium for practice, accommodation and some furnishings, £7,000.—Box P7516, B.M.J.

County town. London 50 miles. Practice over £2,000. Panel 2,100. Freehold, corner, semi-detached house, five bedrooms, no attics, no cellars, easily run, very small garden, upkeep low, rateable value £45. Excellent educational facilities. Price £7,500 cash, including drugs and fittings. Succession May 1. Introduction April.—Box P7581, B.M.J.

Excellent Mixed Practice, South West City, old-established. Certified accountant's figures 1946-7 £5,900. Panel 1,370. Great scope. Particularly suitable for two, but could be run by one energetic man. Very nice house and garden for sale freehold. Good schools. Premium 1½ years' purchase.—Box P7256, B.M.J.

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Edinburgh. Receipts £1,000. Panel 620. With or without house. Large house (price £4,500) part of which might be separately let. House and practice £6,000.—Apply British Medical Bureau (Scottish Branch), 21, Alva Street, Edinburgh.

For Sale. Very old established Practice, indus-trial town 12 miles from Manchester. Panel 1,960. Gross receipts £3,500. House and practice £7,500.—Box P7545, B.M.J.

For Sale. Very old-established Practice in small country town in beautiful locality on the Wolds, about 15 miles from the sea and within easy reach of a Cathedral City. Receipts 1946/47 £3,243. Panel £1,000. Transferable appts : £100. Easily worked. Charming large freehold house, in excellent repair, with all modern conveniences. Large garden. Hunting, shooting, golf, etc. House, drugs, certain fittings and practice, £9,500.—Box P7298, B.M.J.

Glasgow. Woman's Practice (nucleus) modernized lock-up surgery to rent. Superior stone built semi-detached villa for sale, 8 rooms, kitchenette, bathroom, etc., new fireplaces throughout. Garage for two cars. Walled garden. Premium for house and practice £3,500 or offers.—Box P7519, B.M.J.

Increasing West Riding Industrial Practice. Panel over 2,000, gross income about £2,000. Plenty of scope. Freehold detached house. Price £6,000.—Box P7577, B.M.J.

Kent. Established 50 years, Mixed Practice. Panel 2,750. Surgery rent. Resident caretaker. No midwifery. Plenty available. Good schools. Little night work. £3,000 for two years' purchase or best offer. —Box P7547, B.M.J.

Kent. Well-established Mixed Urban Practice. Panel 1,200. Average receipts past three years £3,300. Modern residence with separate surgery. House and practice £9,500. Larger, alternative house also available.—Box P7517, B.M.J.

Medical Practice in attractive Clyde Seaside Town with excellent house, for sale. Gross income over £3,000. For further particulars apply to Crawford, Herron and Cameron, Solicitors, 257, West George Street, Glasgow, C.2. Tel. : Central 3063/4/5.

Medical Practice. Private and panel, West London, including large double fronted house which could be easily converted into three or four flats. £8,500. —Box P7518, B.M.J.

Middlesex Panel and Private Practice. Detached freehold 3 bedroomed house, with garage, some fittings. House and practice £6,000.—Box P7580, B.M.J.

Mid-Cheshire. For Sale. Private and Panel Prac-tice. Turnover approximately £3,000 (accountant's figures). Panel 1,400. 2 yrs' purchase. Large desirable family house (4 bedrooms, etc.), large garden and garage, freehold, £4,000. Car, house, furniture, etc., available if required.—Box P7578, B.M.J.

N. London. Mixed private and panel practice. increasing. Gross takings last year £4,706. Panel units 2,700. Various public appointments. Large family house, in own grounds. Pleasant district. Dispenser kept. Immediate settlement necessary.—Box P7269, B.M.J.

North East Scotland. Old-established Practice. Gross receipts over £2,000. Panel 1,350. Superior modern house in excellent position for sale with practice.—Box P6686, B.M.J.

Practices and Partnership Shares for sale in Midlands and Northern Counties. Full details free on request.—British Medical Bureau, 33, Cross Street, Manchester, 2.

Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool. Telephones : Royal 8116 and Royal 7480 Telegrams : "Organic," Liverpool.

South East London, cash and panel practice for sale, 20 minutes Piccadilly, panel about 3,500. House to rent.—Box P7504, B.M.J.

Sound Mixed Practice, South Staffs, £5,000 per annum, panel 3,145. Five-bedroomed house to rent, £140 per annum. Separate surgery entrance, two waiting and consulting rooms centrally heated. Ideal husband and wife. Premium £7,250.—Box P7270, B.M.J.

Well established compact Mixed Practice North East English coast. Panel 3,500 units, midwifery, clubs and appointments. Receipts over £4,500. Good reason for disposal. Introduction given. Suit two friends.—Box P7546, B.M.J.

WANTED

Wanted, Practice, Partnership or Assistantship with early View, by ex-R.A.M.C., well experienced medical practitioner. Unfurnished accommodation essential.—Box P7292, B.M.J.

Wanted, Practice in Midlands or South or West. Income £1,500 to £2,000. Sound panel and house.—Box P7525, B.M.J.

Wanted, Practice with good House and garden, garage, preferably coast or suburb of industrial town. Replies strictly confidential. Capital available. —Box P7583, B.M.J.

Wanted, Panel or Mixed Practice or Partnership in London or suburban area. House to rent. Income from £1,500 to £2,500. Hospital and G.P. experience. —Box P7573, B.M.J.

Wanted, now or near future, panel Practice with roomy house in good locality, or Assistantship with succession. English, R.C. ex-H.S., long experience G.P.—Box P7549, B.M.J.

Wanted, Panel and Private Practice, or Partner-ship, with good house and garden, Cornwall or Devon. Income £1,200 upwards.—Box P7524, B.M.J.

Wanted, immediately, Mixed Practice in Liver-pool. Panel over 1,400. Would exchange practice in Southport if desired.—Box P7523, B.M.J.

Wanted, Semi-rural Practice with good panel in S.W. counties. Advertiser free now. Trout fishing and shooting desirable. Ample capital.—Box P7522, B.M.J.

Wanted immediately, Practice, Panel, Private or Nucleus with scope. South Coast, preferably Worthing, Hastings, Eastbourne, Bexhill. House or bungalow, modern, leasehold, freehold. Capital available.—Box P6919, B.M.J.

Wanted, good Practice in Scotland or Northern England. Good house and garden essential. Ample capital.—Box P7259, B.M.J.

Experienced Scots practitioner requires Sound Mixed Practice in pleasant area with good schools for girls. Capital available. Good house essential. —Box P7271, B.M.J.

Experienced G.P. requires a good Practice in Newcastle-upon-Tyne. Good house essential. Ample capital. Replies confidential.—Box P7574, B.M.J.

Good Country Practice required in area between Harrogate, Carlisle and Newcastle. Cash available. Confidential.—Box P7521, B.M.J.

Hampstead. Doctor practising Hampstead, Lon-don, wishes to acquire additional private and panel practice.—Box P7505, B.M.J.

London Practice or Partnership with reasonable panel required by young experienced practitioner. Capital available for early succession.—Box P7550, B.M.J.

I.M.S. Officer, retired, aged 45, G.P. experience, wants Practice or Partnership, country town or coast, with good house and near suitable girls' preparatory school. South or Midlands preferred. Capital available.—Box P7520, B.M.J.

M.B., ex-Major R.A.M.C., urgently requires Practice. Income £1,500-£1,800. Panel 1,000 upwards. Ample capital available for immediate settlement.—Box P7222, B.M.J.

Practice or Partnership in Channel Islands re-quired by experienced general practitioner (Guy's). Details in confidence to Box P7548, B.M.J.

Practice or Partnership, mainly panel, required, N.W., Central, W. or N. London preferred.—Box P7219, B.M.J.

Practice wanted in Newcastle-on-Tyne area or North East Durham. Panel about 3,000. Would consider Assistantship with succession later.—Box P7539, B.M.J.

Practices and Partnerships wanted anywhere. England, Scotland, Wales. Purchasers waiting Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88. Church Street, Liverpool, 1.

Practice or Nucleus Wanted Central London area or easy reach. Partnership considered. Accommodation not essential. Ample capital.—Box P7571, B.M.J.

Rural Practice or Partnership in Coastal, Mid or Borders of Wales required by experienced general practitioner (Guy's). Details in confidence to Box P7572, B.M.J.

Small town or good suburban Practice, south Midlands. M B , M.R.C.S., D.R.C.O.G., aged 28, wife M.B. Capital and references. Hospital and G.P. experience since demobilization.—Box P6920, B.M.J.

Woman's small Country Practice wanted with house to rent or buy. Village on high ground, Oxon-Bucks border or East Sussex preferred.—Box P7526, B.M.J.

DIETITIANS, DISPENSERS, NURSES

VACANT

Dispenser-Secretary required early February. Apply, stating experience.—Drs. Shaw, Bever'ey and Wood, Claremont House, Cleckheaton, Yorks.

Dispenser-Bookkeeper required middle of March. Country practice, eight miles from Peterborough.—Drs. Hobson, Fraser and Douglas, Market Deeping, Peterborough.

Dispenser-Secretary required. Experienced. Rural district, Home Counties.—Box 7530, B.M.J.

Locum dispenser wanted for six weeks from February 6, mixed practice, country district, part-time help given, accommodation available.—Fairweather, Royle and Oliver, Clitheroe, Lancs.

Lady Dispenser with Hall qualifications, required. Previous experience not essential. Three dispensers and secretarial staff kept. Please give full particulars with first application.—Drs. Alcock, Ratcliff, Reid, Salzmann, Keeling & Tait, 317, Oxford Road, Reading.

AVAILABLE

Doctor's daughter, 40, having necessary qualifications and experience, seeks Post care of Invalid, physical or nerve, and responsibility of doctor's house. Accommodation self and mother, furnished or unfurnished, with salary desired.—Box 7528, B.M.J.

Pathological Technician's Post urgently required by ex-medical student. Three years' full-time occupation in laboratory, prior to entering University, and vocational work since.—Box 7527, B.M.J.

TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

All types Receptionists, Secretaries, Dispensers, Med. Aux., etc., again wanted and supplied. No fee to employer.—Medical Services Employment Bureau, 23, Mount Park Road, W.5. Tel.: Perivale 1976.

TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

AVAILABLE

The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

Doctor's daughter, aged 45, desires Post Receptionist, light clerical work, no shorthand, typing.—4, Telford Parade Mansions, Streatham, S.W.6. 'Phone: Tul. 6031.

Lady, 48, experienced all clerical duties except shorthand, present post London teaching hospital, desires Resident Post elsewhere. Work need not be entirely clerical. Would undertake light housework and/or some gardening.—Box 7536, B.M.J.

Lady, 34, requires Part-time Appointment with West End specialist three days weekly as Secretary-Receptionist-Shorthand-Typing.—Box 7501, B.M.J.

Nurse-Secretary requires post with specialist, preferably in West End. Dental, pathological, and hospital experience. Excellent references.—Box 7584, B.M.J.

Secretary-Receptionist requires Post in Chester or Liverpool, age 22, ex-A.T.S., public school. Good secretarial training. Nursing experience. Good driver.—Box 7537, B.M.J.

Typewriting, Duplicating, Medical Manuscripts, testimonials, etc. Immediate service, ex-R.A.M.C. staff. Satisfaction guaranteed.—Specialist Typewriting Bureau, 30, City Road, E.C.1. Mon. 4881. Mai. 6344.

Nurse-Receptionist, 3 years office, 4 years nursing experience, seeks position in London.—Box 7587, B.M.J.

Typewriting Service, Testimonials, Theses, Notes, etc., accurately and speedily typed.—Phone HAMpstead 7949 after 1 p.m. daily.

Young lady desires post as Receptionist to doctor. London area. Willing look after house. Typing if required.—Box 7202, B.M.J.

Young lady, 23, desires interesting medical post. N.S.C.N. Diploma. Can type. Knowledge shorthand. Secretarial-receptionist ability.—Box 7531, B.M.J.

Young lady requires position as resident Doctor's Receptionist. 2½ years' nursing experience, knowledge of typing. Pref. in London or Surrey.—C. Michael (Miss), 3, Hurst Road, East Molesey, Surrey.

MISCELLANEOUS

PRIVATE

For Sale. Set of Test Lenses in mahogany case. £35 or near offer. Ultra Violet Sunray Lamp—Tungsten Arc Lamp.—Box 7538, B.M.J.

Midwifery Set. Axis traction forceps, perforator, hook, craniotomy, calipers, curette, mask, stethoscope, stitching instruments, dressing instruments, pessary introducer, uterine scissors, unused. Dental set. Offers.—Box 7532, B.M.J.

Microscope, Beck-London, nearly new condition, mahogany case, complete with 2 eyepieces, 2/3, 1/6, 1/12 O.I. objectives, mechanical stage, substage condenser, accessories, £45. Blood-sugar colorimeter, made by Zeiss-Ikon as described by Cresclius-Seifert. £15 or offer.—Box 7554, B.M.J.

Microscope, Watson's "Bactil," complete. Eyepieces Nos. 2 and 4. Objectives 2/3 in., 1/6 in., and 1/12 in. oil immersion. Condition as new, in mahogany cabinet for sale. Offers to Box 7551, B.M.J.

Microscope, "Swift" Portable. Nearly new condition, in mahogany case. Mechanical stage. Abbé condenser, 3 Zeiss objectives—N.A. 1.25 O.I. —D.D.—A.A., Zeiss dovetailed objective changers. £60.—Box 7591, B.M.J.

Microscopic objectives urgently required, 2/3, 1/6, 1/12 oil immersion. Parachromatic or Apochromatic. Offers to Box 6905, B.M.J.

Portable X-ray apparatus, 90 kV 30 ma. Spare tube. Offers and details.—Box 7533, B.M.J.

Practically unused Watson "Service" Microscope. Substage condenser, 1/3, 1/6, 1/12, objectives. Mahogany case. Will anyone exchange for D.B. 12 bore hammerless ejector shotgun, preferably British. Cash settlement if necessary.—Dr. Cummins, 4, High Street, Horncastle, Lincs.

"Emesay" Portable Gas and Oxygen apparatus for sale, 18 guineas.—Box 7534, B.M.J.

Sale, Diathermy Machine by Stanley Cox, little used, perfect order. £45.—Kellett-Smith, 1, Lypiatt Terrace, Cheltenham.

Surgical Examination Couch, mahogany, rexine covered, £30 or nearest offer. Tel.: WEL. 1611.

Watson "Service" Microscope, 2/3, 1/6 objectives, ×6, ×10 eyepieces, condenser, strong case. Good condition. Offers.—Box 7555, B.M.J.

For Sale. Victor self-rectified 30 m.a./90 k.v.p. x-ray set, single focus tube, in perfect condition.—Apply, Hon. Secretary, East Cornwall Hospital, Bodmin.

TRADE

Wanted to Purchase. Good quality used Microscopes and Accessories. Highest prices paid.—Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. MAYfair 7511.

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire

Occupational Therapy. Prompt delivery of Leathercraft accessories, toy and slipper making materials, etc. We shall be pleased to quote firm prices and advice on all matters.—The Nottingham Leather Co., Ltd., Kent Street, Nottingham. Tel.: 40055-6.

For Sale. Electric Polishers from 15 guineas. Electric Washers. Immersion Heaters. Storage Heaters. Violet-ray lamps. Radiators. Potato Peelers. —Southern Electrics; Office only, 35, Newlands, Wallington. Wal. 7164.

APARTMENTS, BOARD, ETC.

AVAILABLE

Attractively furnished ground floor Flat at Sydenham, 2 rec., 2 bed., kitchen, bath and separate w.c. Constant hot water, self contained and completely redecorated. Spacious rooms, garage and garden. 8 guineas weekly.—Eric Rogers, Farnborough Common, Kent. (Tel.: Farnboro' 67).

Doctor's widow can accommodate two doctors as Paying Guests in her home in S.W. London. Convenient to Victoria.—Box 7589, B.M.J.

Single or Double Room in beautiful home, Romford (25 mins. Liverpool Street). Professional men, especially Christians, welcome. From £2 15s. including morning and evening meal.—Box 6660, B.M.J.

Hampstead Heath. Bed Breakfast; well furn'shed rooms. Collector's unique quiet house. On heath 300 ft. up, magnificent views.—50, Parliament Hill, N.W.3. Hampstead 8844.

S.W.3, near Sloane Square, Furnished Service Rooms with Breakfast for 3 guineas weekly.—Phone Kensington 4435, or write Box 7588, B.M.J.

For Sale. Lease of Flat in Harley Street with complete contents. Very large room, separate bathroom, c.h.w., etc., rent £150 per annum, 6 years' lease, receptionist service. No key money. Write to Box 7294, B.M.J.

WANTED

Home required for mental patient (elderly lady), where nursing available by night and companionship by day. Unfurnished rooms preferred, but not essential, within one hundred miles radius of Oxford.—Box 7535, B.M.J.

HOTELS

Charming Country Hotel in bracing situation on cliff top near Folkestone. Club licence. Beautiful scenery, walking, riding. Extensive grounds. Own produce. Warmth and comfort. Convalescents specially catered for. Apply Manageress, Capel Court, Capel-le-Ferne, near Folkestone.

Cotswold.—Residential Hotel, excellent cooking, well heated, old-world garden, own poultry, bracing, restful, near church, shops, buses, 5-6 guineas. —Old Red Lion, Stow-in-the-Wold, Gloucester. Tel.: 66.

Treharrock Manor, near Port Isaac, Cornwall. One of the mildest climates in the country. To winter in this lovely manor in 14½ acres delightful grounds is to enjoy an atmosphere of unique happiness and complete comfort in traditional country house style. Modern amenities. Tel.: Port Isaac 234.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild, allowing visitors to be out in the wonderful air. The Hotel is central heated, individual heating in bedrooms. H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

HOUSES, CONSULTING ROOMS

Wanted, Consulting Room in Harley Street or district by a Physician. Part-time only.—Write, Advertiser, 22, Wimpole Street, London, W.1.

Brook Street, W.1. Consulting Rooms to let, first-class establishment. Day and night telephone service. Luncheon room. Further particulars apply, Allsop & Co., 21, Soho Square, W.1. Gerrard 5847.

Consulting Room available shortly in W.1 district with unfurnished flat. 1 b.r., 1 rec., kit. and bath.—Box 6984, B.M.J.

Furnished Consulting Rooms to let full- or part-time. All amenities, 9, Queen Anne Street, Harley St., W.1. Also large basement suitable laboratory.

MOTOR CARS

MILHALL MOTOR CO., LTD.

1934 Bentley 3½-litre sports saloon, Thrupp and Maberly. Serviced Bentleys.

1946 (first registered) Rolls Royce Phantom III, DL series 7-seater limousine Mulliner. 6,500 miles. New throughout.

1934 Rolls Royce 20-25 sports saloon, Thrupp and Maberly.

1939 Alvis Speed 25 sports saloon.

1940 Morris 10 h.p. saloon. Speedometer reading 15,000.

1938 Rover 20 sports saloon.

Showrooms: 5, ST. JAMES'S STREET, S.W.1. (Whitehall 1952-4).

Service: 55-57, South Edwardes Square, W.8 (Western 2269).

Gentleman urgently requires 1946-7 Car or low-mileage pre-war model.—King, The Crest, Raggleswood, Chislehurst, Kent. Imperial 5527.

Lanchester 14 Roadrider-de-Luxe, recently rebored. Mileage 39,000. Pre-selector gear, fluid flywheel, radio. One owner only.—Cossor's Motors, Ltd., Goring-by-Sea. 41900.

Motourists (London), Ltd., of Great North Road, East Finchley Station, N.2, urgently require late model cars of all makes, any h.p. Representative will call by appointment. Tudor 2301-2

M.G. 1½-litre drop head coupe 1938 grey. Now in M.G. works where it has been stripped and renovated throughout at cost of over £650. Ready now immediate use. Nearest offer £1,200. Detailed invoice available.—Box 7556, B.M.J.

6¾-litre Bentley. Speedometer milage 45,000. Superb saloon body. Whole in excellent condition. Ideal and impressive consultant's car.—Dr. Leyton, 10, Harley Street, W.1. Langham 4280.

1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

NURSING HOMES

Nursing Home, run like first-class private house. Resident medical man and wife. Certificated nurses. Rest Cures, Neurasthenics and Convalescents (not certified, malignant nor tubercular). Guests also received. Lounge hall, large dining-room, lovely drawing-room. Own poultry kept. Private garden. Beautiful country. Shops four minutes. London 40 minutes. Very comfortable, quiet. Good catering and cooking. Consultants and other medicals can visit their own patients.—C. F. Fothergill, M.B., B.Ch., Hensol, Chorley Wood, Herts., Phone: Chorley Wood 24.

Broadstairs. High class Nursing Home, delightfully situated on sea-front. Has vacancies for medical, surgical and convalescent patients. Every comfort. Professional people especially catered for. Terms from 8 guineas. Applications to Matron, Bradstowe Nursing Home, Sea Front, Broadstairs. Phone: Broadstairs 962.

Nursing Home, run on private house lines, for chronic (not mental), convalescent, and rest cases. —Weir, Molesey 3165.

Whistley House, Axtown Lane, Yelverton, South Devon (Tel. 149). L. B. Reeves, L.R.C.P.&S.Ed. Lovely modern residence run as first-class Nursing Home (registered) for convalescents and aged gentlefolk. Excellent cuisine. Resident doctor and wife. Further particulars on request.

FOR SALE

Convalescent Sanatorium near Ventnor. Established 39 years. 30 patients taken. 5 staff. Beautiful property and attractive buildings in 2 acres of delightful grounds with sea views. Well equipped wards and private quarters. £9,300 freehold property, contents, equipment and goodwill. Folio No. 2586. Write Ashcroft & Taylor, Estate Agents, Ventnor, I.W.

APPOINTMENTS

(Continued from page 23)

Have you read the notice at top of page 12 ?

WHITEHAVEN AND WEST CUMBERLAND HOSPITAL
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), vacant now, for a period of six months. Practitioners within three months of qualification and liable under the National Service Acts may apply. Salary £200 per annum, with full residential emoluments. Applications should be sent immediately to the Secretary-Superintendent.

WREXHAM AND EAST DENBIGHSHIRE WAR MEMORIAL HOSPITAL
RESIDENT HOUSE SURGEON (B2)
Casualty and Fracture Department

Applications are invited from registered medical practitioners (male and female) including those holding A posts, for the six-months appointment of Resident House Surgeon (B2), Casualty and Fracture Department, to commence immediately. Salary £350 per annum, with full residential emoluments. Applications to Leslie Spencer, Secretary.

YORK COUNTY HOSPITAL
(222 beds)
RESIDENT CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of a Resident Casualty Officer (B1), vacant immediately. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £350 per annum with full residential emoluments. Applications should be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B1), vacant immediately. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £350 per annum, with full residential emoluments. Applications should be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

HOMES

NORTHUMBERLAND HOUSE
GREEN LANES, FINSBURY PARK, N.4

A PRIVATE HOSPITAL for the treatment of MENTAL and NERVOUS ILLNESSES. Conveniently situated and easy of access from all parts. Six acres of ground facing Finsbury Park. Voluntary and Temporary Patients received without certification. E.C.T. Group Psychotherapy. Trained Resident and Visiting Staff. INSULIN COMA UNIT. Telephone: Stamford Hill 7866/7 (2 lines). Telegrams: "Subsidiary, London." For further particulars apply to the Medical Superintendent, Robert M. Riggall, Member, British Psycho-Analytical Society.

HAYDOCK LODGE
NEWTON-LE-WILLOWS, LANCASHIRE
Tel.: Wootton, Ashton-in-Makerfield,
'Phone: Ashton-in-Makerfield 7311.

For the reception and treatment of PRIVATE PATIENTS of both sexes suffering from mental and nervous disorders, alcoholism and drug addiction, either voluntarily, temporarily, or under Certificate. Patients are classified in separate buildings according to their mental condition.

Situated in park and grounds of 400 acres. Self-supported by its own farm and gardens, in which patients are encouraged to occupy themselves. Every facility for indoor and outdoor recreation. For terms, prospectus, etc., apply Medical Superintendent.

ST. ANDREW'S HOSPITAL, NORTHAMPTON
For Nervous and Mental Disorders

President: The Most Hon. the MARQUESS OF EXETER, K.G., C.M.G., A.D.C. Medical Supt.: Thomas Tennent, M.D., F.R.C.P., D.P.H., D.P.M. This Registered Hospital is situated in 130 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or who wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in Hospital or in one of the numerous villas in grounds of the various branches can be provided.

WANTAGE HOUSE.—This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped with all the apparatus for the complete investigation and treatment of Mental and Nervous Disorders by the most modern methods; insulin treatment is available for suitable cases. It contains special departments for hydrotherapy by various methods, including Turkish and Russian baths, the prolonged immersion bath. Vichy Douche, Scotch Douche, Electrical baths, Plombières treatment, etc. There is an Operating Theatre, a Dental Surgery, an X-ray Room, an Ultra-Violet Apparatus, and a Department for Diathermy and High-frequency Treatment. It also contains laboratories for biochemical, bacteriological, and pathological research. Psychotherapeutic treatment is employed when indicated.

MOULTON PARK.—Two miles from the main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres. Milk, meat, fruit, and vegetables are supplied to the Hospital from the farm, gardens, and orchards of Moulton Park. Occupational therapy is a feature of this branch, and patients are given every facility for occupying themselves in farming, gardening and fruit-growing.

BRYN-Y-NEUADD HALL.—The seaside house of St. Andrew's Hospital is beautifully situated in a park of 330 acres at Llanfairfechan amidst the finest scenery in North Wales. On the North-West side of the Estate, a mile of sea-coast forms the boundary. Patients may visit this branch for a short seaside change or for longer periods. The hospital has its own private bathing house on the seashore. There is trout-fishing in the park.

At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts (grass and hard courts), croquet grounds, golf courses, and bowling greens. Ladies and gentlemen have their own garden, and facilities are provided for handicrafts such as carpentry, etc.

For terms and further particulars apply to the Medical Superintendent (Telephone Nos.: 2356 and 2357 Northampton), who can be seen in London by appointment.

PENDYFFRYN HALL SANATORIUM
All Modern Methods of Treatment available

Ideally situated for the treatment of Tuberculosis. Shelter from E. and N.E. winds. Climate mild and bracing. Low rainfall, high average of sunshine. The Sanatorium is situated in its own Park. There are miles of graduated walks through pines, gorse, and heather, rising to 800 ft. and commanding extensive sea and mountain views. Central heating, electric light, x-ray installation. Wireless in all rooms. Full day and night nursing staff. Special milk supply from a tuberculin tested herd. Easily accessible from London, Manchester, Liverpool, Birmingham, and the North.

Medical Staff: Dennison Pickering, M.D.(Cantab), P. Keaney, M.B., B.Ch.

Apply Secretary, Pendyffryn Hall, near Penmaenmawr, North Wales. 'Phone: 20.

ASHENDENE, BAYFORD
Nr. HERTFORD, HERTS
(Formerly at Epping House, Little Berkhamsted)

An attractive and comfortable PRIVATE HOME beautifully situated in its own grounds, 400 ft. above sea-level. Exceptionally healthy air and position affords every facility for convalescence. Treatment for Ladies and Gentlemen suffering from Insomnia, Functional, Nervous Disorders, Alcohol and Drug Habits, Chronic Heart and Kidney Disease, also Elderly and Convalescing Cases.—Apply J. C. Baker, M.B. Telephone: Bayford 262. Station: Bayford (L.N.E.Ry.).

CHISWICK HOUSE, PINNER, MIDDLESEX
Telephone: Pinner 234.

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes. A modern country house 12 miles from Marble Arch, in attractive and secluded grounds. Fees from 10 guineas per week inclusive. Cases under Certificate. Voluntary and Temporary patients received for treatment. Douglas Macauley, M.D., D.P.M.

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BRITISH MEDICAL JOURNAL

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EFFECTS OF WAR ON CHILD HEALTH*

BY

RICHARD W. B. ELLIS, O.B.E., M.D., F.R.C.P.

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The influence of any environmental factor on a growing organism must be measured in terms of the immediate effect produced and also of the ultimate effect on subsequent development. When the growing organism is a child the matter becomes infinitely complex, since the health of the child is intimately bound up with his physical, intellectual, emotional, and moral development. The last of these is least accessible to scientific evaluation but is of profound importance in determining the child's immediate and subsequent adjustment to society.

Furthermore, war conditions themselves are so fluid and variable that by their very nature they are ill-adapted to planned survey or statistical assessment. It will be clear, therefore, that my subject is one where the broad generalization, the clinical impression, and all the uncheckable quotations so anathematized in modern scientific medicine still hold pride of place. In saying this I have not lost sight of the many excellent surveys of children under war conditions which have in fact been carried out. But it is true in general that many of the effects of total war involving the child population will necessarily be unassessable. One has only to consider the unorganized movement of populations and the disruption of civilian services and records for this to become plain.

My own direct interest in the subject dates from the Spanish Civil War, when in 1937 I was brought abruptly into contact with the problems of large-scale evacuation of children from a city in a state of siege. During the succeeding ten years I have had the opportunity of seeing something of the effects of war on children in a dozen different countries, and of comparing the problems arising and the methods adopted for their solution.

The particular points I wish to illustrate are these: the disruption of home and family life of the individual child; the instability of his environment, varying from constant movement before an advancing army to evacuation under aerial bombardment; the lowered and often conflicting moral standards with which the child is likely to be brought into contact; the commonest disease processes likely to affect the child; and the means taken to safeguard the welfare of particular childhood populations in countries at war.

Broadly speaking, total war as it affects the child may be considered as an infectious disease: the first phase or period of incubation is that during which a peacetime economy is being rapidly turned over to wartime needs; the second phase is the period of eruption or invasion, which is likely to be fulminating, when a rapidly moving front will result in mass movements of civilian refugees; the third phase is the long-continued period of sickness represented by life under enemy occupation or aerial bombardment: and, finally, we have the stage of convalescence, often protracted and incomplete, which continues through the immediate post-war years. The individual child may succumb at any stage of the disease, and those that survive the period of convalescence may well carry the effects of the illness throughout their lives.

The biological effects of the pandemic will also affect the race as a whole. Against the advantages of earlier marriage and reproduction which commonly result from war conditions must be set the prolonged separation of couples during the reproductive period, the rise in illegitimacy, and the increased number of divorces and broken homes.

Periods of severe nutritional deprivation will result not only in a rising infant mortality but also in a lowered conception and birth rate. Thus in Rotterdam and The Hague, where there was a period of acute undernutrition affecting the whole population for a relatively short and well-defined period in 1944–5, it was calculated that 50% of the female population became amenorrhoeic, and that nine months later the birth rate was less than a third of the normal for the same cities (Smith, 1947). In Berlin the infant mortality rate in the British zone rose to well over 200 infant deaths per thousand live births between July and December, 1945—approximately four times the pre-war rate in Germany.

But in spite of these large-scale disasters there is one feature of the recent war which, personally I consider of the utmost social significance—namely, the attention paid to the protection of child life during the war years in almost every country involved. This was in marked contrast to conditions in the past, when children were to a large extent treated as members of the general civilian population, and were likely to be the first rather than the last to suffer during periods of prolonged deprivation. It may reasonably be argued that war conditions themselves have changed; that the introduction of large-scale aerial warfare has directly involved the civilian population to an unprecedented extent; and that the occasional sack and elimination of cities in the Middle Ages are more than counterbalanced by the systematic destruction of newborn infants and children which was practised in certain concentration camps. Without questioning the validity of this argument, the fact remains that in most countries the importance of preserving child life was realized from the outset.

Movement of Refugees in Spain

I make no apology for taking many of my illustrations from the Spanish Civil War. This is now an old story; but while the conflagration in Spain was at first on a smaller scale it illumined many of the problems which were to

*An address delivered to the Royal Medical Society, Edinburgh, on Dec. 12, 1947.

develop world importance later. As in every war, the movement of refugees in Spain was conditioned by a number of different factors, including not only the movement of the front line but also the nature of the terrain—e.g., the relationship of agricultural land to the larger cities, the position of the sea coast, and the nature of the frontiers. Though not the first war in which aerial bombardment had been deliberately used against civilians, this modern weapon introduced new and unexpected factors into civilian behaviour. The picture was further complicated by the fact that the war was essentially a civil war, in which the presence of a fifth column introduced the atmosphere of mutual distrust and betrayal which was to prove perhaps the most degrading of all the attributes of war.

The first movement of refugees—trekking by road and under shell-fire from the sea—was from the southern extremity of Spain toward the north; the greater part of this mass movement was to Barcelona and the province of Catalonia, bordering the French frontier in the Pyrenees. With the evacuation of Madrid through the narrowing lifeline linking the capital with any agricultural area, the refugee population in the north steadily increased, whilst living accommodation and food supplies as steadily deteriorated. The number of refugees in this comparatively small province was subsequently swollen by the arrival of Basques, whose native province had been overrun, and later by an increasing number of Catalans who had been rendered homeless by the enemy advance. Ultimately, with the final defeat of the Republican Army, over half a million refugees poured over the Pyrenees into France.

The clearest impression that remains after talking to many of these refugees while still in Catalonia is not so much of their often appalling living conditions, inadequate food, and lack of soap and fuel as of their complete insecurity and homelessness (Ellis and Russell, 1937b). Many women with young children had literally been on the road for weeks, while they knew they might be moved on at any moment to some other very temporary asylum. A small boy of 5, who arrived in Barcelona with forty others from a children's colony which had just been machine-gunned, told me with pride that he had already been evacuated three times from the neighbourhood of an advancing army. I was to see him moved three more times before he finally reached France, though even here the prospect of his finding any permanent refuge was remote. A peasant woman from near Malaga, with an infant in arms and two other small children, told me that a fourth child of 5 had left her side during the first panic exodus from the south and had been lost in the stream of refugees on the road, and that she had never seen her since.

Although many had left home with such household goods as they could carry or pack into carts, by the time they reached France their belongings had for the most part been lost, bartered, or stolen on the way. The few donkeys that remained were slaughtered for food in the final trek over the Pyrenees, while any valuables that had been retained were requisitioned by the Sudanese troops guarding the concentration camps in France or finally exchanged for food.

My impression, and I can hardly call it more than this, is that the child can forget physical hardship (as distinct from deliberate cruelty) remarkably quickly, but that if he is brought up with no settled home that he can remember, no personal possessions, and no permanent friends he has a handicap which he can never completely overcome. This in essence is the lot of the refugee child.

To consider a particular, and in many ways more fortunate, group of Spanish children in detail I must go back to the middle period of the Spanish Civil War. In 1937 the Basque country at the Atlantic end of the Pyrenees became an active theatre of war. By May of that year the main port, Bilbao, had been encircled by land and blockaded by sea, and in spite of the efforts of blockade runners and fishermen it was in a state of siege. Refugees escaping by boat or through enemy-occupied territory were still reaching France, but there remained a large child-population in the city, which at that time was living almost entirely on rice, dried beans, cabbage, and 35 g. of black bread a day per head. Unlike the refugees from the south, who in the early days of the war had been shelled from the sea but had not been bombed or machine-gunned from the air, the inhabitants of Bilbao were having the first bitter taste of aerial warfare. Since Bilbao was almost entirely lacking in effective air-defence, it lay open to continuous air attack by day, and full use was made of this weapon in keeping the population in a constant state of disturbance and anxiety. Although the tonnage of bombs dropped on the city and the loss of life may appear trivial by comparison with what was to happen later, the complete destruction of Guernica from the air was still fresh in the mind of every Basque, and had already shown how effective air attack could be against an unprotected civilian objective.

Evacuation of Spanish Children to England

It was at this time that the growing concern for the fate of Spanish children which was felt by many people in both Europe and America was expressed in England by an offer of the National Joint Committee for Spanish Relief to receive and support four thousand children from Bilbao until such time as they could safely return. Whilst this number of refugee children cannot be considered large by present standards, and indeed hardly touched the Spanish refugee problem as a whole, the venture can be taken as representing a considerable act of faith and something of a pioneer venture at the time it was undertaken. It must be remembered that it was allowed by the British Government only on the understanding that no expense should fall on public funds; that the length of time for which the children were to be supported was quite unknown; and that most of the lessons of large-scale evacuation of children had still to be learnt. Medical examinations in Bilbao were undertaken in circumstances which later became only too familiar; but at that time it was a new experience to see the population orientated around air-raid shelters, schools closed to aid dispersal, and every normal activity continually interrupted by raids (Ellis and Russell, 1937a).

After the inevitable delays, the children were embarked at night in an old passenger liner which had been gutted as a refugee ship. Every available foot of space was utilized, children sleeping tightly packed on the floor of the saloons, in corridors, and in the hold. The ship was escorted across the Bay of Biscay by a British destroyer.

The after-story of these children can be told briefly, though it illustrates in miniature many of the effects of war on childhood and their repercussions. First, the possible spread of disease by refugee movement had to be guarded against. The main dangers which were feared were the introduction into England of typhus and trachoma. These fears proved to be exaggerated, and although two cases of trachoma were subsequently diagnosed no case of typhus occurred.

The Commoner Diseases

The diseases which were found to be of greater significance were typhoid fever, pulmonary tuberculosis, pediculosis, and scabies. In spite of a much more thorough medical examination by the port medical authorities at Southampton than had been possible in Bilbao, a small outbreak of typhoid occurred in the tented camp into which the children were first drafted on arrival. This, however, was limited to five cases, and was rapidly controlled (Taylor, 1937; Gibson, 1937).

Tuberculosis

Pulmonary tuberculosis continued to be a source of anxiety throughout the children's stay in England, and a number of fatal cases occurred during the subsequent two years. It is difficult to estimate how far war conditions were directly responsible, though there can be no doubt that the period of severe nutritional deprivation which both children and the accompanying adults had suffered and the crowded life in air-raid shelters would favour infection, and that their subsequent life in residential colonies would increase the likelihood of spread.

The subsequent world war has also emphasized the increased mortality from childhood and juvenile tuberculosis; the two age groups most likely to be affected are children under 5 and adolescents. The figures given by the International Red Cross (Comité International de la Croix Rouge, 1947) for post-war Germany have been severely criticized as being grossly inaccurate (Hart, 1947), and indeed they might well be regarded as a classical example of "sentimental arithmetic"; but if we take those for Scotland, where aerial bombardment and destruction were minimal, the effects of war are even here clearly evident. Comparing the mortality from tuberculous meningitis in 1940 and 1941 with the 1938 figures, the increases in the 0–5 age group were 66 and 28% respectively, and in the 15 to 25 age group 70 and 135% respectively. Although 1941 proved the peak of the war years for the overall mortality from tuberculosis in Scotland, it must be remembered that in most countries in Europe conditions deteriorated rapidly between 1941 and 1945, and in some they continued to deteriorate after the cessation of hostilities. There would be little question that the mortality and morbidity from tuberculous infection in the children of Europe as a whole seriously increased owing to war conditions, and in many countries is still a matter of the greatest concern.

Pediculosis and Scabies

I would say from ten years' experience that these two so-called "minor horrors of war" are in fact two of the major problems of war in dealing with a childhood population. In every country under war conditions there are likely to be lack of soap, lack of clothing, lack of hot water and washing facilities, and crowding in air-raid shelters. Add to these the closure of schools and the disruption of the school medical service, which are often inevitable, and it will be obvious that every factor favouring cross-infection and spread is present. The appalling incidence of typhus in the concentration camps in Germany is well known, and it was generally agreed that ambulant or mild cases occurring in children in Naples during the typhus epidemic in 1944 were an important source of spread. Had it not been for the magnificent work of the Typhus Commission in dusting the population of Naples, of which it was estimated some 50,000 were living in air-raid shelters, and the later large-scale importation of D.D.T. into Europe by Unrra (Sawyer, 1947), pediculosis might well have been responsible for a disaster having world-wide repercussions.

Although the possible effects of scabies are less dramatic, the degree of misery which it can cause in an untreated population is very great. This was well seen amongst the Spanish refugees in concentration camps in France after the major exodus in January, 1939, and could probably be paralleled wherever there has been mass refugee movement. Even in Holland, with its notoriously high standard of cleanliness, one of the major problems of relief work after the occupation was the treatment of scabies, particularly among children. Although I cannot give statistical support for this statement, several European colleagues have commented on the greatly increased incidence of osteomyelitis in childhood during the war and immediate post-war years, which was attributed as much to skin sepsis as to malnutrition. If this observation is correct it would suggest that scabies, as the principal cause of skin sepsis under war conditions, may have more far-reaching effects on child health than the primary infection would at first indicate.

One further disease the local spread of which has been favoured by war conditions is malaria, which in spite of active antimalarial measures is still causing grave concern in Italy and the Balkans. An example of how it was disseminated by refugee movement was seen in the autumn of 1939, when many of the Polish refugees entering Rumania were drafted into camps in the Dobrudja, a highly malarious area where a large proportion became infected (Ellis *et al.*, 1939).

Disruption of the Family

That this is apt to occur with refugee movement is again well illustrated by the Spanish Basques; I have been able to follow the fate of many of these families over a period of ten years, and a typical example may be cited. At the time the Basque country was invaded, a number of countries, including France, Belgium, and Russia, were giving hospitality to child refugees. Although in the group selected for England an attempt was made to include so far as possible children from the same families, it happened in many cases that an older child was sent to a different country and a younger child remained with the mother. With the imminent fall of Bilbao many of the parents themselves escaped into France, thence back into the Catalan province of Spain, and from there back again into France with the final fall of Republican Spain. In the mass entry of half a million Spanish refugees into France husbands and wives were forcibly separated and drafted into separate concentration camps. Those who for political reasons were unable to return to Spain under the new regime either remained in France or were able to leave France for Mexico, North Africa, or elsewhere. I was able in 1944 to visit in French North Africa the mother of two Basque girls who were still in England. At that time the mother had with her in Algeria two younger children; one son was in Russia, the father had died in a German concentration camp in France, and the son who had been with him had reached Mexico. Her own mother was destitute in Spain, whilst the two girls in England she had not seen for seven years.

Although it was possible for the great majority of the four thousand children who came to England to be reunited with one or other parent within two years in Spain, France, England, or elsewhere, there remained a considerable number whose parents were untraceable, were dead, or were political prisoners, or who were separated from their parents and remained in England for a much longer period. In the case of younger children who were 5 or 6 years old on arrival, the difficulty of maintaining a working knowledge of their own language was often considerable. Although at first all had been maintained in Spanish-speaking groups, every effort had been made to encourage English foster-parents to take an interest in individual children, and when England was herself involved in war a number of children were adopted into English homes. There was the further complication that some of the parents were purely Basque and not Spanish-speaking or were illiterate, so that even when their whereabouts were known the children inevitably tended to become more and more out of touch with them.

Even within the microcosm of this small group, therefore, it was possible to see how soon children separated from the parents might acquire a completely different outlook and way of life, and even lose the capacity for writing or speaking the same language. Where children become separated from their parents before the age of 5, as happened in innumerable cases during the recent war, all these difficulties are infinitely magnified. The infamous policy of "Nacht und Nebel," by which the identity of parents and children was deliberately obliterated, was designed, amongst other objects, to make reunion of parents and children impossible, and was only too successful. The work of the International Red Cross and the Tracing Bureau of Unrra and the Allied Military Government after the liberation of the concentration camps in Europe was beset with insuperable difficulties where young children were concerned. That even some measure of success was achieved is a high tribute to those responsible for producing some sort of order out of the chaos left by war.

Enemy Occupation

The life of the child in a country suffering enemy occupation is lived under conditions which require the recognition,

if not the observance, of two completely different standards of behaviour. There is the code laid down by the occupying Power, which demands collaboration by the civil population and the unmasking of saboteurs; there is at the same time the code of the patriot, who regards sabotage and even terrorism as a duty and to whom the informer is a traitor. The example I have in mind, and with which I am most familiar, is that of Belgium; but I fully realize that the child of Jewish parents in Palestine may have been in essentially the same predicament. The parents and those most respected no longer represent the forces of law and order but are ranged against them. The child is required to bear a burden which has broken many an adult back. He must outwardly adopt a standard laid down by an enemy whom it is his duty to hate, since failure to conform may endanger not only himself but his immediate family; at the same time he will earn the admiration of his contemporaries by running counter to this standard and undermining authority in any way he can.

I do not wish to exaggerate or over-dramatize this situation. Indeed, from talking to many Belgian children of the "gang" age I was forced to the conclusion that the situation had been widely used as play-material, and that pin-pricking of authority when a spice of danger was added was not by any means alien to their inclination. The smuggling-in of potatoes from the country, the dropping of a lighted cigarette-end into a German overcoat pocket in a crowded tram, or even the insertion of a pinch of sugar into a military petrol tank all demanded ingenuity and received approval. An attempt to suppress the Scout movement resulted in an unprecedented increase in membership during the German occupation. Probably the children who suffered most were those whose parents were suspected of being collaborators. Nevertheless, there can have been few older children who were not affected to some extent, consciously or unconsciously, by the atmosphere of anxiety and distrust which prevailed. Since arrests were frequent, and an increasing number of able-bodied men were transported into Germany for forced labour, many families were dismembered and large numbers of children were cared for in children's colonies and orphanages.

Again, it is impossible to assess the permanent effects which such a period of enemy occupation will have on children who have experienced it during their formative years. But the fact that use of the black market became universal and virtually the means by which the civilian population could survive (Ellis, 1945), and that innumerable means of subverting authority became not only widespread but respectable, inevitably rendered difficult a return to normal standards of social behaviour. It speaks highly for the quality of the Belgian people that within three years of the liberation life in Belgium is as normal as it is at present; but there is nevertheless an appreciable difference between the social standards in any country which has suffered prolonged enemy occupation and those of a neutral country, such as Switzerland, which has not known the deprivations and subterfuges which such an occupation entails.

Aerial Bombardment

Child health in a country suffering prolonged and intensive aerial bombardment will be considered from the point of view of the secondary effects that aerial warfare will have on the organization of the community rather than from that of loss of life directly due to enemy action. These effects may be related to three major factors: evacuation of children from the danger areas to reception areas; the introduction of a rigid black-out; and conditions of life in air-raid shelters.

Evacuation of Children

Evacuation of children from vulnerable areas to reception areas was carried out on the largest scale and was most highly organized in England and Wales, and since the difficulties involved are well known I need only briefly recall a few points germane to our present subject. The official history of what must be regarded as a major triumph of civilian organization is told in the Report on the State of Public Health during Six Years of War (Ministry of Health, 1946), one of the most interesting documents which these years produced. Before the declaration of war, plans had been made for the evacuation of some three million persons, including young children accompanied by their mothers, expectant mothers, unaccompanied school-children, blind, deaf, and crippled children and adults.

Needless to say, this mass movement of an urban population into predominantly rural areas involved innumerable minor and some major difficulties. It was a rude awakening to many of the families who received evacuees into their homes to find what low standards of living still existed in certain sections of the community. Since the first evacuation took place at the end of the school holidays more children were found to be verminous than if they had been under regular school supervision, and the large-scale organization of inspection and cleansing facilities was necessary. In many reception areas the school population was so much increased that the buildings had to be used in shifts, and children could spend only half the day in school.

The unaccompanied school-children who were evacuated fell into three obvious classes: those who were fortunate in their foster-homes and who rapidly became adapted to their altered circumstances; the misfits; and the unbilletable. Of the first group little need be said except that their position was rather less stable than that of normal children in their own homes and that some loss of contact with the parents was inevitable; these children suffered relatively little, and many benefited physically from their changed environment. The child who was a misfit, usually owing to being billeted on foster-parents with different standards from those of his own parents, became an increasing problem. If the first foster-home were not a success, the child was liable to arrive at the second with the feeling that he was unwanted, and the scales were heavily weighted against a successful adjustment to new surroundings. With each subsequent move the difficulties became greater; delinquency, truancy, enuresis, or other behaviour disorders more or less directly due to the instability of his background were finally apt to bring him into the group of children who could not be billeted in private homes. This last group, of whom enuretics formed a high proportion, required special handling in children's colonies. As might be expected, the results achieved in these colonies varied very greatly, depending to a large extent on the quality of the house-mother and staff. In some instances the grouping together of children whose main need was usually individual attention and affection resulted in their condition deteriorating. In others, children were found to adapt themselves to community life organized on family lines better than they had done to a foster-home where the foster-parents had not had the understanding or devotion necessary for their proper care. Many of these more successful colonies have been retained since the war for the care of problem children referred by education authorities and child-guidance clinics.

Infants and pre-school children were so far as possible kept with their mothers, but with the intensification of aerial bombardment and the recruitment of women into war work there was an increasing necessity for the setting-up of

day and residential nurseries. In the case of day nurseries there was general agreement that these fulfilled a valuable function, and that such increase of infection as occurred was outweighed by their advantages. Residential nurseries were a much more serious problem, since these had for the most part to be housed in country mansions, often quite unsuitably constructed, or in day-nursery schools, which also had not been built with the sanitation necessary for residential homes. Except for a few serious outbreaks of gastro-enteritis, however, the infection rate was much less than had been originally feared. The psychological effects of community life on these "infants without families" have been made the subject of an interesting monograph by Burlingham and Freud (1943).

Black-out; Air-raid Shelters

Black-out.—While children of all ages suffered the minor discomforts of the black-out which were universally familiar, the life of the older child was radically changed during the winter months. He had either to remain entirely indoors after five o'clock on moonless nights or to wander about in complete darkness. The mounting number of street deaths during black-out hours made most parents prefer the former, with the result that the majority of children were largely cut off from youth organizations and other normal evening activities. Lack of parental control, as was inevitable in the case of evacuated school-children, was apt to lead to juvenile delinquency after school hours, and there can be no doubt that the black-out, coupled with the presence of great numbers of troops of different nationalities, was partly responsible for the many sexual offences against children and young adolescents which occurred.

Air-raid Shelters.—In spite of the measures taken for evacuation many children remained with their parents in danger areas, while some reception areas were also subject to air attack. An idea of the child population of London in 1944 can be gathered from the fact that over half a million children left in the organized evacuations which were restarted when flying bombs were first utilized against the city. During the periods of intense bombardment choice lay between children sleeping every night in crowded air-raid shelters or being roused from sleep and taken down to the shelters when the alarm was given. In any case, loss of sleep over long periods, overcrowding in a vitiated atmosphere, continual contact with adult anxiety, and the risk of cross-infection were inevitable. More thoughtful parents have complained that one of the worst features of this and other forms of overcrowding during the war was that every anxiety had to be discussed before children, and that circumstances made respect of personal privacy impossible.

Nutrition

The starvation conditions which occurred in central Europe after the 1914–18 war served to focus attention on the vulnerability of infants and young children in periods of nutritional deprivation: relief work was largely concentrated on children and expectant mothers, whilst the scientific study of deficiency diseases occurring among the childhood population was largely responsible for clarifying the aetiology of rickets and famine oedema. The blockade which was carried on after the signing of the armistice in November, 1918, served to increase the already high infant mortality and permanently crippled many of the children who survived.

The humanitarian reaction to this was the formation of the international Save the Children Fund, and the endorsement by many Governments of the Declaration of the Rights of the Child, which included amongst other provisions that the child must be the first to receive relief in times of distress. Needless to say, when war again broke out in Europe blockade was immediately used, and I repeatedly heard the view expressed in this country during the Spanish Civil War that it was in the last analysis a humane weapon, since starvation of the civilian population would bring the war to an end relatively quickly. The argument was used less glibly during the subsequent world war, since blockade and submarine warfare proved a double-edged weapon; I do not propose to discuss the somewhat tortuous rationalization of the view quoted except to say that the main premise was proved untrue. In every country involved the length of time for which nutritional deprivation could be endured proved far longer than was generally imagined, and it is doubtful if starvation was in any instance the crucial factor in determining defeat. This does not mean, however, that starvation as a war weapon was without profound effect. But many of its cruellest repercussions are seen only after the cessation of hostilities, and I think a reasonable case might be made out for regarding blockade and the systematic destruction of food supplies as the surest method of producing a further war within a generation.

Although by the time of the Second World War the lesson had not been learnt that it is a short-sighted policy to kill or starve other peoples' children, every nation had at least realized that it was essential to protect its own. The means by which the nutrition of children was safeguarded naturally varied from country to country according to local conditions, and in some was much more highly organized than in others. But certain general principles were almost universally followed.

Dispersal of children from large industrial areas into rural districts served not only to protect from air attack but also to take the child to the food rather than the food to the child. In many instances the principle of dispersal was carried further, and children were transported from war areas to neutral countries such as Switzerland, or to countries such as America and Canada which, though belligerent, were remote from devastation. Whilst the deepest appreciation of this hospitality was felt by the countries to which it was shown, the numbers of children received were of necessity only a very small proportion of those in Europe as a whole. With the increasing strain on shipping it became less and less practicable to transport children by sea, and the sinking in the Atlantic of a liner filled with children put an end to any large-scale evacuations by this route.

The great majority of children, therefore, had to be fed within war areas where food supplies were reduced and where at the same time maximum efficiency was demanded both of industrial workers and of military personnel (either of the country concerned or of the occupying power). The fact that priority rations, particularly of milk, were in almost every instance allocated to children and pregnant women is again an index of the importance attached to the preservation of child health. Thus in Belgium, when the official rations for adults provided only 1,230 calories a day (1941-2) those for children of 3 to 6 provided 1,500 calories and those for infants under 3 actually more than their estimated requirements (Ellis, 1945).

Communal feeding of school-children was widely practised, both as an economy in the distribution of supplies and often as a necessity owing to shortage of domestic fuel or to facilitate release of women for war work. This method was not always practicable in cities where schools were closed owing to aerial bombardment, but as a general rule it was found much the most equitable means of distributing food to the school-age group. In Great Britain the provision of school meals and milk was undoubtedly one of the most successful measures adopted for the welfare of children during the war years, and was carried out in spite

of the difficulties of inadequate accommodation, reduced staff, and limited transport in rural areas.

National Milk Scheme

One further measure which was worked out with singular success in Great Britain was the National Milk Scheme, which made milk available to priority groups at an economic price or free in necessitous cases. This is now taken so much for granted that the fundamental importance of the measure is apt to be forgotten unless it is viewed in some historical perspective. Even under peacetime conditions the consumption of milk by children of the lower, and sometimes even of the higher, income groups fell considerably short of the optimum. With the reduction in available agricultural labour and the unreliability of transport during the war, the difficulties of supplying clean milk in adequate amount to the childhood population became multiplied. The production of a standard national dried milk was then put into the hands of commercial firms having the necessary plant, and the price and distribution to infants were controlled by the Government. In addition, a priority distribution of liquid milk was made to older infants and expectant mothers at considerably less than the standard retail price, and dried or liquid milk was distributed in schools. Therefore, although both the quantity and the quality of milk available in the country deteriorated owing to war conditions, the National Milk Scheme resulted in infants being ensured an ample supply of absolutely safe milk, and children and pregnant women a more uniformly adequate amount of liquid milk than the majority had received before the war. The same general principle of priority distribution to these groups was adopted in most European countries, and though this inevitably meant that others had to go short the principle was universally accepted as the right one. It is an interesting reflection on the social conscience that it required a national emergency to put it into practice.

Forewarned by the experience of the 1914–18 war and aided by the great extension of knowledge of deficiency diseases which had been made since that time, widespread provision for distribution of vitamin supplements to infants and young children was made by most Governments, substitutes being provided for the normal sources where these were not available. It cannot be said that the "take up" of these supplements in Great Britain was satisfactory, but there is little evidence that the incidence of rickets (British Paediatric Association, 1944) or infantile scurvy was significantly increased. In fact, in countries which have suffered much greater deprivation than has Great Britain the relative rarity of manifest deficiency disease in childhood, other than rickets, which in Hungary increased alarmingly in 1945 (Kerpel-Fronius, 1947), is in marked contrast to the state of affairs in Central Europe in the early nineteen-twenties (F.A.O.–W.H.O., 1947). The main nutritional needs of children in Europe at the present time are calories and protein.

Nutritional Surveys

Any attempt to give an overall picture of the nutritional state of children in even a single country is apt to be so misleading, and the accounts of different observers so contradictory, that the layman is naturally confused and puzzled by the lack of concrete evidence available. Having been hypnotized during the past twenty years into believing that human nutrition is an exact science, and having seen teams of nutritionists descend like locusts on hungry Europe, he is left to glean most of his information from official statements about calories or from the impressions of visiting journalists. It is worth while, therefore, to consider a few of the difficulties which are presented by nutritional surveys and their interpretation.

In the first instance the central administrator is concerned with the amount of food coming into or being produced within the country and its distribution as rations. Of the food coming in there will be a variable leakage into the black market which may assume very large proportions. Similarly the official returns for food produced within the country will inevitably differ widely from the reality, particularly in the case of a country under enemy occupation. Add to this the fact that some of the perishable food distributed will be inedible when it reaches the consumer, that some will be wasted in packing, preparation, and cooking, and that some of the rations will never in fact be supplied, and it will be seen that the chances of error when the official rations are compared with the food eaten are very considerable even when a standard percentage is allowed for wastage.

The child himself, on the other hand, is concerned primarily with what goes into his mouth. If he is cold and badly clad he is likely to want more food than he normally would; if he is sick he may want less. However hungry he may be, his appetite is likely to be affected to some extent by the palatability of the food and whether it is adequately cooked. Surveys have been undertaken on the basis of food actually eaten by individual children over a given period, but even under peacetime conditions these are extremely laborious, and where homes are liable to be broken, mothers employed on war work, or children evacuated the difficulties of their large-scale application to a childhood population are increased. The method has, however, been usefully employed on selected communities even during the war years (Bransby and Wagner, 1945). One such study undertaken in 1939 (Widdowson, 1947) served to illustrate the very large variation in the food intake of normal children: except in a closed community, such as a children's colony or orphanage, the standardization of rations in a country at war would probably be offset by the composition of the family group, access to the black market, home production of food, or other factors tending to maintain this variation in food intake between individual children. Indeed, when the official rations have fallen very low it has repeatedly been noticed that the possession of an allotment or articles that can be bartered may make the difference between borderline starvation and reasonably good nutrition. As would be expected, the nutrition of children in agricultural districts even in countries most affected by war has usually been found higher than could possibly be accounted for by the official rations.

A point that has hardly received the attention it deserves in nutritional studies made on older children and adolescents under war conditions is the possible effect of severe nutritional deprivation on the age of onset of puberty. There is good reason to believe that starvation may delay puberty, and it is known that more mature children will on the average be both heavier and taller than immature children of the same age. There is also a significant difference in the rate of increase in height and weight during successive phases of development (Ellis, 1946, 1948). If, for instance, it was desirable to compare the heights and weights of 14-year-old girls in a German school to-day with those of a similar group of 14-year-olds from the same school in 1938, the comparison would be much more informative if the maturity-composition of each group—i.e., the percentage immature, pubescent, and adolescent—were known, and comparisons made between groups who were both the same age and at the same stage of development. In the absence of routine maturity-grading in school medical examination it is very seldom possible to make retrospective comparisons on this basis. The practical result has been that priority rationing has been related to chronological age rather than

to physiological development, and many children ceased to get supplements at the phase of development when extra food was most needed.

Assessing the Nutrition of the Individual Child

In Europe this problem is not so much that of distinguishing optimum nutrition at one end of the scale or manifest deficiency disease at the other, but in deciding where the child should be placed in the wide region of suboptimal nutrition which divides the two. Innumerable formulae have been suggested, based on physical measurements, performance tests, and the like, their very number indicating the inadequacy of any one. It is interesting historically to remember that the American Relief Administration in Austria after the war of 1914–18 based its relief on the selection of children according to two formulae constructed by von Pirquet. The nutritional index used—namely, the cube root of ten times the weight in grammes divided by the sitting height in centimetres and multiplied by a hundred—showed on subsequent tests that whilst the error in estimating the sitting height was up to 5 cm., a difference of 1 cm. might cause a child to be placed in or out of the malnourished group (Faber, 1923).

Since this time the value of the haemoglobin, of physical performance, and of muscle tone in assessing nutritional status has been more clearly recognized ; attempts have been made to standardize the measurement of subcutaneous tissue ; the biochemist has added his contribution in estimating vitamin levels and saturation, blood pyruvic acid, phosphatase, and the like ; the cornea has been examined for vascularization, and night vision has been tested. But despite the punching of innumerable cards and the clatter of concatenations of calculating machines it is still largely left to the clinician to decide what is or is not a malnourished child. I need not labour the fallacies of unaided clinical appraisal: this has now become almost a credo of medical education. But I would emphasize once again the difficulty of assessing the effect of malnutrition on subsequent development. A short-term loss of weight can usually be made good ; but long-continued deprivation may result in retardation of growth or infantilism, which will partially mask, on a single examination, the degree of malnutrition from which the child is suffering. This difficulty cannot altogether be overcome by the use of standard height–weight–age tables, particularly when these have been prepared from normal children of a different race. It is only the long-term study of individual children which can in the analysis tell us the ultimate effects of such malnutrition as has been the result of the war years.

Conclusion

It would be only too easy to end on a note of disillusion and despair. We have widespread evidence in Europe of unrest, bitterness, disease, and destitution among those who suffered as children in the early war years and are now approaching manhood. But I feel rather that the experience of the recent war can give us certain grounds for hope. The general recognition that children must be preserved at any cost, the good will that alone made possible the evacuation of children from danger zones, and the equal distribution to children of rations on a scale which made the already heavy burden of the adult community even harder to bear all point to a new understanding of the child's importance to society. These may seem small advantages to set against the havoc and chaos occasioned by war. But they are certainly symbolic of the new spirit which has entered into the protection of child life and health. This is becoming less and less a matter of sentiment or charity and increasingly one of vital concern. The fact that every country has put children first instead of last when survival was at stake is surely an omen for the future, and we can only hope that this at least of what has crystallized in the crucible of war may not be lost in the uncertain years which lie ahead.

Part of the subject matter of this address was included in a Mayo Foundation Lecture delivered at Rochester on July 21, 1947. An abstract of this was published in the *Proceedings of the Staff Meetings of the Mayo Clinic*, 1947, **22**, 441, and I am indebted to the editors for permission to republish it in more extended form.

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OBSERVATIONS ON RATIONING IN TUBERCULOSIS

BY

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Investigations into the adequacy of the diet of tuberculous patients carried out during the earlier war years (Ross, 1943 ; Keers, 1945) seemed to confirm the official view that the dietetic restrictions imposed by rationing had exercised no deleterious effect and that the patient's nutrition had been maintained at a level high enough to enable him to combat his disease successfully. In those investigations the average gain in weight was used as an index of the nutritional state of the patient, although it was recognized that this method did not provide full information regarding possible dietetic deficiencies such as mild degress of avitaminosis. The years 1938 to 1942, as they affected the patients in certain Welsh sanatoria and a Scottish sanatorium, were covered, and the figures produced indicated that on the whole the average gain in weight recorded was no less than in the years preceding the outbreak of war.

The investigation has recently been reopened and extended at Tor-na-Dee Sanatorium, as it was felt that during the past two years the average gain in weight had been less satisfactory—an impression which it was considered necessary to confirm or refute by a detailed examination of the weight records. The method of investigation adopted was that which was used in the previous publication. Each patient in the sanatorium is weighed once a month, and the gain or loss in weight during the preceding month is noted. These gains and losses throughout the patient population, added together and divided by the number of patients

weighed, give the change in weight of the average patient for that month. This average monthly variation has been plotted in graphs showing the variations for the years 1938 to 1942 (Chart 1) and the years 1943 to 1946 (Chart 2).

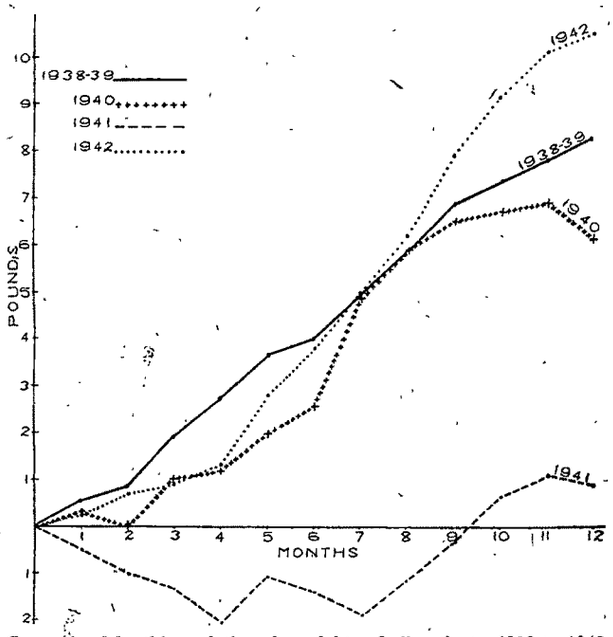

CHART 1.—Monthly variations in weights of all patients, 1938 to 1942.

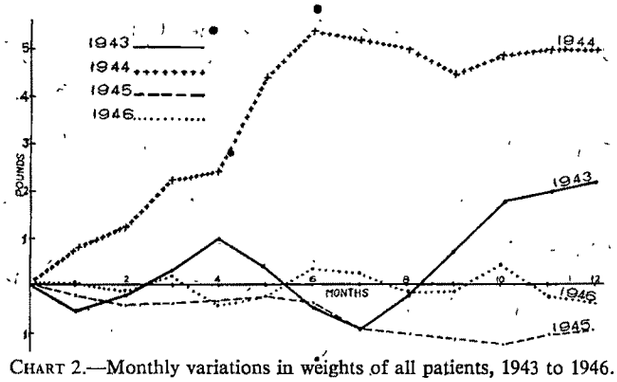

CHART 2.—Monthly variations in weights of all patients, 1943 to 1946.

A survey of these graphs shows that during the years 1940 and 1942 the average gain in weight was well up to the standard of pre-war years, but that from December, 1940, there was a steady decline which lasted until May, 1941, when there was an average gain of 1 lb. (453 g.) throughout the sanatorium. This was followed by a further decline in June and July before the normal upward trend was resumed in August. In searching for a possible explanation of the decline it was noted that the final month of 1940 and the first three months of 1941 saw a fall in the meat ration from 2s. 2d. weekly to 1s. weekly, at which level it remained until it was finally stabilized at 1s. 2d. weekly in July, 1941. Furthermore, in May, 1941, cheese, previously an acceptable and freely used alternative to meat, was rationed for the first time. The initial allowance was 1 oz. (28 g.) weekly, and this was raised to 2 oz. (56 g.) in June and to 3 oz. (85 g.) in July. It is felt that these two rationing measures must have played a part in the loss in weight noted at that time, for, although substitute fare was available, it did not make the same appeal to the palate, and a period of readjustment was necessary before the weight of the average patient showed a satisfactory upward trend. During the early months of 1942 the gain in weight was poor until May, when it rose more sharply and continued to climb steadily throughout the remainder of that year. Here again it should be noted that the cheese ration was increased by stages from the end of May, 1942, reaching its maximum of 8 oz. (226 g.) in July of that year, where it remained until January, 1943, after which it declined gradually to 3 oz. in May, 1943. The reduction to 3 oz. weekly coincides with an average loss of weight during May, June, and July, 1943, from which one is again tempted to postulate a period of readjustment to altered diet, followed by a gradual recovery. No further notable fluctuation in basic commodities took place until March, 1945, when cheese fell to 2 oz. weekly, followed in May by a reduction of 1 oz. in the bacon ration.

The position with regard to unrationed foodstuffs deteriorated steadily throughout the years under review, poultry and even the humble rabbit becoming increasingly scarce until from 1944 onwards a meal of poultry for the sanatorium was practically unobtainable.

During 1944 a further factor entered into the picture owing to the increasing numbers of Service personnel admitted and the gradual elimination of civilian patients. Thus at the end of 1944 the ratio of civilian to Service cases was 2 : 1, at the end of 1945 it was 1 : 2, while by the end of 1946 our patients were drawn entirely from the Services. Practically all these were admitted from Service hospitals, where they had been enjoying a scale of rations considerably more generous than that allowed in civilian hospitals. The result of this change was that the majority of these patients lost weight after admission, in contrast to their civilian precedessors, whose initial response to treatment was usually a substantial gain. This loss in weight is of course reflected in the graphs for the later years.

Apart from this influx of Service cases other factors which might be considered to have a possible bearing on the subject remained relatively constant throughout the course of the investigation (see accompanying Table).

	1940	1941	1942	1943	1944	1945	1946
No. of patients admitted	66	97	106	97	107	110	102
Average age of patients	35·7	32·6	33·4	36·6	32·08	32·09	32·4
Ratio of male to female admissions	2 : 1	2 : 1	2 : 1	3 : 1	2·5 : 1	2·5 : 1	19 : 1
No. of cases requiring collapse therapy	46	38	33	66	66	60	115

The sudden alteration in sex ratio noted in 1946 is due to the fact that by that time the sanatorium was reserved entirely for Service or ex-Service personnel, in which naturally the male element predominated; but it is not considered that this change has had any notable bearing on the investigation as a whole.

Policy regarding treatment remained the same throughout —collapse therapy, including major surgery, being always available and being freely used where indicated. Clinically the proportion of moderately advanced and advanced cases admitted remained constant until September, 1945, when, owing to the great demand for accommodation, it became necessary to practise some selection of material; and from that time onwards very advanced cases were not admitted.

It is universally accepted that an adequate diet is necessary for the treatment of tuberculosis, and a satisfactory gain in weight is regarded as one important indication of the patient's progress while under treatment. During the past three or four years it has been our impression that the healing of the pulmonary lesion has been a slower process and that an infiltration which would previously have

responded to a period of rest in bed and sanatorium regime now failed to show such response, collapse therapy being required on an ever-increasing scale. The records for the years 1940 to 1946 were inspected and the amount of collapse therapy carried out during those years calculated, with the results shown in the Table.

The figures suggest that the impression of less satisfactory pulmonary healing is correct, and it would appear reasonable to regard the stringent dietetic restrictions to which the patient has been subjected as an important causal factor in the absence of clear-cut evidence pointing to any other cause operating on a general basis throughout the sanatorium. It is much more difficult to assess the degree to which the curtailment of a specific element in the diet has been responsible; for experimental evidence of the part played by protein, carbohydrate, or fat in influencing resistance to tuberculosis is scanty and inconclusive. It is worth mentioning, however, that one of the most interesting and best-documented studies of nutrition and tuberculosis (Faber, 1938) adduces evidence to show that the rise in tuberculosis mortality in Denmark during the First World War was associated particularly with a deficiency of protein in the diet. In Britain it has been possible to maintain the total calorie intake by the use of carbohydrates, but the protein and fat content of the rationed diet has suffered severely, and the weight graphs suggest that the fluctuations in the meat and cheese rations are of significance. The importance of adequate protein for the tuberculous patient was recognized in America, where Ration Boards were empowered to grant extra meat allocations to patients suffering from the disease (Pottenger and Pottenger, 1946).

Summary

Observations on the weight records of sanatorium patients during the years of rationing show that from 1943 onwards the average patient failed to show a gain in weight comparable with the gains recorded in pre-rationing years.

This failure to gain weight satisfactorily was accompanied by a diminution in the powers of natural healing of the disease.

It is impossible on the evidence to indicate definitely the specific elements lacking in the rationed diet, but there is a suggestion that the curtailment of protein and fat (meat and cheese) may be of significance.

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Sir Andrew Davidson, Chief Medical Officer of the Department of Health for Scotland, gave an address to the Royal Philosophical Society of Glasgow on Jan. 14. "Health," said Sir Andrew, "is something more than not being ill. A man cannot enjoy life to its fullest capacity if his diet is inadequate. Medical research will establish dietetic needs. He will be emotionally unhealthy if his work is too exacting or insufficiently varied—industrial psychology can play a part here—and he cannot enjoy optimum mental health if he is worried by economic insecurity and the constant dread of unemployment." He said that sickness cost the nation some 7% of its total annual income; that even before the war the work lost through illness reduced our national income by some £100 millions a year, and the cost of treatment amounted to a figure of a dimension of £185 millions. At present the expenditure on prevention of disease was only 4½% of the total cost of sickness. Therefore, while sickness was a misery to the individual it was also a considerable loss to the State, both in production and in finance. As a nation we were becoming at once more health-minded and broader in our outlook on social health, Sir Andrew concluded. Instead of crying, "Can we afford some new service?" we were now tending to realize that we could not afford ill-health and the resulting loss of productive work. We were beginning to realize that expenditure on preventive services and on health research paid an enormous dividend.

GENERALIZED INFECTION WITH THE VIRUS OF HERPES SIMPLEX

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Our knowledge of infection with the virus of herpes simplex has been greatly increased by observations made within recent years. Dodd, Johnson, and Buddingh (1938) showed that stomatitis in children was often a herpetic infection, and this work was confirmed and extended by Burnet and Williams (1939), by Scott, Steigman, and Convey (1941), and by Black (1942). Herpetic stomatitis is usually a primary infection occurring during the first six years of life, and antibodies to the virus of herpes simplex appear during convalescence (Burnet and Williams, 1939; Scott *et al.*, 1941). These primary infections are often associated with fever and some general constitutional disturbance, and groups of cases may occur in families Scott *et al.*, 1941). After the primary infection in childhood persons seem to carry the virus for years and may suffer from recurrent attacks of labial herpes, although these subsequent manifestations are milder and are associated with relatively trivial symptoms. Primary infection in adults appears to be relatively uncommon, and while those who are liable to recurrent attacks of labial herpes invariably have a high titre of antibodies to the virus in their serum, those who have no history of herpetic infection possess no such antibody (Burnet, 1946).

Although the virus of herpes simplex has become so adapted to parasitism in the human host that it causes a relatively mild illness in the primary infection and for the most part remains latent in the host thereafter, primary infection is occasionally more severe. Fatal encephalitis due to the virus of herpes simplex has been recorded in an infant 1 month old (Smith, Lennette and Reames, 1941) and in three adults (Zarafonetis *et al.*, 1944; Whitman, Wall, and Warren, 1946). In these instances the virus was recovered from the brain at necropsy. Armstrong (1943) isolated the virus of herpes simplex from the cerebrospinal fluid of a 14-year-old negro boy who was suffering from meningo-encephalitis; an increase of herpetic antibody was demonstrated in the boy's serum during convalescence. Symptoms of meningo-encephalitis were also noted by Warren, Carpenter, and Boak (1940) in a group of patients who suffered from herpetic infection following fever therapy induced by physical methods.

Primary generalized herpetic infection in adults associated with severe constitutional symptoms would, however, seem to be very rare, and the following case is reported because it presented an unusual problem in clinical diagnosis.

Case Record

N., a motor engineer aged 37, a subject of plethoric build but of the type that never ails anything, made a business trip to Denmark and Sweden in August and September, 1946, and returned to this country on Oct. 3. On Oct. 15 he felt unwell, an event so unusual that he stayed at home from his work. On the 18th he sought medical advice because of backache, which distressed him more than his dirty foul tongue and throat and repeated vomiting. He was sweating profusely, with a temperature of 102.6° F. (39.2° C.) and pulse 120. There were no physical signs in the chest and nothing in the abdomen to warrant surgical intervention. The urine was not examined. Tentatively a diagnosis of virus influenza was made and he was given garg. pot. chlor. cum phenol for the mouth and throat

and mist. bism. sal. for the gastric irritability. The next day (Oct. 19) his vomiting was less troublesome, but the temperature remained at 102° F. (38.9° C.), the stools were frequent and loose, and he complained bitterly of the backache. On Oct. 21 he said he was better except for the backache, vomiting had ceased, the temperature was 99° F. (37.2° C.), but the bowels were still loose. As an afterthought he showed five "spots" on his hands and feet. Four of these were deep in thick skin, with amber heads surrounded by deep crimson areoles about 1 cm. across.

Examination of the rest of his skin showed a number of small septic papules such as are commonly seen on seborrhoeic skins under intense sweating, but the five vesicles mentioned were distinct and without any obvious explanation. Clinically the picture now appeared to be alastrim or variola minor. This diagnosis was supported by the prodromal discomfort lasting three days, the high initial temperature falling on the fourth day, severe backache for four days, and the distribution and character of the vesicles. The history of overseas travel suggested a possible source of infection and an incubation period of 12 days or longer. The case was therefore notified to the local medical officer of health as variola. This action produced three further clinical opinions—one for and two against the diagnosis of smallpox. Those against had no alternative diagnosis to offer other than "a septic state," and at no time was the true nature of the illness suspected. It should be recorded that the Ministry of Health's expert was definitely against the notified diagnosis. Because of the divergence of opinion a specimen of the patient's blood and fluid taken by swab from one of the vesicles was sent to the laboratory for examination; crusts and smears from the lesions were also sent four days later.

Inquiry into the patient's past history showed that he had been successfully vaccinated at the age of 10, and it was later ascertained that there was no history of previous herpetic infection.

Laboratory Investigations

A sample of clotted venous blood and a swab which had been moistened with the contents of one of the vesicles was received in the laboratory on Oct. 23. The blood serum failed to show variola antibody, a result which was considered of no diagnostic significance at this stage of illness. The material on the swab was insufficient for serological examination for variola antigen, and as fertile hens' eggs at a suitable stage of development were not available at this time the swab was placed in the refrigerator for examination at a later date.

Two small crusts and smears on glass slides were received on Oct. 28. No elementary bodies were seen in stained smears, and extracts of the crusts gave a negative result by complement-fixation test for variola antigen. It was considered, however, that the crust material was insufficient in amount for this result to be regarded as conclusive, and the extract was inoculated on the chorio-allantois of two 12-day chick embryos. At the same time the swab of vesicle fluid received on Oct. 23 was extracted with broth and the extract inoculated on two further membranes of developing chick embryos. After three days' further incubation all four eggs showed on the chorio-allantois numerous small raised opaque lesions about 1 mm. in diameter. That these lesions were due to a filtrable virus was shown by the finding that a suspension of these membranes was bacteriologically sterile, and subsequent tests showed that filtrates through a Chamberland L2 candle and a gradocol membrane of A.P.D. 0.725μ were infective for the chorio-allantois of chick embryos. Although the lesions were smaller than those usually produced by variola virus in this tissue (Downie and Dumbell, 1947) this was considered to be due to the large number of lesions present, and, as the virus of chicken-pox and zoster produce no change on the chorio-allantois of the chick embryo, the result of the test was provisionally (and wrongly) reported as positive for variola virus.*

Subsequent histological examination of the lesions on the egg membrane failed to show the cytoplasmic inclusions typical of variola infection, but degenerative nuclear changes suggestive of intranuclear inclusions were present. A neutralization test made by chorio-allantoic inoculation of mixtures of egg membrane suspension with antivaccinal and with normal rabbit serum showed that the virus ("N" virus) was not neutralized by the antivaccinal serum—a result which, taken with the histological appearance of the lesions, indicated that the virus isolated from the patient was not variola.

Identification of the Virus

The "N" virus was transferred repeatedly on the chorio-allantois, and after six or seven transfers had become well adapted to this tissue. The lesions did not increase in size, but 0.1 ml. of a 1 in 1,000 dilution of the supernatant fluid from an infected membrane ground up in 5 ml. of broth regularly produced several hundred discrete lesions. Histological examination of the membranes after fixation in formol-Zenker showed intranuclear inclusions which ranged in appearance from a finely granular acidophilic variety surrounded by a clear unstained zone to a type of inclusion which was homogeneous and faintly basophilic and filled the entire nucleus. In all affected cells the chromatin was displaced to the periphery of the nucleus. The appearances conformed closely to the description by Slavin and Berry (1943) of nuclear inclusions in the lesions produced by herpes simplex virus in mice.

Early attempts to produce lesions by intradermal inoculation on the pads of guinea-pigs were unsuccessful, but virus from the tenth egg passage produced a vigorous "take" by this route and also on intradermal injection of the shaved hairy skin. Virus from the first and tenth egg membranes produced fatal encephalitis when injected intracerebrally in mice, and in two of four rabbits inoculated on the scarified cornea tiny vesicles appeared along the lines of scarification within 24 hours. Material from the seventh egg passage produced an acute orchitis after intratesticular inoculation in a rabbit.

In view of these considerations it seemed possible that the agent isolated was the virus of herpes simplex. A strain of herpes simplex virus, kindly supplied by Dr. Andrewes, of the National Institute for Medical Research, produced lesions on the chorio-allantois similar in appearance both macroscopically and microscopically to those produced by the "N" virus; the possibility that the "N" virus was a strain of herpes simplex was further strengthened by neutralization tests made with human sera, using the chorio-allantoic technique (Burnet and Lush, 1939). Sera from three persons with past histories of recurrent herpetic infection suppressed infection of the chorio-allantois by both viruses, while sera from three persons with no such histories failed to reduce the number of lesions produced by either virus.

Antisera to the two viruses were prepared by the immunization of rabbits. Both viruses produced orchitis when injected intratesticularly, and a week later virus was injected intradermally and subcutaneously. After a further interval of a week virus was injected intraperitoneally, and the animals were bled six days after this last injection. The sera were inactivated by heating at 56° C. for 20 minutes before being used in neutralization tests. Serum obtained from the rabbits before immunization contained no neutralizing antibody to either virus, and was used to control tests with the immune sera. Table I shows the results of the cross-neutralization tests with the two viruses and their antisera. It seems quite clear from these results and from its behaviour on the chorio-allantois and its pathogenicity for animals that the virus isolated from the vesicle fluid and from the crusts of the patient was a strain of herpes simplex virus.

TABLE I.—*Lesions Produced on the Chorio-allantois by Mixtures of Rabbit Sera and Viruses*

Rabbit Sera	"N" Virus	Herpes Simplex Virus
Normal	550, 740, 1,000, 1,000	1,000, 700, 360, 1,000
Immune "N" ..	0, 0, 0, 0	0, 2, 0, 0, 1
Immune herpes ..	0, 0, 0, 0	1, 0, 0, 0, 0

The figures indicate the number of lesions on individual membranes.

* See *British Medical Journal*, 1947, 1, 807; and 2, 395.

Development of Antibody Following Illness

The occurrence of herpetic infection in the course of a febrile illness is not uncommon when the fever itself is due to infection with some other agent. The patient, however, had no history of previous herpetic infection; the stomatitis and the subsequent appearance of the lesions on hands and feet suggested a generalized infection with herpes simplex virus rather than a localized herpetic infection complicating another acute infective condition. Evidence in support of the primary nature of his herpetic infection was obtained by examination of serum taken on the seventh day of illness and again after his recovery 35 days later. These two specimens of sera were examined for neutralizing antibodies against the patient's own virus and against the strain received from Dr. Andrewes. With each test there were included two human sera—one from a person liable to recurrent attacks of herpes and known to contain antibody, and the other from a person with no history of herpetic infection and devoid of neutralizing antibody. The results of four neutralization tests made by chorio-allantoic inoculation are shown in Table II.

TABLE II.—*Results of Four Separate Tests of Neutralizing Power of Sera from Patient N. against "N" and Herpes Simplex Viruses*

Virus mixed with:	"N" Virus				Herpes Simplex Virus			
	1	2	3	4	1	2	3	4
Broth	250	>1,000, >1,000, >1,000	N.T.	N.T.	>1,000, >1,000	N.T.	34, 36	730
Serum A ..	190, 160, 275	230, >1,000, >1,000	>1,000, >1,000, >1,000	509, 620	>1,000, >1,000	>1,000, >1,000	32, 33, 37	930, 975
Serum D ..	0, 0, 0	0, 0, 0	0, 0	0, 0	3, 7	0, 0, 0	0, 0, 0	0, 0, 0
Serum N1 ..	36, 42, 40	200, 45, 60	770, 855	116, 136	390, 500	>1,000, >1,000, >1,000	10, 13, 18	51, 67, 45
Serum N2 ..	0, 1, 0	0, 0, 0	67, 73, 210	0, 1, 0	6, 19	106, 26, 19	2, 4, 0	17, 5, 7

Figures indicate number of lesions produced on the chorio-allantois by mixtures of sera and viruses.
N.T. = Not tested. Serum A = Control serum containing no antibody. Serum D = Control serum containing high-titre antibody. Serum N1 = Serum from patient 7 days after onset of illness. Serum N2 = Serum from patient 42 days after onset of illness.

It will be seen from Table II that, while some antibody had appeared in the patient's serum by the seventh day of his illness, after recovery the antibody titre of his serum was very much increased—a finding which supports the view that his illness was a primary herpetic infection.

Discussion

The outstanding feature of the case was the failure to recognize the nature of the patient's infection on clinical grounds. The general picture was suggestive of a mild variola in a previously vaccinated individual; the diagnosis of systemic infection with herpes simplex virus was not considered, as such cases have not often been recorded in the literature and are probably not of frequent occurrence. No mention is made of generalized herpetic infection in the differential diagnosis of smallpox in the textbooks of Price (1941) and Conybeare (1946). Once the diagnosis had been established it seemed that the significance of the severe stomatitis from which the patient suffered had not been duly appreciated.

Widespread herpetic eruptions superimposed on eczema and chronic dermatitis have been reported both in children and in adults (Thomas, 1941; Wenner, 1944; Barker and Hallinger, 1947), and virus studies have shown that at least some instances of the clinical condition referred to as Kaposi's varicelliform eruption are due to the same agent (Barton and Brunsting, 1944; Lane and Herold, 1944; Lynch *et al.*, 1945). In most of these patients, however, the herpetic rash was confined to areas of skin affected by the dermatitis. In the case reported above there was no such previous skin affection, and the distribution of the lesions suggests a dissemination of the virus by the blood stream.

The variety of clinical manifestations due to infection with herpes simplex virus has been increasingly appreciated in recent years, and it appears that this virus has greater pathogenic potentialities than is generally recognized. More general application of the techniques of virus investigation in the diagnosis of obscure febrile illnesses associated with vesicular eruptions may be expected to extend our knowledge in this field. The virus of herpes simplex can be isolated from human material by inoculation on the cornea or nictitating membrane of the rabbit's eye (Steigman and Scott, 1942), but the susceptibility of the chorio-allantois of developing hens' eggs makes this tissue a convenient alternative medium for the isolation of the virus.

Summary

A case of generalized infection with herpes simplex virus is described. The symptomatology and course of the illness simulated mild smallpox, but this diagnosis was not supported by the evidence of laboratory tests. Herpes simplex virus was isolated from the patient's skin-lesions, and examination of the blood for antibodies supported the diagnosis finally reached.

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On Jan. 14 Lord Horder, Chairman of the Empire Rheumatism Council, gave a lecture demonstration at the Department of Rheumatism of the Royal Free Hospital. The cases were presented to Lord Horder by the Registrars to the Unit, Drs. Chalmers and Lush, and were cases picked from the Unit's wards for their general medical interest. A case of myelomatosis was presented first, and Lord Horder stressed the relation of this condition to other neoplastic blood conditions such as leukaemia. Another interesting case was one of proteinuria associated with rheumatoid arthritis, and the importance of an interpolated myxoedema was fully discussed. Further meetings of this type will be held periodically.

EFFECT OF THIOCYANATE ON BASAL BLOOD PRESSURE

BY

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Many conflicting views have been published since thiocyanates were first administered therapeutically at the beginning of this century; and although Hines (1946) and Watkinson and Evans (1947) stated that these are the only drugs capable of satisfactory use in the treatment of hypertensive disease, many are not convinced of their action. For example, Ayman (1930, 1931) endeavoured to show that their effect was not greater than that of placebos, basing his criteria of action mainly on symptomatic improvement and not so much on pressure changes. Evans and Loughnan (1939) investigated a large number of substances credited with lowering blood pressure and found that most of them, including thiocyanates, were without greater effect than placebos administered for a similar period; the results were based on periods of treatment lasting only two to three weeks. Those who hold similar opinions may find support for their belief in the excellent review by Foster (1943) in which he states that in an extensive search of the literature he had been unable to find evidence of the hypotensive effect of thiocyanates in animals, short of a toxic dose.

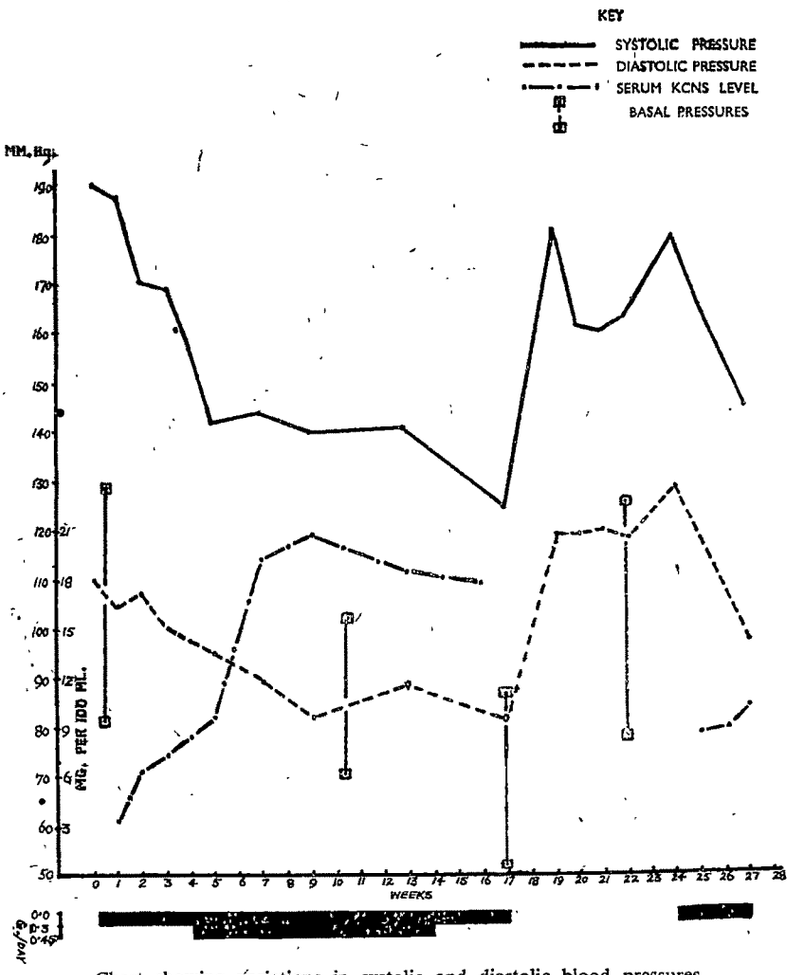

Chart showing variations in systolic and diastolic blood pressures during treatment with thiocyanate.

There have been, however, a number of careful investigations (Daley *et al.*, 1943; Beamish and Adamson, 1945; Watkinson and Evans, 1947) in which every precaution was taken to control and standardize conditions and in which it would seem that thiocyanates did produce significant falls in the systolic and diastolic blood pressures.

At Otago University Medical School special interest has centred round the question of hypertensive disease, and the importance of what have been called the casual, basal, and supplemental blood pressures has been emphasized (Alam *et al.*, 1943). By "casual" is meant that pressure recorded under ordinary clinical conditions of examination. In the particular study to which reference is made below, the casual pressure was estimated after a few minutes' rest, usually in the recumbent position. "Basal," on the other hand, refers to pressures taken after due precautions have been instituted to remove the influence of stimuli, both extrinsic and intrinsic. Basal conditions have been recognized here as being satisfied only when the patient—to whom the whole procedure has been explained beforehand—after a peaceful sleep under the influence of a mild sedative, has become habituated to his surroundings and may be justifiably regarded as in a state of basal metabolism. The "supplemental" pressure—an independent variable—is the difference between the casual and the basal pressures and represents the part of the casual pressure which reflects the physical, emotional, and metabolic activity of the patient at the time of measurement.

The basal pressure has been shown (Smirk, 1944; J. A. Kilpatrick, unpublished communication) to be comparatively stable in hypertensive disease, and I have been interested in the examination of the effect of thiocyanate in patients whose basal pressures were measured periodically throughout treatment, controlling the results against treatment with placebos in most of the cases. In the 20 patients investigated so far the preliminary observations indicate a fall in the basal and supplemental pressures, and I feel that the following case note will be of interest. It is put forward as a preliminary communication, and a more detailed account of the whole series will be forthcoming shortly.

Case Report

The patient, a man aged 74, of rather stolid type with sluggish cerebration, was admitted to Dunedin Hospital on Aug. 29, 1946, complaining of weakness of the right face, arm, and leg for two days. The onset of the weakness coincided with an attack of giddiness. He had no history of fits, no loss of consciousness, no visual disturbances, and no pain, and had not previously experienced any similar weakness.

On examination he was in a slightly confused state, his speech was thick and slow, and he showed a slight weakness of the right face, arm, and leg. The tendon reflexes were present and

equal, the superficial reflexes were normal save for the plantar responses, which were extensor in type on both sides.

The cardiovascular system showed little abnormality for a man of his years; there was no evidence of congestive failure, the pulse was regular except for an occasional extrasystole, and the blood pressure was 190/110 mm. Hg. Radiography confirmed the clinical findings concerning the size of the heart, and revealed it to be of a shape usually associated with hypertension. The basal blood pressure at this time was 128/84 mm. Kidney-function tests were normal, and examination of the other systems showed no evidence of gross pathological change. Improvement was complete in the course of four weeks, and a diagnosis of essential hypertension of a labile variety with encephalopathy was made.

In January, 1947, when the symptoms and clinical manifestations had completely disappeared, it was decided to treat him with potassium thiocyanate in an attempt to reduce his blood pressure so as to minimize a recurrence of the complication: the accompanying chart shows the course of the treatment. He maintained high concentrations of the drug with great improvement in his general well-being, but later developed mild diarrhoea as a toxic manifestation and continued on treatment for 10 days without indicating this. The drug was stopped temporarily.

Comment

Attention was drawn to the following: (*a*) The casual systolic and diastolic pressures began to fall soon after treatment was instituted. (*b*) At the end of 17 weeks the casual blood pressure had fallen from 190/110 to 125/84, and the basal from 128/84 to the low figure of 88/52. These reductions represent a response to treatment to the extent of 65 mm. systolic and 26 mm. diastolic in the casual blood pressure, and in the basal of 40 mm. systolic and 32 mm. diastolic. (*c*) The withdrawal of the drug was followed by a rise of both casual and basal pressures, which two weeks afterwards had returned to the levels found before treatment was begun. (*d*) On treatment being restarted the casual and basal pressures showed the same tendency to fall again.

Conclusions

In some patients with essential hypertension treatment with thiocyanate causes a well-marked fall in blood pressure.

The reductions in pressure are due partly to decreases in the basal and partly to decreases in the supplemental pressures.

The falls in basal pressure are good evidence that the effect of adequate thiocyanate therapy is pharmacological and not psychological.

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The Hon. Secretary of the West Derbyshire Medical Society, Dr. H. Rhys Davies, reports that at a meeting held at Matlock on Jan. 25 the following resolution was passed *nem. com.*: "That this meeting is of the opinion that the omnipotence of the Minister under the Act in general, and in particular in regard to the power of dismissal without appeal to the courts, is contrary to the interest of the community and justifies the profession in abstaining from the Service."

TREATMENT OF ANGINA PECTORIS BY REDUCTION OF BASAL METABOLISM

BY

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From the therapeutic point of view sufferers from angina can be divided into three types: obese, anaemic, and slim. The first two groups are amenable to treatment by reduction of weight and correction of anaemia respectively. The others can only be given nitroglycerin either to shorten attacks or occasionally to prevent them. These comprise, in my experience, more than half the victims of the disease.

Some fifteen years ago American workers first conceived the idea of reducing the demand upon the failing heart by reducing the oxygen demand of the organism. This was achieved by total surgical removal of the thyroid gland, followed by medication with thyroid extract sufficient to prevent myxoedema but not enough to restore the basal metabolism to normal. A new principle was thereby introduced into cardiological treatment: instead of trying to boost the output of the failing heart, the principle of "load shedding" was substituted. In many cases the results of total thyroidectomy were good, but there are objections to radical surgery in a cardiac invalid, and these, together with the inherent technical difficulties, prevented the method from attaining any great popularity.

Thiouracil and its derivatives have now given the physician the means of suppressing thyroid activity, but rather surprisingly these means have not yet been widely exploited in cardiology. In America, W. Raab (1945) treated a small group of cases of angina, with promising results, and in this country a number of cases of heart failure have been given methylthiouracil (Sharpey-Schafer, 1946).

Three cases of angina treated ambulantly with methylthiouracil are here described. All had typical angina of effort, exhibited electrocardiographic abnormalities corroborating the diagnosis, and suffered from three to six attacks daily in the course of their routine activities. Two had previously had a coronary thrombosis—one four years and one nine months before the start of treatment. Their daily routine was not altered in any way during the treatment. Since it is well known that the effect of methylthiouracil is to reduce basal metabolism and eventually produce myxoedema, no attempt was made to follow up changes in basal metabolism. It was felt that this treatment had two possible end-points: the cessation of angina before the onset of myxoedema, and the onset of myxoedema without amelioration of the angina. Each of these two end-points could be determined by clinical observation and by regular control of weight, without estimations of the basal metabolism.

Case 1

R. D., a male clerk aged 64, had no history of previous illness. In March, 1946, he suffered an attack of severe substernal pain lasting for 36 hours. Heart sounds were normal, blood pressure was normal and remained so, and ectopic beats appeared during the first two days. An electrocardiogram taken on the fourth day showed the typical changes of a recent coronary thrombosis. After six weeks' rest in bed he was allowed up, but he did not resume work because of two or three attacks of anginal pain daily on minimal physical effort. A chest film showed considerable enlargement of the heart to the left, with elongated and uncoiled aorta. Methylthiouracil, 0.6 g. daily, was started on Dec. 10, 1946. It was reduced to 0.4 g. daily four weeks later. After ten weeks' medication the patient reported complete cessation of angina, and methylthiouracil was thereupon reduced to 0.1 g. a day. His weight had remained constant throughout this period.

Twelve weeks after the start of treatment he gained 6 lb. (2.72 kg.) in one week and developed typical myxoedematous facies. Treatment was then stopped completely for a week, during which time the gain in weight was lost and the facial expression returned to normal.

Throughout this episode the patient was not aware of anything unusual happening. Treatment was then restarted with 0.05 g. daily, and has continued up to the time of writing (June, 1947). He has remained free from angina, and maintains that he feels generally better than before the treatment (presumably because of the absence of attacks). He had retired from work, but now contemplates looking for a light job. The heart has not changed in size or shape. The electrocardiogram was still grossly abnormal at the start of the treatment and remained virtually unchanged (Fig. 1).

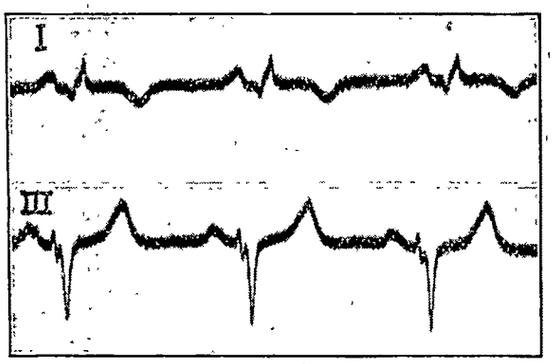

FIG. 1.—Electrocardiogram of Case 1, leads I and III.

Case 2

R. J. H., a male clerk aged 55, had coronary thrombosis four years previously. Since then regular attacks of angina, relieved by nitroglycerin, occurred approximately six times a day during mild weather and considerably more often during cold and windy spells. Two years later he had a gastric ulcer, which healed after six weeks' treatment, including rest in bed, and has since caused no trouble. Attacks of angina occurred on walking more than a quarter of a mile (400 metres), on walking up three flights of stairs (which he had to do three to four times a day in the course of his work), and on leaving the office for shopping after lunch.

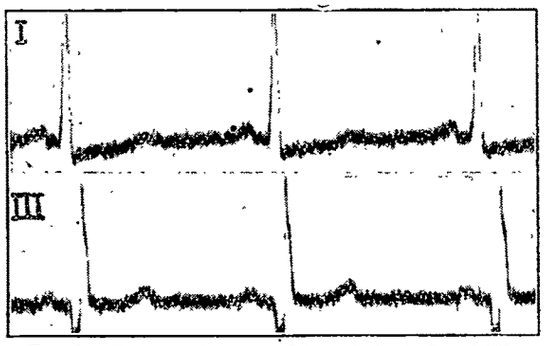

FIG. 2.—Electrocardiogram of Case 2, leads I and III.

The electrocardiogram was characteristic of long-standing myocardial damage, and has remained unaltered since 1944 (Fig. 2). His heart was radiologically normal. Treatment with methylthiouracil was started on Dec. 10, 1946, with 0.6 g. daily for 5½ weeks; it was then reduced to 0.2 g. a day until March 29, 1947, when it was increased again to 0.6 g. a day.

The patient reported no change in his condition for the first 10 weeks, but improved to a certain extent thereafter. He was then able to negotiate the three flights of stairs at his office without any discomfort, but still had angina on walking to or from the station and on shopping after lunch. A week after reintroducing the larger dose of 0.6 g. of methylthiouracil daily he lost the attacks that had occurred regularly when he went out shopping after lunch, and the attacks on going to and from the station diminished considerably in intensity and no longer occurred regularly. He now has only one slight attack each day, which is rapidly relieved by nitroglycerin, whereas before treatment he had at least six severe attacks a day. At the time of writing he had not reached the stage of myxoedema; his weight has in fact dropped by 4 lb. (1.81 kg.) during the treatment.

He says that he is at least as active at his work as before, and that his general condition has been much improved. Neither his chest film nor his electrocardiogram has shown any changes since the start of the treatment.

Case 3

F. W. B., a road surveyor aged 55, has had typical angina of effort for ten years, and latterly it had been getting worse. Because he could not walk to the station in the morning or walk any distance during the day, he reluctantly contemplated retirement. The number of attacks varied, but there was hardly ever a day without at least one, and usually there were several.

On examination the heart sounds were muffled, and the blood pressure was 190/110. Screening revealed a moderate enlargement of the heart to the left and an elongated aorta. The electrocardiogram showed evidence of myocardial damage (Fig. 3). Treatment with methylthiouracil, 0.6 g. daily, was started on Feb. 22, 1947, and 2½ weeks later the patient noted that for the past few days he had been able to walk to the station in the mornings without stopping. On April 1 and 10 he reported that he had had one very mild attack of angina during each of the previous weeks. He had walked to and from the station at a normal pace without difficulty, had walked

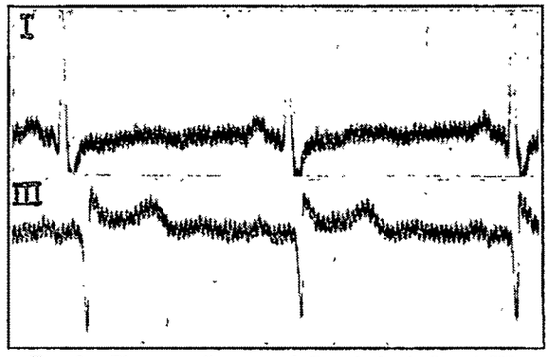

FIG. 3.—Electrocardiogram of Case 3, leads I and III.

for 15 to 20 minutes in the course of his work without having to stop and without pain, and on several occasions had done a test walk after tea over a course that previously he had never been able to traverse at this time of day without at least one attack.

His weight remains steady, his electrocardiogram and blood pressure are unchanged, and he has given up thoughts of retirement.

Discussion

No dogmatic conclusion can be reached from a study of only three cases, but angina is a condition not prone to spontaneous fluctuations in severity; thereafter daily observations on a small number of cases may have more value in this complaint than in many other pathological conditions.

In the above investigation it was a salient point that the patient should not change his daily routine. It was therefore essential to select patients who could be treated in private practice. White cell counts were checked at 48-hour intervals. In each case one or more occasions arose when the drug was discontinued for 24 hours because of a fall in the white cell count. Clearly, the number of cases treated had to be limited, but in view of the promising results obtained it might be considered worth while to treat similar cases in hospital until the onset of myxoedema and then discharge them on a maintenance dose in order to observe the results after their return to full activity.

It would seem that in order to reduce thyroid activity to any appreciable extent it is often necessary to give much

larger doses for a comparatively longer period to those with normal thyroid activity than to those with hyperthyroid activity. Since this paper was written Cases 2 and 3 have developed myxoedema and have recovered as rapidly as Case 1 did.

Summary

Three cases of angina of effort are reported. Treatment with methylthiouracil was successful in either abolishing or markedly reducing the frequency of attacks. On the whole, comparatively large doses were required. This treatment has possibilities in that patients may be restored to their former earning capacity.

I wish to thank Dr. A. Morton Gill for his advice and help in the preparation of this paper.

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CHRONIC HEPATITIS TREATED WITH METHIONINE AND CHOLINE

BY

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AND

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Experimental studies and clinical observations in recent years have focused attention on the importance of dietetic factors in liver disease. Witts (1947) gives a valuable list of references. Neither the exact effects of these factors nor their value as therapeutic agents have as yet become clearly defined. It seemed interesting, therefore, to study the effects of large doses of methionine and choline as an adjunct to the treatment of a group of patients suffering from chronic hepatitis.

Clinical Material.—Six cases of chronic hepatitis were selected for this study. The salient clinical features of each are presented in Table I. Biochemical tests showed impairment of liver function in each case, and a feature common to all was a low level of the plasma albumin with inversion of the albumin–globulin ratio (Table II).

Method.—The patients were placed on a high-protein diet, which consisted of the national ration supplemented by the extra meat and milk which are authorized for this condition. It is estimated that each patient received a daily intake of 120–150 g. of protein throughout the period under review. Case 6 had been on the diet for the previous eighteen months, and the other five for only two to four weeks before the course of methionine was started. The dose given was 1 g. five times daily by mouth, increasing on the third day to 3 g. five times daily for six weeks. The methionine was then discontinued and choline chloride in similar doses was prescribed for a further period of three months.

A careful clinical assessment of each case was made immediately before the beginning of treatment and at the end of the courses of methionine and choline. It seemed probable that any real clinical progress would be reflected in an improvement of the plasma albumin level, with a return towards normal of the albumin–globulin ratio (Higgins *et al.*, 1944). Levels of total plasma proteins, plasma albumin, and plasma globulin were consequently estimated at the times of the clinical examinations (Table II).

Results.—No reactions to either of the drugs were observed, but the patients stated that the tastes were extremely unpleasant. In Case 5 the course of choline was abandoned for this reason. No striking clinical changes were observed in any of the patients during the period of treatment. One (Case 5) has since died in cholaemia, one (Case 3) is deteriorating rapidly, and the condition of the other four remains unchanged. There was a small rise in plasma albumin in Cases 3, 4, and 6, a small drop in plasma albumin in Cases 2 and 5, and no appreciable alteration in the plasma albumin of Case 1. It is apparent that there has been no consistent alteration of the biochemical findings attributable to the treatment. These results confirm the view that supplementation of diets already containing adequate amounts of choline and methionine is not likely to be effective (Miller *et al.*, 1947).

Summary

Six patients suffering from chronic hepatitis were treated on a high-protein diet with a supplement of 15 g. of methionine daily for six weeks and choline chloride in the same dose for a further period of three months.

There was no change in the clinical condition of the patients during this time, and the variations in the plasma proteins did not seem to be due to the treatment.

It is a pleasure to acknowledge the help of the Department of Biochemistry and to thank Mr. George Higgins for the plasma protein estimations. We also wish to thank the Medical Research Council for *dl*-methionine.

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TABLE I.—*Clinical Features*

Case No.	Age	Sex	Duration (Years)	Aetiology	Jaundice	Haemorrhage	Ascites Oedema	Palpable Liver	Palpable Spleen
1	67	F	5	Insidious onset	Intermittent attacks	Epistaxis	Oedema of ankles	4 cm.	2 cm.
2	34	M	10	Infectious hepatitis	,, ,,	,,	Nil	2 cm.	Nil
3	54	M	4	Alcoholic history	,, ,,	,,	Oedema and ascites	12 cm.	Nil
4	61	M.	10	,, ,,	Nil	Nil, but oesophageal varices present	,, ,,	8 cm.	4 cm.
5	60	F	4	Insidious onset	Intermittent attacks	Haematemeses	,, ,,	2 cm.	4 cm.
6	26	F	7	Splenic anaemia	,, ,,	,,	Oedema ascites and pleural effusion	Nil	Splenectomy 2 years ago

TABLE II.—*Plasma Proteins in Grammes per 100 ml.*

Case No.	Before Treatment			After Methionine			After Choline		
	Albumin	Globulin	Total	Albumin	Globulin	Total	Albumin	Globulin	Total
1	3·10	4·17	8·10	3·15	4·10	7·80	3·05	4·00	7·10
2	3·50	3·85	8·00	—	—	—	2·90	4·20	7·70
3	2·40	5·40	8·10	3·20	4·60	8·40	2·80	4·80	8·35
4	2·50	2·90	5·75	3·00	3·70	7·00	3·45	3·07	6·60
5*	2·51	4·79	7·63	2·40	4·40	7·10	1·90	3·69	6·15
6	2·00	4·00	6·35	2·30	4·00	6·50	2·45	3·75	6·25

* Course of choline not completed.

Medical Memoranda

Resection of Two-thirds of the Small Intestine

A case of an old gunshot wound of the abdomen is presented in which 14 feet (4.26 metres) of small intestine from the mid-jejunum to the terminal ileum was removed at an operation for extensive gangrene resulting from volvulus due to a solid adhesion of the jejunum to the abdominal wall. The patient was well and gaining weight six weeks after operation.

The length of the small intestine may vary between 15 and 30 feet (4.5 and 9 metres); the average is usually stated to be about 22 feet (6.7 metres). Survivals after resections of up to 19 feet (5.8 metres) have been recorded, but there is no very clear evidence of how much small intestine is necessary for life, or, indeed, of what proportion of patients survive extensive resections such as the one here reported. This case suggests that a man may become accustomed to the non-function of part of his small intestine and as a result accommodate himself to resections which in others might well prove fatal.

CASE REPORT

W. E. B., aged 54, had received a gunshot wound of the abdomen in 1917. He had an immediate laparotomy, and was subsequently twice operated on for intestinal obstruction, in 1918 and 1926. On the latter occasion it was reported that a volvulus of the small intestine had been found and reduced. Between 1927 and 1945 he had occasional pains but no attacks of obstruction. In 1922 he sustained a fractured pelvis, and in 1934 he was shown to have a gastric ulcer, for which he received medical treatment on several occasions.

In December, 1945, he began to have colicky abdominal pain. This was diagnosed as intestinal obstruction, and he was treated conservatively by intubation with some success at another hospital. In January, 1946, symptoms recurred, and he was admitted to Queen Mary's Hospital, Roehampton. Intubation with a Miller–Abbott tube gave but slight improvement, and on Jan. 18 laparotomy was performed. The upper part of the small intestine was found to be greatly distended and many adhesions were present. The patient was in poor condition, and a side-to-side anastomosis between two loops of bowel was made, excluding the most distended area. His convalescence was stormy, but by the summer he was able to get about and was almost free from pain.

On July 24, 1946, he complained of a sudden severe pain in the abdomen. The pain became colicky in nature and remained of the same intensity. He was seen at 2 p.m., four hours after the pain had started. There appeared to have been no exciting cause for the attack, and he stated that he had been as well as usual on the previous day. On examination he was in shock. His pulse was 80 and of poor quality, his extremities were cold and clammy, and his blood pressure was 60/45. After morphine and a pint (568 ml.) of serum his condition improved somewhat, and operation was decided on.

At operation (Mr. Gillis) a right paramedian incision was made. On entering the peritoneal cavity a moderate amount of bloody fluid was seen. Almost the whole of the small intestine was grossly distended and black. The cause appeared to be an adhesion of the upper jejunum to the anterior abdominal wall which had resulted in a volvulus. His condition improved markedly when the massive amount of gangrenous bowel was delivered from the peritoneal cavity. This portion was excised, and a side-to-side anastomosis made between the jejunum and the caecum, the appendix being removed. Two enterostomy tubes were inserted—one through the anastomosis, and one from the blind end of the jejunum and brought out through a stab incision in the flank. The specimen of small intestine removed was examined later. It was approximately 14 feet (4.26 metres) in length and contained two side loops where a previous side-to-side anastomosis had been done. These side-tracked loops were 6 feet (1.82 metres) long in all, so that about 8 feet (2.44 metres) of functioning intestine was removed. It was estimated that roughly 4 to 5 feet (1.22 to 1.52 metres), or perhaps less, of small intestine had been left *in situ*; two-thirds of the functioning small intestine had been removed.

The patient's post-operative course after the first few critical hours was remarkably satisfactory. He was given two further pints (1.14 litres) of serum during and after operation and intravenous glucose and saline for 24 hours. He received penicillin, 20,000 units every three hours intramuscularly for ten days, and a high-protein and high-carbohydrate diet with supplementary vitamins as soon as he could take it by mouth. He also received casein hydrolysate for the last four weeks of his stay in hospital. The enterostomy tubes came out on the seventh day and the wound healed well.

Laboratory studies after operation may be tabulated as follows:

	Aug. 1	Aug. 8	Aug. 14	Aug. 15	Aug. 21	Aug. 28
Weight (lb.)	113	113	115½		118½	
Serum proteins (mg./100 ml.)	4·9	2·8		4·9		5·1
Albumin (mg./100 ml.)	2·9	1·6		3·2		3·6
Globulin (mg./100 ml.)	2·0	1·2		1·7		1·5
Serum chlorides (mg./100 ml.)	560	577				
Serum calcium (mg./100 ml.)	11·0					
Blood urea (mg./100 ml.)				35		
Haemoglobin	78%					
Red blood cells (millions)	4·00					

Two pints of serum were given between Aug. 8 and 15. The patient's appetite was poor for the first two weeks after operation, but then it improved, and when he left hospital on August 30 he was able to eat a more or less normal diet. At that time he was feeling well and his general condition was quite satisfactory. He had put on 7 lb. (7.2 kg.) in weight. He had no other complaints except occasionally a little tightness in the abdomen; his bowels were open twice in 24 hours, the motions being quite loose but not very voluminous.

Cineradiography of the gastro-intestinal tract demonstrated that a barium meal which had been swallowed 40 minutes previously was already passing down the descending colon while there was some still present in the stomach. There was no increased urge to evacuate the bowels.

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MICHAEL NEWTON, M.D.,
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Recent Cases of Methyl Bromide Poisoning

The fact that methyl bromide is a dangerous and insidious poison is not widely recognized among members of the profession, and non-medical people know little of its risks. The initial symptoms (nausea, vomiting, and urgent evacuation of bowel and bladder) soon pass off, to be followed by a latent period of apparent recovery. In mild cases headache and malaise may follow, but where much of the gas has been inhaled, unconsciousness, asphyxia, anuria, and violent convulsions come on quickly after a few hours. In a recent group of eight simultaneous cases, six boys died within 24 hours of exposure. The two survivors were critically ill for several days. A detailed report by the clinicians in charge of the cases is in course of preparation, but meantime this note may serve as a warning and help to prevent similar fatalities which otherwise might occur through ignorance.

The boys, aged 11 to 14, secretly established "gang headquarters" in the hold of a barge. A fire-extinguisher of a type used in naval vessels and aircraft was accidentally or intentionally discharged in the evening. All recovered from the primary effects in a short time, and employed the hours of darkness smoking, eating chocolates and biscuits, and playing cards, and probably dozing. Next morning two left the vessel and went home. The alarm was raised when they suddenly became ill two hours later. The police discovered the others almost at once—one dead and five unconscious.

Of the five boys found unconscious four died within 24 hours, and one of the two who had gone home died within the same period. The post-mortem findings varied, but the general picture was one of lung and brain haemorrhages.

The extinguisher is a copper cylinder 14 in. (35 cm.) long and marked with a warning. Other extinguishers of the same type have a larger warning but no note of the contents (methyl bromide). Similar extinguishers may be on disused vessels and in Service stores being dispersed or destroyed, thus constituting a potential death-trap to the uninformed.

W. FYFFE DORWARD, M.B., Ch.B.,
Police Surgeon, City of Dundee; Lecturer in Forensic Medicine, University of St. Andrews.

Grants to a total of £133,150 towards the cost of homes and other welfare schemes for old people have been recommended by their advisers to the Governors of the National Corporation for the Care of Old People since it was established on Aug. 1, 1947. Of this sum £64,000 has so far been recommended from the resources of the Lord Mayor's National Aid Raid Distress Fund.

Reviews

MEDICAL RESEARCH

Medical Research. A Symposium. Edited by Austin Smith, M.D. (Pp. 169; 17 illustrations, including 10 subjects in colour. 25s.) London and Philadelphia: J. B. Lippincott Company. 1947.

Books on medical research are often rather uninviting to the medical reader—probably because medical research, like women and the American constitution, has had so many foolish things said about it. This is a great pity, for it is important that those who are engaged in research should pause now and again to consider what they are doing and why, and it is even more important that medical teachers, administrators, and practitioners should know something about the conduct of research—the growing tree, as it were, and not merely the fruits.

Austin Smith has had a useful training for editing a symposium of this kind, for he has been secretary of the Council on Pharmacy and Therapy of the American Medical Association for a number of years. It is not surprising, therefore, that pharmacology predominates, but this makes for consistency and the avoidance of repetition. Different contributors discuss the fundamental and practical aspects of research, the organization of the laboratory, the manufacture and development of new drugs, and the place of medical research in the university medical school. To counterbalance undue stress on laboratory techniques there is an inspiring article by Alvarez on clinical research with a notebook, and the book finishes with a brilliantly illustrated article on photography in medical research.

The articles on fundamental aspects of research by Sollmann and that on medical research in the university medical school by Boyd are extremely well thought out and merit reading by anyone who is engaged in medical teaching. There is no doubt in these authors' minds that "medical science cannot be adequately taught by those who stand aloof from its advances," or, in other words, that research is one of the most important functions of the medical schools. Questions such as salary, security of tenure, and publication are discussed against this background, and the book forms a valuable corrective to current thinking in Britain, where the organization of medical services and clinical teaching is considered so largely in terms of technical skill and administrative efficiency. Sollmann considers that the primary motive for research must be curiosity, though there may well be an admixture of vanity or the desire for profit. Accurate and selective observation, technical skill, and factual knowledge are the chief elements in the success of the average worker. Boyd discusses the advantages and disadvantages of a university post with a good deal of candour, and he has much to say about part-time and whole-time payment and about the inequality of salaries in different chairs. He concludes that outside work should be encouraged within limits but that a major proportion of fees should be paid into a common pool, or else subjects with no immediate practical application will suffer. He also believes in promotion and demotion, again within certain limits, to reward good work and to discourage the man who rests on his oars when he has secured a leading position.

L. J. WITTS.

COLLAPSE OF THE SUPERMAN

Essays on Contemporary Events. By C. G. Jung. Translated by Elizabeth Welsh, Barbara Hannah, and Mary Briner. (Pp. 90. 8s. 6d.) London: Kegan Paul.

The unparalleled events of the last decade have had an inevitable influence upon the mental life of individuals. Prof. Jung in his practice became aware of this influence, particularly in the dreams of patients, where appeared impersonal, collective elements. He consequently found it necessary to study contemporary events in order the better to understand the problems of his patients. This volume contains an Introduction on "Individual and Mass Psychology," which the B.B.C. broadcast in the Third Programme in 1946, and five essays. With one exception ("Psychotherapy and a Philosophy of Life") the essays are a commentary on collective psychology in Germany, and he discusses the significance of happenings in Russia.

Readers unfamiliar with Jung's terminology will find the book difficult, but for others—and they are many—it provides a penetrating psychological study of events associated with the war. As is fitting, Jung pays special attention to the problem of collective guilt. In 1918 he wrote of the possible result of movements in the unconscious of the German people. These anticipations were accurate. Then, as here, his point of view was that of an unprejudiced empiricist whose observations rested upon facts rather than abstractions. His conclusions are undogmatic and he enunciates no general theory, though he makes suggestions towards the formulation of a scientific outlook. The opinions expressed in this book have an interest far beyond the clinical situation and open new vistas of the background of modern thought.

Jung, although Swiss, was on the Nazi black list and his books were suppressed in Germany. Despite this some have misunderstood his views, for they have been reproduced (particularly in America) in fragmentary form and inaccurately translated. A reading of the final essay should dispose of these misconceptions. This volume, well translated and presented, is on the level one would expect from C. G. Jung, who stands among the great thinkers of to-day.

E. A. BENNET.

RHEUMATISM IN PRACTICE

The Treatment of Rheumatism in General Practice. By W. S. C. Copeman, M.D., F.R.C.P. Fourth edition. (Pp. 258. 12s. 6d.) London: Edward Arnold and Co. 1947.

The fact that this work has reached a fourth edition is ample evidence that it has proved its worth. Designed to aid the general practitioner in the management of a group of diseases which crowd his surgery and occupy much of his time, it has well satisfied a real need. This edition is distinctly better than its predecessors, for the author discusses many of the more recent advances in methods of treatment, his experience of them in practice, and his opinion of their value, basing his judgment on a wide experience of the management of cases in the Forces.

He fully considers treatment in all its aspects; the chapter on doctor and patient contains much wise advice and might with advantage preface the whole section on treatment. His account of simple methods of physical treatment which the patient can carry out in his home is interesting; they should be more widely used. Among these the local contrast bath for the extremities, which is useful in rheumatoid arthritis, might with advantage be described in a future edition. We note with interest his view that psychoneurosis is not such a frequent cause of fibrositis as some would have us believe. We recommend the book without hesitation as a most useful addition to the practitioner's shelves.

C. W. BUCKLEY.

THORACIC SURGERY

La Désinsertion Extrapleurale des Symphyses Pulmonaires sous Controle de la Pleuroscopie. By Jean Braillon. (Pp. 120; 25 figures. 210 francs.) Paris: Librairie Maloine. 1947.

The freeing of adhesions between the lung and the chest wall when performing artificial pneumothorax is of fundamental importance in the successful management of pulmonary tuberculosis. Most operators fully realize the need for dissecting the adhesion from the chest wall in either the extrapleural or the extrafascial plane rather than dividing the adhesion itself. When the area of adherence is of any size "enucleation," or extrapleural dissection, is the only method that can be employed. There is, therefore, nothing new in the conception of extrapleural "disinsertion."

In this short book Dr. Braillon gives a detailed description of his technique, with a lucid account of the surgical anatomy. This alone makes the book worth reading by those interested in this work. More remarkable is his account of how he has adapted the operation to include really extensive freeing of the adherent lung, particularly over the dangerous paravertebral and mediastinal areas. He has performed 36 partial or complete mediastinal dissections. His technique is evidently meticulous and time-consuming; he often spends three to four hours

at a sitting. Haemorrhage has so far caused no great trouble in his 165 cases, but, as would be expected, tuberculous pleurisy has often supervened—occurring in 22 cases (13.3%). In 11 of these the infection matured to form frank pus; a staphylococcal empyema formed in one other case. Total or partial pleural obliteration occurred in 40%. In spite of this high incidence of complications the method deserves serious study, and we therefore recommend the book to specialists in thoracic disease.

R. C. BROCK.

HEALTH EDUCATION

Health Facts for College Students. A Textbook of Individual and Community Health. By Maude Lee Etheredge, M.D., D.P.H. Fifth edition. (Pp. 439; 75 figures. 12s. 6d.) Philadelphia and London: W. B. Saunders Company. 1947.

Dr. Etheredge states in her preface that "college students are naturally interested in the facts of physiology and hygiene." That her book has reached its fifth edition testifies to the truth of this statement. The writer sets out first to persuade the university student that health is essential for the full enjoyment of life and then that active steps must be taken to achieve and maintain health. The thirteen chapters on elementary physiology are excellent and constitute a useful text for sixth-formers or the intelligent layman. Those on food and its relation to health, the locomotor system, and the origins of faulty posture are particularly well done. The author then considers some of the special emotional problems of the university student in chapters on "Friendship, Love, and the Preparation for Marriage" and "Marriage, the Home and Parenthood." She discusses these problems in a straightforward way, and her treatment of them carries conviction on account of the high moral values on which she clearly bases it. The remaining ten chapters cover public health, genetics, allergy, infective agents, and cancer, and the book ends with a useful chapter on first aid.

The scope of this work is wide, but on the whole the author considers the various topics adequately. She might have devoted more space to discussing mental health and less to the signs and symptoms of organic disease. Her account of heart disease, for example, receives three pages, but that of psychoneurosis, hysteria, and neurasthenia only one. The style is on the whole clear and concise, though occasional exhortations and slogans, of which the following are examples, may slightly irritate English readers: "Try these study thoughts: A wanting to learn goes nine-tenths of the way," and "Community pride is a great hill climber."

The great need for more health education in the U.S.A. as in this country is indicated by some of the facts about drug addiction and venereal disease that the author gives. We are told, for example, that there are 750,000 addicts to alcohol in the U.S.A., and it is estimated that 20% of all mental patients are alcoholics. The problem of drug addiction is not confined to adults, however, for the book mentions a New York clinic for children addicted to marihuana. In the chapter on venereal disease the author writes, "Nearly seven million of our people have syphilis."

Considerable attention has been paid to the problems of student health in Britain recently, and a report on this subject prepared by a subcommittee of the Association of University Teachers has included in its recommendations that "a voluntary course of instruction in personal and social hygiene open to all members of the university" should be provided. *Health Facts for College Students,* with modifications necessitated by the differences between our two countries, would provide a useful basis for such a course. The work would also be instructive to teachers and others responsible for the training and education of young people. There is an extensive bibliography.

JOHN PEMBERTON.

The first new edition since the beginning of the war of *Diseases of the Nervous System,* by Dr. W. Russell Brain, has now appeared, published by the Oxford University Press at 37s. 6d. There has long been a demand for this book, and Dr. Russell Brain has brought it up to date by adding new sections and altering old to include the changes in knowledge and thought that the war years have brought about. The main body of the text needs no introduction and no further recommendation.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

Neurological Complications After Spinal Anaesthesia. By Gunnar Thorsén. (Pp. 272. No price.) Stockholm: Ab Nordiska Hokhandeln. 1947.

A monograph with extensive bibliography; in English.

Surgical Disorders of the Chest. By J. K. Donaldson, B.S., M.D., F.A.C.S. 2nd ed. (Pp. 485. 42s.) London: Henry Kimpton. 1947.

A short account intended for the general surgeon, physician, and student.

The Postnatal Development of the Human Cerebral Cortex. By J. LeRoy Conel. Vol. III. (Pp. 148. 70s.) London: Geoffrey Cumberlege. 1947.

An account of the cortex of the three-months-old infant.

Diagnostic Agents. By T. D. Whittet, Ph.C., D.B.A. (Pp. 32. 2s. 6d.) London: The Pharmaceutical Press. 1947.

A summarized account for pharmacists of the preparation and use of certain diagnostic agents.

Pathological Histology. By Robertson F. Ogilvie, M.D., F.R.C.P.Ed., F.R.S.Ed. 3rd ed. (Pp. 459. 37s. 6d.) Edinburgh: E. and S. Livingstone. 1947.

A textbook of morbid histology for the student and graduate.

Housing and the Family. By M. J. Elsas. (Pp. 135. 8s 6d.) London: Meridan Books. 1947.

An inquiry into housing carried out in 1944–5.

Medical Addenda. By various authors. (Pp. 158. 10s. 6d.) New York: The Commonwealth Fund. 1947.

Essays on the doctor, psychosomatic and social medicine, convalescence, and chronic disease.

Medicine, Psychiatry and their Borderland. By Alexander Frank, M.D. (Pp. 238. 21s.) London: Shakespeare Head Press. 1947.

Essays on various themes in medicine.

A Textbook on Pathology of Labor, the Puerperium and the Newborn. By Charles O. McCormick, A.B., M.D., F.A.C.S. 2nd ed. (Pp. 514. 42s.) London: Henry Kimpton. 1947.

A textbook intended primarily for the medical student.

Safety Rules for Use in Chemical Works. Part I, Model Rules. 3rd ed. (Pp. 71. 7s. 6d. cash with order.) London: The Association of British Chemical Manufacturers. 1947.

A manual summarizing the rules, with indexes and blank pages for additions.

Catalogue of Medical Films. Compiled by the Royal Society of Medicine and the Scientific Film Association. (Pp. 125. 7s. 6d.; 6s. to members of Aslib or the S.F.A.) London: Aslib. 1948.

About 800 titles are listed, and details of 200 given.

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Includes papers on biochemical problems of psychiatry and on psychical seizures.

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The physiology of breathing in irrespirable atmospheres and the apparatus required.

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A textbook intended primarily for pathologists and research workers.

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MR. BEVAN INTIMIDATES

Mr. Bevan is doing his best to forfeit what little confidence medical men may still have in him as a Minister of Health desiring to start the new Health Service with the willing co-operation of those who will have to work in it. In the House of Commons on Jan. 29, referring to the B.M.A. plebiscite, he said: "Of course open votes of this description always give rise to the possibility of intimidation"—an observation followed by Ministerial cheers. Mr. Tiffany, Labour M.P. for Peterborough, had stated that the method of the plebiscite "is bound to cast doubt on the validity of the result." Mr. Baird, Labour M.P. for Wolverhampton E., asked: "Does the Minister not think that this House should have an opportunity of expressing its views on this attempted blackmail?" The B.M.A. issued a prompt reply to these typical allegations, and stated: "A definite assurance is printed on every plebiscite form issued from B.M.A. House that how individual doctors vote will not be divulged, and that assurance will be kept." This underlines what we stated in a leading article on Jan. 17: "Needless to say, how doctors vote will not at any time be divulged." It must be said once more that there is absolutely no question of divulging to anyone—least of all to Mr. Bevan—the names of any doctors who vote in the plebiscite, and no question of exerting pressure of any kind on those who vote Yes. Mr. Bevan forgets that the B.M.A. is not a trade union but a voluntary association of medical men. Members of this voluntary association would not tolerate for one moment the intimidation of one group of members by another group. Some members have asked how the B.M.A. "will keep itself informed of the practitioners who enter, or apply to enter, the Service before the appointed day." The B.M.A. will know through clerks of Local Executive Councils the *numbers* entering, but not the *names* of those entering. It is simply a question of knowing whether the majority is being sustained. And once the plebiscite returns have been checked the forms, with the names on them, will be destroyed.

It may be that Mr. Bevan is a victim of the psychological mechanism known as "projection," and is attributing to the medical profession a mental activity of his own. He is, indeed, in the process of coercing doctors against their will by financial threats. As the prospective employer of all medical men after July 5, and as the proposed owner of hospitals and doctors' practices in the public service, he is dictating terms to his employees. A learned profession which in an atmosphere of intellectual freedom has made its great contributions to knowledge of the problems of health and disease is being forced into the position of having to conform against conscience. This is the most deplorable aspect of the present conflict, and it is hoped that those who may feel intimidated by Mr. Bevan will have the courage to vote No if that is their sincere conviction. And those who wish to vote Yes will do so in the sure knowledge that their names will remain secret and that they will be free from any intimidation by fellow doctors.

Mr. Bevan is, with few exceptions, ill-served by those papers and publicists joining in the present controversy. There is a deliberate attempt on the part of some of these papers to foment antagonism between the public and the doctors. There is in some sections of the Press a gross misrepresentation of fact and at the same time a suppression of the viewpoint of the majority of medical men in this country. In the *News Chronicle*,[1] for example, Mr. Ritchie Calder, science correspondent to that paper, says that for the 10d. a week out of the 4s. 10d. compulsory contribution every man, woman, and child will be provided with a series of benefits which he lists. This is a serious misrepresentation, because the tenpenny item in the National Insurance contribution will not even finance the first one on his list—namely, the family doctor service. The 10d. a week will provide £30,000,000 a year to a service estimated to cost at least £152,000,000. Four-fifths of the cost of the Service will be borne by the Exchequer—in other words, by the taxpayer; and the taxes will fall most heavily on that section of the community represented by doctors, the professional and middle classes. Medical men will be paying handsomely for the Service in which they are asked to take part. We may, perhaps, expect a science correspondent to be inaccurate, but it is disquieting to note that medical men are taking part in a campaign to intimidate their colleagues. In *Reynolds News*[2] a Dr. Irwin Brown, described by the newspaper as "a leading member of the medical profession," writes: "But the public can make sure that the B.M.A. will not get that 13,000 votes . . . if he is wise he will make a point of telling his doctor *now* that he will expect to be treated under the new 'free at the time of service' scheme, and will not require the advice of any doctor who stays outside the service." This suggestion is also being put about, according to the *Daily Worker*, by Dr. Stark Murray, of the Socialist Medical Association. "Find out," he says, "from your panel doctor whether he is falling in with the National Health Service or opposing it." According to the *Daily Worker* Dr. Murray "called upon people insured to withdraw their names from the doctor's list if he were in opposition." We are informed that in one or two districts panel patients acting on this advice are telling their doctors that they will withdraw their names from the panel list unless the doctor will agree to enter the National Health Service in July. These are very muddy matters indeed, and no good will come from concealing them. There is only one answer medical men can give to these shameful attempts at intimidation and that is to resist them.

On another plane of activity it is distressing to find a respected figure such as Dr. Somerville Hastings adding his name to a letter signed by four medical M.P.s (Labour) in which among other things this observation is made:

[1] *News Chronicle*, Jan. 28, 1948.
[2] *Reynolds News*, Jan. 25, 1948.

"The condition that each voting paper must be signed lays the whole thing open to the kind of intimidation, persecution, and victimization now associated only with totalitarian countries. . . ." The letter has been published in three national newspapers.

Mr. A. J. Cummings has on more than one occasion deplored in the *News Chronicle* the ill-feeling that has been stirred up by some members of the present Government between the working classes and the middle classes. The medical profession has the disadvantage of being in the "tinker's cuss" category. "To the Left, the middle class is unmistakably—*pace* Mr. Morrison—a class enemy," states that sober and influential newspaper *The Economist*.[3] The professional class as a whole, *The Economist* observes, "is too proud to fight; too proud certainly to enter wholeheartedly into the inflationary game of mutual blackmail." It is necessary to bear these facts in mind, because they are relevant to the present medico-political situation. Blackmail and intimidation are not part of the doctor's equipment, and as a profession we have too strong a civic sense, and too great a tradition of disinterested service, to throw back the discoloured brickbats hurled at us. But we must expose the attempts at intimidation now being made and which will no doubt be intensified if the plebiscite results show a sufficient majority of Noes.

We print elsewhere in this issue an account of a remarkable meeting held at B.M.A. House on Jan. 27, convened at the instance of the Consultants and Specialists Committee of the B.M.A. Lord Horder, in the opening speech, set the tone of the discussion when he observed that the present issue was one between collectivism and individualism. "This question of freedom," he observed, "is vital to us." At the end of the meeting the following resolution was carried by 766 votes to 11:

> That in the opinion of this meeting consultants and specialists should not take service under the National Health Service Act until it has been modified so that agreement has been reached between the Government and the profession as a whole.

On Jan. 5 the Fellows of the Royal Faculty of Physicians and Surgeons of Glasgow reaffirmed the views on the Health Service it had expressed on March 3, 1947. They were as follows: "That the Minister's proposals under the National Health Service Act should be amended by legislation to ensure: (1) the retention of the ownership of the goodwill of medical practices; (2) no direction of doctors either negative or positive; (3) no universal basic salary; (4) the right of appeal from the tribunal to the courts on questions of fact as well as of law; (5) free choice for patient and doctor and no interference with clinical freedom; (6) curtailment of the immense powers placed in the hands of the Minister to mould the shape of the Service by Regulations, by Orders, and by directions; (7) a more democratic appointment of professional representatives to the various statutory bodies and committees to be set up under the two Acts."

Resolutions have been passed by the staffs of various hospitals, including several teaching hospitals in London, expressing disapproval of an Act which may lead to a whole-time State Medical Service, and affirming the solidarity of the consultants and specialists with their colleagues, the general practitioners. The Royal College of Surgeons made a welcome plea for professional unity. In view of these encouraging movements towards professional unity and solidarity, which all express what some of us may at times tend to forget—that the medical profession is one profession—the resolution passed by the Comitia of the Royal College of Physicians at its meeting on Jan. 29 will strike many as evasive, indecisive, and lacking in courage. It was as follows: "That after the plebiscite and the Special Representative Meeting of the British Medical Association, on March 17, a special Comitia should be held to determine what action could most usefully be taken in the interests of the public and the profession as a whole." The Royal College of Physicians is determined to be wise after the event. The workers' hospital, Manor House Hospital at Golders Green, is being wise before the event by claiming exemption from the State Hospital Service.

The results of the plebiscite will be known in about a fortnight's time. Whatever these results may be it is as well to point out that the opposition of the medical profession is to certain fundamental parts of the Act and not to the introduction of a comprehensive medical service. The burden of anxiety among all professional groups is that service under the Act in its present form will be incompatible with professional freedom. The freedom of the practitioner must be safeguarded in a service open to the whole community and paid for out of public funds under the control of the Treasury. To compare buying and selling of practices with the previous practice of buying commissions in the Army is, of course, nonsense. The man who bought a commission in the Army bought a qualification to which he was not entitled. To state that buying and selling of practices involves the buying of patients is equally nonsense, because patients have the complete freedom to change their doctor. If the financial burden of buying a practice is too heavy for the young man to bear in these days then there is a case for reasoned discussion on this point. At the moment it is difficult to see how the general practitioner can maintain his professional freedom without ownership. But if, as was suggested by the Negotiating Committee to Mr. Bevan, the Act was amended to state that remuneration for general practitioners should be by capitation fee only, with allowance for inducements into difficult areas, then this, it would seem, might offer an alternative safeguard.

In the House of Commons last week Mr. Morrison, in a reply to a question asking for a discussion on "the doctors' ballot" said that if a debate took place it would have to be on a somewhat wider issue than the plebiscite. If such a debate does take place it is hoped that political partisanship will not be allowed to obscure the fact that the medical profession has serious and well-considered objections to the present Act. Unless these objections are seriously considered and met, Mr. Bevan—and through him the Government—will be acting in an anti-social manner in trying to operate the Act in opposition to those who have to work in it.

[3] *The Economist* Jan. 24, 1948.

ASTHMA AND MITES

It is not surprising, in view of the general difficulty in arriving at precise conclusions about the status of suspected allergens in individual cases of asthma, that no final conclusion has been reached about the validity of the hypothesis first advanced by Carter, Wedd, and D'Abrera.[1] They suggested that in Ceylon certain cases of asthma associated with high eosinophilia might be caused by infestation of the bronchi by mites. D'Abrera[2] has recently published further observations on six additional cases. Mites were found in the sputum; there was a clinical response to organic arsenicals given by mouth, and after this the mites could no longer be found. The maximal total eosinophil count in these cases ranged between 15,300 and 42,000 per c.mm. These counts fell dramatically in every case after the administration of arsenic, though they remained above the normal level. Two of the patients were pregnant women. One was treated successfully, and the subsequent delivery was easy and uneventful. The other was not treated and had severe respiratory symptoms during labour; her baby was normal and showed a normal leucocyte count. In two further cases other drugs were tried before arsenicals were given. In one case bismuth and in the other organic antimony intramuscularly in the usual doses had no effect on symptoms, eosinophilia, or the presence of mites in the sputum. In both cases "carbarsone" by mouth, 0.5 g. on the first three or four days and 0.25 g. for another three or four days, gave some symptomatic relief and led to a fall in eosinophil count. D'Abrera also reports a second case (one had been described in a previous communication) in which a relapse of asthma with eosinophilia had occurred several months after an apparent response to arsenical treatment but was controlled by a second similar course of treatment. He regards these cases as belonging to the same group as the "tropical eosinophilia" originally described by Weingarten,[3] and in some of his patients there were radiological changes of the type described in that syndrome.

There have now been reported in patients who have never been to the Tropics a number of cases which conform to Weingarten's description of "tropical" eosinophilia. Hall[4] investigated two patients suffering from respiratory symptoms of bronchitic type with distressing paroxysms of cough in whose blood high eosinophilia was found; their maximal total counts were 33,840 and 4,884 eosinophils per c.mm. One man had served in the R.A.F. in India and Colombo and had there been concerned with the supervision of stores in which he had been exposed to dust. The other had never been in the Tropics but just before the onset of his illness had worked in a store where vegetables and fruit were delivered in jute sacks. In the first of these patients examination of the sputum revealed on one occasion one degenerated mite of unrecognizable type. Both responded well to treatment with arsenic—"carbarsone" 0.2 g. night and morning for ten days; their symptoms were relieved and the eosinophil count was considerably reduced though still remaining above normal. Hall admits that the diagnosis of "pulmonary acariasis" in the case in which mites were not actually found in the sputum must be doubtful, but is apparently prepared to accept the diagnosis in the first case on the finding of the one degenerated mite on one occasion.

The symptom-complex of asthma or paroxysmal bronchitis with high eosinophilia and possibly evidence of pulmonary infiltration demonstrable radiologically is observed from time to time quite apart from residence in the Tropics. In the discussion on this subject at the recent International Conference of Physicians it was suggested by Crofton that these cases belong to a series of clinical syndromes which pass by gradations from the benign and transient infiltrations with eosinophilia first described by Loeffler to the full-blown picture of periarteritis nodosa. It seems likely that an allergic reaction to agents unfortunately unidentified in most cases affects various elements of the lung-tissue—alveoli, bronchioles, bronchi, pleura, and arterioles—more or less severely to produce the varied clinical pictures. The only feature which clearly distinguishes the syndrome described by Weingarten is the response to arsenic, which has not generally been observed in other cases of this group. It is tempting therefore to conclude that in the so-called "tropical eosinophilia" the allergen may be connected with a living agent which can be eliminated by organic arsenicals. However, the further inference from the reported finding of mites in the sputum of some of these cases that these are the living agents postulated by this hypothesis requires much further investigation before it can be accepted. It is noteworthy that mites when present have usually been found in very small numbers and often only after the most exhaustive search. Soysa and Jayawardena,[5] for instance, state that in some instances a single specimen of sputum might be searched for five days before a mite was found. Moreover, although Carter, Wedd, and D'Abrera made careful observations to exclude the possibility of contamination of the sputum with air-borne mites after expectoration, there has been no report of an adequate series of control observations in which the sputum of subjects living under similar conditions to the patients and not suffering from this syndrome has been routinely examined by a comparably thorough technique. The mites reported by Soysa and Jayawardena were species of the genera *Tyroglyphus* and *Tarsonemus*; those found by Carter, Wedd, and D'Abrera belonged to eight different genera, representatives of more than one genus sometimes being found in the same patient. All the species found are common inhabitants of the dust of store-rooms and old houses. Before the hypothesis of infestation of the bronchi by these mites can be accepted it is clearly necessary to establish that mites of these several genera can maintain themselves and become true parasites in the bronchial tree. If the hypothesis is simply that the mites are inhaled in dust and act as allergens so long as they remain passively in the bronchial tree, alive or dead, it would be expected that on removal of the patient from the dusty atmosphere they would be expelled in the bronchial secretions with relief of symptoms. Much work remains to be done on several distinct and separate problems before the questions

[1] *Indian med. Gaz.*, 1944, **79**, 163.
[2] Ibid., 1946, **81**, 414.
[3] *Lancet*, 1943, **1**, 103.
[4] *Brit. J. Tuberc.*, 1946, **40**, 124.
[5] *British Medical Journal*, 1945, **1**, 1.

raised by these interesting observations from Ceylon and India can be answered. The significance of the finding of mites in the sputum must be investigated statistically. If the incidence of this finding in asthmatics is significantly high, the behaviour of the mites in the bronchial tree and their potentialities as allergens and provokers of eosinophilia in affected and in normal subjects will need investigation. Whatever the result of these investigations, there will remain, related or unrelated, the further problem of the mode of action of organic arsenicals in relieving the symptoms and reducing the eosinophilia in one group of broncho-pulmonary disorders associated with eosinophilia.

CLINICAL PATHOLOGY

The Association of Clinical Pathologists celebrated its twenty-first birthday with a dinner on Friday, Jan. 30. The birth of this association was announced in our correspondence columns on Jan. 1, 1927, in a letter signed by ten practitioners of pathology, among them being Dr. S. C. Dyke, heralded at the dinner as the founder of the new association. The B.M.A. at that time had appointed a special pathological committee to look into the question of facilities for pathology.

In a leading article in 1926[1] we observed: "Pathological investigations of clinical material are an essential to good medical work. . . . Further, the technical elaboration of many modern pathological investigations is such that a practitioner, with rare exceptions, will not himself attempt them as part of his regular clinical work but must rely upon the assistance of medical colleagues who devote themselves to what is commonly known as clinical pathology." The B.M.A. may therefore claim to be, if not one of the parents, at least one of the god-parents of the now thriving Association of Clinical Pathologists. The B.M.A. has now been able to round off its parental duties by publishing in conjunction with the clinical pathologists the new and excellent *Journal of Clinical Pathology*. In its earlier years the association was more in the nature of a club and enjoyed the friendliness and informality found among men and women with a common interest. It has now grown into an institution with rules and regulations and officers. But the dinner last Friday showed that though it had now reached years of discretion members of the Association of Clinical Pathologists still preserved the verve and informality of its youth. The President, Dr. Cuthbert Dukes, proposed a charming toast to the past, and Dr. S. C. Dyke eloquently demonstrated that the past was still present and indeed in very good form.

The medical profession is now more conscious than ever before of the importance of clinical pathology and of the need for its services to be available to the practising doctor. During the past 21 years the advances in medical knowledge have been almost bewildering in their extent and complexity. No one small head can possibly hold all there is to be known. To meet this the idea of health centres has been mooted. We may doubt, however, whether the grouping of ten or twelve general practitioners in one building is the right answer to a difficult question. What is needed is the grouping of the facilities of medical science so that recent knowledge can be applied to the benefit of the patient and of the general practitioner. The clinical pathologist has the new knowledge and the new weapons which both need. He has, indeed, a key part to play in the evolution of a reformed medical service, and the problem of the moment is to see that the medical practitioner has quick and easy access to the resources of clinical pathology. The practitioner of medicine has much to learn from, and also much to teach, the clinical pathologist. It should be made possible for the two to work in closest co-operation. This is the answer to the question we put in 1926, "Should the pathologist be a colleague of the clinician, or a veiled oracle whose methods and the quality of whose work may be unknown or very little known?"

[1] *British Medical Journal*, 1926, 1, 205.

THE WORKING OF REGULATION 33B

Defence Regulation 33B was born on Nov. 5, 1942; on Dec. 31, 1947, it passed peacefully away, to the regret of many, though in its short life it did not achieve any very spectacular results. Until the early years of the recent war voluntary methods in the tracing of contacts had proved highly successful in reducing the V.D. rate in this country, but by the autumn of 1942 the serious rise in the incidence of syphilis, with its consequent effects on the members of the Armed Forces, particularly those of the Allies, compelled the Minister of Health to take stronger action. The Regulation was directed mainly against those infected persons who declined to attend voluntarily for treatment and who therefore remained sources of infection. For various reasons the Regulation was unsatisfactory to administer, chiefly because few infected persons were willing to state the sources of their infections, and obviously in fewer cases was it possible to prove that a single individual had infected two or more persons—a necessary preliminary to formal action. Nevertheless, a not inconsiderable number of persons were found and brought under treatment as a result, though the number of occasions on which compulsion was exercised was exceedingly small. Most of the successes obtained were through the medium of Servicemen, who were less reluctant than civilians to name the sources of their infections, though this was offset to some extent by the fact that a very considerable proportion of these were strangers in the neighbourhood where they were stationed, and therefore less likely to know the names and addresses of their consorts, and this applied particularly to U.S.A. troops. As might be expected, the vast majority of notifications concerned women, and only occasionally did a woman name a man as responsible for her infection. There was always the chance that uninfected persons might be named through spite, or even for purposes of blackmail, but this seems to have been quite unusual.

After the Regulation had been in force for some time it was decided that action might be taken on a single notification, though of course in such cases no compulsion could be used. This proved distinctly encouraging where it was employed with vigour and tact, and doubtless was responsible for numerous persons being brought under treatment. Nevertheless some medical officers in the U.S. Forces could not understand why in this country it was not always possible to compel a woman to undergo treatment when it appeared reasonably certain that she was a source of infection. The principal administrative objection to the Regulation was the complicated procedure necessary, and this at a time when medical officers of health were more than usually busy with other health matters, and venereologists, much depleted in numbers by the demands of the Services, were being overworked. However, it can be said with confidence that Regulation 33B, admittedly only a wartime measure, served a useful if somewhat limited purpose. It has at least had a marked effect in stimulating clinics and health authorities to take an interest in contact-tracing.[1] Perhaps it is a pity that it should have died a natural death

[1] Dalrymple-Champneys, W., *Brit. J. vener. Dis.*, 1947, 23, 101.

at a time when V.D. still takes a heavy toll, though modern methods of treatment, and especially the use of penicillin, have brightened the prospect to an extent undreamt of twenty years ago.

Although almoners have played an important part in the larger V.D. clinics for many years past, some clinics and health departments had never tackled the social problems connected with the disease until Regulation 33B came into existence.

The Ministry of Health has just issued a circular (5/48) stressing the necessity of continued contact-tracing by voluntary methods, and pointing out that particulars should be obtained from the patient only by persuasion and that his or her permission should be obtained for an approach to be made to the person thought to be the source of his or her infection. This, no doubt, is what all good clinics are doing, and results will depend on the energy and tact with which this policy is pursued.

On the other hand, the Union Internationale contre le Péril Vénérien passed a resolution at its General Assembly held in Paris in October, 1947, advocating that compulsory powers should be sought, nationally and internationally, to treat those in a contagious state who refused to come forward. Probably such powers would be more effective on the Continent, where, in parts at least, the population is more fluid, individuals more elusive, and contacts more difficult to trace than in Britain. The U.I.P.V. also resolved that the World Health Organization should help in defining the minimum requirements for combating venereal disease in each country and formulate the measures required to trace infective contacts beyond national frontiers. These problems and others related to the control of venereal disease—such as general education, provision of specific information, and special measures for defaulters from treatment—will be studied by a special committee of the U.I.P.V., which will co-operate with Unesco.

A NEW SUBSTANCE FOR ASTHMA

Adrenaline is still the most reliable agent for the relief of bronchial asthma. In recent years it has been given not only by subcutaneous injection but as a fine spray pumped into the back of the throat and inhaled. For this purpose a 1% solution is used. When adrenaline fails to give relief in more severe asthmatic attacks—for example, bronchitis—theophylline may be injected intravenously, dissolved in a suitable solvent such as ethylene diamine.

A further addition to anti-asthmatic substances is a derivative of adrenaline, the properties of which Konzett[1] described in 1940. Adrenaline has an amine group at the end of its side chain in which one of the hydrogen atoms is substituted by $-CH_3$. Konzett found that replacement of this meythl group by an isopropyl group resulted in a substance which was 10 times as powerful as adrenaline in relaxing bronchial spasm produced in the anaesthetized dog. He examined other related substances: N-ethyl adrenaline was 3 times as potent as adrenaline: N-propyl- and N-butyladrenaline were about equal in potency to adrenaline; and, finally, N-isobutyladrenaline was about 10 times weaker. The substance neosynephrine or metasympatol, which differs from adrenaline in having only one $-OH$ group in the benzene ring, was also found to develop great power to relax the constricted bronchioles when an isopropyl group replaced the methyl group in the side chain.

Isopropyl adrenaline (now manufactured in the U.S.A. as " isuprel ") has an action on the heart similar to that of adrenaline, but, unlike adrenaline, it causes a fall of blood pressure. This effect is not likely to be appreciable when isopropyl adrenaline is used therapeutically, since the amount required is so small. The properties described by Konzett have been confirmed recently by Lands, Nash, and their colleagues.[2] It is to be hoped that isopropyl adrenaline will be made available in this country.

[1] *Arch. exp. Path. Pharmak.*, 1940, **197**, 27, 41.
[2] *J. Pharmacol.*, 1947, **90**, 110.

THE PREVALENCE OF DIABETES

The incidence of diabetes is unknown, although some idea of its prevalence can be obtained from the mortality returns. Not all the deaths of diabetic persons are recorded as due to diabetes, and since the introduction of insulin the proportion of deaths assigned to other causes has increased. Marks[1] has reviewed the recent studies of diabetes in America. The evidence suggests that the deaths from diabetes may be understated by as much as 50% and that the number of diabetics in the general population is equivalent to a rate of 3.5 per 1,000. Since the introduction of insulin the diabetic patient has had a longer expectation of life and this has been associated with an improvement in working capacity. An apparent paradox is that the death rate from diabetes has increased during recent years. This rise in mortality is due to the relative increase in the population at older ages, especially females, among whom the incidence of diabetes is higher. In America the incidence of diabetes shows a steady rise with increasing age up to a maximum in the early seventies. The National Health Survey conducted by the U.S. Public Health Service revealed that less than 1 per 1,000 of the population were diabetic at ages under 30; in the early seventies the rate was 15 per 1,000 for males and 25 for females.

Hanssen,[2] in a study of the mortality, morbidity, causes of death, and complications of diabetes mellitus in Bergen in the period 1925–41, found that the rate of incidence in 1941, when supplementary rations were issued to diabetics, was 3.8 per 1,000, being 3.2 for males and 4.3 for females. The corresponding rate in Oslo during this period was 4.8 per 1,000. Although the rate of incidence in Bergen is similar to that in America, the age and sex distribution varied. The age of onset of diabetes in Bergen is apparently from five to ten years later than in America. In Bergen there was no difference between the sexes in the liability to develop diabetes up to age 60; in America the trends for males and females diverged from age 30, and between the ages of 45 and 65 the rates for females were approximately double those for males. The deaths of diabetic patients in Bergen were analysed and it was found that 58% of the deaths of male diabetics and 68% of the deaths among females were registered as deaths from diabetes. The distribution of deaths by causes, omitting those in which diabetes mellitus was recorded as the only cause of death, was: diabetic coma 8.2%, arteriosclerotic lesions 48%, infections 22%, tuberculosis 4.1%, and other causes 8.6%. Hanssen suggests that deaths among diabetics should be registered in two groups—deaths due to diabetes and deaths from other causes in diabetics. This classification would permit of a more accurate comparison of the trends in diabetes between different countries than is possible at present.

B.M.A. ISSUES WRIT

The British Medical Association has issued a writ against the editor and publishers of the *Daily Mirror*, claiming damages for libel and asking for an injunction. The matter complained of includes passages which have recently appeared in the *Daily Mirror* relating to the plebiscite.

[1] *New Engl. J. Med.*, 1946, **235**, 289.
[2] *Acta med. scand.*, 1946, **125**, Suppt. 178.

HEALTH OF THE SCHOOL CHILD IN WARTIME

Much that appears in the report of the Chief Medical Officer of the Ministry of Education on the health of the school child during the war years[1] is familiar, though it is useful to have it embodied within the buff covers of a Government document. Assessments of the nutrition of school children, problems of evacuation, and of the incidence of infectious diseases have all been the subject of copious writings and tabulations. On the whole, whatever may have happened to other sections of the community, the health of the school child, and also of the pre-school child, was maintained and even improved during the war. From the first he was, rightly, a high priority, a most-favoured customer.

Families Sundered

It is true, of course, that the war exposed school children to many disadvantages and perils. Families were sundered, education interrupted, the normal rhythm of life broken. The three-quarters of a million children who were evacuated at the outset of the war and those who took part in the three subsequent waves of evacuation may have benefited by the change of air and scene, but it is doubtful whether this compensated for the effect of a strange and to them unnatural environment. In town areas large numbers of children remained exposed to aerial bombardment and slept in shelters. This report, by the way, sounds a little complacent when it says that "taking the child population as a whole [it] . . . stood up to aerial bombardment with its accompanying terrors with the same courage and fortitude displayed by the civilian population generally." The medical officer of one borough on the outskirts of London says, "Enfield children learned to take air raids in their stride." Surely with children it was neither a question of courage nor of timidity, but a reflection of the attitude of the adults in charge of them.

As against these factors certain advantages have to be recalled. Dr. J. A. Glover summarizes them from the point of view of nutrition. A campaign for a complete school meals service reached its immediate target—a million dinners a day—in October, 1942, and by October, 1945, the number of dinners served daily reached 1,840,000, and during those same years about 3,300,000 pupils in primary and secondary schools were having extra milk. Added to this were the improved nutritive qualities of national bread and flour, and the general increase in the income of parents, which raised the standard of home feeding. An assessment of the nutritional state of elementary school children seen at routine medical inspections in England and Wales during the six war years and the five previous years of peace gives the proportion who showed "excellent" nutrition as rising from about 14.5% in the pre-war period to 16.3% in 1945. The proportion showing "normal" nutrition, about 74.5%, scarcely varied throughout the entire period. The proportion of "subnormals" fell slightly, while the proportion described as badly nourished, averaging 0.6% in the five pre-war years, stood at 0.3% from 1942 to 1945. In brief, the nutrition of the school child was maintained and almost certainly improved during the war. Deficiency diseases were hardly seen at all.

The Common Infections

Again, whatever the cause, the common diseases of childhood were, in general, less frequent and showed a diminished virulence. The fall in the death rate from diphtheria is most noteworthy. Among children aged 1 to 5, during the years 1931–5 this rate was 46 per 100,000 living; by the last year of the war it had fallen to 10. Measles, whooping-cough, and scarlet fever showed the same tendency. The one disease which, immediately on the outbreak of war, showed a high prevalence was cerebrospinal meningitis. The high prevalence continued until 1942 and over-topped any previous epidemic of that disease in this country, but thanks to the revolution in treatment effected by the introduction of the sulphonamides the death rate fell from about 60% to 20%. The other great crippling nervous disease, anterior poliomyelitis, fortunately spared this country during the war years. Infant mortality during the recent war was only about half of what it was during the war of 1914–18. The mortality of children of school age showed a similar fall, and the mortality of children aged from 1 to 5, which was rather over 15 per 1,000 living in the decade 1911–20 and has been falling ever since, reached the lowest figure, 2.6, in 1945.

Much was made at the time of evacuation of the prevalence of pediculosis amongst city children, and of the increase in scabies, but nothing was said about ringworm, a major problem in the early days of the school medical service, which became negligible during pre-war years, and during the war showed only a slight recrudescence in certain areas.

The treatment of school children, especially in the clinics for diseases of the eye and of the ear and for orthopaedic defects, was maintained during the war; foot clinics were actually extended. Child guidance was considerably expanded. (The setting up of a child-guidance clinic is now a duty of the local education authority in every area.) Another service which went on developing during the war was speech therapy. Before the war about 90 local education authorities, following the lead of Manchester as far back as 1906, had appointed speech therapists; by the end of the war the number was 115. It is said in this report that 500 whole-time speech therapists will be required to provide a satisfactory service, and that between 1 and 2% of English children have speech defects which require treatment.

Activities Maintained and Extended

Altogether, the school medical service has reason to be proud of its achievement. It was disrupted at the outbreak of war. In the evacuation areas its work was largely suspended; in the reception areas the conditions were chaotic. It suffered from the call-up of its personnel, and even where its numerical strength was maintained its functional strength was decreased. Nevertheless, essential activities were maintained and some activities extended. It was during the war, too, that the Education Act, 1944, was passed—an Act making medical inspection an essential and integral part of the school regime and laying it down as the duty of the authorities to ensure that, with the exception of domiciliary treatment, "comprehensive facilities for free medical treatment are available."

This report, above the signature of Sir Wilson Jameson, is a composite document made up of contributions from the medical staff of the Ministry. Some of the chapters are of special interest, notably one on the child-guidance service, another describing the adaptability and improvisation which were called for during the war by those in charge of the special schools for the handicapped, and a third a review of the medical provisions of the Education Act. The final chapter is on health education in the schools. Perhaps on this last point it might be said that the chief factor in promoting health education in the schools would be a high standard of cleanliness and sanitation in the school buildings themselves. It is encouraging to learn that steps are being taken to ensure the modernizing of school buildings and furniture, which includes lavatory and sanitary accommodation. Many schools are admittedly far below present-day standards of hygiene, and to impart health education in such circumstances must be difficult if not impossible.

[1] *The Health of the School Child. Report of the Chief Medical Officer of the Ministry of Education for the Years 1939–45.* London: H.M. Stationery Office, 1947. 2s. 6d. net.

The British Social Hygiene Council (Tavistock House North, Tavistock Square, London, W.C.1) has issued three interesting pamphlets (price 6d. each). In *Over-population as a World Problem* Sir John Megaw discusses some of the many problems that arise from man's remarkable capacity for the reproduction of his species. He advocates education as a key to the solution, though in itself it is not enough. Dr. C. Fraser Brockington in *Problem Families* discusses some of those feckless families which have in recent years been closely studied. He points out that the importance of these families is greatly in excess of their number, partly because individually they are usually large. In discussing their rehabilitation he emphasizes that each must preserve its identity. Delinquent children are the subject of W. F. Roper's *When the Family Fails* He outlines the case histories of several young delinquents, and points out that the social defects favouring delinquency tend to be handed down from one generation to another; possibly some 25% of the population is involved.

Preliminary Sorting

PLEBISCITE IN PROGRESS

The posting of plebiscite forms to every member of the profession whose name is on the *Medical Register* was completed on Thursday, Jan. 29. In conducting a plebiscite of this kind the two overriding considerations are accuracy and secrecy. Two groups of people will be involved in the process of checking and counting. The initial sorting and counting will be done by clerks at the Headquarters of the British Medical Association. Their findings will be checked at every stage by the Association's auditors, Messrs. Price, Waterhouse, and Co., under whose supervision every step in the plebiscite has been conducted.

The first check that was made by the auditors was designed to ensure that forms were posted to every doctor. Names were taken at random from the *Register* and were then checked against the sealed envelopes which were ready to be sent out. Addresses were taken from the *Directory* and the B.M.A. records since those in the *Register* are often out of date. The bags containing the batch of envelopes were controlled by the auditors until they were handed to the Post Office. The first plebiscite forms were returned on Monday, Feb. 2, and since then there has been a steady stream each day. The big majority have been returned in the business reply envelopes which were sent out with the forms. All these envelopes are delivered to what, for the moment, is known as the Plebiscite Room, which for obvious reasons is strictly out of bounds to everyone not engaged in the actual counting. The envelopes are opened in batches of 4,000, and in the first instance are divided according to the colour of the plebiscite form. Doctors in England and Wales received blue plebiscite forms, those in Scotland received pink forms, and alien doctors received grey forms.

The numbered and sorted forms are then separated into "Yes" and "No" groups under Question A—or, more precisely, into "Approve" and "Disapprove" groups. At this stage, too, all those voting papers which are invalid are separated. Each plebiscite form is stamped with a serial number which varies in colour according to whether the answer to the first question is "Approve" or "Disapprove." Other colours are used in stamping the numbers on forms which are invalid and forms which do not indicate the voter's professional category. There follows a first check against the batch total, supervised again by the auditors. Invalid votes added to the total numbers saying "Yes" or "No" to Question A in the three main groups—England and Wales, Scotland, and alien—must total 4,000.

The next phase of the operation is the division of the same three batches into the 19 categories indicated on the plebiscite form. These are separated out into 38 baskets according to whether the first answer is "Yes" or "No." Two clerks check the total number of forms in each of these baskets and record the answers on a tally sheet. Working in pairs, they check each other's findings and totals independently, and all the figures on the tally sheets are then added up and again carefully checked. At each stage the findings of the individual clerk are tested once more by the representatives of Messrs. Price, Waterhouse, and Co. This same procedure is repeated with the forms in categories 1 to 4, inclusive, a second time in relation to Question B, and a third time on Question C, and at each stage there is again a check against the basic figure in these categories. At the end of each day the representatives of Messrs. Price, Waterhouse, and Co. are sealing all the forms on which work has to be continued on the following day. A few doctors have returned the plebiscite forms in an ordinary envelope, which has been dealt with in the usual way in the different departments of B.M.A. House. When the last plebiscite was conducted some doctors returned their plebiscite forms in ordinary envelopes together with subscriptions, which were welcomed, contributions to charity, which were gratefully received, indignant letters, to which soothing replies were sent,

Separation into Categories

and one doctor enclosed with his plebiscite form a number of B.U.s—which was not understood. The same sort of thing is happening again, and these few forms are being specially checked. It has also been necessary to send out a number of letters to doctors who have omitted to indicate the type of professional work in which they are engaged. It would be simple enough to look these people up in the *Directory* or the B.M.A. card index to find out whether they are general practitioners or whole-time officers in the public health service, but it has been thought better in each instance to make sure that voters are classified according to their own conception of the work on which they are predominantly engaged. In these cases the plebiscite forms are not returned but are filed separately to await the reply indicating under which category the answers to Questions A, B, and C are to be counted. In the Plebiscite Room, therefore, at the end of each day it is known how many forms have been received and how the voting has gone under the three questions and in relation to the three main groups of practitioners, classified into the nineteen different categories.

All the forms which have been dealt with will be destroyed. Once the plebiscite is over there will remain only a series of totals which have been checked and rechecked.

It is worth stressing again that not only will the way in which individuals voted not be divulged, but once this complicated process of checking, counting, rechecking, and adding up is completed it will be quite impossible to find out how any individual voted.

The plebiscite forms issued to practitioners in England and Wales and in Scotland refer to the "National Health Service Act, 1946." Lest there should be any misunderstanding, it should be appreciated that the pink forms issued to practitioners in Scotland refer to the "National Health Service (Scotland) Act."

The plebiscite closes on Feb. 14, and the counting will continue over Sunday, Feb. 15. Over the fourteen-day period from the receipt of the first forms to be returned there will inevitably be some dislocation of the normal work of the Headquarters staff. Letters on the hundred and one subjects which arrive every day in the ordinary course of events may not be dealt with quite so promptly as usual.

The final results of the plebiscite will be made known to the Council of the B.M.A. at a special meeting which has been called for Wednesday, Feb. 18. The results will then be published in the *Journal* and elsewhere, and the Council will report to the Divisions and ask them to instruct their representatives on the final decisions which have to be taken at the Representative Meeting which will be held on March 17.

RETURN OF PLEBISCITE FORMS

The plebiscite forms are flowing in thick and fast. Whatever your views, please vote, and if you have not already returned your plebiscite form send it in as soon as possible.

A circular from the Ministry of Health to voluntary hospitals discusses the superannuation scheme of the National Health Service. It states that in some cases governing bodies have found difficulty in dealing with the statement of pension expectations for individual staff because there is no clear evidence of past practice or intention prior to March 19, 1946. It points out that the Minister does not wish any officer to lose superannuation benefits which he would have had in his present employment simply because the intention of the governing body had not been expressed before the date the significance of which they could not have been aware of beforehand. Where the purchase of annuities is impossible, the Minister would not rule out a declaration of intention subsequent to that date, provided the board affirm that the intention existed in respect of the named person prior to that date and had not been influenced by the forthcoming transfer of the hospital. It points out that if forms S.D.2g and 2f have already been returned the governing body may still submit a further statement in respect of any officer if they wish to do so after considering the circular.

THE CONSULTANTS' VOTE

"SEVENTY TO ONE" REJECTION AT MASS MEETING IN LONDON

A crowded meeting of the consultants and specialists of London and the Home Counties was held in the Great Hall of B.M.A. House on Tuesday evening, Jan. 27. It was presided over by Mr. A. M. A. Moore, chairman of the Consultants and Specialists Committee of the Association, who was supported on the platform by Lord Horder, Mr. Dickson Wright, Dr. Geoffrey Marshall, and others. After the speeches, which lasted nearly two hours and a half, the following resolution was carried by 766 votes to 11:

That in the opinion of this meeting consultants and specialists should not take service under the National Health Service Act until it has been modified so that agreement has been reached between the Government and the profession as a whole.

"Towards Totalitarianism"

Lord Horder, who was received with cheers, said that when he was asked to speak at that meeting he had demurred on two grounds, the first that as it was now some years since he ceased to be a visiting physician at his hospital it might reasonably be said that his own future was not at stake, and the second that he had said all he wanted to say on the matter at a meeting in the Marylebone Division and in the Press. His objections had been overruled. As to the first, he was quite willing to let the young leader-writer of *The Times* have his gibe about elderly doctors. *The Times* leader wobbled a good deal. But the wobbling was perhaps determined by some uncertainty as to the issue of this present struggle. On the whole the Press took the side which one would expect, according to the party affiliation of the particular journal. In the widest sense of the word he thought it was a party issue—an issue between collectivism and individualism.

"Here, as I see it" (Lord Horder continued) "is the crux of the present struggle. I believe we have more and more of the thinking public with us. I believe that the public is looking to the medical profession to be the first body of responsible citizens possessing prestige and possessing—let us not blink the fact—public confidence to make a concerted stand against regimentation, to cry 'Halt' to this mad march towards totalitarianism. (Applause.)

"Well, if that is a party business, I am not ashamed of being a party man. I see that the *British Medical Journal* has begun to quote Herbert Spencer. But the most apposite of Herbert Spencer's dicta is one that I myself quoted three years ago when I asked the question, 'Shall we nationalize medicine?' Referring to Lincoln's historic remark that 'the price of liberty is eternal vigilance,' Spencer said: 'But it is far less against foreign aggression against liberty that this vigilance is required than against the insidious growth of domestic interference with liberty.' Someone has said that he would have loved freedom at all times, but in the time in which he now lived he was ready to worship freedom. We have been charged with putting emotion before intelligence. An old pupil of mine—he writes no worse for that, at all events he writes clearly—in the *Spectator* this week goes further and says that the whole issue is religious rather than political. Well, here is emotion to the *n*th degree, and I am sympathetic with it."

The Vital Question of Freedom

After stressing that this was a meeting of consultants and specialists and of research workers, Lord Horder went on: "This question of freedom is vital to us. The consultant's services must be open to any practitioner who advises his patient that such service is desirable, and the service must be available whether in an institution or in the home. The research worker must have full liberty to publish the results of his work uncensored.

"Is it conceivable that these freedoms will be enjoyed under the present Act? To me it is not conceivable. Although I

have said that we must stand by the general practitioner in this issue and resist to the uttermost any attempt at cleavage in the profession, I still say that in our own interests as consultants and specialists we must not be led into this trap."

It had been pointed out that the contract between hospitals and specialists would not be ready by the "appointed day." Here he read a letter which he had received from Sir William Douglas, of the Ministry of Health, to whom he had written saying that a number of his colleagues were rather worried as to their position as members of the honorary staffs of voluntary hospitals. Sir William replied that the general position was that there would be agreed arrangements for both voluntary and other bodies of staff, but that at first, no doubt, the Service would begin with staffing arrangements "much as they are now." Therefore there was plenty of time. Nobody need hustle to sign anything.

"What is the actual position at the moment in Greater London in this matter of payments made to members of the staff of voluntary hospitals? At my suggestion Mr. Eric Steeler took great pains about this business and canvassed 79 voluntary hospitals. He got replies from no fewer than 74, so that the interest in this matter is obviously very much alive. In 49 (66%) no payment is made so far; in 19 payment is made either on a sessional basis or in a lump sum; and in six hospitals the question is under discussion. This result struck me as not being very satisfactory because it shows that until to-day there is no sort of agreed policy in regard to this matter, and it does seem to me that there should be an agreed policy; and why not have that policy as soon as possible, if not, indeed, to-night? (Applause.)

"I say 'an agreed policy' because I personally regard the position as an unfortunate one. But this view I take presupposes that it is desirable that we should as a profession stand united on this issue."

Lord Horder said in conclusion: "If we yield to this terrific concentration of power that the Act as it now stands places in the hands of one man I say without hesitation that we are selling our heritage. The full effects will not be seen in July next: they will be seen months after that, for things will worsen and not get better as time goes on. It was a wise man who said 'Power tends to corrupt, and absolute power tends to corrupt absolutely.' That is what we shall see eventually if we give way now." (Loud applause.)

Consultants Have Lacked a Lead

Mr. Dickson Wright said that he did not think at that meeting they should discuss the general practitioner attitude at all. The general practitioners were well able to take care of themselves.

The Act would enable the Minister, without any further application to Parliament at all, to proceed to a full-time salaried service. He could, if he wished, abolish private practice, and in between such an extreme and the present arrangement he could inflict various injustices upon the profession. He was going to abolish the whole system of hospitals built up over centuries in this country.

"Once we take a salary the medical committees which play a big part in the running of hospitals will disappear. A medical committee is unthinkable when all the members sitting on it are paid a salary by the hospital in which they meet. Several boards of management have intimated to the medical members on their committee that, being in receipt of salary, while they may attend the meeting they must not vote. Presently the position will be reached in which they will come in as the matron or steward comes in and says something and then goes out. That is the menial position to which we should be reduced in a State Service.

"One thing we do not want to happen. We do not want anything that consultants may do to have the effect of weakening the stand taken by the general practitioners. (Applause.) There is nothing that would please the Minister more. Already it has been announced that the Minister has secured substantial agreement with the consultants over this hospital scheme. I should like an emphatic statement to go from this meeting that we are not going to let the general practitioners down. (Loud applause.) If we had all been rallied earlier there would have been no doubt on that issue.

The New Health Bureaucracy

"I have already mentioned that the Medical Committee will cease to function eventually. It will not do so at once. . . . But eventually any control of the hospital by the profession will vanish. In point of fact, by working for our hospitals for nothing—practically the only people who were doing so—we were able to establish a certain control. We had an independent position. In future no non-teaching hospital will be able to elect its own staff. We shall have to wait and see what the Regional Board sends down to us. We shall have no say at all in the choice of the men with whom we have to work. In the teaching hospitals almost the same thing will obtain in time. The Minister has to appoint chairmen of all these committees. Why cannot he leave the committee to elect their own chairmen? The reason is that he wants to have these chairmen paid servants of the Ministry, and then the committee no longer matters. At present we have got a part-State Service running. The chairmen of the Regional Boards are not paid, but they get expenses. Their secretaries and assistant secretaries, architects and assistant architects, treasurers and assistant treasurers, auditors and assistant auditors have been appointed. This is the Service that, the Minister said, would not cost a single servant more than we had at present. This Service is going to bring in a whole lot of people to make a jolly good living out of medicine who have not bothered to go through six years to qualify!"

The Staffs of Non-teaching Voluntary Hospitals

Mr. N. Ross Smith spoke as a member of a staff of a non-teaching voluntary hospital, though in a personal, not a representative, capacity. There had been some doubts as to the relation between staffs of teaching and of non-teaching hospitals, but the staffs of both were alive to the dangers of becoming employees in a total State medical service. They faced the same issue of personal and professional freedom. He hoped that every specialist would give a properly considered answer to the questions in the plebiscite. A year ago, when 46% of specialists voted "Yes," many of them had not studied the situation. Now, having read the report of the Negotiating Committee and the reply of the Minister, they could hardly answer otherwise than "No."

The specialist was, in his view, in an even more dangerous position than the general practitioner, for if the general practitioner gained his four points—retention of goodwill, freedom from direction, payment only by capitation fee, and appeal to the courts against dismissal—he would be a relatively free man even though operating the Service; but the specialist, who was at present a free man, limited only by the traditions of his profession, was certain to become an employee in a State-owned hospital; for a hospital appointment was vital to him. If he had no alternative to State practice he certainly had no freedom.

The nationalization of medicine was but one further step towards universal State administration and employment which had proved so disastrous to human freedom and happiness in other countries.

The Third Question in the Plebiscite

The third question in the plebiscite (Mr. Ross Smith continued), the question of undertaking not to enter the Service if the requisite majority were secured and if so advised by the B.M.A., must exercise the minds of all specialists. There would be a tremendous "No" to the first two questions, but unless the third question were answered according to the same logic, and they stood by their undertaking, the earlier answers would be of no value.

It had been said that specialists need not worry about this at present because they would not have to make their personal decision until some months later than July, and by the time they had to decide finally the fight would be over, having been won, it was hoped, by general practitioners. Moreover, it suggested rather a low level of courage for specialists to leave the fight to them. Specialists in that event would be in the extraordinary position not only of standing by while general practitioners carried on the fight, but of aiding the Minister to continue with a large and essential part of the Service. The specialist himself in hospital would continue to work in an honorary capacity or

perhaps with some interim payment, not knowing what his final terms and conditions were to be; and meanwhile the hospitals would be open without charge to persons of all grades of income, so that there would be more concentration of public patients and less private practice—the private practice to which the specialist would have to look for most if not all of his income.

If, on the other hand, the specialists decided to fight at the same time as the general practitioners, and in the same way by refusal to participate in the Service, it would mean cessation of service under the Act unless the Act was amended. That would be drastic action, but what would be the moral difference between that action and the action of general practitioners, or between cessation of service on July 5 and withdrawal at a later date?

The Chairman at this point said that the Council of the Association and the Representative Body had given this matter the fullest possible consideration. When they acted they would act, he hoped, as a united profession. If the consultants were determined not to sign contracts if presented to them, there was no possibility of the hospitals continuing to function without their assistance. They would go on working in the hospitals until the day came when the agreement was reached with the whole profession and they were ready to sign contracts which they considered suitable.

"The Best Medical Profession in the World"

Sir Reginald Watson-Jones said that in his most recent pronouncement the Minister had reminded them that since 1942 the ideal of a comprehensive health service had been actively pursued, and asked why the people should wait longer. On the face of it a reasonable question. But before it was answered, let it be said that the people who were waiting for it had already in this country the best medical profession in the world.

"It is with that background that we must consider these new proposals. It is with that background that we must refrain from being unduly hasty in seeking further improvement, which improvement, of course, it is the aim of everyone to achieve. The few years since 1942 are but an hour in the history of this profession. Let us then consider the position calmly, with none of that inflammation of the mind against which the Minister warned us in South Wales a few days ago—unfortunately going on to make a most inflammatory speech himself. In the consultant service we see a definite concession—secured, I have no doubt, as a result of much diplomacy—but, when examined, a limited concession. We still find that astonishing anomaly the "amenity bed"—the bed which has no medical justification but is only to ensure privacy and comfort. It is the kind of bed I saw in Russia, occupied by commissars and members of their families. I have great difficulty in understanding where this fits in. As for the private bed, this will depend on local availability when circumstances make it possible. Are these 'circumstances' intended to make for the free encouragement of private practice in which you and I believe?

"Why is it that the vast majority of our profession are in favour of the encouragement of private practice and against basic salary? It is said, by the way, that on a former occasion we voted for basic salary. Of course we did, but there is a vast difference between basic salary in under-populated areas, used as a means of direction in the Service, and a universal basic salary as a step towards the introduction of a full salaried service. But why this almost unanimous opinion in favour of private practice and against basic salary—an opinion expressed in resolutions from the London, St. George's, St. Bartholomew's, and other hospitals? If our object had been to amass wealth we should have taken up a profession other than medicine. It is because we want freedom, and freedom not merely from lay intervention but from the dictatorship of medical councils and committees. How would such pioneers as Florence Nightingale in nursing, Lister in surgery, Simpson in anaesthetics, Robert Jones in orthopaedics have fared had they been subject to decisions and contra-decisions, to promotion and demotion, to exclusion and inclusion, to advancement and retirement by medical committees and councils? We want freedom from medical control, and that freedom demands private practice. I saw the abolition of such freedom in Russia, and it has meant the end of medical progress in that country."

Questions

A brief interval was allowed for questions, which were answered by Dr. D. P. Stevenson, who acted as secretary of the Consultants Subcommittee of the Negotiating Committee. In reply to the first question, which concerned domiciliary visiting, Dr. Stevenson said that the Act was ambiguous on this point. It was discussed between the Negotiating Committee and the officers of the Ministry, and the former indicated its view that consultants and specialists should be able to opt for domiciliary attendance if they so desired; but it would not necessarily be incumbent upon them. In his reply the Minister said he considered:

"... that specialists should, as widely as practicable (though not universally), be expected to accept as part of their duties the undertaking of domiciliary work within defined limits."

This brought up the question whether or not any remuneration attached to the extension of hospital duties to include domiciliary attendance. If the total remuneration was held to include domiciliary work it brought up the possibility that the "popular" consultants—as assessed by the public—would be rushed off their feet, while those less popular would be able to devote more time to hospital duties for the same remuneration. That possibility was behind the Negotiating Committee's recommendation that domiciliary work should be paid for on an item-of-service basis additional to hospital remuneration. The travel over the region which would be entailed by domiciliary work should also be borne in mind.

In reply to a further question concerning whole-time registrars and ex-Service practitioners holding postgraduate appointments, Dr. Stevenson said that hospital residents were advised to continue under their present contract, and draw remuneration from whatever contract they entered into, but not to enter into any field of conflict in which the general body of the profession was involved—that is to say, not to enter into contract with the Local Executive Council as general practitioners or with the Regional Hospital Board as consultants and specialists.

Asked to make a statement on the question of payment to voluntary hospital staffs, Dr. Stevenson said that the official policy of the B.M.A. and the British Hospitals Association, partly influenced by the number of qualified men coming out of the Forces and having heavy commitments, was that hospital authorities be recommended to pay honoraria to members of honorary hospital staffs, and four guineas for a two-hour session had been suggested. It had been made clear that this would be without prejudice to the recommendations of the Spens Committee.

A final question concerned the right of appeal to the courts and the fact that the profession objected to the absence of right of appeal under the new Act but acquiesced in the absence of right of appeal from the decisions of the G.M.C. Dr. Stevenson pointed out that erasure by the G.M.C. concerned practitioners who had been convicted in the courts or had been found guilty of infamous conduct in a professional respect, whereas under the Act a doctor might be dismissed from the Service for some misdoing of which the General Medical Council would take no cognizance.

An Interrupted Speech

Dr. H. B. Morgan, M.P., said he wanted to see a united profession fighting a good case together and going straight to a democratic goal. Lord Horder had said that power corrupted, but, after all, power in Government in a civilized community rested upon the democratic will as expressed through the legislative assembly. They were entitled to disagree with the Act; he himself disagreed with certain parts of it—he fought more than any other member for right of appeal to the courts—but when he attended the debate in the House of Lords he did not hear Lord Horder, although he listened carefully, make any reference to that subject. But if the profession looked at this matter from a wholly sectional point of view they set a bad example to the workers of the country. ("No.") Very well, if there was trouble later on in the mines or on the railways owing to the bad example they had set, there it was. He was told that this was nationalization. The Post Office had been nationalized for years, and it was the best postal service in the world. ("Oh.").

As Dr. Morgan proceeded he was interrupted by dissenting cries from the audience, and the Chairman asked that he be allowed to conclude his speech. The Chairman also said, in reply to a question, that Dr. Morgan was a member of the staff of the Manor House Hospital, which, he understood, had been exempted by the Minister.

Dr. Morgan said that so far as his information went that statement was entirely untrue, but like the Jewish, the Masonic, and other hospitals, Manor House had asked for exemption. Dr. Morgan went on to point out that a number of services, such as the public health service and the Colonial Medical Service, were full time and functioned satisfactorily. At this point Dr. Morgan was greeted with more cries of dissent, and said that the audience evidently did not wish to hear him further. He would have other opportunities to say what he wanted to say about the Act.

Mr. Hermon Taylor rose from the body of the hall to protest against the "rowdy tactics" of a part of the audience. A collection of intelligent people, he said, should allow the other side to be heard. He asked that Dr. Morgan be allowed to continue.

The Chairman said that Dr. Morgan had had the average time allotted to a speaker from the floor.

State Monopoly and Inefficiency

Dr. Geoffrey Marshall said there were some good things in this Act, taken largely from schemes put forward by the B.M.A. It was sometimes forgotten that there had been a pretty good service up to now. The weaknesses were in the ancillary services, the getting of accommodation for patients, the shortage of nursing, of rehabilitation facilities, and so on. Was it necessary to put the doctor in chains because of these weaknesses? There were good things in this Act, but why was it necessary to expropriate the hospitals? Why should practices be taken over by the State? Why these penal clauses? Why the refusal of right of appeal to the courts? There could be no doubt whatever that all this was done in order that in a few years there might be a complete State monopoly of medicine. Was that going to make for better treatment of patients? Most of those whom he was addressing had seen service under discipline in the war. As one who was in the Services in the first war, and in a more detached position in the second, he had seen the strength and the weakness of the Service, and he was sure that unless the Service was recruited, as it was in wartime, by people from outside who had at heart not merely administrative efficiency but concern for patients in accordance with their free professional experience, it tended to deteriorate.

Dr. Geoffrey Marshall closed by proposing the resolution set out at the beginning of this report.

Dr. A. Cavendish said that one of the essential safeguards of the profession and public was that the whole basis of the specialist contract should be on a part-time basis. It should be at the option of the specialist himself whether he held a part-time or whole-time contract, and if he elected the former it should be open for him to undertake private practice if he so desired; and it was the Minister's responsibility to see that facilities for private practice were reasonably accorded.

A Position of Dependence

The closing speech was by Mr. Lawrence Abel, who declared that the Act held a far greater menace to the consultant than to the general practitioner.

"We shall become salaried officials of the Regional Boards. As State servants we lose our professional freedom and our financial security, and once we are all in the bag we shall lose the power to negotiate our terms of service. We shall be dependent on the Ministry of Health for permission to use their hospitals and for accommodation for any private patients they may allow us to have. We shall be dependent on the Minister for regulations with regard to our nurses, whether in hospital or in private nursing-homes. There will be a State monopoly of every hospital bed. We are told that there will be a small proportion of private beds, but we have only one man's word as to how many private beds there will be.

"To-day the higher positions are attained by work and service, but in future they will go to the planners and the supervisors, which means that our great profession will suffer the loss of its thinkers and craftsmen."

"What we wanted in our hospitals was State assistance, not State ownership. The B.M.A. and many hospitals had given the lead that this Act conflicted with principle. The issue was neither cash nor compensation. So far as cash was concerned they had already agreed, and the Government had agreed, to accept the findings of the Spens consultants committee when these were known.

"It is now or never. Throw off your inertia. Have you not seen spreading through the ranks of the profession in this country a new loyalty? We are forgetting our differences and abandoning our fears. Our duty is not only to ourselves but to the public. The English-speaking world is looking to us; the Continent too. Therefore, I say, stand firm! Three hundred years ago Descartes said that if ever the human race was raised to its highest practical level, intellectually, morally, and physically, the science of medicine would perform that service. That service is in your hands. See that you act worthily of your traditions." (Applause.)

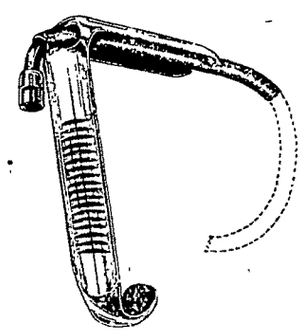
The show of hands was then taken, and, as already stated, resulted in an overwhelming vote in favour of the resolution that consultants and specialists should not take service under the Act until it had been modified so that agreement was reached between the Government and the profession as a whole.

Preparations and Appliances

A MODIFICATION OF THE BOYLE-DAVIS GAG FOR ORAL INTUBATION

Mr. J. S. C. MONRO, aural surgeon, Darlington Memorial Hospital, writes:

While there can be little doubt that endotracheal intubation is advisable in the dissection of tonsils, the customary nasal route does present certain disadvantages in children, four of which are as follows: (1) Owing to the presence of adenoids considerable bleeding may occur in passing the nasal tube. (2) To curette the adenoids it is necessary to remove the nasal tube, thus discontinuing the anaesthetic, and, though the tonsillar fossae may be dry, there is still the danger of inhaling the blood from the nasopharynx. With oral intubation, on the other hand, the adenoids may be removed at an early stage, and complete haemostasis can be ensured, before restoration of the cough reflex is accelerated, by the use of carbon dioxide and oxygen given through the tube. A rubber catheter passed along the nose and attached to a suction pump is in this method very useful to remove the blood from the nasopharynx. (3) Owing to septal spurs it may be impossible to pass a nasal tube of adequate bore. The oral route ensures that a tube of optimum size is used. (4) There is a more certain ease in oral intubation, though I am aware many anaesthetists will disagree with this.



With these facts in mind I have devised a modified tongue-plate which will maintain an oral tube in place between the plate and the tongue. It is concave in section, and the connexion end of the endotracheal tube is passed through a central aperture in the angle of the plate, as in the diagram (the tube being first introduced, of course, through a laryngoscope). The flexible connexion between the endotracheal tube and the anaesthetic apparatus is fitted with a small hook which clips on to the gag, and is so kept out of the way.

The modified tongue-plate in its experimental form was made by a local engineering firm from stainless steel, and has been found very satisfactory for use in a standard gag. I will be very pleased to give further details to anyone interested.

I have received much helpful co-operation from my anaesthetist colleagues, Dr. R. K. Robertson and Dr. S. H. Love.

Reports of Societies

MYASTHENIA GRAVIS

At a meeting of the Liverpool Medical Institution on Jan. 8, with the president, Dr. H. WALLACE-JONES, in the chair, a symposium on myasthenia gravis was presented.

Dr. H. S. PEMBERTON said he felt that, while present information about the thymus was scanty and obscure, more light was being thrown on the pathogenesis of myasthenia gravis. He discussed at some length the phenomenon of transmission at the neuromuscular junction as altered by the disease, reviewed the recent work, and stated his grounds for believing that the altered transmission was due to a changed cholinesterase-acetylcholine balance, which in turn led to the production of a curare-like block. This defect was temporarily removed by prostigmin, eserine, and ephedrine, and for a much longer period —if not permanently—by thymectomy, whether the thymus was histologically normal or abnormal. He further assumed that directly or indirectly thymic activity was related to this block phenomenon, although most of the mechanism remained at present concealed.

Mr. HUGH REID said the first thymectomy was performed by Sauerbruch. Blalock had reported 20 operations in 1942, and more recently Keynes described a series of 100 cases. The results proved satisfactory in many cases. Mr. Reid then showed a colour film illustrating the steps of the operation.

Dr. R. D. HOTSTON reviewed the medical treatment of myasthenia gravis over the last twenty-five years. Prostigmin, though merely palliative, was a useful therapeutic measure. He discussed the literature relating to D.F.P. and concluded that this drug would not play an important part in the treatment of the condition. He described 7 cases of myasthenia gravis; 5 had been subjected to operative removal of the thymus gland. One patient with a very large malignant thymoma had died on the second post-operative day; 4 patients who had survived the operation for a period of from one to two-and-a-half years were shown. Three were undoubted successes, and one, who had been free from symptoms and off all treatment for two years, had recently relapsed. After thymectomy it might be possible to withdraw prostigmin immediately, as in one very severe case operated upon two and a half years ago, or it might have to be withdrawn gradually as in the other two successful cases. Post-operatively, the value of a steam-tent and daily examination of the chest by a physician was stressed.

Dr. WINSTON EVANS said that histological examination of thymus glands removed from five cases of myasthenia gravis showed a slowing down of the age involution process and an irregular infiltration of the medulla by lymphocytes. Hassall's corpuscles were present in each gland. A characteristic feature found in the medullary portion of all these glands was the presence of actively dividing reticulum cells. These were arranged in a focal and circumscribed manner resembling the Flemming centres seen in reactive follicular hyperplasia of lymph glands and of intestinal lymphoid tissue. Their pale centres showed many mitotic figures. These follicle-like structures were not found in specimens of thymus gland taken from patients without evidence of myasthenia gravis. American workers had reported the finding of lymph follicles in the thymus gland in myasthenia gravis and also in Addison's disease, acromegaly, and hyperthyroidism.

Mr. R. MARCUS spoke on thymomas associated with myasthenia gravis. The classification of thymomas was still a matter of controversy. Andrus and Foot's classification was discussed and the speaker suggested excluding granulomatous and teratoid types from this classification. The incidence of thymomas in myasthenia gravis, as Keynes had pointed out, was approximately one in ten. The surgical approaches, split sternal, transcostal, postero-lateral, antero-lateral, and combined postero-lateral and antero-lateral were discussed with their advantages and disadvantages. Benefit resulted in 9 cases out of 31 in which thymomas were removed surgically from cases of myasthenia gravis.

The diagnosis of thymoma was difficult. The clinical symptoms were few at first and not pathognomonic. It was only when lymph node involvement and symptoms of intrathoracic pressure developed that the presence of a neoplasm was suspected.

Surgical removal of encapsulated tumours was the only sure method of cure. Radiotherapy caused temporary regression or disappearance of thymomas in a large proportion of cases. Four cases were reported and the effects of high-voltage therapy in 3 were shown. In 2 there was complete disappearance of the tumour and relief of symptoms eighteen and fifteen months after exposure to 4,500 r through four portals of entry over a period of twenty-eight days. In the third case recurrence occurred three months after exposure to 3,750 r. The diagnosis was confirmed by biopsy in two of the cases. The fourth case responded poorly to prostigmin and a malignant thymoma was removed through a split sternal approach. The patient died twenty-four hours after the operation.

General Discussion

In the discussion which followed, Prof. HENRY COHEN doubted if thymectomy was the answer to the therapeutic problem presented by myasthenia gravis. The effects of the operation were often beneficial and could not be explained on the basis of the natural remissions which were a feature of the condition, but the crucial question remained unanswered, Why did many patients fail to improve after operation, though in all observed respects they were apparently similar to those who benefited? Where tumours of endocrine glands caused metabolic disturbances—for example, the hypercalcaemia of a parathyroid adenoma or the hypoglycaemia of a pancreatic islet adenoma—removal of the tumour was followed by an immediate restoration to normal; indeed, in many cases there was a temporary swing in the opposite direction, so that transient tetany from hypocalcaemia was often found after the removal of a parathyroid tumour, and hyperglycaemia often followed the excision of an islet adenoma. Improvement in myasthenia gravis after thymectomy was, on the contrary, practically always slow and commonly incomplete.

Prof. Cohen then discussed possible explanations of myasthenia gravis and of the effects of pregnancy and thyrotoxicosis, and concluded on both clinical and physiological grounds that there were different types. Hyperthymism (using that term to indicate the elaboration of an excessive amount of thymic secretion, normal or abnormal) might have myasthenia gravis as one of its manifestations, but myasthenia gravis did not always imply hyperthymism. From the diagnostic standpoint it should be remembered that myasthenia gravis might remain localized in a restricted site for many years, commonly in the ocular or palatal muscles, but occasionally in the muscles of the trunk or limbs, and in the latter group it was commonly overlooked. A relapsing myasthenia gravis might mimic disseminated sclerosis; remissions not infrequently lasted several years, and he had known one case in which the remission persisted for over twenty years. There was still need for research into the fundamental problem of muscle fatigue in relation to myasthenia gravis.

Dr. T. CECIL GRAY said there were no special points in respect of anaesthesia of these patients. They were all anaesthetized with pentothal and cyclopropane. It was hardly necessary to state that curare was not used, but he emphasized the importance of light anaesthesia. These patients did not require a deep plane of anaesthesia and should be conscious before leaving the operating table; by this means any danger of a sudden myasthenic crisis while the patient was still unconscious was avoided. Very little anaesthetic was required in these cases.

Mr. RONALD EDWARDS showed a case of gross hyperplasia of the thymus in a woman of 50 which was confirmed by operation. There was no evidence of myasthenia gravis either before or after operation.

Dr. R. C. NAIRN said the "specific" histological appearances of the thymus described by Dr. Winston Evans and others in myasthenia gravis and certain other conditions, such as Addison's disease and thyrotoxicosis, should not be regarded as anything other than non-specific lymphatic hyperplasia in the gland. It might be associated with a similar hyperplasia elsewhere in the body, and might arise in a wide variety of conditions. It was not diagnostic of any disease and merely suggested some altered state of the body.

Correspondence

National Health Service

SIR,—In the leading article (Jan. 24, p. 153) you seem to express a doubt whether the doctor who elects to stay out of Mr. Bevan's Service will maintain the present right to sell his practice. That question was, I submit, authoritatively decided by the Lord Chancellor, speaking on behalf of the Government in the debate on the second reading of Mr. Bevan's Bill in the Lords (Oct. 8, 1946), when he used these words : "May I say here that it is to be understood that no doctor is to be compelled either by direct or indirect pressure to enter this scheme. He may carry on his private practice exactly where he likes; he may sell his practice as and when he likes, and he is in no way to be interfered with." Incidentally, this dictum makes pure poppycock of Mr. Bevan's absurd indictment that the doctor who rejects his scheme is opposing the will of Parliament and of the nation.

In support of your perfectly correct statement that the National Health Service is not an insurance scheme, and so-called "free" medical attention is not a "benefit" under the National Insurance Act, may I cite an answer given to me in the House (*Hansard*, Jan. 20) by the Minister of National Insurance, who declared that the contribution to the Health Service from the national insurance fund was limited to £700,000 a week, representing one-tenth of the total amount contributed by the compulsory levy imposed by the Insurance Act. The full cost to each insured person of the so-called "free" medical service seems impossible to ascertain, but the contribution from the national insurance compulsory levy clearly covers a relatively small proportion of the expenditure involved in implementing the Bevan Act.

Mr. Bevan makes much of the doctor's right to go to the courts to test the legality of the Minister's action in dismissing a doctor from the National Service. He suppresses the important consideration that all the costs of an action in the courts incurred by the Minister would be paid by the Exchequer, while the doctor might face ruin by bringing an action. In a remarkable reply given by the Attorney-General (*Hansard*, Aug. 1, 1946, column 268) it was laid down that a Government Department is empowered to "indemnify public officials who may be sued in respect of torts committed by them in the course of their official duty." The most remarkable illustration of the privilege thus enjoyed by public officials was furnished by the Odlum *v.* Stratton case, in which an official of the Ministry of Agriculture, convicted in a High Court action of a gross libel on a farmer, was indemnified for all his costs (totalling well over £6,500), including substantial damages awarded to the plaintiff.—I am, etc.,

House of Commons, S.W.1. E. GRAHAM-LITTLE.

The Plebiscite

SIR,—While the plebiscite form which we are all about to complete is a confidential document, many doctors who are intending to vote against accepting service are anxious to know how many of their neighbours are acting likewise. It is felt that this knowledge will establish mutual confidence and give moral support to each individual in fulfilling the obligations he has undertaken by signing the plebiscite form, if called upon to do so. Opposition to the Act will naturally involve some financial risk and uncertainty; therefore mutual confidence is essential to our success.

In view of these considerations a meeting of thirty neighbouring doctors who were almost unanimous in their opposition to the present Act have agreed all to sign a mutual declaration as follows:

"We, the undersigned, hereby declare that we have voted in the B.M.A. plebiscite of February, 1948, against accepting service under the National Health Service Act, 1946, in its present form, and we have agreed to abide by the decision of the majority, and we have undertaken not to enter the Service if the same plebiscite reveals a majority as defined in para. 4 of the plebiscite form, and if so advised by the British Medical Association."

This declaration is not intended to be a legal document or an agreement of any sort. It is a declaration of each signatory before the other signatories, professional colleagues in one neighbourhood, that he has signed an agreement and an undertaking with the British Medical Association. The wording of the declaration does not bind the signatories to anything more than that which they will already have agreed and undertaken by voting in the plebiscite against accepting service. Indeed, the actual wording of the plebiscite form is used, but in an altered tense.

I forward this to you, Sir, in the hope that doctors in other areas may consider taking similar action, because our opposition to the Act will be made in the face of adverse Government propaganda, and possibly even adverse public opinion. Therefore any method of establishing mutual confidence and solidarity in adhering to our intentions is of value. I feel that this may well be achieved if the whole country is covered by a series of such local declarations as this.—I am, etc.,

Banbury, Oxon. N. J. P. HEWLINGS.

The Issue is Freedom

SIR,—Acceptance of service under the present Act will result in a State medical service. A State medical service is the only possibility under a totalitarian regime; in a free country it is an anachronism, unless as a prelude to a totalitarian State.

Doctors now have an opportunity of deciding what at first seems to be their own mode of life, but in reality will eventually —one by one—decide the mode of life of all sections of the community. The lay Press seems to imply that this is a private quarrel between the B.M.A. and Bevan : far from being so, it is a question of freedom, as shown so ably in Dr. Doris Odlum's letter (Jan. 24, p. 166). *The Times* thinks "it is high time that the Government and public opinion intervened to prevent a conflict which would be as exasperating as it would be futile." Personally I think it futile to suggest that the Government should intervene (dog does not eat dog); but as regards public opinion, it may have a sobering effect to reflect for a moment what would be the reactions of lawyers, architects, engineers, chemists, scientists, stockbrokers, insurance agents, industrialists, and business men if the Act applied to them and not to us. Let every doctor, before filling up the plebiscite form, look to the East and ponder over the implication of a State medical service; let him also look to the West and freedom and an alternative mode of life.—I am, etc.,

London, W.1. STANFORD CADE.

Mr. Bevan's Challenge and the Plebiscite

SIR,—Our immediate problem is the plebiscite. Although we are convinced that we shall get the requisite majority against the new Service, that is not enough; we would like to get as near 100% as possible. Unfortunately there are still a number of doctors who will sign "yes" because they are afraid of losing their compensation if they fail to enter the Service on July 5. It is apparent that recent statements made by the B.M.A. have not sufficed to allay their fears. On the other hand, Mr. Bevan's statement in Wales has added to their fears. He has stated that on July 5 the old medical service will be repealed and the new Service will begin even with a minority of doctors. This is a challenge that we must accept. Mr. Bevan has taken the gloves off and declared war on the medical profession. We must retaliate, and retaliate quickly before the plebiscite. There are many doctors who are not prepared to wait until July 5 in order to see if the profession means to carry out what it says in the plebiscite returns. In my opinion, the fight must be carried into the enemy's camp before the appointed day. The B.M.A. should state categorically now that in the event of a majority decision in the plebiscite they will advise all doctors to refuse certificates of every description from April 1 onwards. There need be no compunction about breaking our contract with the Government; they have become used to this sort of thing in the various strikes of their own Trade Union members. All work other than certification will continue as usual.

Unless something like this is announced immediately I am afraid the plebiscite returns will be seriously affected. The doctors are waiting for some real evidence of strength from the B.M.A.—I am, etc.,

Newcastle-upon-Tyne. H. H. GOODMAN.

Fight

SIR,—It is evident that, whatever the results of the much criticized questionary of 1944, an overwhelming majority of the profession have now, after time for reflection, recognized that it stands in grave danger of losing its liberty of thought and action under the Act as at present constituted. To achieve amendment of the Act we must fight. Let us have the courage to stand fast by our convictions and trust our leaders, and we shall win this battle for freedom.—I am, etc.,

Billingshurst, Sussex. C. W. HOPE GILL.

No Certification

SIR,—I understand that if the plebiscite results in a refusal of the profession to enter the new Service it is proposed that general practitioners will continue to treat their patients, giving them receipts for fees paid and issuing certificates supplied by the B.M.A. on the lines of the present certificates used by doctors for patients who are not on their panel. If this is the course to be followed then the profession is certain to lose the fight. So long as the Government can get its certificates it can pay sickness benefit on them, and patients will be able immediately to recover the fees paid by presenting the receipts at Post Offices, or special offices set up for the purpose. The only chance of winning will be to refuse to give any certificates at all on which sickness benefit could be paid. It will even be necessary to refuse to sign such certificates if the Government decides to make unfitness for work notifiable.

I feel that if there were no *fear* that it is the intention of the Government to bring in a whole-time salaried State medical service a majority of doctors would vote for the Service which the Minister offers. In fact, we are branding him as a liar before we have proved him to be one. In my opinion we should accept the proposed Service, with regulations based on the present N.H.I. Act. The Council of the B.M.A. should inform the Minister that if there are any alterations (no matter how trivial) to our terms of service, including the regulations, which are not agreed to by the B.M.A., the B.M.A. will treat them as a breach of contract and will instruct doctors to cease to issue any sickness certificates until the proposed alterations have been withdrawn. In these circumstances there need be no question of the conditions of service being altered later to our detriment.—I am, etc.,

Birmingham, 15. C. H. HEATON.

Payment by Patients

SIR,—It is admitted by all parties concerned that in the event of a majority of doctors refusing to enter N.H.S. until their grievances have been settled their patients will not suffer in the meantime but will be attended as faithfully as before. And there the matter rests. Everybody is quite satisfied on this very important point, and beyond touching on the question of payment for professional attendances by mutual agreement between patient and doctor there is the end of the difficulty. To my knowledge we have never discussed this question in my divisional meetings, nor have I seen the matter under discussion in any of the correspondence in the *Journal*.

Personally, I can see no end of disputes arising out of this contretemps, and I should like to see the subject discussed very thoroughly without delay. *The Times* is very anxious that we should curb our "emotions," and in this event we should notice carefully that Mr. Bevan is not above borrowing from it in his earnest appeal for common sense. But surely here we have reality, affecting as it does our bread-and-butter, entirely outside the passions. Let us take one single case in point.

Dr. X is called to a case. He gives the patient to understand that he is not working for the Government. He completes the attendance, long or short as may be, and renders an account. The patient disputes the liability, since he is a contributor to the N.H.S. Already the Minister has made up his mind on this point, if I judge him aright, and Dr. X may whistle for his fees, *usque ad finitum*. Admittedly the patient could have called Dr. Z, who is a N.H.S. servant, and in all probability would have done so, but for the fact that the doctors' list was already strangling him. The shortage of such State servants was very acute, indeed. To my way of thinking there can be only one answer—"cash on the nail." In everyday life there are legions of cash transactions accepted willy nilly, and no need to call in the emotions. Well, do we squirm, or do we?

And, finally, I should like to see in every division a bond, and I mean a bond, bearing the names of men of principle. That's all.—I am, etc.,

Monkseaton, Northumberland. J. A. LEIPER.

The Principles and the Act

SIR,—At no stage in your presentation of the official B.M.A. case for opposing the Act do you show the slightest awareness of change in the structure of our society. Social security has been accepted in principle by all our political parties and will, it is certain, become permanent. The corollary is just as sure. The individual man and woman must part with some fraction of his personal freedom to achieve this new security. Can the doctors alone claim to be exempt from this obligation? According to you, Yes.

You argue, in effect, that the commercialism of private practice and a hospital system based upon private charity are necessary to maintain the freedom of the profession. Your arguments are exactly those used by your predecessor of the 1911-12 period, when the capitation fee was the bugbear. The only difference to-day is that you urge the Minister to drop the basic salary and to maintain the capitation fee. I suppose that 95% of the profession now accept N.H.I. as a sound conception. Your advice was proved wrong, Sir, in 1912, and I maintain that it is equally wrong to-day.

There are three features of the new Act to which special exception is taken: the abolition of the sale of practices, the basic salary, and the absence of the right of appeal to the courts.

The Sale of Practices.—Why, Sir, do you persistently ignore the fact that in the 1944 plebiscite the profession voted for the abolition of the sale of practices? This archaic procedure is found in few countries to-day. It certainly rests on no "principle" which the profession need defend.

The Basic Salary.—Again, the 1944 plebiscite: a majority favoured some salaried element. Pathologists, physiologists, M.Os.H., and many others in our profession (to say nothing of all other professions) receive a salary without the quality of their work being affected. A salaried worker is no slave to his employer. But the salary is necessary for quite other reasons. The young doctor entering the Service must have some assurance of livelihood. The elderly doctor with a small list will need this help too. You argue that the acceptance of a small salary *now* will tie the profession to a whole-time salaried service later. This is a *non sequitur*. If the Minister gave way under pressure and abolished the salary element he would still have the power under the Act to introduce it later or to vary its amount. Some of your correspondents object that the remuneration is subject to review. If it were fixed by the Act there would be no possibility of increasing it to meet a change in the cost of living. The fact is that the vast majority of G.P.s will be far better off without having sacrificed one jot of their personal freedom.

Appeal to the Courts.—What exactly *are* the rights of a doctor against whom a complaint is lodged? (1) His case will be heard by the Medical Services Subcommittee, consisting of doctors and laymen. (2) He can appeal to the Tribunal, whose judicial character no one has questioned. (3) He can appeal to the Minister, and his case will be examined afresh by the Minister's Advisory Committee. (4) He can sue the Minister for wrongful dismissal under the recent Crown Disputes Act. (5) He can appeal to the ordinary courts of law against an adverse decision by any of the above bodies on a point of law—e.g., if the Tribunal refused to admit some evidence which should in law have been admitted.

The above rights guarantee justice to the doctor against whom a complaint is lodged. In fact the medical profession will have better protection than any class of the community.

These three features of the Act to which you mainly object in no way compromise any principles of the profession. I am not alone in this belief. The *Lancet*, *The Times*, the *Manchester Guardian*, the Medical Practitioners' Union agree. The whole living structure of the new Health Service has yet to be created. We doctors have a large representation on all the bodies which will give life to the bare bones of the Act. Let us enter the Service willingly and do our part in making this Service the finest that can be achieved.—I am, etc.,

Bristol. BRUCE CARDEW.

*** The medical man dismissed from the Service would not be able to appeal against dismissal but only against illegal procedure.—ED., *B.M.J.*

Needs and Wants

SIR,—The concern of the world to-day is what people need, not what they want. Not a few of your correspondents leave the impression that with them the concern is reversed. The medical profession has proclaimed that a reorganization of the health services of the nation is a necessity. It has fallen to the lot of the present Government to see that this reorganization is implemented. It does seem rather much to expect the responsible Minister of the Crown to adopt a positive or confident attitude towards the profession, whose members from the outset have been enveloping him in political and personal innuendoes, if not actual abuse.

The Minister by his negative attitude may not have gained strength, but he has gained dignity. The correspondence in your columns suggests that the profession may have gained neither.—I am, etc.,

New Buckenham, Norfolk. R. G. BLAIR.

Intimidation

SIR,—The profession should be thankful for the present Minister of Health. Being the trusting and unbusinesslike folk that we are a less crude dictator might well have lulled us into a belief that "all would be well on the night." With the warning of his treatment of the Spens Report, of the unsavoury *Tribune* incident, and now his attempt to impugn the honesty of the plebiscite, we have warning of what we are up against. The only attempt at intimidation we are likely to get is from the Minister.—I am, etc.,

Newton Ferrers, Devon. W. F. BENSTED-SMITH.

The Younger Generation

SIR,—I was delighted to read the letter from Mr. Gerald C. Watmough (Jan. 24, p. 167), and, as one in an almost identical position, I should like to put my case—and that of thousands of others—as briefly as possible. In 1939 I forsook my studies to take up the sword. In 1946 I handed in my sword and indented for a stethoscope "in lieu." In 1950 I hope to qualify (and I shall, as Mr. Gerald Watmough mentions, be about 30). Of the host of reasons for my actions over the past few years one was *not* to prepare myself to become a salaried, pseudo-Civil Servant of Mr. Bevan, and if he (Bevan) is under such a misapprehension then he has certainly got another think coming.—I am, etc.,

London, S.W.5. JOHN K. PATERSON.

Plea for Compromise

SIR,—May I make a plea for compromise? Let the differing sections of the profession come closer together and sink their differences, so that we may present a united case to the Minister. Having compromised among ourselves, we can then be firm about the points upon which we agree and with more justice call upon the Minister to compromise with us. Negotiations have reached such a stage that we are faced with another impasse. If this happens the profession will not come well out of it. Let us not be mistaken on this. We are not seen well through the eyes of the Press. If, however, through our leaders we show the statesmanship which I have heard it said the Minister lacks, we shall come well out of the encounter and gain respect for our views.

I feel that I stand midway between the two extremes of my profession or, to put it another way, midway between the views of the Negotiating Committee and those of the Minister. It is an uncomfortable position, because I feel that on balance I must say "Yes" in the plebiscite, and yet have no desire to be a black sheep. I should much prefer to vote with the rest of my profession. My personal position is that I have been qualified four years, I am about to be demobilized from the Army, and I am married with two children. With this in mind, let me now take the main points of the Negotiating Committee said to be fundamental and see if they can be narrowed down.

(1) *Question of Distribution.*—I do not feel we should make this a fundamental issue. There is nothing in the Act which prevents a doctor from coming into the Service. As to the question of negative direction, I feel we are on very poor ground here. It is obvious that one cannot receive money from public funds whether by capitation fee or salary for practising where there is not a public need. It is not just to expect it. If one wishes to practise in a particular locality one can still do so, if the Service doctors give such bad value that there is a need for a doctor outside the Service. As to the cumbrousness of the methods of selection of practitioners to fill vacancies, obviously the scheme would not work if it was as bad as it is made out to be. Ergo, it will not be.

(2) *Ownership of Goodwill.*—On this point, as a member of Council has said, there is much to be said on both sides, but taken in conjunction with direction and the basic salary it is anathema to the profession. Now is it really such a fundamental issue taken by itself? The majority of the profession in 1944 said that ownership was not desirable. Now let us not be divided on this point. Let us be thankful to agree on anything. When one considers that compensation will be paid for practices taken over, I do feel that we could sink our differences and let the Minister have his way.

(3) *Remuneration.*—This point is fundamental to our case. We do not want a basic salary. I am one of the young men whom this is supposed to aid. I have enough confidence in my own ability to support a family without being given a dole—and a dole with strings attached. It would appear that the Minister would wish to pay one-tenth of the piper's wages and yet call all ten tunes in his repertoire. In addition I feel that here we have our strongest case. As a Socialist the Minister believes in the worker determining his wages (or salary, or income, to suit all tastes) by collective bargaining. Well, let us play his game and bargain collectively. We do not want a salary and will not have one. We want piece-work rates If we are firm we will get them.

(4) *Right of Appeal to the Courts.*—This is fundamental to our case. There is a precedent for this in Ulster, and I believe the Minister will give way.

(5) *Midwifery.*—I do feel it is fundamental to our case that every practitioner should have the right to elect to do midwifery within the Service, but I do not feel it is fundamental that every general practitioner should have the right to practise midwifery. I think it is to the advantage of the patient and the profession alike that certain men should be set aside to do it. A man would then have the choice of doing midwifery or not.

(6–9) The Minister has already met the profession on these points.

(10) It is indeed fundamental that local health authorities should be required to co-opt to health committees representative medical practitioners. We should press most strongly for this to be incorporated in the Act.

(11) *Public Health Service.*—I see no fundamental divergence of views between the profession and the Minister here.

(12) *Representation of the Profession on Administrative Bodies.*—I feel that the Minister has gone as far as he constitutionally can to meet us on this, and we should be most ill advised to press this point further. Let us remember that the Minister has come a long way from the avowed intentions of his party to meet us. He has given way on a whole-time salaried service. Admittedly he has kept a handle in the basic salary, but let us not try to eat our cake and have it. Let us be reasonable and show a willingness to compromise. As I have said, I feel sure we stand to lose our case if it comes to an impasse.

Let us stand by our strongest points and give way on our weakest. Let us say to the Minister: "We will give way over direction and the ownership of goodwill, if you will give way over the basic salary, give us our appeal to the courts, and give us statutory representation on the statutory health committees."

I feel sure that I am not alone in the views that I express. I feel that broadly they are the views of the moderate section of the profession. I feel sure also that if the Negotiating Committee do not adopt a more conciliatory tone they will lose the support of this considerable section of the profession, who will thereby be forced, like me, to say "Yes" to the plebiscite even if we agree to stand by the majority opinion.—I am, etc.,

Worthing, Sussex. CHARLES R. PALMER.

Buying and Selling

SIR,—One matter of not inconsiderable importance in relation to the N.H.S. Act appears so far to have escaped attention. I refer to the position of the young doctor in the Service if Mr. Bevan should amend the Act to allow the buying and selling of practices to continue. It is my belief that any man with little or no capital, obliged to pay out 6% of his remuneration from the Service for superannuation, in addition to all the expenses entailed in buying a house and practice on borrowed money, would have insufficient left to live on, having regard to the high rate of income tax and the prices of essential goods prevailing to-day. I estimate that from an average practice earning £2,000

gross per annum purchased for £3,000 and with a house purchased at £2,000 (and there are no mansions at that price these days) a married man with one child would have little more than £400 left after paying practice expenses, loan interest, capital instalments, life assurance premiums, superannuation, and income tax. This calculation assumes that he takes fifteen years to repay his loan, so it would be a long time indeed before he could hope for his position to improve; and he would still have to pay rates and other expenses before food and clothes could be thought of.

This aspect of the matter must compel younger doctors like myself to ask, "Is the right to buy and sell practices really vital to our freedom?" Personally I am far from convinced that it is. What is vital to my mind is that the general practitioner should be given a satisfactory status in relation to the Minister and the Executive Councils, and, of even greater importance, that his status should be free from the risk of violation by Ministerial regulation or order. The status the Minister proposes for us is not a satisfactory one. To achieve such a status the universal basic salary must go, and the Act must be amended to give Parliament alone the authority to alter that status.

No doubt the abolition of the sale of goodwill does create problems, but I believe all could probably be solved if a section of the Act were carefully framed with that object in view. Regulations would be necessary to facilitate succession on the death or retirement of a practitioner, but these would not need to be the same as those by which the Minister now seeks to control the distribution of doctors, which were not designed for this purpose and are not well adapted to it.

It is also well to recognize that this is probably the one matter above all others on which Mr. Bevan would find the greatest difficulty in making any concession. To him the buying and selling of practices is "an intrinsic evil." It is part of a creed sincerely held, and for the present Minister that is sufficient justification for this section of the Act. There is, however, a weakness in preaching dogmatically to unbelievers, and Mr. Bevan evidently recognizes this. Hence the system of propping one section of the Act up by another, to which the Secretary of the B.M.A. has already drawn attention.

One purpose of the basic salary is clearly to provide justification for the regulations by which the Minister proposes to control the distribution of practitioners. A little clear thinking quickly reveals that these regulations of themselves will in practice be quite ineffective in ensuring an adequate service for areas which for some reason prove unattractive. In reality they are there not for this purpose at all, but in their turn to provide a justification for the abolition of the sale of goodwill. So the universal basic salary has to stand stooge for the rest, without any subordinate section to support it, and I think even the Minister himself would have to admit that it does not put up a very good show.

The implication of this argument is that if we agreed to the abolition of the sale of goodwill in return for an undertaking to secure us a satisfactory status under the Act the Minister would no longer find it necessary to justify this point, and logically could concede our demands relating to the basic salary and the control of distribution. I do not say that he would concede these points; only that it would make possible for him what would now appear to be virtually impossible.

Finally it is worth remembering that for most men with family responsibilities freedom from financial stress is just as important as freedom from Government interference, and it may be that many young doctors who dislike many of the implications of the Act as it now stands will nevertheless indicate in the plebiscite their willingness to enter the Service on July 5 rather than risk the economic difficulties which would face them should they have to buy a practice. In my view they would be ill advised to indicate acquiescence at this stage, for once we do that it is clear that we shut ourselves off from the hope of further negotiation on the structure of the Act itself.—I am, etc.,

Manchester. K. HEAP.

Voluntary Hospital Staffs

SIR,—The circular "Some Practical Questions Answered" (Q 12) advises consultants on the staffs of voluntary hospitals to continue with their hospital work after the appointed day. Surely such action would gravely weaken the fight of the general practitioners, many of whose patients will flock to the hospitals when they find they are expected to pay fees to their doctors. Admittedly, the alternative policy of a "strike" of voluntary hospital staffs is unthinkable; but let us undertake to refuse to do more of the G.P.'s work than is essential. We must firmly refuse, for example, to give certificates of any description; then the public will rapidly be made aware of the seriousness of the conflict, while not being deprived of the essential medical care.—I am, etc.,

London, W.1. A. PINEY.

S.M.A. Member Says No

SIR,—I feel that many of our profession have failed to appreciate fully Mr. Bevan's Machiavellian cunning. It is manifest that he hopes to force us into his Health Service; he will not hesitate to use starvation and pecuniary embarrassment as his tools if we wait till the appointed day before taking action.

Bevan, when he worked, was ready to go on strike if his union's demands were not granted. It should be noted that a trade union always demands, it never requests! If we genuinely desire to achieve our objects in connexion with the reform or alteration of the Act, we must take action *now*. If we wait till the appointed day we will have waited too long and will have lost our battle. I am certain that our only hope is to adopt Bevan's own trade union methods and strike now. I would suggest that the B.M.A., as soon as the plebiscite figures are known, should call us out on strike, and that all signing of certificates should be stopped until Bevan realizes that doctors have the same rights as miners and railwaymen. All certificates from death certificates downwards must be firmly refused. Such action would not impair our work as doctors; it would naturally inconvenience the people not a little, but by this the public would realize that we have something to fight for. When a trade union brings its members out it thinks little of public convenience. This is Bevan's method, therefore let him have some of his own treatment.

If we act now we can lose nothing; we will still have our N.H.I. payments and private practice. If we delay till July we shall lose the former and will, I am sure, have difficulty in getting a living from the latter when people are paying for a national service which they will not get. I work in an industrial area and am convinced that this is the only way in which we can succeed. I have so often seen the trade unions succeed in their demands by the tactics I advise that I am confident that we, too, will be successful.

I might add that, though I am a member of the Socialist Medical Association, I am whole-heartedly opposed to the Act in its present form. Many of my fellow members of the S.M.A feel as I do and are opposed to the Act as it stands. They will, I am certain, be prepared to take the action I suggest, even though Bevan relies to some extent on the S.M.A. to help him to push the Act upon us.

The time for talk and courtesy is now long past. If the Minister wants to fight let us take up the challenge and join issue with him on his own ground, and using his own well-known weapons. If we are united in our resolution we shall soon be able to make our demands in a language which he understands. No trade union would allow its members to be threatened, coerced, or bullied, nor would it have indulged in negotiations which it could not refer to its branches during the discussion. Dictatorial habits must be stopped, and force must be used when the circumstances warrant it.—I am, etc.,

Broxburn, West Lothian. J. A. SCOTT.

Immediate Action

SIR,—The greatest threat at this time to the unity of the profession lies in the widely felt fear that those doctors who resolutely refuse to join the new Service by the appointed day may incur thereby considerable financial loss. It is obviously foolish to postpone action until July, when the Minister will be able to put unbearable financial pressure on us to join. Our only hope lies in united action, taken well before that date.

We urge that if the result of the plebiscite shows that a large majority of the doctors are against joining the Service in its present form, the B.M.A. immediately should advise all doctors to refuse to sign certificates, but to keep records of all patients entitled to them so that they may ultimately receive their sickness benefit. This should be explained to the patient at the time. Death certificates should be excluded from this plan. We should persist in the refusal to sign certificates until the Government gives an undertaking that the Act will be suitably amended before being put into force.

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ZOE E. HARRIS.
PAUL HARRIS.

Wolverhampton.

It Won't Wash

SIR,—To-day I was faced by a request from a patient for a "medical certificate" for a washing machine. Feeling that this was beyond the bounds of all reasonableness I declined to comply with the request and expressed a certain amount of resentment that an industrial organization had sought to place this further burden upon the doctors. It was then explained to me that the firm had not actually requested the certificate but had assented to the patient's suggestion that such a certificate might help to give priority in a long waiting-list. I then endeavoured to explain that if doctors were to comply with all such requests it would, in either case, render any such system of priorities virtually of no value. However, I was left with the feeling that I had, perhaps not for the first time, offended a patient by refusing such a request and that the patient would now possibly seek a doctor who would comply with his wishes.

Although in this particular instance I am convinced that the patient acted in good faith, I feel that the business firm was wrong in assenting to the suggestion and that an end should be put to this time-consuming form of blackmail—for such it may be—and that action should be taken by the public relations department of the Association to make known to industrial and business houses that doctors have other duties to perform than to select for them those customers who are unable to do their washing or those who, being perhaps unable to leave their homes, should have a radio or television and so on. While one has every sympathy with the rare deserving case, one could spend a lot of time "selling" such certificates to the detriment of one's sick patients.

Certification should surely be confined to such forms, in themselves more than plentiful, as are required by Government departments for the issue of extra milk, petrol, and so on.—I am, etc.,

E. Horsley, Surrey. BASIL S. GRANT.

What a Pity!

SIR,—What a pity that the hard-pressed British taxpayer should have to fork out £66,000,000 to buy up the doctors' practices when the whole thing could have been done by an extension of the present National Health Insurance with such modifications and improvements as might be necessary. No need then for basic salary or purchase of practices. In 1912 the infant N.H.I. would have been stillborn had it not been for the concessions wrung at the last minute from its father by the profession. Even then the circumstances attending its birth brought about such distrust among both patients and doctors that the infant was afflicted with an inferiority complex which lasted for many years and even now has not completely disappeared. And now the Minister of Health hopes to force his Act on an unwilling profession, and if he is successful a similar legacy will result. What a pity!—I am, etc.,

Crediton. M. TYLOR.

An Association of Rural General Practitioners

SIR,—This is a plea for the formation of an association of rural general practitioners. With the successful outcome of the contest between the profession and the Minister on the question of principles, the remuneration of general practitioners in a national health scheme will have to be reconsidered, and to be equitable the numbers of patients and costs should be correlated. The numbers in a rural practice are limited by the scattered population plus the time factor in covering a large area. For this reason, and because most of us have outlying surgeries to maintain, the costs are considerably higher.

To show how inadequate has been the consideration given to the special conditions of a rural practitioner as distinct from one in or close to a country town, where the density of the population is naturally greater, the following should be noted: (1) The Spens Committee glossed over the increased cost of running a rural practice by saying that this could be met by weighting mileage more heavily. (2) There would appear to be a dangerous notion that the cost of running a practice is roughly one-third of the gross receipts, whereas in our rural practices it is roughly one-half this for the reason already stated.

It may seem to be beyond the realms of credulity when I say that, were I to enter the Service on the proposed remuneration and were all my private patients to become public patients, and if expenses remained the same, including the basic salary, my net income would work out at about £2 per week. But there is always the mileage fund!

The terms of reference of the Spens Committee included *inter alia* "the desirability of maintaining in the future the proper social and economic status of general medical practice." The Act as it would affect me makes a mockery of these terms of reference. I cannot believe that mine is an isolated case, and were others to publish their figures it would be found that I am not exaggerating.

The payment under any scheme, in my view, to be equitable should vary on the density of the population. Even at this late hour it seems to me that an association of rural general practitioners should be formed to see that conditions peculiar to us are given proper consideration. Unless we move quickly we may find ourselves in the position of having to develop our hobbies into a trade and do medicine in our spare time.—I am, etc.,

Princes Risborough, Bucks. O. F. CONOLEY.

What is an Adequate Capitation Fee?

SIR,—If remuneration is to be by capitation fee only, I think it would be better if a clear statement could be made on what the British Medical Association think is an adequate capitation fee. If 15s. 2d. to 18s. is even considered as an adequate fee, then, as I have said previously, remuneration by capitation fee alone will almost certainly prove a financial failure. I should say that a capitation fee of £1 12s. 6d. might possibly be adequate. So far as the sale of practices is concerned, I would suggest that no great harm would be done if a practitioner received immediate compensation for what his practice is worth, and this could easily be calculated from the income-tax returns of the practice. Compensation could then be made in full instead of receiving a proportion of £66 million. A proportion of a set sum is no compensation if the number to be compensated varies. I agree that freedom to enter and choose area of practice should be preserved, but I also consider that "squatting" or setting up practice in a district already adequately cared for should be strongly discouraged by all responsible authorities.

To anyone who may think I am pro-Bevan I can only say that my opinion concerning his views would not be printed in the *British Medical Journal*. My answer in the plebiscite will be a very negative "No," but I would like to see some definite constructive suggestions, as something must be done to replace the faulty parts.—I am, etc.,

Callander, Perthshire. F. C. M. MCILWRICK.

Remuneration in the N.H.S.

SIR,—Perusal of your correspondence columns reveals little comment on the financial aspect of the National Health Service Act. If one were to take part in the Service as the Act stands, the restraint at present exerted by monetary considerations on the part of paying patients with regard to trivialities will be removed. Even with this restraint private practice subsidizes panel practice to a considerable degree, and yet in the Act remuneration per head is hardly any more than the present N.H.I. capitation fee.

At a recent discussion in this district it was estimated that attendances would be roughly doubled, and that this increase would be due to trivial complaints and extra certification, which would interfere with the time available for those needing *medical* attention. This increase would therefore come almost entirely from those whom we now call private patients. Attention has been focused on the earnings of the doctor with 4,000 patients, but very few, and only those in heavily populated areas, will have such a number on their list, and it is my contention that adequate medical service for so great a number by

one man is an impossibility. In this area there are five general practitioners serving a population of under 9,000, and we all work pretty hard. According to the proposals before us we shall each receive roughly £1,500 per annum *gross*. There is no provision for any adjustments due to alterations in the cost of living, and there is nothing to prevent the Minister on any pretext—probably the cost of administration of the Service will be found as convenient as any—from reducing the remuneration by regulation within six months.

Put shortly, we are expected to do more work for less money, expenses increasing all the time, and with no safeguards. Each doctor should work out the figures as they apply to himself and compare the result with the recommendations of the Spens Committee. If that doesn't open his eyes he should see a doctor!—I am, etc.,

Fleet, Hants. T. C. JAMESON EVANS.

The Presidents and the N.H.S.

SIR,—The attempted negotiations with the Minister were invited by the three Presidents of the Royal Colleges. In view of what has happened, I suggest that it would be only fair for them to admit that their policy of appeasement has been a failure and that the Minister evidently never had any intention of negotiating. Further, it is to be hoped that they will now lend the weight of their authority to backing the British Medical Association and the profession in the stand being made against the dictatorial powers assumed by the Minister.

This is an important matter at the present time, when there appears to be an attempt to cause a split between practitioners and consultants, particularly as many people think that the opinions of the latter are represented by the Presidents.—I am, etc.,

Lincoln. G. A. BAGOT WALTERS.

B.C.G. in Control of Tuberculosis

SIR,—Prof. W. H. Tytler (Jan. 24, p. 173) argues that the comparison made between vaccinated and control children by Levine and Sackett in the New York trials is vitiated by a "serious error in the statistical analysis which, if corrected, would leave the results showing almost the maximum possible difference in favour of B.C.G., though even that would have only a limited significance." His argument runs as follows: Of the 11 deaths in the B.C.G. group 10 occurred in infants known to have been exposed to positive-sputum contact in the home *prior to vaccination* (his italics): since no claim has been made that B.C.G. immunization could check an infection already established, individuals for whom that possibility exists must be excluded from the analysis—i.e., only one death must be counted against the B.C.G. group. Such a procedure, in my opinion, makes the resulting figures entirely meaningless. It is impossible to make such exclusions *differentially*. In other words, we cannot introduce a factor which can—and in this instance does—materially reduce the mortality in the treated group and yet is not to be applied similarly to the control group. Why, too, should one make such withdrawals for the deaths and ignore the many similar cases of infants similarly placed who did not die? Under such circumstances the resulting comparison must be not only useless but grossly misleading.

To my mind two specific questions might be asked with regard to the possible efficacy of B.C.G. in infants in tuberculous families—namely (*a*): We can accept the world as it is, in which infants or young children in tuberculous households will, unfortunately, often have been exposed to risk of infection before they have come under observation and before they can be vaccinated. Does vaccination with B.C.G. under such circumstances confer, on the average, any benefit upon its recipients? This appears to have been the situation in which Levine and Sackett were working. For instance, in 10 out of the 11 deaths of the B.C.G.-treated infants there had been exposure to a positive-sputum case from birth and the ages of vaccination were first week (four cases), three weeks (one case), second month (three cases), fourth month (one case), and tenth month (one case). There must, of course, have been numerous similar cases, both in the B.C.G. and control groups, in which death did not occur. Accepting this situation, the New York experience, in its efficiently controlled period, revealed no material, if any, advantage to the inoculated.

Prof. Tytler thinks this is a useless question, since "it neglects the principle of avoiding infection before immunity has been established." Scientifically I would not dispute his objection: realistically, it may, of course, materially reduce the field in which B.C.G. can operate, since it necessitates pre-detection of the tuberculous household and removal of the infant at birth for some months.

(*b*) Accepting his objection, however, the second question is as follows: Are children not previously exposed to infection (so far as is known) more resistant to exposures *after* vaccination than *similarly* placed children who have not been vaccinated? To answer it two similar groups, except for vaccination, are essential—*both* must be removed from exposure up to vaccination or to a similar point of time, both must be returned to the environment at similar points of time. The subsequent history is then the criterion. Clearly that may be a very difficult trial to make, but how else can that question be approached? It certainly cannot be answered merely by "correcting" the deaths in the vaccinated group only.—I am, etc.,

London, W.C.1. A. BRADFORD HILL.

Sulphamerazine Treatment of Pneumonia in Adults

SIR,—In reply to the points raised by Dr. R. N. Johnston (Jan. 10, p. 73) we would say that the cases of pneumonia dealt with in our article were consecutive cases received by a large general municipal hospital, and are representative of this condition as seen at present in an industrial area of N.W. London. Radiological investigations and leucocyte counts are available, but as the article was written with a view to aiding general practitioners in the treatment of pneumonia we did not feel their inclusion was particularly relevant. Pneumococci or other pathogenic organisms were isolated in 70% of cases, as detailed in the article; over a large series of cases previously investigated blood cultures did not seem to help in prognosis or assessment of severity, and therefore we have not continued them.

We were aware of the statement that 80% of sulphamerazine is bound to the globulin fraction of the plasma, but we know of no statement as to what percentage of other "sulpha" drugs are so bound. Practical experience suggests that this is not a therapeutic disadvantage.

The dosage we have used has been adequate, not only in pneumonia but in many other conditions. Dr. M. D. Sheppard (p. 73) has been using a continuing dose twice as large as ours and we suggest this explains his cases of anuria. Three thousand patients have been treated in this hospital with sulphamerazine and in one case only has a deposition of crystals given rise to temporary anxiety. We are convinced that fluid intake is the important factor, associated with correct dosage.—We are, etc.,

Central Middlesex County Hospital, London, N.W.10. HORACE JOULES. S. D. V. WELLER.

Intra-arterial Injections of Penicillin

SIR,—We were interested to read the annotation on intra-arterial penicillin (Dec. 27, 1947, p. 1040). We have been using arterially injected penicillin in infected gangrene of the lower limbs for the past three years. The rationale was to present the infected area with a massive concentration of penicillin which was impossible to achieve by any other known route. In the few cases so treated a remarkable diminution in the toxaemia and improvement in the general condition of the patient have been noted. Penicillin was also given intramuscularly to these cases. Occasionally we have combined penicillin with heparin. In none of the cases was it possible to save the limb, which had to be amputated. All survived the operation—the oldest case was 85.

Bacterial flora of the infected area was ascertained in each case and penicillin sensitivity tests were done. The injections were given into the femoral artery and the technique was fairly simple. Patients were usually given "omnopon" gr. 1/3 (22 mg.) and scopolamine gr. 1/150 (0.43 mg.) an hour before the injection. With the patient in a recumbent position a sandbag was placed under the hip, and the leg slightly abducted and externally rotated. The skin was shaved and the artery located in the groin by palpation. Its outline was marked by a skin pencil and the skin was disinfected with iodine. Usually a small weal of "novocain" was raised at the site of puncture. A 20-gauge needle was bent sufficiently to make

the puncture easy, and the artery entered with the needle having its concavity upwards, the operator facing the patient's feet. Occasionally an adapter was mounted to the butt-end of the needle.

As soon as the needle entered the artery, rapid spurting of bright red blood was noted. The syringe charged with penicillin was mounted to the needle by an assistant, and the injection completed. The dosage used was 500,000 units of penicillin in 10 ml. of distilled water. The site of arterial puncture was rapidly covered with a pad and firm pressure applied for a few moments. The site was then covered with an "elastoplast" bandage. Sometimes several such injections were made into the artery.

The difficulties encountered were: (1) Occasionally the artery slipped as the needle entered the subcutaneous tissues; this could be avoided by fixing the artery between the thumb and the index fingers of the left hand. (2) Occasionally it was difficult to puncture the artery on account of thickness of its walls, but with a little change in the site of puncture this was overcome.

The untoward accident which we met was the late development of subcutaneous extravasation of blood. This was due to accidental venepuncture.

Transcutaneous puncture of the femoral artery is not quite so simple as it may sound here, but with practice and skill the technique is soon mastered.—I am, etc.,

Kingston-upon-Hull. G. M. DIN.

Recent Outbreaks of Smallpox

SIR,—The writer of a leading article in the *Journal* of Jan. 24 (p. 157) alludes to the story, more than one version of which has met my eye lately, that Ricketts (mis-spelled Rickets) once misdiagnosed a case of smallpox. I am interested to discover the origin of this tale, and I would welcome details of a case which, to my regret, appears to be in danger of becoming famous. For I am concerned lest, by force of repetition, the story should become embodied in the literature and at this comparatively late stage Ricketts should acquire the reputation of a great expert who made one mistake.

I am sure that Ricketts, in the course of his immense experience, erred more than once in the diagnosis of smallpox—as sure as I am that he would not have regarded his own judgment as infallible. The great Dr. Grace once remarked to a proud mother who presented her son as one who had never dropped a catch, "Then, madam, your boy cannot have played much cricket."

No, Sir, rather does the true reputation of Ricketts depend on the unique teaching of his subject which has been transmitted through his immediate pupils, and most of which, fortunately, is placed on record in his book. Though published in 1908, *The Diagnosis of Smallpox* contains, for those who will search diligently enough among its pages, almost everything relating to the clinical diagnosis of the disease which is known to us to-day; including, for example, the fact which has been rediscovered by someone in every outbreak of smallpox of recent years that (I quote from your leading article) "vaccination is no certain prophylactic after contact has occurred."—I am, etc.,

Dartford, Kent. J. PICKFORD MARSDEN.

Superior Mesenteric Arterial Occlusion

SIR,—I read with interest Mr. W. Garden Hendry's article on mesenteric arterial occlusion (Jan. 24, p. 144) in which he describes a case of recovery without resection. A similar case was admitted to this hospital recently.

A girl of 12 years was admitted to Booth Hall Children's Hospital on Dec. 30, 1947, complaining of abdominal pain of four days' duration. She had undergone a routine appendicectomy here 30 days previously and had been discharged 7 days later.

Four days before admission she complained of central abdominal pain of a severe colicky nature. The pain occurred about every 5 minutes and lasted 1–2 minutes. Her bowels opened twice that day and no blood was seen. The pain persisted in frequency and intensity, and there was no further bowel action. For the last 48 hours she vomited repeatedly.

On examination she was found to be an ill child with sunken eyes, a dry brown-coated tongue, and faecal-smelling breath. Her temperature was 97.6° F. (36.4° C.), and pulse 122, of poor volume. The abdomen showed a recently-healed pararectal scar. There was distension in the hypogastrium with visible dilated coils of gut. No peristalsis was seen. On palpation the coils of gut were palpable and very tender. There was well-marked rebound tenderness; shifting dullness could not be detected clinically. On auscultation the gut sounds were few in number and high-pitched. Per rectum the rectum was ballooned and a tender coil of gut palpable in the pouch of Douglas. Routine examination of the other systems revealed nothing abnormal. While being examined the girl vomited 50 ml. of stercoraceous fluid. The residual gastric contents were aspirated and an intravenous glucose-saline infusion set up.

Laparotomy was performed through a right paramedian incision under intratracheal anaesthesia. The abdomen contained 2–3 pints (1.1–1.7 litres) of blood-stained fluid which did not clot on standing. The last 3–4 feet of ileum with its mesentery were in a state of haemorrhagic infarction. The gut was a deep purple colour, oedematous, showed no peristalsis, and did not change colour on the exhibition of 100% oxygen. The mesentery was over 1/2 in. (1.3 cm.) thick with no visible or palpable pulsation in its vessels. No adhesions or volvulus were found. As the affected bowel extended to 1 in. (2.5 cm.) from the ileo-caecal valve and the patient's condition was deteriorating, a Paul-Mikulicz type of operation was performed, using the mobilized ascending colon and normal ileum 2 in. (5 cm.) proximal to the affected portion. In an effort to prevent resection later, a rubber catheter was sewn into the proximal limb. The exteriorized bowel was wrapped in gauze soaked in liquid paraffin.

The patient's condition rapidly improved after the infusion of 3 pints of plasma. Anticoagulants were not immediately available and were not used. Thirty hours later the dressings were removed. The ileum was still oedematous and plum-coloured but now showed definite peristalsis: the mesentery had not changed in appearance and there was no pulsation in the vessels. The catheter was removed, the enterostomy closed, and the gut replaced.

The next day there was no aspirate from the Ryle's tube and she was allowed fluids by mouth. She had 12 motions in the succeeding 48 hours, all of which contained mucus and altered blood. Intravenous fluids were discontinued on the third day. The patient sat out of bed on the next day and was discharged fit on the eleventh post-operative day. On discharge the coils of gut were still palpable and slightly tender.

This case, I feel, was one of mesenteric vascular occlusion secondary to pressure by an adhesion from the previous appendicectomy (the last 4 feet of ileum are always examined for the presence of a Meckel's diverticulum). The fortunate issue depended upon her age and the ease with which a collateral circulation became established through longitudinal vessels in the ileal wall. The marked improvement in her condition after the rapid infusion of 3 pints of plasma agrees with Mr. Hendry's comments on the causation of shock in these cases.—I am, etc.,

Manchester. ANTHONY R. ANSCOMBE.

Air Embolism during Operation

SIR,—The article by Drs. C. Langton Hewer and H. I. Coombs on "Fatal Air Embolism during Mastectomy" (Jan. 17, p. 97) is an interesting one, and this case raises several points which are insufficiently widely known. It is likely that air embolism during operation is more frequent than is generally believed, although in all probability its effects are either not recognized or, if noted, are not appreciated as being of any particular significance. Entry of air into a vein at operation is largely a matter of hydrostatics, and where the damaged vessel is situated above the level of the heart there is always a possibility of air entering the vein, especially during inspiration. Pressure variations in the great veins can be clearly seen at operation and must be familiar to all surgeons.

Hewer and Coombs point out that their patient's shoulder was raised on a sandbag and that pressure in the axillary vein was probably negative during inspiration. In the case of mine to which they refer the air embolism occurred several days after a severe facial wound with injury to the internal jugular vein. My co-author, a physician with a mechanical turn of mind, was greatly interested by the hydrostatics of our case and pointed out that had the patient been lying flat instead of sitting up in bed he would probably have had a secondary haemorrhage instead of an air embolism when the wall of the vein gave way. Since that time I have always made a point of having the head of the table slightly lowered to distend the axillary vein during a radical mastectomy, and to distend the internal jugular vein during dissection of tuberculous glands and similar operations in the neck. The classical description of air embolism at operation is of an audible "hissing" or "gurgling"; this may occur in some cases, but air may also enter a vein quite silently. I believe that this occurrence may actually be much more common than the type of air embolism so classically described, and surgeons should be on their guard against it.

Hewer and Coombs are to be congratulated on publishing their case and bringing this problem once more to our notice. The moral of this case is obvious and every effort should be made to avoid the possibility of air embolism at operation. The simple expedient already described should be an adequate preventive when working on the neck or axilla ; it only remains to warn those gynaecologists and others who make use of the high Trendelenburg position that air embolism may equally well occur from the iliac and pelvic veins. This consideration may, perhaps, further encourage the abandonment of the high Trendelenburg position, a posture which (owing to the weight being carried by the shoulders and the backs of the flexed legs) considerably impedes respiration, and may cause damage to the deep veins of the calf with increased liability to post-operative thrombosis.—I am, etc.,

Radlett, Herts. REGINALD S. MURLEY.

Sterilization of Syringes by Hot Air

SIR,—We regret that the brevity of our comments (Nov. 22, 1947, p. 854) on your note (Oct. 25, p. 680) has conveyed to your correspondents, Dr. Charlotte Riesenfeld and Mr. J. C. H. Hanson (Jan. 10, p. 77), the impression that we doubt the efficacy of sterilization of syringes (and other instruments) by hot air under ideal conditions. Certain instruments—e.g., Amsler's needle for abstraction of fluid from the anterior chamber of the eye for cytological examination—can be sterilized in no other manner. Our aim in quoting the failures recorded by Hanne was to emphasize the difficulty of obtaining these ideal conditions in practice, and to indicate both the possibilities (and disadvantages) of alternative methods.

As Miss Riesenfeld and Mr. Hanson hold that "many hot-air ovens fall short of the ideal" and itemize the careful controls they feel are advisable, it must, we think, be admitted that without the provision in many cases of new apparatus and trained staff the method cannot readily be applied in the near future. As both trained staff and complex sterilizing apparatus are, as well as instruments, in short supply, it seems possible that the quicker, effective, and simpler detergent methods mentioned may yet be regarded as having something to commend them in those applications where there is no known disadvantage or specific contraindication.—We are, etc.,

JOHN FOSTER.
Leeds. C. H. LE MAY.

Curare

SIR,—I have employed this method of giving curare, in close co-operation with Dr. Margaret Poston, Dr. H. J. Simmons, and Dr. A. H. Saleh, who regularly give anaesthetics for me. The method applies only to upper abdominal cases.

After the abdomen is opened I inject the drug slowly through a fine needle into the presenting liver edge. This may sound an unnatural injustice to a blameless organ, but it is difficult to imagine that any more damage is caused than by a retractor. I used to seal the puncture with diathermy, but this is unnecessary. I have never had failure with the drug and rarely use the entire ampoule of 15 mg. I give the dose which the anaesthetist requires, judged by him on the behaviour and physique of the patient, usually 1 ml., or 10 mg., for a normal adult. There has never been any suspicion of disturbance at the site of the injection. The muscular effect develops rather suddenly after two or three minutes and lasts as a rule for the duration of the operation, usually a gall-bladder or gastric procedure.

Against the only possible disadvantage of local liver damage, this method has certain advantages over the usual intravenous route. First, the timing is dead accurate and therefore a much smaller dose is required. Secondly, the method is extremely simple and there are no "administrative" difficulties. I cannot see that it is ever advisable to leave a needle lying in a vein for an indefinite period, and I find an intravenous infusion a nuisance in the theatre and avoid it whenever possible. Worst of all is the sudden groping for an arm with disturbance of towels and the discomfiture of the surgeon.

A third advantage is also a condition for its success : there must be close co-operation between the surgeon and the anaesthetist, and this is particularly important with curare, which is an anaesthetist's drug of whose early and late effects the surgeon remains the final judge. There is a style of abdominal anaesthesia which I particularly avoid, when a patient leaves the theatre after a half dose of anaesthetic and the repeated summation of more than a full dose of curare. The method which I have described requires a reasonable level of anaesthesia before the abdomen is opened, and curare serves only as an adjuvant to provide an upper abdominal field which almost approaches the perfection of a local anaesthesia. I do not use a second dose to make closure easier, and the patient never returns in anything like a curarized state. Anaesthetists may criticize this method, but my anaesthetists are very satisfied with it, although I notice that they watch very carefully how much I inject. It seems to me that the method offers no change in the best use of curare, but it does offer a little extra convenience all round.—I am, etc.,

Manchester. G. O. JELLY.

Hay Fever to Eczema via Benadryl?

SIR,—At the end of the hay-fever season I saw two similar cases that suggest a possible changed allergic state. Both were women in their late forties who had suffered from seasonal hay fever every summer since girlhood. This season, however, their respective medical practitioners had prescribed "benadryl" 150 mg. daily, with complete supression of symptoms. Both had taken the tablets continuously until the end of August, when, within a week of each other, they presented an eczematous eruption of face, neck, and forearms. Under conservative treatment with mild tar applications the eruption rapidly subsided, and both patients are symptom-free.

I am unable to find any reference to benadryl causing an eczematous eruption, although usage has been widespread. As neither patient had in the past suffered from any skin symptoms the possibility occurred to me that the suppressive action of benadryl may have transferred the reaction from the nasal mucosa to the skin.

Both patients have promised to report to me next year before the hay-fever season starts and before taking benadryl, for observation.—I am, etc.,

Warwick. K. M. TOMLINSON.

Convulsive Properties of Thiopentone

SIR,—Dr. R. L. Wynne in his interesting article (Jan. 10, p. 48) has again brought to our attention the arm and shoulder movements which may occasionally accompany induction of thiopentone anaesthesia. He points out that minor movements have been widely observed but seem to have roused little comment.

In a small series of consecutive thiopentone administrations in which such arm movements were specifically looked for, I failed to encounter any gross manifestation similar to the case he describes, although in the past I had seen such reactions with "evipan." I did, however, record 40 instances of brisk simple pronation and internal rotation, occasionally bilateral, and sometimes accompanied by momentarily rhythmic "shoulder shrugging." The minor unilateral reactions suggested a form of "withdrawal response" and could hardly be described as convulsive, but they merged by degrees into, and invariably formed a component of, the more complicated

Age in Years	No. of Cases	Vigorous and/or Multiple Movements	Pronation Only	Total No. Showing Movements
5–9 ..	22	6 (27·3%)	5 (22·7%)	11 (50%)
10–14 ..	63	8 (12·7%)	14 (22·2%)	22 (34·9%)
15–19 ..	40	1 (2·5%)	1 (2·5%)	2 (5%)
20–24 ..	42	0	0	0
25–29 ..	74	0	0	0
30–34 ..	79	0	1 (1·3%)	1 (1·3%)
35–39 ..	108	0	0	0
40–44 ..	62	0	2 (3·2%)	2 (3·2%)
45–49 ..	68	0	0	0
50–54 ..	54	0	2 (3·7%)	2 (3·7%)
55–59 ..	41	0	0	0
Over 60 ..	86	0	0	0
Totals ..	739	15	25	40

patterns of a convulsive type. The age-frequency distribution of these phenomena is noteworthy and can be seen from the table. Whereas some form of motor response occurred in 38.8% of 85 children between the ages of 5 and 15, similar manifestations were observed only in about 1% of 654 patients scattered throughout older age groups. The movements appeared to come on spontaneously on 16 occasions, but their onset coincided with the withdrawal of the needle or application of spirit in 17 cases. In the remaining seven, pulling forward the chin seemed to act as a trigger mechanism.

The differences between the percentages in the first two age groups is not significant, but that between the total percentages

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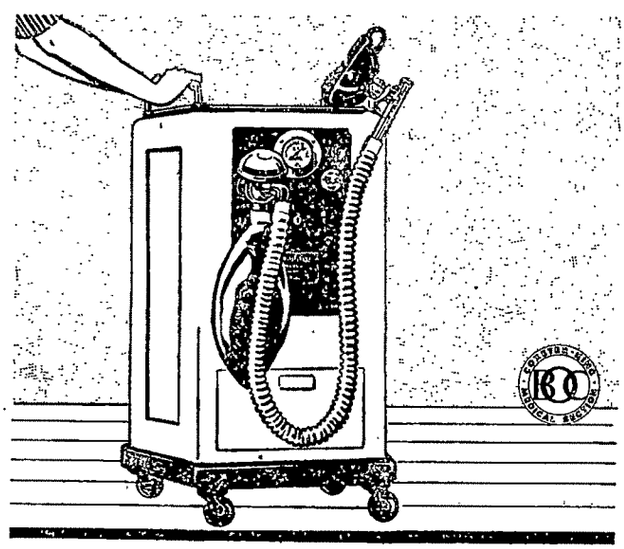

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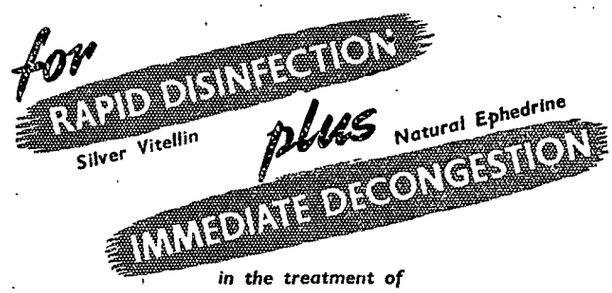

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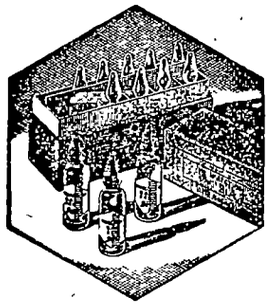

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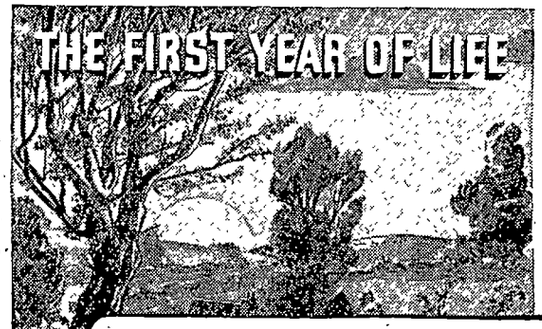

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of the second and third groups is 4.3 times its standard error. This result may be due solely to the influence of age, but the effect of premedication cannot be overlooked. The use of opiates, or to a greater extent the absence of premedication, may well be important factors. The young children in my series were given "seconal" and atropine, the older children and adults "opoidine" and scopolamine, the change being made about the age of 12. My figures are too few to give a definite answer to this side of the question, neither would it be justifiable under the circumstances further to subdivide the younger age groups. But it would indeed be interesting to collect a series of cases, with an accent on youth, sufficiently large to stand the strain of rigid analysis with respect to the principal variables of age, sex, general condition, premedication, dose of thiopentone, rate of injection, time of onset and type of movement, nature of stimulus, etc. I hope that such an undertaking may commend itself to some suitably diligent and neurologically minded anaesthetist whose work brings him into contact with large numbers of juvenile patients.—I am, etc.,

Hillingdon, Middlesex. H. J. V. MORTON.

Iridocyclitis Treated with Benadryl

SIR,—The use of "benadryl" in certain allergic manifestations is well established. The response to this drug of a case of acute iridocyclitis may be of interest. A male patient, aged 30, suffered from recurrent attacks, lasting from 10–12 weeks, of iridocyclitis over a period of ten years. Treatment consisted of the usual atropine and local application of heat. Detailed investigation during this period revealed no pathological condition.

A more recent attack treated with benadryl t.d.s. a week after onset cleared rapidly during the course of the following three weeks. A subsequent attack treated promptly at the onset cleared completely within three days.—I am, etc.,

Moseley, Birmingham. BARBARA SHAW.

Drug Addiction

SIR,—I do not understand Dr. F. R. Ellis's assertion (Jan. 24, p. 175) that morphine addiction is incurable "notwithstanding all evidence to the contrary." Of what possible use is any evidence if it is to be discarded in so arbitrary a manner? I disagree with Dr. Ellis because out of 90 addicts treated with auto-sero-therapy, about 50% have remained cured after a varying lapse of years, from ten years downwards. The prognosis depends mainly on two factors: (1) a strong incentive to be cured; (2) the duration of the addiction. A patient who has been addicted for many years is far more likely to relapse than one who has taken large doses for a few months.—I am, etc.,

Bournemouth. MARGARET VIVIAN.

Biography of the late Sir Joseph Barcroft

SIR,—Lady Barcroft and Prof. Henry Barcroft have honoured me by inviting me to write the biography of the late Sir Joseph Barcroft, C.B.E., F.R.S. I have accepted the invitation in the certain belief that I can count on the assistance of Sir Joseph's numerous colleagues and friends, and I write this letter to enlist their assistance, which will receive full acknowledgment in any consequent publication.

The form which such assistance will take will vary from individual to individual. One may make suggestions as to treatment of the subject, another may provide an anecdote, another may give an instance of Sir Joseph's generous help in research, and so forth—it is not for me, at this stage, to ask for specific information about this or that aspect of Sir Joseph's life and work. I must, however, give a closing date for the receipt of such material, and the date I have in mind is the last day of April, 1948.

I should be grateful if the material could be sent to me at the Department of Physiology, the Medical College of St. Bartholomew's Hospital, Charterhouse Square, London, E.C.1, with clear indications as to whether it is to be returned to the sender or can be retained.

Should I be prevented from writing the biography, I assume that I may hand over any material so received to an alternative author chosen by Lady Barcroft and her son.—I am, etc.,

London, E.C.1. K. J. FRANKLIN.

POINTS FROM LETTERS

National Health Service

Dr. A. A. REID (Newcastle-upon-Tyne) writes: I would suggest four inviolable principles which we must be prepared to fight for to the last: (1) The preservation of the doctor-patient relationship; (2) the right of appeal to the courts; (3) the correction of the legal ambiguities relating to existing partnership agreements; (4) a binding promise that the "closed shop" policy should never be applied to medicine. . . . Apart from matters of principle, material ends are not to be despised, but they should be kept distinct. The necessity of the continued sale and purchase of practices sticks in the throats of many members of the B.M.A. Insistence on this forms a useful lever in the hands of such as the Minister. The Spens Report, which has been accepted by Mr. Bevan, must be fully and honestly implemented. To pretend that an increase in remuneration of 10 or 20% is a true assessment of the present degree of inflation is rank deceit and dishonesty. Let us insist that the Minister sticks to his promise. Wages, according to Government statistics, have increased by 73% since 1939. Let us insist that the Spens figures be increased by 50% at the least. . . .

The Extent of Neurosis

Dr. ALICE E. BUCK (London, W.1) writes: May I say how heartening it was to read Dr. Erskine's letter (Jan. 24, p. 175). The time has now come when this question should be genuinely attended to, and not given merely lip service. The facts are that training facilities in such work are, as far as the universities are concerned, inadequate and obsolete. The D.P.M. schedule is hopelessly inept. The most important parts of the training of a mental health worker—i.e., his personal development and analysis—are ignored. He could pass D.P.M. and be a menace in regard to the treatment of both neurotics and psychotics. The banner of greater knowledge is being carried by comparatively few people. This state of things should be recognized and remedied.

Severe Reaction after Penicillin

Dr. D. HEFFERNAN (Worcester Park, Surrey) writes: I read, with considerable interest, Dr. J. F. L. Walley's report (Jan. 24, p. 150) of a severe reaction following penicillin injections, as I saw an almost identical reaction following penicillin injections in one of my patients.

A young man aged 19 consulted me because of repeated boils and abscesses. I gave him six intramuscular injections of 100,000 units of penicillin (sodium salt) at intervals of four days. These injections ended on Dec. 19, 1947. On Jan. 5, 1948, I called to see him because of a rash on his body. He then had a typical giant urticaria, with a temperature of 100° F. (37.8° C.). I put him on ephedrine gr. 1/2 (32 mg.) thrice daily and saw him again on Jan. 7. His condition was much the same, although the swellings had subsided somewhat. Two days later his condition was much worse—the rash had now completely disappeared, but he looked extremely ill, with a temperature of 100° F. He complained of anorexia and nausea, and also severe pains and stiffness in all his joints, particularly his wrists, fingers, and elbows. I then put him on tab. aspirin gr. 10 (0.65 g.) every four hours and saw him next day. His condition was no better, and as I suspected rheumatic fever I sent him into hospital. He has now completely recovered.

This case is almost identically the same as the one described by Dr. Walley and may be a rare, but distressing, reaction following penicillin injections.

State Controlled

Mr. ERIC VERNON (Douglas, Isle of Man) writes: First let us realize that the N.H.S. Act was never designed with an improvement in the nation's medical services as its *primary* object. Even in the day of the National Government the plan was only adopted because their prior acceptance of the social security programme had made a medical service an unavoidable necessity—that is, it was adopted for political and not medical reasons. The Act as now passed by the present Socialist Government is also a political necessity to them; it is a pure instrument of National Socialism whose expressed aim is the creation of a full-time salaried service. The State-employed doctor is the State-controlled doctor: concede the one and you concede both. The Minister's recent behaviour shows beyond all doubt that he is far more concerned with the political control of the proposed service than with its medical efficiency, and it must be clear to anyone who looks beneath the surface at all that, far from *opposing* the will of the nation, we are actually protecting it from an Act designed against its interests. We, the former friends of our patients, are expected to become a body of medical policemen protecting the Treasury purse from the depredations of a malingering public by "controlling certification of sickness"—and we are saying "No." This may be politically wrong of us, but there can be no doubt that it is medically right. . . .

Obituary

EDWARD STAINER, D.M., F.R.C.P.

Dr. Edward Stainer, who had been living in retirement in Buckinghamshire for the last twenty-five years, died on Jan. 23 at the age of 78. The son of Sir John Stainer and a student at Oxford University, he took his medical training at St. Thomas's Hospital, graduating B.M., B.Ch. in 1897. He proceeded D.M. in 1912, and was elected F.R.C.P. in the following year. He was head of the Skin Department at St. Thomas's Hospital from 1902 until 1920, when failing eyesight occasioned his resignation.

We are indebted to Sir Ernest Graham-Little for the following appreciation: Edward Stainer and I were next-door neighbours in Wimpole Street for many years at the beginning of this century. We were both bachelors, both heads of dermatological departments at teaching hospitals, and became intimate friends. One of our common major interests at that date was the building up of the Dermatological Society of Great Britain. The long-established Dermatological Society of London was in possession of the field, but it admitted to its membership practically only those who were heads of dermatological departments at the great hospitals, and Stainer and I and a group of friends wished to provide common ground for meetings between the leaders of the specialty and practitioners who had not taken the plunge of specializing but were nevertheless interested in dermatology. The younger Society therefore naturally attracted the younger men and provided very friendly and stimulating gatherings. Stainer, as head of the dermatological department at St. Thomas's Hospital, was a frequent and highly appreciated exhibitor at its meetings, as is recorded in the earlier volumes of the *British Journal of Dermatology* up to 1907, when, to the regret of many members of both Societies, they became merged in the Section of Dermatology of the Royal Society of Medicine. He was an acceptable teacher with a pretty wit. One of his happy phrases won wide circulation in our dermatological world. Struck with the increased incidence of alopecia areata after the air raids on London in the first world war, he coined the description "alopecia air raider," which fixed that causation indelibly in the minds of his pupils. He filled the office of Dean of the Medical School at St. Thomas's for several years, and was active in the social life of the hospital and of medical London. He had many interests outside his profession, especially in the musical world, where his father had been so great a figure. He enjoyed all his life a settled income which made him independent of his profession and in a measure deprived him of incentive to contribute to its literature. His friends will cherish his memory as a cheerful and merry companion and a loyal co-worker in medico-political campaigns.

B. A. LLOYD, Ch.M., F.R.C.S.

Prof. B. A. Lloyd, emeritus professor of forensic medicine in the University of Birmingham and consulting surgeon to the Birmingham United Hospital, died suddenly on Jan. 22 at the age of 63 at his home in Edgbaston.

Bertram Arthur Lloyd was educated at King Edward's High School, Birmingham, at the University of Birmingham, and at the London Hospital. He qualified M.R.C.S., L.R.C.P. in 1908, graduating M.B., B.S. in the following year, and he took the F.R.C.S. in 1911. He held resident appointments at the Queen's Hospital, Birmingham, and at the Great Ormond Street Hospital before becoming R.M.O. at the Charing Cross Hospital. He served as a captain in the R.A.M.C., and from 1915 to 1919 was attached to the 1st Southern General Hospital. He returned to Birmingham after the war and was soon appointed to the staff of the Queen's Hospital, the Children's Hospital, and the Smallwood Hospital at Redditch. He was professor of forensic medicine at Birmingham and an examiner in the subject at the University of Bristol. He also acted as a medical referee under the Workmen's Compensation Act. He was president of the University Graduates' Club in Birmingham in 1935, and in the following year was president of the University of Birmingham Medical Society.

Prof. H. F. Humphreys writes: May I be allowed, as an old friend of more than fifty years' standing, to add a personal tribute to your account of Prof. Bertram Lloyd's career? He was a man of simple modesty to whom prominence on a platform, contention in a committee, and even writing for publication were alike distasteful, so that he was known to the world only as a capable and conscientious surgeon, and latterly as an erudite professor. But he was a man of quite exceptional intellectual power and range, never happier than in his study. In youth he displayed a flair for mathematics and was always at home in the developments of science. This doubtless contributed to his mastery of the piano, which reached a high professional standard until the claims of surgery bereft him of the leisure for those daily hours of digital practice without which no pianist can excel. He was a voracious reader on many subjects and had a particular interest in Oriental scripts. In fact, languages fascinated him, and there were few European tongues of which he did not command a working knowledge and few Continental countries he had not visited. He was the perfect travelling companion, organizing details so smoothly that everything seemed to conspire to make the holiday a success, and he was always prepared, in spite of a never very robust physique, to face any exertion required to put him on terms with the mountains he loved so well. Bertram Lloyd was one of the most lovable of men, held in affectionate regard by a wide circle of friends. They all found great cause for satisfaction in the happiness of his marriage, and will wish to offer their sympathy to his widow, Hilda Lloyd, the present professor of midwifery and gynaecology in the University of Birmingham.

Dr. NOEL CONSTABLE FORSYTH, of Malton, died on Jan. 16 at the age of 69. Dr. Forsyth, who was born on the Isle of Mull, was educated at Loretto and Edinburgh University, where he graduated in 1905, proceeding M.D. in 1910. He was house-physician to the Royal Hospital for Sick Children in Edinburgh and a house-surgeon at the Edinburgh Royal Infirmary before starting in general practice at Malton, Yorks. He was particularly interested in paediatrics, and was medical officer of the Castle Howard Farm Reformatory and an honorary physician at the Malton Cottage Hospital. He was also medical officer for the North-Eastern Railway and for the Post Office. He had been a member of the British Medical Association for over thirty years and was chairman of the York Division in 1928–9.

A friend writes: The death of Noel Forsyth will bring sorrow to friends all over the world. His was an outstanding personality which drew to him the affection of those who penetrated his sensitive shyness. To his professional work he brought the best of his great skill, and his death will be mourned by all classes of the community in which he worked for forty years. He remained an enthusiastic student all his life, and he worked continually towards a further and fuller knowledge of all the latest developments of the science and art of medicine. To see him at work was to realize that all the gentleness, sympathy, and tenderness of human nature are not feminine attributes only, but that they are given to some men as well. Yet, on occasion, he could be blunt in speech in real Abernethian style. His early days were spent in the Western Highlands, and to his Celtic temperament Noel owed much of those things which, outside his profession, gave him joy. He was a lover of all things artistic. Music especially was a solace and inspiration to him, not only as a listener, for he was a 'cellist of first-class calibre. After music his greatest hobby was wood-cutting. He had the freedom of the woods on one of the largest estates in the North Riding, and on Thursday afternoons he could always be found there cutting up the big boles of fallen oaks. A loyal friend, a first-class doctor, especially in the practice of obstetrics, and a very perfect Highland gentleman has passed over.

Dr. WINSLOW SEYMOUR STERLING BERRY, who died recently in Eire, was the elder son of the late Bishop Sterling Berry. He graduated at Trinity College, Dublin, in 1904, practised for a decade in Armagh, and then served from 1914 to 1919 in the R.A.M.C. with the rank of major. Towards the end of his service he was a D.A.D.M.S. with the British Army of the Rhine. He was mentioned twice in dispatches and was awarded the O.B.E. and the Belgian Croix de Guerre. After his demobilization he became a medical inspector under the Irish Local Government Board and remained in the department when the Irish Free State was constituted in 1922. Subsequently he was deputy chief medical adviser until his retirement in April, 1946.

Medical Notes in Parliament

THE PLEBISCITE

In the House of Commons on Jan. 29 Mr. TIFFANY asked the Minister of Health whether he was aware of the nature of the plebiscite in which doctors were being asked to participate in regard to the National Health Service Act, and if he had any statement to make.

The Minister of Health, Mr. BEVAN, replied: I understand that each doctor has to sign his name on the voting paper, with his address and professional particulars, and the Association conducting the ballot is itself engaged in a campaign to induce the doctor to vote one way. This House may well feel that this procedure is a long way removed from the secret ballot and the workings of democracy as we know it in this country and that it is bound to cast doubt on the validity of the result.

Mr. SOMERVILLE HASTINGS: Will my right honourable friend take steps to see that all the doctors concerned have knowledge of what he has just told the House?

Mr. BEVAN: The doctors, of course, will be informed when they receive the plebiscite form itself, because there they will see that it is not a secret vote but an open ballot.

Mr. BAIRD: As the doctors seem to be taking the law into their own hands in this matter, does my right honourable friend not think that this House should have an opportunity of expressing its views on this attempted blackmail?

Mr. BEVAN: This is a question which ought properly to be addressed either to the Prime Minister or to the Leader of the House because it involves procedure and giving an opportunity for debate. So far as I am concerned, the Government's case is so strong that I should welcome an opportunity of deploying it.

Mr. CHURCHILL: There is no compulsion, of course, on any medical man to take any notice of this paper unless he likes?

Mr. BEVAN: None at all, as I understand it, but of course open votes of this description always give rise to the possibility of intimidation.

Mr. CHURCHILL: Intimidation?

Mr. BEVAN: It was because open votes of this sort were removed from our constitutional practice that the secret ballot was established. Fear of intimidation is the reason for the secret ballot.

Col. ELLIOT: Is that the reason why——

HON. MEMBERS: Order.

Dr. STROSS: In view of the great importance of this matter to everyone, may I ask the Leader of the House in his presence whether he will not now give us an early date so that we shall have an opportunity of debating the matter?

Mr. SPEAKER: I must point out here that there must be responsibility of a Minister, and a Minister is not responsible for the form in which this ballot has gone out. Therefore a debate is rather awkward at the present moment.

Col. STODDART-SCOTT: Why should signing a ballot form invalidate a vote? In the university elections you sign your ballot form. Any doctor, whether he is a member of the B.M.A. or not, and I myself am not, has no need to vote unless he wishes, and if he does not wish to sign his ballot form he need not do so. Therefore I do not see that it makes any difference whether you sign it or not.

Mr. SIDNEY SILVERMAN: Is there not all the difference in the world between signing a ballot paper in a university election, where the university takes no part in the election and is indifferent to the result, and signing a ballot paper to be sent to an Association which has already taken sides, indicated a preference, and hopes for a result?

Mr. SPEAKER: That would seem to be a little hypothetical. The point has been made, and I should think we had better leave it at that now.

Mr. GALLACHER: May I put a point to the Minister?

Mr. SPEAKER: My decision was that we should carry on with the next business.

Mr. TIFFANY: On a point of Order, Mr. Speaker, may I point out that I put down this Question on the Order Paper and have had no opportunity of putting a supplementary?

Mr. SPEAKER: If the honourable gentleman wishes to put a supplementary, seeing he put the question down, I am prepared to allow it.

Mr. TIFFANY: May I ask the Minister whether this form of taking a plebiscite is not reminiscent of pre-war Germany, and should we not place the same value on the results of the election as we did upon those?

Later the Lord President of the Council was asked by Mr. T. REID if in view of these questions and answers he would arrange a day for discussion of the doctors' ballot.

Mr. HERBERT MORRISON said that if a debate took place it would have to be on a somewhat wider issue than the plebiscite It might cover outstanding issues in dispute between the Minister of Health and the British Medical Association. The Government would not be unsympathetic towards a debate as early as possible.

Health and Rations

Mr. SHINWELL on Jan. 27 stated that the change of environment of Army recruits, and the regular meals, graduated exercise, and comparative open-air life, stimulated the young recruit so that he made full use of the energy provided by his rations and any additional food available from N.A.A.F.I. and other sources. The initial result of training was a reduction in weight owing to loss of fat. This was followed by a gain in weight due to the improved mechanical efficiency of the body with a consequent saving in energy expenditure, and the diversion of the energy value of the diet to the building up of the heavier muscle tissues instead of fat. The end-result in six weeks on the average was a gain in weight of four pounds.

On the following day Mr. A. V. ALEXANDER announced changes in the rations of the Army, Navy, and R.A.F., to bring Service rations broadly into line with the food available to the civilian labourer. The amount of meat and offal would be reduced by 12½ oz. a week, bacon and ham by 4½ oz. a week, and cheese by 1¼ oz. a week. By way of compensation and to make good the existing deficiencies in those items, the amount of fats would be increased by 2½ oz. a week, and sugar by 3½ oz. a week. The net calorie reduction that would result from these adjustments would fall to be met partly by an increase of bread and partly by additional purchases of fish, vegetables, and such other unrationed items as were available These adjustments applied only to the Forces stationed at home The calorie value of the ration would remain at 2,900 for men and 2,600 for women.

Dr. EDITH SUMMERSKILL said on the same day that no reductions in the scale of rations for the Forces at home or abroad had been made during 1947.

Alien Doctors

Mr. HASTINGS on Jan. 29 asked how soon any of the doctors covered by Section 3 of the Medical Practitioners and Pharmacists Act could hope to secure permission to practise in this country.

Mr. BEVAN replied that applications for registration under the Section were a matter for the General Medical Council. Certain preliminary work had been necessary before formal applications could be invited. This was nearly complete.

Permission to Publish

On Jan. 29 Col. STODDART-SCOTT inquired if the doctors and dentists who entered the National Health Service would have complete freedom to publish articles and books without having to seek permission. He asked Mr. Bevan for an assurance that there would be no attempt to suppress freedom of publication.

Mr. BEVAN replied that so far as he was concerned there would be no restriction whatsoever in the National Health Service on the publication of scientific or clinical writings.

Practice after the Appointed Day

Sir HENRY MORRIS-JONES on Jan. 27 asked what would be the position on July 5 of panel practitioners who found themselves unable to take up service under the National Health Act but who intended to continue to practise.

Mr. BEVAN said that these practitioners would be able, if they wished, to take part in the new National Health Service. The old National Health Insurance Service would be superseded by the new arrangements at that date, but a doctor could confine himself entirely to private practice.

Universities and Colleges

ROYAL FACULTY OF PHYSICIANS AND SURGEONS OF GLASGOW

Dr. James W. Affleck, F.R.F.P.S., will deliver the James Watson Prize Lecture in the Hall of the Faculty (242, St. Vincent Street, Glasgow) on Wednesday, Feb. 11, at 5 p.m The title of the lecture is "Administrative and Clinical Problems of Chronic Sickness and the Diseases of Later Life." Medical practitioners are invited to attend.

Medico-Legal

PATENT IN NEW DRUGS

Mr. Justice Jenkins, in the Chancery Division, delivered a reserved judgment in a petition by Boots Pure Drug Company, Ltd., for the revocation of letters patent granted to May and Baker, Ltd., and Ciba, Ltd., a Swiss company, for an invention entitled "manufacture of new benzine sulphonamido derivatives." His Lordship also had before him a motion by May and Baker, Ltd., and Ciba, Ltd., for leave to amend the complete specification upon which the letters patent were granted by substituting for the derivatives mentioned "para-amino-benzine sulphonamido thiazole" and "-4-methyl-thiazole." The subject-matter of the application was a convention patent dated January, 1939, in respect of four applications made in Switzerland.

Mr. Justice Jenkins, in his judgment, after a hearing which lasted seventeen days, said the importance of the class of chemical compounds falling within the general description of benzine sulphonamido derivatives lay in the chemotherapeutic value which some of them possessed. The discovery of the therapeutic value of sulphanilamide had set many chemists in various countries to work on the problem of producing some further derivative of the parent substance which would possess a wider range of activity and a lower degree of toxicity. The ideal, but probably unattainable, goal was a drug which would be completely effective against all infections and completely innocuous to the patient.

After reviewing the grounds of objection to the specification his Lordship allowed the petition for revocation of the patent. On the motion to amend the specification he held that the amendments would make the invention, as amended, different from the invention claimed by the unamended specification, and accordingly they were not such as the Court could allow. The motion was therefore refused.

His Lordship said if there was an appeal the order for revocation would be stayed pending judgment in the Court of Appeal.

We understand that the effect of this judgment is to throw open not only to Boots but to other firms the production of this group of drugs.

Medical News

RETURN OF PLEBISCITE FORMS

The Plebiscite Forms are flowing in thick and fast. If you have not already returned yours, please send it in as soon as possible.

Royal Faculty of Physicians and Surgeons of Glasgow

At a meeting of the Royal Faculty of Physicians and Surgeons of Glasgow held on Jan. 27, with the President, Prof. Geoffrey B. Fleming, in the chair, the following resolutions were adopted:

(1) The Royal Faculty of Physicians and Surgeons views with apprehension the failure of the Minister of Health and the Negotiating Committee of the medical profession to reach agreement and urges Parliament to amend the National Health Service Act and the National Health Service (Scotland) Act. The Royal Faculty considers that if these Acts are implemented in their present form they will not operate in the best interests of the public and will seriously impair the ultimate quality of medical treatment in this country.

(2) That the above resolution be communicated to the Prime Minister, the Leader of the Opposition, and the Press.

Guy's Hospital and the Act

At a meeting of the visiting medical and dental staffs of Guy's Hospital on Jan. 27 it was resolved by those present that, while continuing to serve the patients of the hospital, they are not prepared to accept service under the National Health Service Act until it is clear that it commands the confidence of the majority of the medical practitioners of the country.

St. Bartholomew's Hospital Resolution

The following resolution was approved unanimously at a meeting of the Medical Council of St. Bartholomew's Hospital:

"The Medical Council of St. Bartholomew's Hospital is unanimously opposed to the National Health Service Act as at present constituted and will not enter into any contract with the Regional or Teaching Hospitals Boards under this or an amended Act without further discussion in this Council.

This Resolution is made on the assumption that the whole-time officers will continue their work but that they will not enter into the field of general practice nor into new contracts as part-time consultants or specialists with the Regional or Hospital Boards, even if continuing their work involves accepting new contracts with new employing bodies to which they may be automatically transferred.

The whole-time officers will not take over the wards or duties of their part-time colleagues; the members of the staff will continue to care for their patients at St. Bartholomew's Hospital."

Westminster Hospital Disapproves

The medical staff of the Westminster Hospital has met and passed a resolution "strongly disapproving of the Act as it stands," and refusing to serve under it until it has been modified and agreement reached between the Government and the medical profession as a whole.

Voting Last Week

Very large majorities were recorded in all parts of the country against service under the N.H.S. Act as it stands. The honorary medical staff of the Kent and Sussex Hospital recommended consultants and specialists not to serve until agreement had been reached with the profession as a whole. The medical staff of the Warwick Hospital engaged in private practice met on Jan. 23 and decided not to accept service under the Act as it stands. Over the week-end a meeting of Norfolk doctors resolved by 78 votes to 1 not to accept service, and 141 members of the Guildford Division of the B.M.A. decided unanimously not to serve. At Liverpool 300 doctors unanimously passed a resolution expressing confidence in the B.M.A.'s leadership and policy. Doctors in the Bexley, Erith, Crayford, and Dartford districts of Kent voted unanimously against the Service. Croydon Division of the B.M.A. voted 168 against the scheme, 7 for it; at Hastings and Bexhill the voting was 94 to 1.

Art and Rehabilitation

Lord Horder will open an exhibition of pictures by patients from the mental treatment centre of Hill End Hospital, St. Albans, on Wednesday, Feb. 11, at 3 p.m., at Foyle's Galleries, Charing Cross Road, London, W.C., under the title "Patients' Paintings—A Pathway of Progress." A small exhibition on similar lines was held at St. Albans last summer and attracted considerable attention. It was opened by Mr. Adrian Hill, the artist and author of *Art versus Illness*, which deals with the advantage of painting in the rehabilitation of tuberculous patients at a sanatorium.

Saint Leonard's Hospital

Saint Leonard's Hospital, Shoreditch, is to be allowed to continue as a training centre for nurses as a result of the appeal against the General Nursing Council, which has been heard by Mr. V. Zachary Cope and Miss M. F. Dykes.

Association of Clinical Pathologists

The 21st anniversary of this Association was celebrated by a dinner at the Piccadilly Hotel on Friday, Jan. 30, with the President, Dr. Cuthbert E. Dukes, in the chair. The toast, "The Association of Clinical Pathologists," was proposed by Sir Wilson Jameson, and responded to by Dr. Sydney C. Dyke, to whom a commemorative medal had been presented on the previous day. Dr. Dyke pointed out that the Association had come into being as a result of the activities of provincial pathologists. The health of the guests was proposed by Dr. J. G. Greenfield and replied to by Sir Alexander Fleming. Dr. Norah Schuster, speaking for the women members of the Association, quoted from an epitaph on a German tombstone, which she translated thus: "You may not be good doctors, but you were kind to the women."

The Association has established a "Dyke Medal" to be awarded every three years to a distinguished pathologist who will give the "Dyke Lecture." The first award of the medal is to Dr. Dyke himself.

COMING EVENTS

Socialist Medical Association

The North-west Middlesex Branch of the Socialist Medical Association has arranged a meeting for members and friends on Feb. 12 at Wembley Town Hall. Dr. Peter Dupre will speak on "The B.M.A. Negotiations."

SOCIETIES AND LECTURES

Monday

MEDICAL SOCIETY OF LONDON, 11, Chandos Street, Cavendish Square, W.—Feb. 9, 8.30 p.m. "*Folic Acid,*" Prof. J. F. Wilkinson. "*The Differential Diagnosis of Tuberculous Cervical Adenitis,*" Mr. Hamilton Bailey. "*Potassium Thiocyanate in Hypertension,*" Dr. Geoffrey Evans.

ROYAL SOCIETY OF ARTS, John Adam Street, Adelphi, London, W.C.—Feb. 9, 4.30 p.m. "*Fats in the Life of the Nation,*" Cantor Lecture by Sir Jack Drummond, D.Sc., F.R.S.

Tuesday

CHELSEA CLINICAL SOCIETY.—At South Kensington Hotel, 47, Queen's Gate Terrace, London, S.W., Feb. 10, 7 for 7.30 p.m. "*Some Difficulties in the Science of Crime Detection.*" Discussion to be opened by Dr. C. Keith Simpson.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—Feb. 10, 5 p.m. "*Diseases of the Nails,*" by Dr. H. Corsi.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, Pall Mall East, S.W. —Feb. 10, 5 p.m. "*The Public Health Laboratory Service,*" Milroy Lecture by Prof. G. S. Wilson.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHARMACOLOGY, Gower Street, W.C.—Feb. 10, 5.15 p.m. "*The Pharmacological Chemistry of Enzymes* (i)," Mr. F. Bergel.

Wednesday

SOCIETY OF CHEMICAL INDUSTRY: FOOD GROUP.—At Chemical Society's Rooms, Burlington House, Piccadilly, London, W., Feb. 11, 6.30 p.m. "*Some Effects of Fumigants upon Foods,*" Drs. A. B. P. Page and O. F. Lubatti.

Thursday

HUNTERIAN SOCIETY.—At Grosvenor House, Park Lane, London, W., Feb. 12. *Annual dinner.*

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C. Feb. 12, 5 p.m. "*Psychosomatic Dermatoses,*" by Dr. W. J. O'Donovan.

ROYAL COLLEGE OF PHYSICIANS OF LONDON, Pall Mall East, S.W.—Feb. 12, 5 p.m. "*The Public Health Laboratory Service,*" Milroy Lecture by Prof. G. S. Wilson.

ROYAL PHOTOGRAPHIC SOCIETY OF GREAT BRITAIN (SCIENTIFIC AND TECHNICAL GROUP), 16, Prince's Gate London, S.W.—Feb. 12, 7 p.m. "*The Importance of Illumination in Photomicrography,*" R. McV. Weston, M.A., F.R.P.S.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, S.W.—Feb. 12, 4.30 p.m. *Psychiatric lecture-demonstration.* Dr. D. Curran.

Friday

BIOCHEMICAL SOCIETY.—At Westminster Hospital Medical School, 17, Horseferry Road, London, S.W., Feb. 13, 2 p.m. *Communications and demonstrations.*

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.—At Leeds General Infirmary, Feb. 13, 8.30 p.m. "*The Home, the Family Doctor and the Hospital in Relation to Child Care,*" Prof. W. S. Craig.

LONDON CHEST HOSPITAL, Victoria Park, E.—Feb. 13, 5 p.m. "*Acute Respiratory Infections,*" Dr. R. Sleigh Johnson.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—Feb. 13, 8 p.m. "*Princess Charlotte and the Uterine Haemorrhage of Pregnancy,*" Address by Prof. R. J. Kellar.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—Feb. 13, 5 p.m. "*The Evolution of the Surgeon,*" Dr. E. A. Underwood.

Saturday

KENT PAEDIATRIC SOCIETY.—At Farnborough County Hospital, Feb. 14. Discussion: "*Tuberculosis in Childhood.*" Section I, 11 a.m. "*Symptomatology and Diagnosis,*" Dr. D. G. Madigan; "*Orthopaedic,*" Mr J. H. Mayer. Section II (open to non-medical persons interested in the subject), 2 p.m. "*Epidemiology and Prevention,*" Dr. R. Cruickshank.

BIRTHS, MARRIAGES, AND DEATHS

BIRTH

Shaw.—On Jan. 25, 1948, at the Christopher Nursing Home, Wigan, to Doris May (*née* Annett), wife of George Hubert Shaw, M.B., Ch.B., a daughter.

DEATHS

Bray.—On Jan. 26, 1948, Frederick Richard Bray, M.R.C.S., L.R.C.P., of Hagg Lane, Sandygate, Sheffield, aged 79.

Hill.—On Jan. 25, 1948, at Oxford, William Hugh-Hill, M.D.Ed.

Howley.—On Jan. 28, 1948, at Sunningdale, Henry Edward Howley, L.R.C.P.&S.I. and L.M., Lieutenant-Colonel, R.A.M.C., retired.

James.—On Jan. 29, 1948, at Southampton Borough Hospital, Henry Walter James, M.R.C.S., L.R.C.P.

Lunham.—On Jan. 28, 1948, in London, John Lumsden Lunham, M.B., B.Ch., F.R.C.S.I., Lieutenant-Colonel, I.M.S., retired, aged 69.

Prichard.—At Menai Bridge, I. Llewelyn Prichard, M.D., D.P.H., late M.O.H. and School Medical Officer, Aberdare.

Steele.—On Jan. 6, 1948, at Geranium Cottage, Reigate, Florence Harriett Steele, aged 90.

White.—On Jan. 27, 1948, Ernest White, L.D.S., M.R.C.S., L.R.C.P., of 17, Chesterford Gardens, Hampstead, N.W., and 86, Brook Street, London, W.

No. 3

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Jan. 17.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London) (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	47	3	13	2	—	58	6	31	2	1
Deaths		2	—				2	—		
Diphtheria	203	21	59	19	9	256	18	78	40	10
Deaths	5	1	1	—	—	5	—	1	—	—
Dysentery	96	4	37	2	—	72	4	17	1	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	1	—	2	—	—	1	—	1	—	—
Deaths		1					1			
Erysipelas			55	12	7			48	5	3
Deaths		—					—			
Infective enteritis or diarrhoea under 2 years				28					39	
Deaths	49	5	15	6	2	96	13	14	8	—
Measles*	3,304	240	899	137	16	11,087	378	276	61	890
Deaths†			—	—	—	15	—	1	—	3
Ophthalmia neonatorum	39	5	13	1	—	69	6	21	—	2
Deaths										
Paratyphoid fever	4	—	1 (B)	—	—	6	—	2 (B)	—	—
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal	787	67	5	10	8	2223	73	53	13	6
Deaths (from influenza)‡	13	1	4	2	2	85	13	23	—	—
Pneumonia, primary			253	38				413	30	
Deaths	468	50		9	9		94			14
Polio-encephalitis, acute	2	—				1	1			
Deaths							—			
Poliomyelitis, acute	47	3	6	2	—	9	2	—	15	—
Deaths§	5	1					—			
Puerperal fever		3	11		—		2	12		1
Deaths										
Puerperal pyrexia‖	102	5	13	—	2	153	9	31	1	—
Deaths		—					—			
Relapsing fever	—	—			—	—	—			—
Deaths										
Scarlet fever	1,754	109	377	24	49	1,226	106	276	22	29
Deaths†			—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	2	—	1	4	—	4	—	2	4	—
Deaths	—	—	—	—	—	1	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	2,343	160	46	49	7	2,192	158	488	107	62
Deaths	6	1	—	—	—	18	—	7	1	2
Deaths (0–1 year)	415	55	66	27	12	622	81	72	39	9
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	5,248	850	617	198	124	6,579	1056	785	277	155
Annual death rate (per 1 000 persons living)			12·8	12·4				17·3		
Live births	8,510	1397	920	412	285	10,628	1721	1260	404	269
Annual rate per 1,000 persons living			18·5	25·8				25·3		
Stillbirths	252	29	25			291	32	29		
Rate per 1,000 total births (including stillborn)			26					22		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Poliomyelitis

Notifications of poliomyelitis for the week ended Jan. 24 numbered 35 (47) and of polio-encephalitis 3 (3). Figures for the previous week are in parentheses. This is the largest fall in notifications for some weeks. Multiple cases of poliomyelitis were reported from London 4 (3), Chester 2 (4), Durham 2 (0), Lancs 5 (4), Lincs (Kesteven) 2 (0), Middlesex 4 (3), and Yorks (West Riding) 2 (0).

Pulmonary Tuberculosis in British Zone

Out of a population of 22,344,800 in the British Zone of Germany, according to the Foreign Office, there were 9,376 deaths from pulmonary tuberculosis during the first nine months of 1947. Comparative figures for 1946 and 1947 for the various Laender are as follows:

	1947	1946	Population
Schleswig-Holstein	1,073	1,011	2,652,500
Hamburg	747	816	1,426,900
Niedersachsen	2,494	2,205	6,455,300
North Rhein/Westphalia ..	5,062	5,170	11,810,100
	9,376	9,222	22,344,800

The large number of refugees in Schleswig-Holstein and Niedersachsen should be taken into account when considering the figures for these two Laender.

Discussion of Table

In *England and Wales* an increase was reported in the notifications of scarlet fever 299 and whooping-cough 286 and a decrease was recorded for measles 442, acute pneumonia 188, dysentery 18, diphtheria 13, and cerebrospinal fever 13.

The largest increases in the incidence of scarlet fever were those of Yorkshire West Riding 66, Warwickshire 45, and Lancashire 33. An increase in the notifications of whooping-cough was fairly general throughout the country; the largest rise was Yorkshire West Riding 40. With the exception of a slight rise in London and the eastern counties the incidence of measles fell in most areas; the largest declines were Nottinghamshire 75, Staffordshire 74, and Kent 65. Notifications of acute pneumonia declined in most areas except in London and the south-east and south-western counties where the incidence remained unchanged.

The largest fluctuations in the returns of diphtheria were an increase of 11 in Birmingham C.B. and a decrease of 10 in Lancashire. The notifications of dysentery in Lancashire rose from 20 to 30; the only other large centre of infection was Glamorganshire 15.

The notifications of acute poliomyelitis decreased by 5, and the largest returns were 4 cases in Cheshire, Devonshire, Lancashire, and Sussex. Only four administrative areas had 2 cases of poliomyelitis: Buckinghamshire, Eton, R.D.; Devonshire, Newton Abbot R.D.; Southampton, Portsmouth C.B.; and Staffordshire, Burton-upon-Trent C.B.

In *Scotland* a decreased incidence was recorded for measles 445, acute primary pneumonia 76, whooping-cough 18, and diphtheria 9, while a rise occurred in the notifications of scarlet fever 70 and dysentery 20. The increase in cases of dysentery was mainly due to an outbreak in Aberdeen county and Aberdeen city. An increase in the notifications of scarlet fever was general throughout the country.

In *Eire* the only changes in the incidence of infectious diseases were decreases in the notifications of measles 94 and of whooping-cough 12. There was an increase of 5 in the notifications of diarrhoea and enteritis.

In *Northern Ireland* little change occurred in the trends of infectious diseases.

Births and Deaths during 1947

The number of live births registered in England and Wales during 1947 was 886,633, the highest figure since 1920. This represents a birth rate of 20.5 per 1,000, which is 1.4 above the value for 1946 and is the highest birth rate since 1921. There were 517,622 deaths registered, which is equivalent to a rate of 12.0 per 1,000 and 0.5 above the rate for 1946.

Week Ending January 24

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,847, whooping-cough 2,547, diphtheria 199, measles, 3,457, acute pneumonia 780, cerebrospinal fever 47, acute poliomyelitis 35, dysentery 131, paratyphoid 7, typhoid 6.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Allergy and Immunity in Tuberculosis

Q.—*What is the role of allergy in the operation of immunity in tuberculosis? How is it possible to render an allergic immune into a desensitized immune person? Are sanatorium workers who have had manifest pulmonary tuberculosis more liable to contract the disease—as a reinfection, and in a more malignant form—than those who have not? What do you recommend in such circumstances?*

A.—The relationship between allergy and immunity in tuberculosis has been the subject of much investigation, and it is not possible to consider all its aspects in a short answer. A full account will be found in A. R. Rich's *The Pathogenesis of Tuberculosis* (Thomas, Springfield, Ill., 1946), to which the questioner is referred.

Reinfection produces an acute exudative reaction which rapidly progresses to caseation. Dissemination of the tubercle bacilli is delayed, they are reduced in numbers and tend to remain localized in the lesion—unlike the primary infection, in which there is rapid dissemination of the bacilli to the regional lymph glands. Pirquet described this altered reactivity of the body as "allergy," but, although it is associated with cutaneous hypersensitivity to tuberculin, it is a much slower and less violent process than, for instance, serum hypersensitivity. Recent experiments in animals by Rich and his colleagues have shown that acquired resistance to tuberculosis can be independent of allergy. Infected animals were desensitized by repeated doses of tuberculin, and it was found that desensitized animals dealt with a subsequent infection more efficiently and with less local reaction than allergic animals. The reaction of the infected and desensitized animal resembled that of an animal with a high natural resistance. Subsequent infection was accompanied by the minimum amount of inflammation and negligible tissue damage.

When discussing the possible applications of this work to human tuberculosis it must be remembered that tuberculosis in laboratory animals is vastly different from the same disease in man, and it is not possible to compare the two directly. Also, the allergic reaction may have some purpose which is not yet apparent. Nature is said to do nothing in vain, and the reason for the development of tuberculin hypersensitivity has not yet been demonstrated satisfactorily. It is possible to render a tuberculin-positive individual tuberculin-negative by giving suitable repeated doses of tuberculin. How far this "desensitization" affects other organs as well as the skin is not known. The administration of tuberculin in sufficient doses is fraught with danger because it may cause activation of quiescent tuberculous lesions; many laboratory animals died in the process of desensitization.

There is no evidence that tuberculosis workers who have had lesions due to either primary infection or reinfection are more susceptible to subsequent infection, nor do they develop the disease in a more malignant form. In fact, the tuberculin-positive worker is better protected than the tuberculin-negative one.

Pyelonephritis and Hypertension

Q.—*Could bilateral intrarenal pelves and some degree of chronic pyelonephritis on one side be responsible for hypertension? If so, what curative treatment, if any, is available?*

A.—Whether the anatomical character and development of the renal pelvis have any bearing on the development of hypertension is very uncertain. In all probability there is no relation between the two except that the more gross forms of structural abnormality in the kidney predispose to a chronic pyelonephritis (urinary infection). There is no doubt at all that unilateral chronic pyelonephritis can cause hypertension of any degree of severity, and many of the most successful cases of nephrectomy

for hypertension have been of this type. The great difficulty is to be certain that the pyelonephritis is in fact unilateral and that the other kidney has not developed arteriolar changes which are contributing to the hypertension. If thorough investigation seems to show unilateral chronic pyelonephritis with a normal kidney on the opposite side nephrectomy should be performed.

Treatment of Young Mental Defectives

Q.—*(a) What is the expectation of life in mongol infants, and has treatment by irradiation of the hypophysis given any good results?*

(b) Is there any evidence that pituitary extract in any form has effected improvement in young mental defectives?

A.—(a) The expectation of life of mongol infants depends to a considerable extent on whether a congenital heart lesion is present and, if so, on the nature of the lesion. However, even infants in whom the heart is normal are abnormally susceptible to infection, and the majority die before the age of 14. In other cases patients reach adult or middle life. There is no convincing evidence that irradiation of the hypophysis has given any good results.

(b) There is no evidence that any of the preparations commercially available at the present time have improved mental development. C. E. Benda (*Mongolism and Cretinism*, 1947) has recently suggested that an effective thyrotrophic preparation, given alone or followed by thyroid therapy, might be expected to cause improvement in mongols, and cites a case in which this form of treatment appeared to stimulate bone development; there was, however, no conclusive evidence that the mental condition was improved. In the case of mental defectives where sexual development is retarded anterior pituitary preparations might stimulate sexual maturity, but where the mental condition is unimproved this can hardly be regarded as an advantage.

Anaphrodisiacs

Q.—*What is the best drug to depress sexual desire without doing undue harm (a) in the male and (b) in the female?*

A.—There are no drugs which are satisfactory for this purpose. Bromides and phenobarbitone might be of some value, but would have to be given continuously and in a dose large enough to have other depressant effects. The more rational approach, and one which is more likely to be successful, is for the individuals, male or female, to occupy their time fully with other activities. Physical and mental tiredness and preoccupation with other interests are conducive to loss of sex appetite.

Infantile Tetany

Q.—*Could you suggest a treatment for infantile tetany in a baby 5 months old? The mother has been subject to latent tetany before and during pregnancy. The child was bottle-fed from birth and developed laryngeal and bronchial spasms in a few weeks, and also occasional carpopedal spasms. The symptoms are never alarming, but they persist. Calcium chloride 4–5 g. daily in 10% solution, proved of value, but as soon as it is withdrawn the symptoms reappear. Is there any contraindication to the prolonged use of calcium chloride? Calcium lactate given in massive doses has been of no avail. The child is also getting vitamins A and D daily. Would you give calciferol instead? If so, what dosage would be appropriate for that age? Owing to laboratory difficulties in this part of India it has not been possible to ascertain the blood-calcium level.*

A.—This unfortunately appears to be a case in which biochemical investigation is essential if treatment is to be based on more than guesswork. No mention is made of any clinical or radiological evidence of rickets, and if this is absent it is probable that the tetany is due to some other cause than lack of vitamin D—e.g., hypoparathyroidism or alkalosis. The fact that symptoms were consistently relieved by calcium chloride, but not by calcium lactate given over presumably a long period, suggests alkalosis as a more likely cause. Unless calcium chloride causes gastro-intestinal upset, the only danger of prolonged administration is likely to be the production of an acidosis. If any evidence of rickets is present it would be advisable to give three teaspoonfuls of pure cod-liver oil daily, together with calcium lactate in preference to calciferol. Although cases of vitamin-D-resistant rickets (with or without tetany) do occur, they are extremely rare; if synthetic products are used in large amount without adequate proof of vitamin-D resistance there is a real danger of overdosage.

Pigmentation of Skin

Q.—*A woman aged 44 has had lupus of the face since 1923. Injections of bismuth and quinine and various ray treatments have left a butterfly area of thin skin. Nine months ago dark-brown lines appeared across the butterfly area, and the lower-jaw line on both sides is pigmented the same colour. This gives her an unwashed appearance. Is there any way of removing this discoloration?*

A.—It is presumed that the condition was lupus erythematosus. The pigmentation, being of recent origin and affecting parts not touched by the original disease, is probably unrelated to the disease or its treatment. It may be the affection of poikilodermia, described by Civatte and seen occasionally in women at the time of the menopause. This condition may respond to oestrogen therapy, but in any case it clears in about five years. A similar toxic melanodermia is seen from the use of creams or the ingestion of fats or from tar products. No active local treatment is suggested. The affection can be masked by suitable cosmetics.

Disinfection of Ambulance after Removal of Infectious Case

Q.—*Some local health authorities are recommended to make use of the ambulance which deals with the general work of the district for removal of infectious cases. In the past this has been contrary to the ruling of the St. John Ambulance Association. Is it free from all risk to use this ambulance indiscriminately provided it is disinfected after conveying an infectious case, or should a special van be allocated to deal with notifiable infectious diseases?*

A.—The use of the same ambulance for the conveyance of infectious and other cases may be safely recommended provided proper precautions are taken to disinfect the ambulance after removal of an infectious case. A patient with a notifiable infectious disease who is being removed from his home is usually wrapped in blankets brought from the hospital, so that any discharges from throat, nose, etc., are likely to contaminate the blankets rather than the stretcher or any other part of the ambulance. After the patient has been removed in his blankets, the inside of the ambulance is thoroughly disinfected either with formalin spray or with a phenolic disinfectant. For cases of smallpox, where the infectivity is very high, a special ambulance attached to the smallpox hospital is used.

Recovery following Heartblock

Q.—*Four years ago a woman of 87 was found to be suffering from heartblock, with a rate of 17 per minute. A few months ago the rate rose to 37, and is now 67 to 74 per minute. There is a soft mitral systolic murmur, and the pulse is of reasonably good quality. Is it not extraordinary that anyone of so great an age should develop a normal pulse after at least four years of heartblock?*

A.—The bundle of His receives its blood supply from branches of both the anterior (left) and posterior (right) coronary arteries, and deprivation of one or other of these sources can lead to complete heartblock. It has been shown that obstruction in one or other system may be remedied by the growth of new anastomotic channels from the other, and this process has recently been described in detail by Laubry in a communication to the Section of Cardiology at the International Conference of Physicians. Heartblock in the elderly is almost always due to ischaemia, and it is probable that in the case described the bundle was deprived of one of its sources of blood supply so that complete block developed. The formation of new anastomotic channels might in due course provide a blood supply sufficient to restore the function of the bundle. It is true that four years is a long time for complete block to last, but it is hard to imagine any other explanation of the phenomenon.

Effect of Phenobarbitone

Q.—*What would be the effect of the regular use of, say, 1 gr. (65 mg.) of phenobarbitone soluble a day? Would it have any effect upon a pregnant woman and the child?*

A.—In most persons the regular use of 1 gr. of soluble phenobarbitone daily would have no ill effect beyond producing a certain heaviness. There is, however, much variation in different individuals, and since it is very slowly excreted it is important to look out for signs of accumulation. Soluble barbitone passes from the maternal blood to the foetus, and, though a dose of 1 gr. daily to the mother is certainly small, it ought not to be assumed that if given for many weeks it would have no harmful effect on the baby. The probability that it would do harm is slight, and this must be weighed against the benefit which might accrue to the mother in other directions.

Xerostomia

Q.—*A woman aged 60 has suffered from partial dryness of the mouth for about ten years. For the past four months the dryness has been complete; eating and speaking are now almost impossible. She has a moderate degree of hypertension but a normal blood picture. Dilute hydrochloric acid with meals and large doses of vitamins A, B, C, and D have had no effect. What is the cause, and can you suggest treatment?*

A.—The description of this patient suggests a diagnosis of Sjögren's syndrome—a condition of unknown cause most frequently seen in elderly women, in which dryness of the mouth and pharynx is associated with keratoconjunctivitis sicca and loss of hair. It would be interesting to know whether there is evidence of the two latter changes in this instance. Treatment is unsatisfactory, both in Sjögren's syndrome and in other types of xerostomia. Large doses of vitamin A (30,000 to 40,000 units daily) have been advocated, but it must be admitted that they usually have little effect. It is often necessary for the patient to take a fluid or semi-solid diet, while some of the discomfort can be allayed by frequent mouthwashes.

Stilboestrol and Mastitis in the Male

Q.—*Does stilboestrol cause mastitis in the male? A man aged 73 developed bilateral mastitis after a fortnight's treatment with stilboestrol for prostate trouble. The drug was immediately discontinued, but the condition persists after two months.*

A.—Yes, painful enlargement of the breasts is a complication of the stilboestrol treatment for carcinoma of the prostate. The condition usually subsides if treatment is withdrawn. Gynaecomastia also occurs with atrophy of the testes, or with destruction of the liver by cirrhosis or neoplasm. Possibly one or other of these features is present in this case. If the prostatic trouble is non-malignant, testosterone might help the mastitis, but would be contraindicated with carcinoma of the prostate, defeating the object of the original treatment with stilboestrol.

"Semi-hypertrophy"

Q.—*In a female baby aged 5 months the left leg is uniformly fatter, but not longer, than the right. The increase in circumference at mid-calf and mid-thigh is in the neighbourhood of 3/4 to 1 in. (1.9 to 2.5 cm.). The lower half of the body has slightly more fat than the upper half. Radiography shows that the bones and muscles of both sides are equal. The baby has been seen by a paediatrician, an orthopaedic surgeon, and an endocrinologist, none of whom offered any rational explanation or suggestion for treatment.*

A.—Various minor degrees of asymmetry of the body are not uncommon, and such a term as "semi-hypertrophy" is used to denote this condition if, as in the case cited, it is at all obvious. It is necessary to exclude any deep-seated naevoid condition; this would be indicated by a warmer feel to the limb and probably some discoloration. In general the differences become less obvious as the child grows. An embryological explanation could possibly be offered; there is no treatment.

NOTES AND COMMENTS

Intractable Tinnitus.—Mr. N. L. ROWE, H.D.D., writes from the Plastic and Jaw Unit, Hill End E.M.S. Hospital, St. Albans, Herts: May I be permitted to make a further observation on the Question and Answer (Jan. 3, p. 34) about "Intractable Tinnitus"? Two factors appear to have been overlooked which may possibly throw some light on the aetiology of the case under discussion. In the first place the presence of unerupted teeth may occasionally give rise to reflex irritation which need not necessarily manifest itself as a neuralgia—as, for example, the occurrence of blepharospasm associated with unerupted maxillary or mandibular third molars. In this case the unerupted upper left canine may, by pressing on the greater palatine nerve, a branch of the spheno-palatine ganglion, be setting up an irritation of the fifth cranial nerve. In this connexion it is worth recalling that the tensor tympani muscle is supplied by the motor division of the trigeminal nerve via the otic ganglion, which itself sends a communicating twig to the nerve of the pterygoid canal on its way to the spheno-palatine ganglion previously mentioned. A communication also exists with the tympanic plexus via the lesser superficial petrosal nerve. I can recall a case of paralysis of the motor division of the trigeminal nerve due to poliomyelitis in which there was tinnitus and impairment of hearing on the same side. In the second place no mention has been made of Costen's syndrome, a term used to denote certain symptoms associated with dysfunction of the temporo-mandibular joint caused by loss of molar support, resulting in the backward displacement of the condylar head on to the tympanic portion of the glenoid fossa (Costen, J. B., *Ann. Otol., etc.*, St. Louis, 1934, **43**, 1).

Among such symptoms as trismus, glossodynia, neuralgia, and reflex effects which have been observed tinnitus occupies a prominent place. This has been stated to be due to relaxation of the soft tissues surrounding the Eustachian tube, notably the pterygoideus lateralis and the tensor palati muscles, and although the tube may be patent, as stated in your correspondent's case, this was presumably upon insufflation and would readily collapse again. Retroposition of the condylar head may cause pressure on the auriculo-temporal branch of the trigeminal nerve, and possibly reflex irritation in this manner, via the otic ganglion, of the nerve to the tensor tympani; or compression of the chorda tympani emerging from the petrotympanic fissure of the glenoid fossa may produce remote effects in its course across the tympanum, although this compression is usually productive of the glossodynia frequently associated with these cases.

Although no indication of the dental condition, apart from freedom from sepsis as shown by radiographic examination, is available in your correspondent's letter, his age (50) is suggestive of the possibility of overclosure of the mandible due to attrition, loss of molar support, or resorption of the alveolar ridges, which amounts to overclosure if a prosthesis is worn. Aggravation of the symptoms upon waking as stated by him can be visualized as due to removal of partial dentures at night, or grinding of the teeth during sleep, with the train of events previously enumerated. At all events, removal of the unerupted canine and investigation into the vertical dimension of the bite would appear to be worth while before designating the condition as "intractable tinnitus."

Thoraco-Lumbar Splanchnicectomy.—Mr. H. A. HAXTON (Manchester) writes: I was interested to see (Jan. 10, p. 86) that Mr. F. E. Stock now uses an extended Fey incision in this operation, for I also applied it some 18 months ago. The removal of the lumbar part of the sympathetic chain is easier by this approach than by the usual Smithwick procedure, but there is, in my opinion, a greater risk of tearing the pleura. On the whole, there is little to choose between the two approaches.

Corrections

In our report of a conference arranged by the National Association for Mental Health (Jan. 24, p. 160) the remarks attributed to "Alderman G. R. Spruit (Hull)" were actually made by Alderman R. E. Smith, who attended as chairman of the Health Committee of Kingston-upon-Hull.

The name of Mr. A. K. Henry was misspelt in the letter from Prof. G. Grey Turner in our issue of Jan. 24 (page 173).

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone.
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SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY FEBRUARY 7 1948

B.M.A. LECTURES ABROAD

A little over a year ago the Council of the B.M.A. set aside a sum of £1,000 to provide lectures by distinguished British practitioners to the medical profession in Europe, more especially in those countries occupied by the enemy during the war. Since the inception of the scheme "B.M.A. Lectures" have been delivered by Dr. S. C. Dyke in Czechoslovakia on clinical pathology, Prof. T. P. Kilner in Denmark on plastic surgery, Mr. I. Lawson Dick (for Sir Reginald Watson-Jones) in Norway on orthopaedics, and Mr. C. Price Thomas on chest surgery in Spain and the Netherlands. At the end of February Mr. N. R. Barrett is to visit Denmark to lecture on recent advances in chest surgery, and two lectures are also being arranged for Austria.

These B.M.A. Lectures are evidently very much appreciated, and are forming valuable links between British medicine and the Continent, while the lecturers themselves are stimulated by the contact with foreign practice. The following abstract of the report submitted to the International Relations Committee by Mr. Lawson Dick on his return from Norway illustrates the value of the scheme:

Surgery in Norway

"I came home from Norway with these strong impressions: the welcome which was given to us could not have been more cordial or more hospitable; national feeling in Norway is very strong, and they have a high regard and a warm affection for Britain; the medical men are deeply interested in their work and are most anxious to accept any opportunity for an exchange of views. The audience much enjoyed the lectures. They were still listening at the end, and asked questions.

"In Bergen, where I was supposed to give only one lecture, I was greeted on arrival with the news that 'they had heard I gave two lectures in Oslo and they hoped I would do the same there.' So that meant another marathon evening, but again the audience was so responsive and receptive that it was no effort to talk to them.

"The hospitals are very fine, particularly the long-stay hospitals for tuberculosis and orthopaedics. We saw two of them—the Martina Hansen Hospital, near Oslo, and the Kysthospitalet i Hagevik, which is on the coast about fifteen miles south of Bergen. These are lovely buildings, magnificently situated in superb surroundings. The standard of hospital buildings and equipment seemed to me to be much more uniform than it is with us. There were no vast differences such as are so often seen between English hospitals even in the same town. In all the hospitals there was a most admirable friendliness between staff and patients.

"Medicine in Norway bears the marks of the long isolation from recent progress which the Norwegians suffered. In particular their fracture treatment shows much more of the influence of Böhler than is now seen in Britain. But some of their work is excellent. There is the closest possible liaison between the professor of neurology in Oslo and the neurosurgeon, to their great mutual advantage, and the imprint of Dr. Smith-Petersen's teaching is everywhere recognizable.

"Specialization is not yet completely developed in Norway, but they are alive to the need for it and are taking active steps to introduce it. When I first saw Dr. Carl Semb's work in Oslo I was a little perturbed, because he is obviously a man of very great competence in a wide field of surgery, and I thought that he might be one of those great 'general' surgeons who can be a bar to real progress. But I very soon realized that he was fully aware of the advantages of breaking up the huge field of surgery into its component parts and of having each one in the hands of a surgeon specially trained to it. He is a man of great personal charm and very wide experience (which includes a flight from the Gestapo with only hours to spare, and a leading part in the raising in Sweden of a Norwegian 'police force' 80,000 strong and armed with artillery), and will be an ideal leader of a surgical team.

"Their five years of occupation did not break the Norwegian courage. Nearly all of the doctors whom we met had been in concentration camps for varying periods. The Secretary of the Norwegian Medical Association, also a charming man, was interned for nearly five years because of the intransigence of his colleagues, who would not subscribe to the new German-controlled Association. And they teased the Germans mercilessly all the time. A Norwegian lady doctor, who spoke four European languages perfectly, was asked by a German officer the way to a well-known Oslo street. 'May I reply in English?' she said. The officer assented, and the lady said, 'I'm sorry, I don't know.' That little story epitomizes the spirit of Norway. But my host in Stavanger had tears in his eyes when he told me how he saw, through the window of the room we were then in, the first British paratroops march down the hill into the town, and that is now more than two years ago. I shall never forget my visit. It was a most stimulating experience and was made wonderfully enjoyable by the boundless Norwegian hospitality."

Medical Education in Holland

Mr. Price Thomas's report on his visit to the Netherlands included the following observations.

"I found the Dutch students, doctors, and specialists very keen and very anxious to hear all there was to be heard about thoracic surgery. I gave lectures to mixed audiences of students and medical men at Amsterdam, Utrecht, Leiden, and Groningen. In each place the lecture-room was full, and I think in all, at an absolute minimum, twelve to fourteen hundred people attended. I was also asked at Utrecht to give an additional lecture to the students on the subject of cancer of the lung, which was also very well attended, there being between two and three hundred people present.

"The standard of medicine in Holland, as judged by the university hospitals, was very high. They were working on progressive lines and turning out very good specialists. The system of education differs somewhat from ours, especially so in that the university degree can be obtained without having done any clinical work in the wards, the students' sole contact with patients being through lecture demonstrations. The student, however, before being allowed to practise, has to take a State examination, and this entails having done a minimum of one year's clinical experience in hospital. On an average, I was told that each student did eighteen months. No other hospital work is done by the students unless they desire to specialize—in other words, only those who intend specializing hold resident appointments. There are many more students at the universities than can be satisfactorily coped with. The smallest number of medical students in any university is about twelve hundred, including all years of study."

HEARD AT HEADQUARTERS

"Shouting Down"

The allegation contained in a letter of four Labour M.P.s that dissentient speakers at B.M.A. meetings are shouted down deserves some examination. The writer has attended half a dozen big meetings of the profession during the present crisis. At three of them there were no dissentient speakers at all. At two there were one or two dissentient speakers, who had a perfect hearing and were given every courtesy. The remaining occasion was the meeting at which Dr. H. B. Morgan, M.P.—one of the signatories of the letter—did not conclude his speech owing to interruption. It is stretching the description to say that Dr. Morgan was shouted down. What actually happened was that Dr. Morgan made one or two statements which were greeted with cries of dissent. But they were not the long sustained cries of dissent which indicate that an assembly desires to hear no more of a speaker. Dr. Morgan was not "shouted down" in the sense in which Miss Jennie Lee, M.P. (Mrs. Aneurin Bevan), was shouted down at the Labour Party Conference at Margate last Whitsuntide, when she was not allowed even to finish her first sentence. There was nothing to prevent Dr. Morgan from proceeding with his speech if he so desired. The cries of dissent with which he was greeted were no more prolonged or intense than the applause which greeted other speakers. But rather surprisingly Dr. Morgan, who is surely used to much more riotous assemblies, suddenly gave in and said that evidently the audience did not wish to hear him, and next day *The Times* said that Dr. Morgan had been shouted down, and a day or two later there appeared the letter from the medical Members of Parliament. The meeting would have been quite prepared to listen to Dr. Morgan longer, but he appeared to expect interruption and ready to interpret it as closure.

The Secrecy of the Ballot

Why this sudden fuss about the secrecy of the voting in the plebiscite? If it had been done the other way and the plebiscite forms had been sent in unsigned there would have been an immediate outcry that dummy votes were being cast. Moreover, is there any properly conducted election which is really secret? Certainly not Parliamentary elections. Anyone who has ever been in a polling booth is aware that it would be possible to tell afterwards, if it should prove necessary, how any person has voted. That, indeed, is the only way of keeping a check on the democratic principle of one man one vote.

The Stand of the Consultants

One of the many heartening things at the big meetings of the profession we have attended during the present struggle has been the presence and support of the consultants; they have supported the case put forward on behalf of the profession as enthusiastically as their general practitioner colleagues. The Minister's insistent efforts to placate them have not succeeded, and many in conversation have avowed their determination to line up with the general body, irrespective of any concessions which might affect their own individual position. A well-known consultant, until lately a member of the Labour Party and a prospective Parliamentary candidate, told us that in consequence of the Bevan crisis he had left the party. He felt that the issues involved went to the root of things, and that the fight of the profession was part of a wider fight for freedom.

Mural Propaganda

One general practitioner of our acquaintance has put up in his surgery and waiting-room such posters and cartoons as he can secure which represent the facts of the situation in a way that can be readily assimilated by those who wait. The folder which the Association has issued, the "Octopus," may prove useful in this connexion. It is important that doctors should explain the facts of their case to the public, and in many cases their wives can help. It tends to be forgotten that the profession's case is a technical one, familiar enough to those who have been in medical politics for years but requiring some exposition to get it over to the public.

Association Notices

GROUP OF OTOLARYNGOLOGISTS

Notice is hereby given of the formation by the Council of a Group of Otolaryngologists, which shall be composed of members of the Association who are engaged predominantly in the practice of otolaryngology. Members of the Association who claim to conform to this definition are invited to complete the form set out below and return it to the Secretary, B.M.A. House, Tavistock Square, W.C.1, not later than Feb. 20, 1948. The first general meeting of the Group will be held at a date to be subsequently announced in the *Supplement*.

CHARLES HILL,
Secretary.

BRITISH MEDICAL ASSOCIATION
GROUP OF OTOLARYNGOLOGISTS
FORM OF APPLICATION FOR MEMBERSHIP

To the Secretary,
BRITISH MEDICAL ASSOCIATION, B.M.A. House,
Tavistock Square, London, W.C.1.

I wish to apply for membership of the Group of Otolaryngologists, which is composed of members of the Association engaged predominantly in the practice of otolaryngology.

I understand that the inclusion of any individual within the Group is at the discretion of the Group Committee subject to appeal to the Council of the Association.

I am a member of the Association. I am an otolaryngologist, and am engaged predominantly in the practice of otolaryngology.

Name (in Block Capitals).....Age.....

Qualifications..... Date of Qualifying.....

Experience in Otolaryngology since Qualifying.....

.....

Appointments .....

.....

.....

Whether employed in full or part-time duties and, if the latter, number of hours per week devoted to otolaryngological work.....

.....

Signed.....

Address.....

.....

Date.....

Diary of Central Meetings

FEBRUARY

12 Thurs. Journal Committee, 2 p.m.
18 Wed. **Council**, 10 a.m.

Branch and Division Meetings to be Held

DONCASTER DIVISION.—At Danum Hotel, Doncaster, Tuesday, Feb. 10, 7.30 p.m. B.M.A. Lecture by Mr. A. Lawrence Abel: The National Health Service Act.

KENSINGTON AND HAMMERSMITH DIVISION.—At Medical School, the Royal Cancer Hospital, 24, Onslow Gardens, S.W., Tuesday, Feb. 10, 8.30 p.m. Lecture by Lord Horder: General Approach to the Cancer Problem.

WINCHESTER DIVISION.—At Banqueting Hall, Winchester, Wednesday, Feb. 11, 7.45 for 8.15 p.m. Dinner-dance. Tickets 15s. (exclusive of wines). Dancing and buffet from 9.15 p.m. (Tickets 7s. 6d.)

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

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Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

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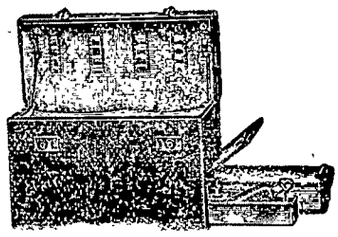

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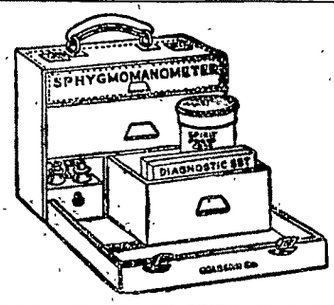

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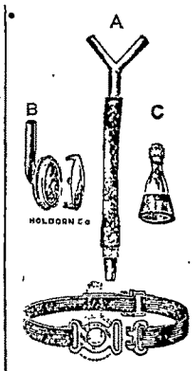

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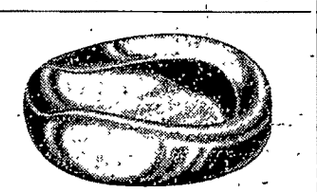

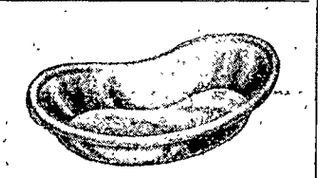

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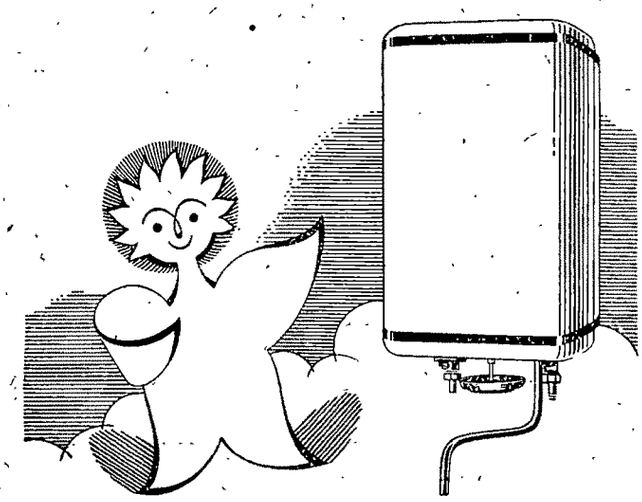

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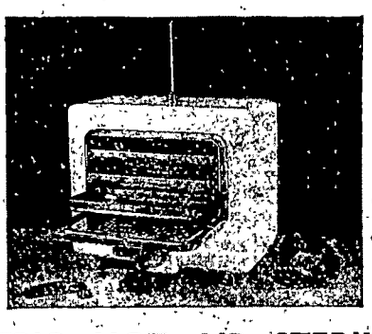

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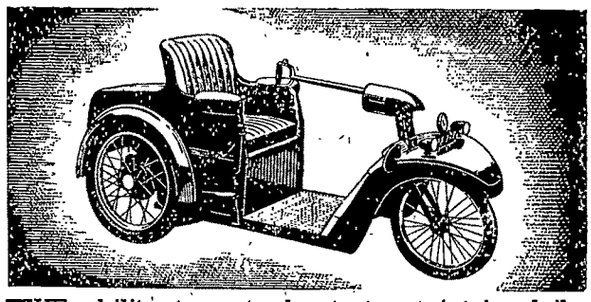

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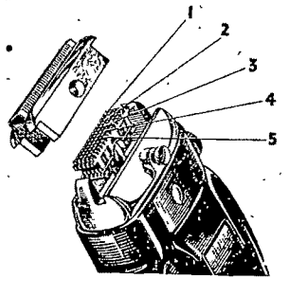

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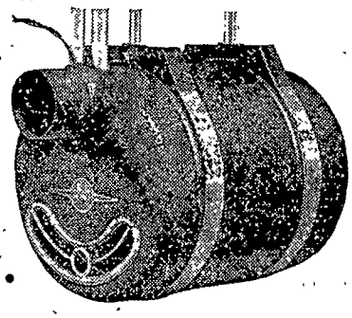

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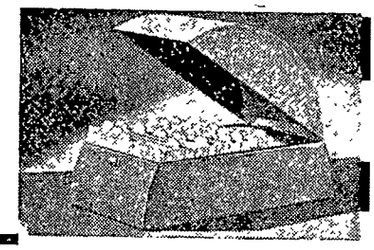

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R—Male, liable to military service under the National Service Acts.
W—Women practitioners.

APPOINTMENTS

HIS MAJESTY'S COLONIAL SERVICE TRAVELLING MEDICAL OFFICERS
in Sarawak

Applications are invited to fill vacancies in the Colonial Medical Service for Travelling Medical Officers in Sarawak. These posts offer wide scope for initiative and the broadening of both lay and medical experience. Successful candidates will be required to tour inland areas by river and to be in charge of mobile dispensaries. The climate is not unsuitable to Europeans and the country is healthy provided reasonable precautions are taken against malaria. Candidates must be of British nationality with medical degrees registrable in the United Kingdom, and should have had at least twelve months' post-graduate experience and should also possess a good working knowledge of abdominal surgery, obstetrics and tropical medicine. Candidates born after January 1, 1908, will be eligible for permanent and pensionable posts, but appointments may also be made on contract, and selected candidates after a few years in this work will be given an opportunity to transfer to other duties in the Colonial Medical Service. Salaries are on the scale $500 × 25 – $800 a month (one dollar equals 2s. 4d.). A cost-of-living allowance of 10% per month is also payable, plus 25% of gross salary for married officers and 15% of gross salary for bachelors, with maxima of $135 and $85 respectively. Free quarters are at present provided and free passages for officer, wife and two children under sixteen on appointment and on leave. Salaries and conditions of service are, however, under review. There is no income tax in Sarawak. A form of application may be obtained from the Director of Recruitment (Colonial Service), 15, Victoria Street, S.W.1.

HIS MAJESTY'S COLONIAL SERVICE ASSISTANT PATHOLOGIST
Department of Pathology in Singapore

Applications are invited to fill the post of Assistant Pathologist, Department of Pathology, in Singapore. Applicants must be "qualified medical" practitioners with degrees registrable in the United Kingdom, and experienced in pathology, and should preferably be bachelors under 40 years of age. Appointment will be on agreement for two to three years at a salary of $750 a month (£1,050 a year). Cost-of-living allowance is also payable at $10 a month plus 20% of salary for bachelors and 30% for married officers, subject to maxima of $110 and $160 a month. Children's allowance, where applicable, is paid at $70 a month for first child and $50 for second child up to 18 years of age. Government quarters are provided if available and a rental charged of not more than 6% of salary. Messing accommodation for bachelors. Free passages for officer, wife and up to three children on appointment and on expiry of agreement. Outfit allowance of £60 on appointment. Applications should be addressed to the Director of Recruitment (Colonial Service), 15, Victoria Street, London, S.W.1.

KILLEARN HOSPITAL GLASGOW AND WEST OF SCOTLAND NEURO-SURGICAL UNIT FIRST ASSISTANT

The Joint Committee administering Killearn Hospital invite applications from registered medical practitioners for the post of full-time First Assistant in the Glasgow and West of Scotland Neuro-surgical Unit at Killearn Hospital. Applicants should hold a higher surgical qualification and have a substantial experience of Neuro-surgery. The salary range is from £1,000 to £1,400 per annum, assessed on a non-resident basis. If the successful applicant resides in the hospital, £100 per annum will be charged for full board and lodging. Applications stating age, qualifications with dates, present appointment and previous experience, together with the names of not more than three referees, should be addressed to the undersigned, from whom further information may be obtained, not later than February 25, 1948.—Nell M. Adam, Secretary, 87, Union Street, Glasgow, C.1.

JERVIS STREET HOSPITAL, Dublin TWO VISITING PHYSICIANS

The Committee of Management of this Institution invite applications for vacancies for Two Visiting Physicians on the Staff of the Hospital for recommendation to the Governors. Only persons possessing the membership of the Royal College of Physicians of Ireland or of the Royal College of Physicians of England, or the M.D. Degree from a recognized University, will be eligible for election. The successful candidates will be required to give an undertaking not to accept similar appointments with any other public general hospital during their tenure of office. Candidates should address their letters of application to the Secretary of the Hospital so as to reach her not later than February 20, 1948.—By order, Sheila O'Dea, Secretary.

GOVERNMENT OF SOUTHERN RHODESIA VACANCIES FOR MEDICAL OFFICERS

Applications are invited from male medical practitioners for appointment as Government Medical Officers in Southern Rhodesia. Salary scale is £660 by £27 10s. to £990 per annum, plus the right to private practice or an allowance in lieu, at present at the rate of £200 per annum, at certain stations where private practice is not permitted. The commencing salary may be higher than the minimum of the scale (not exceeding four steps in such scale) in recognition of approved previous experience. A cost-of-living allowance, at present at the rate of ten per cent of basic salary, will also be paid in terms of regulations. Successful applicants will be required to pass a medical examination by a Southern Rhodesia Government or other duly appointed medical officer and will be provided with travelling fare from place of appointment to Southern Rhodesia for themselves and, if applicable, half the cost of fares for their wives and dependent children under the age of eighteen years. They will be employed, in the first instance, as Relieving Medical Officers. Official duties may include the supervision of European and Native Hospitals and Native Clinics; attendance upon Government patients and school children; performance of medico-legal work, routine public health duties, and any other work of a medical nature which may be allocated by the Medical Director. Motor transport will be provided for official duties and will be available for private purposes at tariff mileage rates. Applications in duplicate, stating age, nationality, marital condition, qualifications and previous experience (giving exact dates), full particulars of any military service, the earliest date on which duty could be assumed, and giving the names of two persons to whom reference may be made, should be sent, together with copies of three recent testimonials, to reach the Secretary to the High Commissioner for Southern Rhodesia, Rhodesia House, 429, Strand, London, W.C.2, on or before March 22, 1948. Canvassing will disqualify applicants.

TYRONE COUNTY HEALTH COMMITTEE DIVISIONAL MEDICAL OFFICERS

The Tyrone County Health Committee invite applications for four Divisional Medical Officers, who will perform the duties of Assistant County Medical Officer and Medical Officer of Health in respect of the areas allocated to them. The positions have arisen in consequence of the proposed re-organization of the Health Services in Northern Ireland.

Division No. I comprises the Urban District of Dungannon and the Rural District of Dungannon. Division II comprises the Urban District of Strabane and the Rural Districts of Strabane and Castlederg. Division No. III comprises the Urban District of Omagh and the Rural District of Omagh. Division No. IV comprises the Urban District of Cookstown and the Rural Districts of Cookstown and Clogher.

Applicants must be registered medical practitioners holding a Diploma in Sanitary Science, Public Health or State Medicine and must have had experience in a whole-time Public Health appointment in accordance with the Health Authorities (Qualifications and Duties of Medical Officers) Regulations (Northern Ireland), 1948, and must be otherwise qualified in accordance with the above Order. The salaries for the positions have been fixed at £960 per annum rising by annual increments of £25 to £1,160, inclusive of cost-of-living bonus. Superannuation will be payable in accordance with the Northern Ireland Local Government Superannuation Acts, which is payable on a non-contributory basis. Travelling expenses will be payable according to the scale and conditions applicable from time to time to Civil Servants of the Government of Northern Ireland. Other things being equal, preference will be given to ex-Service candidates possessing the required qualifications. Forms of application, conditions of appointment and particulars of the Qualification Order above referred to may be obtained from the undersigned, with whom applications must be lodged not later than February 21, 1948.—Robert Parke, Secretary, County Health Office, Omagh, County Tyrone.

CITY OF SALFORD HOPE HOSPITAL VISITING PSYCHIATRIST

Applications for the post of Visiting Psychiatrist at Hope Hospital, Salford, are invited. The appointment will be for four sessions per week and will be on a temporary basis for the time being. Remuneration will be in accordance with the agreement between the B.M.A. and the local authority association. Applications, with particulars of experience and the names of two referees, should be forwarded to the Medical Officer of Health, 143, Regent Road, Salford, not later than February 14, 1948.—H. H. Tomson, Town Clerk.

DOWN COUNTY HEALTH COMMITTEE SIX DIVISIONAL MEDICAL OFFICERS

Applications are invited for the above-mentioned whole-time appointments from registered medical practitioners, who must also be registered in the medical register as holding a Diploma in Sanitary Science, Public Health or State Medicine. Applicants must have had not less than two years experience in general Public Health duties in a whole-time capacity as a Medical Officer of Health, Deputy Medical Officer of Health or Assistant Medical Officer of Health under a Local Authority in accordance with the Health Authorities (Qualifications and Duties of Medical Officers) Regulations (Northern Ireland), 1948, and/or must be otherwise qualified in accordance with the above Order. The salaries for the positions will be £960 per annum, rising by annual increments of £40 (first increment payable as from April 1, 1949) to £1,160, inclusive of cost-of-living bonus, plus travelling expenses on the County Council scale of 5d. per mile, and the posts are superannuable on a non-contributory basis in accordance with the Superannuation Acts relating to Local Government in Northern Ireland. The precise Boundaries of the Divisional Areas (which will have a population of 30,000 to 40,000) have not yet been finally determined, but these will be formally approved prior to the attendance of applicants for interview, and the opportunity will then be afforded to applicants to state their preference (if any) for individual areas. The positions have arisen in consequence of the re-organization of the Public Health Services in Northern Ireland, and the successful applicants will be required (*inter alia*):—(a) to reside in the Division to which they are appointed (b) to act under the direction of the County Medical Officer of Health as Assistant County Medical Officer within the Division; and (c) to act as Medical Officer of Health to the various Borough, Urban, and Rural Districts within the Division. Details of the conditions of appointment and particulars of the Qualifications Order above referred to may be obtained from Dr. J. B McKinney, County Medical Officer of Health, at the under-mentioned address. Other things being equal, preference will be given to ex-Service candidates possessing the required qualifications. Applications to be lodged with the undersigned not later than Monday, February 23, 1948.—J. C. Pantridge, Secretary, 17, Ocean Buildings, Donegall Square East, Belfast.

CIVIL SERVICE COMMISSION FULL-TIME PATHOLOGIST

Applications are invited from registered medical practitioners preferably holding a University degree in medicine for the permanent post of full-time Pathologist in the Home Office attached to the North Eastern Forensic Science Laboratory at Wakefield. The successful candidate will be required to give expert advice and assistance to police forces in Yorkshire, including the carrying out of examinations at the scenes of crime as well as in the laboratory, and will also be required to give expert evidence in court. Salary is £960 per annum for candidates age 35 on appointment, rising by annual increments of £30 and £50 to £1,320; £30 will be deducted for each year below 35. Superannuation provision will be made either under the Superannuation Acts or the Federated Superannuation System for Universities. The post will be filled by competitive interview in London. Further particulars and forms of application may be obtained from the Secretary, Civil Service Commission, 6, Burlington Gardens, London W.1, quoting No. 2108. Completed application forms must be received not later than March 4

CHRISTCHURCH HOSPITAL
Christchurch, New Zealand
ASSISTANT RADIOLOGIST

Applications, closing on February 28, 1948, are invited from Radiologists holding a postgraduate qualification in Radiological Diagnosis for the position of Assistant Radiologist, Christchurch Hospital. Salary scale, £1,000 to £1,200 per annum (N Z currency). Further details may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London, with whom applications close on the date mentioned above.

MINISTRY OF HEALTH
Blood Transfusion Service
CHIEF TECHNICIAN

The Ministry of Health invites applications for the under-mentioned appointment in the Blood Transfusion Service at the South London Blood Supply Depot, Sutton, Surrey. Chief Technician at a salary range of £312 to £600 inclusive, according to qualifications. Candidates should have been trained as Pathological Laboratory Technicians and preferably should have had experience in serology and bacteriology. Applications, stating age, qualifications with dates, present appointment, if any, and previous experience, together with the names of two references, should be sent to the Director, South London Blood Supply Depot, Benhill Avenue, Sutton, Surrey, not later than February 21, 1948

Have you read the notice at top of page 13 ?

MINISTRY OF HEALTH
REGIONAL BLOOD TRANSFUSION SERVICE
JUNIOR MEDICAL OFFICER
in the Liverpool Area

Applications are invited from registered medical practitioners for the post of Junior Medical Officer in the Ministry of Health Blood Transfusion Service with Headquarters at Liverpool. The appointment is for six months in the first instance. The salary is at the rate of £422 to £528 per annum, according to experience, payable by the Ministry of Health. This salary is assessed on a non-resident basis and will be at the rate of £100 per annum, less if full board and lodging are provided. The appointment is terminable by a month's notice on either side and the duties include the collection of blood from donors and work in the laboratories. Applications, stating age, qualifications (with dates), nationality and present post, should be sent to the Regional Transfusion Officer, 102, Whitechapel, Liverpool, 1, not later than February 21, 1948.

MINISTRY OF PENSIONS
STOKE MANDEVILLE HOSPITAL
Aylesbury, Bucks
SURGICAL OFFICER (B1)
SURGICAL OFFICER (B2)

A vacancy exists for a Surgical Officer (B1) at the above-named hospital, and applications are invited from registered medical practitioners (men and women). Applicants should have held house appointments and have had surgical experience. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary is at the rate of £350-£550 per annum, according to experience, plus appropriate consolidation addition, and free board and lodging, or an allowance of £100 per annum in lieu if permission is given to live out.

Applications are also invited from registered medical practitioners (men and women), including R practitioners who already hold A posts, for appointment as Surgical Officer (B2) in the Spinal Injuries Centre at the above-named hospital. If an R practitioner is appointed, the appointment will be limited to six months. Salary £300 per annum, plus consolidation addition and free board and lodging, or an allowance of £100 per annum in lieu if permission is given to live out.

Applications for each post, stating age, qualifications (with dates) and nationality, accompanied by copies of two recent testimonials, should be addressed to the Secretary, Ministry of Pensions, Medical Services Division, Norcross, Blackpool, Lancs.

NORTH WEST METROPOLITAN REGIONAL HOSPITAL BOARD
REGIONAL PSYCHIATRIST

Applications are invited from suitably qualified medical practitioners for appointment as Regional Psychiatrist. The duties will include the planning, development and integration of the Board's mental health services with the general hospital service and with the mental health services provided by local authorities. The officer appointed will also be required to maintain close contact with clinical work. Applicants should have had wide experience in general psychiatry, including administrative experience of in-patient and out-patient work, and of after-care. Salary £2,000 a year. The officer appointed will work under the general direction of the Senior Administrative Medical Officer. The appointment is subject to the National Health Service (Superannuation) Regulations, 1947, and is terminable by three months' notice on either side. Applications should include a brief statement of the candidate's age, qualifications and experience, together with the names of three referees, and should be addressed to the Secretary, North West Metropolitan Regional Hospital Board, 13, Portland Place, London, W.1, not later than February 21, 1948.

STAFFORDSHIRE MENTAL HOSPITALS BOARD
ST. MATTHEW'S HOSPITAL
Burntwood, near Lichfield
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Medical Officer (B1). Salary £455 per annum rising by £25 to £555 together with emoluments consisting of board, lodging, laundry and attendance valued for Superannuation purposes at £130 per annum, plus appropriate war bonus, and if holding the D.P.M. an additional £50 per annum. Appointment subject to the Asylums Officers' Superannuation Act, 1909. In the event of a married man being appointed arrangements could be made for wife to be accommodated in the flatlet, subject to financial adjustments. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Further particulars may be obtained from the Medical Superintendent, to whom applications should be sent as soon as possible.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT THORACIC HOUSE PHYSICIAN (A) or (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Thoracic House Physician ("A" or "B2"), now vacant, for work in the Thoracic Centre (70 beds) of the above hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months; otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months; otherwise it will be for a period of one year. The salary payable will be, in the case of an A appointment, £120 per annum and for a B2 appointment at £200 per annum, together with full residential emoluments The Hospital, in addition to the Thoracic Unit, accommodates acute medical and surgical Service and Civilian patients and has an Orthopaedic Centre (300 beds). Total beds 1,000. Applications, with full particulars, should be forwarded to the Medical Superintendent, Pinderfields Emergency Hospital, Wakefield, forthwith.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT HOUSE SURGEON (A) or (B2)
for the Orthopaedic Department and Casualty Dept.

Applications are invited from registered medical practitioners for the above appointment, now vacant, at the Pinderfields Hospital, Wakefield. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months; otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months; otherwise it will be for a period of one year. The salary payable will be, in the case of an A appointment, £120 per annum and for a B2 appointment at £200 per annum, together with full residential emoluments. The Hospital, in addition to the Orthopaedic Centre (300 beds approx.), accommodates acute medical and surgical Service and Civilian patients and has a special Thoracic Surgery Unit (70 beds). Total beds 1,000. Applications with full particulars should be forwarded forthwith to the Medical Superintendent, Pinderfields Hospital, Wakefield.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT HOUSE SURGEON (A) or (B2)
for Fracture and Casualty Departments

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident House Surgeon (A) or (B2) now vacant, for work in the Fracture and Casualty Departments of the above Hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months; otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months; otherwise it will be for a period of one year. The salary payable will be in the case of an A appointment £120 per annum, and for a B2 appointment at £200 per annum, together with full residential emoluments. The hospital, in addition to the Fracture and Casualty Department, accommodates acute medical and surgical Service and Civilian patients and has a Thoracic Surgery Centre (70 beds). Total beds 1,000. Applications with full particulars should be forwarded to the Medical Superintendent, Pinderfields Emergency Hospital, Wakefield.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

BOROUGH OF WILLESDEN
RESIDENT MEDICAL OFFICER (B1)

The Council invite applications for the post of Resident Medical Officer (B1) at the Willesden Maternity Hospital, Honeypot Lane, Kingsbury, N.W.9 (56 beds). Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The salary will be at the rate of £455 per annum rising by annual increments of £25 to £555 per annum plus current cost-of-living bonus with in addition accommodation, board, laundry and attendance. The appointment is for a period of twelve months, is subject to the staff regulations of the Council and to one month's notice on either side. Application forms may be obtained from the Medical Officer of Health, Health Department, 54, Winchester Avenue, Kilburn, N.W.6, to whom they should be returned not later than Saturday, February 28, 1948, envelopes being marked "Resident Medical Officer."—R. S. Forster, Town Clerk, Town Hall, Dyne Road, Kilburn, N.W.6.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS EMERGENCY HOSPITAL
Wakefield
RESIDENT HOUSE SURGEON (A) or (B2)
General Surgical Duties

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) or (B2), now vacant, for General Surgical duties at the above hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a perod of six months, otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be for a period of one year. The salary payable will be, in the case of an A appointment, £120 per annum and for a B2 appointment, £200 per annum, together with full residential emoluments. The Hospital accommodates acute medical and surgical Service and Civilian patients and, in addition to an Orthopaedic Centre, has a special Thoracic Surgery Unit (70 beds). Applications with full particulars should be forwarded to the Medical Superintendent, Pinderfields Emergency Hospital, Wakefield, forthwith.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

ROMFORD JOINT HOSPITAL BOARD
RUSH GREEN EMERGENCY AND ISOLATION HOSPITAL, Romford
HOUSE SURGEON (B2)

Applications are invited for the post of House Surgeon (B2) at the above hospital, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of one year. The salary is at the rate of £250 per annum plus bonus (at present £24 18s.) and emoluments. Applications with copies of two testimonials or names for reference to be sent to the Medical Superintendent, Rush Green Hospital, Romford, as soon as possible.—Ernest E. Taylor, Clerk of the Board, Clerk's Office, Rush Green Hospital, Romford.

BOROUGHS OF STALYBRIDGE AND DUKINFIELD
JOINT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners, including those serving in H.M. Forces, for the permanent appointment of Medical Officer of Health for the two Boroughs. The salary will be at the rate of £960 per annum, rising by three annual increments of £50 to a maximum of £1,110 per annum, plus cost-of-living bonus. Applicants must be registered in the Medical Register as holders of a Diploma in Sanitary Science, Public Health, or State Medicine. The appointment will be subject to the Sanitary Officers' (Outside London) Regulations, 1935, and the person appointed will be required to undertake the performance of all duties imposed upon a Medical Officer of Health by statute and by any orders, regulations or directions from time to time made or given by the Minister of Health, to whose approval also the appointment will be subject, and to any by-laws or instructions of the Councils. It is probable that the successful applicant will also be appointed at an increased salary as Divisional Medical Officer under the Cheshire County Council's Scheme (of which the two Boroughs form exclusively one Division) under the National Health Service Act, 1946. Applicants should possess experience in school medical work, and the successful candidate will not be permitted to engage in private or consultant practice. Every effort will be made to provide the successful applicant with housing accommodation. The appointment is subject also to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination for that purpose. Further particulars of duties, conditions of appointment, and form of application may be had on application to the undersigned, and applications, marked "Medical Officer of Health," accompanied by copies of not more than three recent testimonials, must be sent to the undersigned not later than February 14, 1948. Canvassing will disqualify.—H. D. Elston Macvitie, Town Clerk, Stalybridge, Town Clerk's Office, Stalybridge.

CITY OF PORTSMOUTH
SAINT MARY'S HOSPITAL (1,085 beds)
JUNIOR GENERAL ASSISTANT RESIDENT MEDICAL OFFICER (A)

Applications are invited from male registered practitioners for the appointment of Junior General Assistant Resident Medical Officer (A post), including practitioners within three months of qualification, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period of twelve months. The salary is at the rate of £250 per annum, with residential emoluments valued at £150 per annum, and a temporary cost-of-living bonus at present payable at the rate of £29 18s. per annum. Applications in writing, giving full particulars of experience and stating date when available if appointed, should be sent to the Medical Officer of Health, 1, Western Parade, Southsea, not later than February 14.—V. Blanchard, Town Clerk, City Council Chambers, 1, Clarence Parade, Southsea.

BOROUGH OF WEMBLEY
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited for the established post of Deputy Medical Officer of Health, at a salary of £900 by £50 to £1 050 per annum inclusive of cost-of-living bonus. The salary scale is subject to review on the issue of the next revision of the Askwith Scales. The possession of a Diploma in Public Health or similar qualification is essential. Candidates must be capable of assuming full responsibility in the Public Health Department in the absence of the Medical Officer of Health, so that general public health experience is necessary. The officer appointed will undertake such duties as the Medical Officer of Health, with the consent of the Council, may assign from time to time, and they may include clinical duties in the School Health and Maternity and Child Welfare Services. The appointment will be subject to the Conditions of Service adopted by the Council and to the Local Government Superannuation Acts, 1937 and 1939, and the successful candidate will be required to pass a medical examination. Forms of application may be obtained from the Medical Officer of Health at the undermentioned address, and must be delivered to him duly completed, accompanied by the names of three referees to whom reference may be made, in an envelope endorsed "Deputy Medical Officer of Health" not later than February 21, 1948. Canvassing will disqualify.—Kenneth Tansley, Town Clerk, Town Hall, Wembley.

BOROUGH OF WILLESDEN
WHOLE-TIME ASSISTANT MEDICAL OFFICER OF HEALTH

The Council invite applications for the appointment of a whole-time Assistant Medical Officer of Health in the Health Department. The duties include Maternity and Child Welfare work, School Medical work, control of infectious diseases, the supervision of the work of health visitors and such other duties as the Council or the Medical Officer of Health may require to be undertaken. The appointment is terminable by three months' notice on either side, is subject to the provisions of the Local Government Superannuation Act, 1937, to the regulations governing officers of the Council and to satisfactory medical examination. The salary is £750 per annum, rising by annual increments of £30 to £900 per annum, plus cost-of-living bonus. Application forms may be obtained from the Medical Officer of Health, Health Department, 54, Winchester Avenue, Kilburn, N.W.6, and should be returned not later than Saturday, February 28 1948 All communications must be marked "Assistant Medical Officer of Health" on the outside of the envelope. —R. S. Forster, Town Clerk, Town Hall, Dyne Road, Kilburn, N.W.6.

BERKSHIRE EDUCATION COMMITTEE
ASSISTANT SCHOOL DENTAL OFFICERS

Applications invited from qualified and registered dental surgeons for posts as Assistant School Dental Officers. The persons appointed required to devote their whole ume to the duties and to act under the direction of the School Medical Officer and the Senior School Dental Officer. Salary scale £585, annual increments £25, plus final increment of £15 to £750, plus cost-of-living bonus. Further particulars and forms of application obtainable from School Medical Officer, 11, Abbot's Walk, Reading, and should be returned to him within 14 days from the appearance of the advertisement, with copies of three recent testimonials. Applicants must disclose in their applications whether, to their knowledge, they are related to any member of, or the holder of any senior officer under, the Council. Canvassing, either directly or indirectly, will be a disqualification.—H. J. C Neobard, Clerk of the County Council, Shire Hall, Reading.

BUCKS COUNTY COUNCIL
TINDAL GENERAL HOSPITAL, Aylesbury
(125 beds, Resident Medical Staff, 4)
HOUSE PHYSICIAN (A)

Applications are invited from duly registered medical practitioners (male), including those within three months of qualification who are liable under the National Service Acts, for the post of House Physician (A). The appointment is for a period of six months at a salary of £200 per annum, with full residential emoluments. The vacancy may be filled by an R practitioner now holding an A post, in which case it will rank as a B2 appointment with a salary of £250 per annum. The hospital is an Acute General Hospital with a quick turnover of patients. Applications, stating date free to commence duty, together with copies of two recent testimonials, should be submitted to the Medical Superintendent by February 12, 1948.

BUCKS COUNTY COUNCIL
SLOUGH EMERGENCY HOSPITAL
HOUSE SURGEON (B2)
HOUSE PHYSICIAN (B2)

Applications are invited from duly registered medical practitioners, including R practitioners holding A posts for the posts of House Surgeon and House Physician. The appointments are for a period of six months at a salary of £250 per annum, with full residential emoluments. The posts are vacant immediately. Applications, together with copies of two recent testimonials, should be submitted to the Medical Superintendent immediately.

CITY OF LEICESTER
CITY GENERAL HOSPITAL
Gwendoline Road (550 beds)

Applications are invited from registered medical practitioners for the following appointments:—

HOUSE PHYSICIANS (A). Three vacancies for general duties. One vacancy for Paediatric Department.

HOUSE SURGEONS (A). Two vacancies. One for general surgical duties. One for general surgical and orthopaedic duties.

Salary for each post £200 per annum, with full residential emoluments.

The post of House Physician to the Paediatric Department is recognized for the D.C.H. and both posts of House Surgeon are recognized for the F.R.C.S. England.

All posts will be vacant from April 1 next except that of House Surgeon for general surgical duties, which is vacant immediately.

Practitioners within three months of qualification and eligible under the National Service Acts may apply, when appointment will be for a period of six months, otherwise will not exceed one year. Applications (on form supplied) must be submitted as soon as possible, endorsed "House Physician or House Surgeon, City General Hospital," and addressed to Dr. E. K. Macdonald, Medical Officer of Health, City Health Department, Grey Friars, Leicester.—L. McEvoy, Town Clerk.

CITY OF STOKE-ON-TRENT
CITY GENERAL HOSPITAL (1,200 beds)
APPOINTMENTS TO MEDICAL STAFF

Applications are invited from registered British medical practitioners, including R practitioners now holding A posts, for the following appointments at the above-named hospital, viz:—

HOUSE SURGEON (B2) (General)
HOUSE SURGEON (B2)
(Ear, Nose and Throat and General)
HOUSE SURGEON (B2)
(Gynaecology and Maternity)

In the event of R practitioners being appointed, the appointments will be limited to six months. Salary at the rate of £355 per annum plus full residential emoluments and bonus. Further particulars may be obtained from the Medical Superintendent (Dr. C. Gordon Lewis). Applications to be forwarded to the undersigned, as soon as possible, in envelopes endorsed "City General Hospital—Medical Staff"—Harry Taylor, Town Clerk.

CITY OF LIVERPOOL
ASSISTANT MEDICAL OFFICER
in the Maternity and Child Welfare Department

Applications are invited from duly qualified women practitioners for the post of Assistant Medical Officer in the Maternity and Child Welfare Department. The City Council have adopted the interim revision of the Askwith scale and the salary will be within the range of £650 rising by annual increments of £25 to £850 per annum, plus bonus (£48 4s. 7d. per annum at present). The appointment will be held subject to three months' notice on either side, and to Standing Orders of the City Council. The officer appointed must devote the whole of her time to the duties of the office and must not engage in private practice. She must be prepared to perform maternity and child welfare and such other duties as may be required by the Medical Officer of Health. Applicants should have held a previous appointment as Medical Officer of maternity and child welfare clinics or have had at least three years' experience of practical midwifery and ante-natal work and in the care of young children. The holding of a Diploma in Public Health or a Diploma in Child Health and experience in the treatment of venereal diseases will be deemed additional qualifications for the post. The officer appointed will be required to pass a medical examination, and to reside within the city boundary. Canvassing, directly or indirectly, will disqualify. Applications should be made upon forms obtainable from the Medical Officer of Health, Gordon House, Belmont Grove, Liverpool, 6 These forms should be returned to the undersigned, together with copies of three testimonials, not later than February 28, and endorsed "Assistant Medical Officer."—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool, 2.

CITY OF LIVERPOOL.
ALDER HEY CHILDREN'S HOSPITAL
Eaton Road, Liverpool, 12
Resident ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male and female) for the above appointment, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of twelve months. Candidates should preferably have had previous experience in diseases of children. The position offers exceptional opportunity for anyone wishing to specialize in this work. The salary is at the rate of £200 per annum, together with cost-of-living bonus and full residential emoluments. All fees received in connection with the appointment to be handed over to the City Council. The appointment will be made in accordance with the Standing Orders of the City Council, and will be determinable by one calendar month's notice on either side. Applications, stating whether R practitioner, age, nationality, qualifications (with dates), experience and details of present and previous appointments, together with copies of recent testimonials, should be endorsed "Resident Assistant Medical Officer," and sent to the undersigned not later than Monday, February 16, 1948.—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool, 2.

CITY OF PLYMOUTH
CITY GENERAL HOSPITAL
RESIDENT OBSTETRICAL AND GYNAECOLOGICAL OFFICER (B1)

Applications are invited from duly qualified and registered medical practitioners (male and female) for the above appointment. Suitably qualified R practitioners holding B2 appointments are invited to apply Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Previous experience in a Maternity Department of a General Hospital is essential. The officer appointed will be responsible for the Maternity Department (normal and abnormal) at the Hospital, an associated Maternity Home outside the City, the Hospital Ante-Natal Clinics, and the Gynaecological ward of the hospital. The appointment is recognised for the requirements of the Membership of the Royal College of Obstetricians and Gynaecologists, and for the Diploma in Obstetrics. Salary will be at the rate of £450 per annum, plus full residential emoluments and war bonus. The appointment will be limited to twelve months, and terminable by two months' notice on either side at any time. Further details of the post are obtainable from the Medical Superintendent, City Hospital, Plymouth. Applications should be sent to the undersigned as soon as possible.—T. Peirson, Medical Officer of Health,, Seven Trees, Lipson Road, Plymouth.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
NEWCASTLE GENERAL HOSPITAL
HOUSE SURGEON (A)
to Accident and Admissions Department

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A) to the Accident and Admissions Department, vacant on March 1, 1948. The appointment will be for a period of six months. Salary at the rate of £150 per annum, with residential emoluments and cost-of-living bonus Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
NEWCASTLE GENERAL HOSPITAL
HOUSE SURGEON (B2) to Neurosurgical Dept.

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (B2) to the Neurosurgical Department, which will become vacant in the middle of February, 1948. The post is tenable for six months with salary at the rate of £250 per annum, plus cost-of-living bonus and residential emoluments. R practitioners holding A posts may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1, immediately.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1

CITY OF LEEDS
DEPUTY MEDICAL OFFICER OF HEALTH
DEPUTY SCHOOL MEDICAL OFFICER

Applications are invited for the above post from registered medical practitioners possessing the D.P H Salary £1,200 per annum plus cost-of-living bonus (at present £59 16s. per annum). The post is subject to the Superannuation Act, 1937, and is terminable by three months' notice on either side. The candidate will be required to pass a medical examination. Applicants should have had administrative and clinical experience in the public health and school health services. The successful candidate will work under the direction of the Medical Officer of Health and will be required to perform such duties as are allotted to him. The person appointed will be eligible for appointment as part-time lecturer in Public Health in the University of Leeds. Applications endorsed "Deputy Medical Officer of Health and Deputy School Medical Officer," with full details of the applicant's age, qualification and experience, together with the names of three persons for reference, should be sent to the Medical Officer of Health and School Medical Officer, Health Department, 12, Market Buildings, Vicar Lane, Leeds, 1, by 10 a.m. on Saturday, February 21, 1948 Canvassing in any form, either directly or indirectly, will be a disqualificaton.—I. G. Davies, Medical Officer of Health, 12, Market Buildings, Vicar Lane, Leeds, 1.

CITY OF LEEDS
Public Health Department
ST. MARY'S HOSPITAL
204 beds (104 Maternity, 100 Chronic)
LOCUM MEDICAL OFFICER

Locum Medical Officer required for six to eight weeks from March 1 next. Previous experience of maternity work essential. Remuneration £10 10s. per week. Applications to the undersigned as soon as possible—I. G. Davies, Medical Officer of Health, Public Health Department, (Hospitals Administration Section), 12, Market Buildings, Vicar Lane, Leeds, 1.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

COUNTY COUNCIL OF DURHAM
Education Department
ASSISTANT SCHOOL MEDICAL OFFICER

The County Education Committee invite applications from registered medical practitioners (men and women) for appointment as Assistant School Medical Officer, to act under the direction of the School Medical Officer. Applicants must have had at least three years' experience in the practice of their profession and the possession of a diploma in public health is desirable. Married women would be eligible for appointment to the temporary staff. Commencing salary £650 per annum, rising by annual increments of £25 to a maximum of £850 per annum, plus bonus at the current rate. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to satisfactory medical examination. For conditions of appointment and form of application, which must be returned not later than the first post on February 21, 1948, apply, enclosing stamped, addressed foolscap envelope, to the Director of Education, Shire Hall, Durham. Canvassing, directly or indirectly, is prohibited and will disqualify.—A. A. Denholm, Director of Education.

COUNTY OF LINCOLN—PARTS OF LINDSEY
Public Health Department
COUNTY INFIRMARY, Louth
(240 beds)

Applications are invited for the following appointments vacant on March 1:—

RESIDENT MEDICAL OFFICER (B2). Salary at the rate of £250 a year. Includes R practitioners who now hold A posts for whom appointment would be limited to six months.

RESIDENT MEDICAL OFFICER (A). Salary at the rate of £225 a year. Includes practitioners within three months of qualification and liable under the National Service Acts. Appointment is for six months.

The above appointments include full residential emoluments and applications can be received from male or female practitioners. Applications should be forwarded to the Surgeon-Superintendent, County Infirmary, Louth, Lincs., as soon as possible, without testimonials, but with names of two persons to whom reference can be made.

COUNTY BOROUGH OF BARNSLEY
Public Health Department (M.O.H. Circular 202/46)
PATHOLOGIST

Non-resident whole-time Pathologist required. Salary £1,000 by £50 to £1,250 per annum, plus cost-of-living bonus. Further information and conditions are obtainable from Medical Officer of Health, Town Hall, Barnsley. Applications (no form issued) from registered medical practitioners experienced in pathology are returnable to the undersigned within fourteen days from publication hereof.—A. E. Gilfillan, Town Clerk, Town Hall, Barnsley.

COUNTY BOROUGH OF SOUTHEND-ON-SEA
PART-TIME PSYCHIATRIST

Applications are invited for appointment as part-time Psychiatrist and Director of the Child Guidance Clinic. Salary £500 per annum, rising by annual increments of £20 to a maximum of £620, will be payable. If the person appointed resides in London, 1st class return fare will be payable. Applications should be sent to the Medical Officer of Health, Municipal Health Centre, Warrior Square, Southend-on-Sea, not later than Saturday, February 28, 1948. —Archibald Glen, Town Clerk, Town Clerk's Office, Southend-on-Sea.

COUNTY BOROUGH OF GATESHEAD
QUEEN ELIZABETH HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Applicants should have held House appointments and had surgical experience. Preference will be given to candidates holding a Diploma of F.R.C.S. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment will be subject to the requirements of the Superannuation Acts whereby the successful candidate must pass a medical examination. The salary is at the rate of £700 per annum with full residential emoluments. Applications should be sent immediately to the Medical Superintendent.—J. W. Porter, Town Clerk, Town Hall, Gateshead, 8.

COUNTY BOROUGH OF GATESHEAD
QUEEN ELIZABETH HOSPITAL

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable under the National Service Acts, for the following resident appointments:—

TWO HOUSE SURGEONS (A). Vacant now. Salary at the rate of £250 plus bonus £59 16s. with full residential emoluments.

ONE HOUSE PHYSICIAN (A). Vacant now. Salary at the rate of £250 plus bonus £59 16s. with full residential emoluments.

If the practitioners appointed are liable under the National Service Acts the appointments will be limited to six months. Applications should be sent immediately to the Medical Superintendent.—J. W Porter, Town Clerk, Town Hall, Gateshead, 8

COUNTY BOROUGH OF GATESHEAD
BENSHAM GENERAL HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable under the National Service Acts, for the post of House Physician (A) to the above Hospital, vacant now. If the practitioner appointed is liable under the above Acts, the appointment will be limited to six months. Salary at the rate of £250 plus bonus £59 16s., with full residential emoluments. Applications should be sent immediately to the Medical Superintendent.—J. W. Porter, Town Clerk, Town Hall, Gateshead, 8.

COUNTY BOROUGH OF BIRKENHEAD
Department of the Medical Officer of Health
BIRKENHEAD MUNICIPAL HOSPITAL
(560 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the above post which will become vacant on February 21, 1948, including R practitioners now holding A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be for a period of twelve months. The duties attached to the post are mainly medical, and preference will be given to candidates who have had previous post-graduate medical experience in either a Municipal or Voluntary hospital.

RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the above appointment which will become vacant on February 21, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period not exceeding one year. Salary for the above appointments at the rate of £200 per annum, plus bonus and full residential emoluments. Application forms may be obtained from the Medical Officer of Health, 9, Hamilton Square, Birkenhead, to whom they should be returned as soon as possible after completion.—E. W. Tame, Town Clerk, Town Hall, Birkenhead.

COUNTY BOROUGH OF WOLVERHAMPTON
NEW CROSS HOSPITAL
OBSTETRIC REGISTRAR (B1)

Applications are invited from male registered medical practitioners for the post of Obstetric Registrar at the above hospital, the maternity department of which contains 42 beds, exclusive of ante-natal beds, and in which there are over one thousand confinements annually. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Previous obstetric experience is essential, and preference will be given to candidates possessing a higher qualification in obstetrics. The appointment will be for a period of twelve months. Salary is at the rate of £580 per annum (inclusive of bonus at the present rate), plus full residential emoluments. There are no married quarters available. Applications, together with copies of three testimonials and/or names of three referees, should be forwarded to the Medical Superintendent.—J. Brock Allon, Town Clerk, Town Hall, Wolverhampton.

CHESHIRE COUNTY COUNCIL
THE COUNTY BOROUGH OF CHESTER AND THE CHESTER ROYAL INFIRMARY
JOINT APPOINTMENT OF PAEDIATRICIAN

Applications are invited for the above appointment for duties in West Cheshire, including the City of Chester and the Chester Royal Infirmary. Whole time appointment. Commencing salary £1,500 per annum with cost-of-living allowance at present £48 per annum, and travelling expenses, on the Cheshire County Council Scale. Superannuable under the Local Government Act, 1937. Candidates must hold a higher qualification in Medicine and have experience in paediatrics. Further particulars and forms of application for the appointment may be obtained from the undersigned, to whom applications should be sent to arrive not later than February 24, 1948.—P. R. J. Arnold, Honorary Secretary to the Joint Committee, The Royal Infirmary, St. Martin's Fields, Chester.

HAMPSHIRE COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified medical men for the joint whole-time appointment of Assistant County Medical Officer, Hampshire County Council, and Medical Officer of Health, Havant and Waterloo Urban District Council. The salary will be a minimum of £960 per annum plus cost-of-living allowance, at present £59 16s. per annum. Previous experience will be taken into consideration in fixing the commencing salary. If a nationally agreed scale comes into operation, this will be applied. The Diploma in Child Health is desirable, the Diploma in Public Health essential. The appointment will be subject to the provisions of the Local Government Superannuation Act 1937, and in relation to the appointment as Medical Officer of Health to Havant and Waterloo Urban District Council will be subject to the approval of the Ministrey of Health. Forms of application, which can be obtained from The County Medical Officer, The Castle, Winchester, should be returned to him not later than February 28, 1948.—G. Andrew Wheatley, Clerk of the County Council, The Castle, Winchester.

CHESHIRE COUNTY COUNCIL
Public Health Department
PAEDIATRICIAN

Applications are invited from registered medical practitioners for the post of full-time Paediatrician at a salary of £1,500 per annum plus cost-of-living bonus and travelling and subsistence allowances on the County Council Scale. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937. Applicants must hold a higher qualification in medicine and have had real experience of Paediatrics. The person appointed will have beds allotted to him at the West Park (County) General Hospital, Macclesfield, and will conduct Paediatric Clinics at Centres in the eastern portion of the County of Cheshire. Applications, with names of three referees, to be sent to the undersigned by February 24, 1948.—Arnold Brown, County Medical Officer, Public Health Department, 24, Nicholas Street, Chester.

CUMBERLAND COUNTY COUNCIL
BLENCATHRA SANATORIUM
ASSISTANT MEDICAL SUPERINTENDENT

The Cumberland County Council invite applications for the above appointment. Applicants must be registered medical practitioners not over 45 years of age (male or female). The post is resident, and the salary will be £550 × £25 to £650, together with a small furnished house, food, fuel, light, and attendance. The person appointed will be required to contribute to the appropriate Superannuation Scheme, and to pass a medical examination. Forms of application with the terms of the appointment may be obtained from the County Medical Officer, County Health Department, 11, Portland Square, Carlisle, and completed applications must be received by him not later than March 17, 1948. Canvassing, directly or indirectly, will disqualify.—G. N. C. Swift, Clerk of the County Council.

DERBYSHIRE COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited from male medical practitioners for the whole-time appointment of Assistant County Medical Officer of Health. The possession of the D.P.H. is essential, but it would be an advantage if the candidate had in addition the D.P.M. or experience in mental deficiency work. The work will be largely administrative in connection with the Public Health and School Health Services, but other duties may be assigned to the officer appointed, who will work under the direction of the County Medical Officer. The successful candidate will not be allowed to engage in private practice. Office accommodation will be provided in the Central Office. The salary is £900 rising by annual increments of £25 to £1,000 per year, plus a cost-of-living bonus which at present is £59 16s. per annum, together with a travelling allowance in accordance with the County Council's scale, which at present is as follows: Cars not exceeding 8 h.p. or 1014 c.c., £84 per annum plus 1½d. per mile; cars exceeding 8 h.p. or 1014 c.c., £96 per annum plus 1½d. per mile. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment will be terminable by three months' notice on either side. Every candidate is required to disclose in writing whether to his knowledge he is related to any member of the Council or to the Head of a Department under the Council. Canvassing of members of the Council, directly or indirectly, will be a disqualification. Applications should be submitted to the undersigned so that they are received not later than February 23, 1948. Forms of application are not provided.—J. B. S. Morgan, County Medical Officer, County Offices, Derby.

HERTS COUNTY COUNCIL
HILL END HOSPITAL AND CLINIC
(Herts County Mental Hospital), St. Albans
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) to commence duty in April. Salary £575 rising by annual increments of £25 to £625, together with full residential emoluments valued at £100 per annum, and a cost-of-living bonus at present £59 16s. per annum, part of which is payable in cash. An additional £50 per annum is payable for the D.P.M. In the case of a married man, the emoluments will consist of an unfurnished house, coal, light, laundry, and garden produce. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The salary is subject to a deduction of 3% under the A.O.S. Act. Applications should be addressed to the Medical Director.

HERTFORDSHIRE COUNTY COUNCIL
HEMPSTEAD HOUSE BASE HOSPITAL
Hemel Hempstead
RESIDENT OBSTETRIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male or female), including R practitioners holding A posts, for the post of Resident Obstetric House Surgeon (B2) for the Maternity Unit consisting of 30 maternity beds and 12 ante-natal beds. Applicants must have had at least six months' previous obstetric experience, and be available to commence duty at once. The salary will be at the rate of £250 per annum and the appointment is for six months. Applications should be sent to the Medical Superintendent. Testimonials should not be sent, but applications should give full particulars of the candidate together with the names of two persons to whom medical reference can be made.

GLOUCESTERSHIRE COUNTY COUNCIL
NORTH GLOUCESTER CENTRAL HOSPITALS GROUP
REGISTRAR (B1) (Gynaecological Department)

Applications are invited from registered medical practitioners (B1) for the post of Registrar to the Gynaecological Department. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment is a new one, and the successful candidate will have to assist and deputise for the Visiting Gynaecologists at the Central Hospitals, the smaller hospitals where they are members of the Visiting Staff, and the Sunnyside Maternity Hospital (Gloucestershire County Council). The Central Hospital Group comprises the Gloucestershire Royal Infirmary; Cheltenham General, Eye and Children's Hospital, the City General Hospital, Gloucester. The first named is recognized for the M.R.C.O.G. examination. Salary will be at the rate of £650 per annum, non-resident. Demobilised Medical Officers may apply for a higher rate of pay under the Postgraduate Scheme. The appointment would be for six months in the first instance, subject to one month's notice on either side. Applications should be sent to Dr. S. L. Mucklow, Honorary Secretary, Joint Standing Administrative Committee, at 8, Imperial Square, Cheltenham, not later than February 14, 1948.

KENT COUNTY COUNCIL
SENIOR Assistant COUNTY MEDICAL OFFICER for Mental Health Services
(Second Advertisement)

Applications are invited from suitably qualified and experienced practitioners, including those in H.M. Forces, for the above appointment on the central staff of the Public Health Department. The successful candidate will be responsible to the County Medical Officer for the general conduct of the Mental Health Services of the Health Committee as prescribed in the National Health Service Act, 1946, and will be required to undertake clinical duties, particularly in connection with mental defectives. The salary scale is £1,110 a year rising by biennial increments of £50 to £1,210, and the commencing point will be fixed according to qualifications and experience. A cost-of-living allowance will also be paid. The appointment is superannuable and the successful candidate will be required to pass a medical examination and to provide a motor car, for which a travelling allowance will be paid on the County Council's scale. Applications, stating age, qualifications and experience, accompanied by the names and addresses of two persons to whom reference may be made as to professional ability and character, should be addressed to the County Medical Officer, Public Health Department, County Hall, Maidstone, not later than March 2, 1948. No forms of application are being issued.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

KENT COUNTY COUNCIL
COUNTY HOSPITAL, Lenham
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the appointment of Resident Medical Officer at the above Hospital. Salary within the Scale £455 rising by annual increments of £25 to £555 a year according to experience, plus a temporary cost-of-living allowance and full residential emoluments. Applicants should have had previous experience in the treatment of pulmonary tuberculosis. Suitably qualified R practitioners holding B2 appointments and those who have returned from the Forces are invited to apply. R practitioners now holding B1 appointments and ineligible for H.M. Forces may also apply. The appointment is subject to the Local Government Superannuation Act, 1937. Applications, stating age, qualifications, experience, together with the names and addresses of two responsible persons to whom reference may be made as to professional ability and character, should be addressed to the County Medical Officer, County Hall, Maidstone, by not later than February 17, 1948.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL
Edgware, Middlesex
Radiology Department
CHIEF ASSISTANT with D.M.R.E.

Chief Assistant with D.M.R.E. Full time Radiologist in charge. Facilities granted for postgraduate study. General scope of duties, may include teaching, arranged by Medical Director. Whole-time appointment, one to three years; subject to medical examination. Inclusive salary £750 by £50 to £850 per annum, plus any temporary bonus (now £60 per annum); non-resident, but required to live near hospital. Applications (no forms) with copies of up to two recent testimonials and two referees to the undersigned by March 1, 1948 (Quoting D.545, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
RADIOGRAPHER

Registered Radiographer with M.S.R. Diploma for Clare Hall County Hospital, South Mimms, Middlesex (560 tuberculosis beds). J.N.C. (hospital staffs), scale £310 by £12 10s. to £360 per annum inclusive. Whole-time, established, subject to medical examination. Immediate vacancy. Application to Medical Director of Hospital by March 1 (quoting D.503, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL
Enfield, Middlesex (Approx. 800 beds)
CHIEF ASSISTANT
in Obstetrics and Gynaecology Department

Chief Assistant in Obstetrics and Gynaecology Dept. Higher degree or diploma in obstetrics and gynaecology and considerable experience in this work required. General scope of duties arranged by Medical Director and Senior Obstetrician may include teaching. Inclusive salary £750 by £50 to £950 per annum, plus any temporary bonus (now £60 per annum). First increment payable from April 1 following completion of six months' service. Appointment renewable annually up to three years, with possible extension; subject to medical examination. Whole-time, non-resident posts, but resident when on duty. Applications (no forms) with copies of up to two recent testimonials and two referees to the undersigned by March 1, 1948 (Quoting D.545, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
DEPUTY COUNTY MEDICAL OFFICER

Deputy County Medical Officer required. Must be medical practitioner with degree or Diploma in State Medicine or Public Health; sound knowledge of clinical medicine and practical experience in public health administration. Established, subject to medical examination. Salary £1,200 by £60 to £1,500 per annum, plus any temporary bonus (now £60 per annum). Duties mainly administrative on central office staff under supervision and control of County Medical Officer. Whole-time, no other appointments or private practice permitted. Applications to the undersigned by February 21. Relationship to any member or officer of the Council to be disclosed. Canvassing directly or indirectly will disqualify. (Quoting D.496, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Guildhall, Westminster, S.W.1.

LONDON COUNTY COUNCIL
TWO SENIOR PHYSICIANS (Paediatrics)
TWO ASSISTANT SENIOR PHYSICIANS (Tuberculosis)

Medical practitioners required for the undermentioned whole-time positions:—

Senior Physician for Paediatrics, Archway Group of Hospitals, Highgate, N.19; **Senior Physician for Paediatrics,** Queen Mary's Hospital for Children, Carshalton, Surrey; **Assistant Senior Physician for Tuberculosis (deputy to Physician Superintendent),** Colindale Hospital, The Hyde, Hendon, N.W.9; **Assistant Senior Physician for Tuberculosis (deputy to Physician Superintendent),** Grove Park Hospital, Lee, S.E.12.

The salary for a Senior Physician is £1,500 a year, rising by annual increments of £100 to £1,800; and that for an Assistant Senior Physician is £1,000 a year, rising by annual increments of £50 to £1,400. No emoluments are payable except in the case of deputy to the Medical Superintendent where an allowance at the rate of £50 a year will be granted. The officers selected for appointment as Senior Physician will be subject to the administrative direction and control of the medical superintendent, but will have full clinical responsibility for the work of their department at the hospital. Applications should be made on the prescribed forms obtainable on written application from the Medical Officer of Health (S.D.2), The County Hall, Westminster Bridge, S.E.1. The completed form should be returned by February 16, 1948. Canvassing disqualifies. (201).

LONDON COUNTY COUNCIL
Public Health Department
Consultant and Specialist Service
CONSULTANT DERMATOLOGIST
at St. Nicholas Hospital, Plumstead

Applications are invited for appointment as Consultant Dermatologist for duty at St. Nicholas Hospital, Plumstead, for one short session a fortnight. Remuneration, £2 12s. 6d. a session (duration one hour or less), plus mileage allowance of 1s. a mile. Application forms, giving further particulars and conditions of appointment and service, obtainable from the Medical Officer of Health (S.D.6), County Hall, S.E.1. (Stamped addressed foolscap envelope necessary). Returnable by March 1, 1948. Canvassing disqualifies. (260)

SOMERSET COUNTY COUNCIL
TWO ASSISTANT COUNTY MEDICAL OFFICERS OF HEALTH

The Somerset County Council invite applications (men or women) for two appointments as Assistant County Medical Officer of Health at a salary of £650 per annum, rising by £25 per annum to £850 per annum, plus bonus. Applicants must be registered medical practitioners. Possession of the D.P.H. or D.C.H. would be an advantage. The duties will be mainly concerned with the services of School Medical Inspection and Maternity and Child Welfare. Possession of a motor car is essential. Travelling allowance will be paid in accordance with the County scale. The appointment will be subject to Local Government Superannuation Act, 1937, and to a satisfactory medical examination. Applications, on forms to be obtained from the undersigned, giving particulars of age, qualifications and experience, together with two copies of recent testimonials, should be received not later than February 21, 1948.—J. F. Davidson, County Medical Officer of Health, County Hall, Taunton.

MANCHESTER CORPORATION
CRUMPSALL HOSPITAL (1,400 beds) and PARK HOUSE (1,644 beds)
DEPUTY MEDICAL SUPERINTENDENT (B1)

The Health Committee invites applications from registered medical men, including those in H.M Forces, for the post of Deputy Medical Superintendent and Resident Medical Officer, which is vacant now, at Crumpsall Hospital (adult, general) and the adjoining Park House (Poor Law Institution including mental wards). No married quarters are available at the hospital. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Candidates should possess a higher medical qualification, whilst preference will be given to those who have had some administrative experience. Basic annual cash salary £610 rising to a maximum of £850 with board, residence and laundry in addition valued at £150 per annum, subject to the Manchester Corporation conditions of service. A temporary bonus is payable in addition to the basic salary. Any fees received must be refunded to the Corporation. Full information and forms of application may be obtained from the Town Clerk, Town Hall, Manchester, 2, and applications for the post must be received by him not later than February 23, 1948. Applications or copies thereof must not be sent to any members of the Council. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

MANCHESTER CORPORATION
CRUMPSALL HOSPITAL (1,400 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from medical practitioners, including those in H.M. Forces, for the appointment of Resident Surgical Officer (B1) at Crumpsall Hospital (adult, general), Manchester, 8. Suitably qualified R practitioners now holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Applicants must hold a higher qualification in surgery and must have had previous experience in resident hospital posts. The salary scale for the post is £475 per annum rising to a maximum of £650, but the actual commencing salary may be fixed within the scale according to the successful candidate's experience. Board, residence and laundry will be provided valued, for superannuation purposes, at £150 per annum. A temporary bonus is payable in addition to the basic salary. Subject to the Manchester Corporation conditions of service The appointment will be tenable for two years but is renewable annually at the discretion of the Health Committee to a maximum of five years' duration. Full information and forms of application may be obtained from the Town Clerk, Town Hall, Manchester, 2, and applications for the post must be received by him not later than February 23, 1948. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

NOTTINGHAMSHIRE COUNTY COUNCIL
KIRKBY-IN-ASHFIELD URBAN DISTRICT COUNCIL
JOINT MEDICAL OFFICER

The Nottinghamshire County Council and the Kirkby-in-Ashfield Urban District Council jointly invite applications from duly qualified and registered medical practitioners, including those now serving in H.M. Forces, for the joint whole-time appointment of a Medical Officer to act as:—(*a*) Assistant Medical Officer of the County Council; (*b*) Medical Officer of Health of the Urban District of Kirkby-in-Ashfield. The salary attaching to the position will be £960 by £50 to £1,160 per annum, plus war bonus. The person appointed will be required to reside within a radius of three miles from the Council Offices, Kirkby-in-Ashfield. Applicants must have had at least three years' professional experience since qualifying, should be conversant by experience in the duties of a Medical Officer of Health and School Medical Officer and must possess a Diploma in Public Health. Experience in refraction work and the examination of defective children is desirable. As regards his duties under the County Council the officer will act under the general control and supervision of the County Medical Officer, and will be required to perform such duties, either as Assistant School Medical Officer or otherwise, as may be from time to time prescribed. As regards his duties as Medical Officer of Health of the Urban District of Kirkby-in-Ashfield, the officer will also be required to act as Medical Officer for Maternity and Child Welfare in the Urban District. The appointment is subject to superannuation and the selected candidate will accordingly be required to pass a medical examination. Forms of application and conditions of the appointment may be obtained at my office, and applications, accompanied by copies of not more than three recent testimonials, must be forwarded to me not later than February 16, 1948 —K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

STIRLINGSHIRE, CLACKMANNANSHIRE AND WEST PERTHSHIRE DIVISIONAL COUNCIL FOR HOSPITAL SERVICES
CONSULTANT IN ORTHOPAEDICS

Applications are invited for the appointment of an Orthopaedic Surgeon of Consultant status. The appointment is a new one and is made jointly by the Voluntary Hospitals and the Local Authorities of Stirlingshire, Clackmannanshire and West Perthshire. The salary is £1,800 per annum with car allowance and superannuation rights. Private practice will not be allowed, and the successful applicant will require to live within the area in reasonable proximity to the hospitals. Applications, with copies of three testimonials and three references, should be sent to Mr. M. D. Kennedy, Hon. Secretary, Divisional Council for Hospital Services, 14, Princes Street, Falkirk, not later than February 28, 1948.

SURREY COUNTY COUNCIL
Mental Hospitals Department
BROOKWOOD HOSPITAL, Knaphill, nr. Woking
PATHOLOGIST

Applications are invited for the post of Pathologist at the Brookwood Hospital, at a salary of £1,200 inclusive, rising by annual increments of £50 to a maximum of £1,500 a year inclusive. The appointment, which is non-resident, will be on the Council's permanent staff, will be subject to the Asylums Officers' Superannuation Act, 1909, and to the staffing regulations of the Council. The doctor appointed will be expected to live within a reasonable distance of the hospital. The successful candidate will be required to pass a medical examination and the appointment will be terminable by three months' notice on either side. Applications will normally be entertained only from persons with wide experience and who possess a higher medical qualification. The medical establishment of the hospital has recently been revised and further information can be obtained from the Physician Superintendent of the hospital. Applications, accompanied by three recent testimonials or the names of three referees, should be sent by February 28, 1948, to the County Medical Officer, County Hall, Kingston-on-Thames, Surrey. Canvassing is strictly forbidden and will disqualify.

SURREY COUNTY COUNCIL
FARNHAM COUNTY HOSPITAL
Hale Road, Farnham (200 beds)
ST. LUKE'S HOSPITAL, Guildford (470 beds)
ASSISTANT PATHOLOGIST

Applications are invited from suitably qualified practitioners for the combined whole-time appointment of Assistant Pathologist to the above general hospitals. Candidates must have had considerable pathological experience. The holder of the post will be required to devote approximately half time to each hospital and will be in charge of the laboratory at Farnham subject to the general control of the pathologist at St. Luke's Hospital. Travelling expenses on official business will be paid. The commencing salary will be fixed according to qualifications and experience on the grade £950 by £50 to £1,150 per annum inclusive. The post is subject to the Local Government Superannuation Act, 1937, but has a tenure limited to seven years. Applications by letter stating age, qualifications and experience with a copy of not more than three recent testimonials and/or the names of three referees should be sent to the County Medical Officer, County Hall, Kingston-upon-Thames, by February 14, 1948.

SURREY COUNTY COUNCIL
SURREY COUNTY SANATORIUM
Milford (348 beds approx.)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those serving with H.M. Forces, for the above appointment. Applicants must have had previous experience in house appointments. The appointment will be for six months renewable for a further six months. Salary £350, £400 or £450 per annum according to qualifications and experience, plus full residential emoluments and bonus. Suitably qualified R practitioners holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have already completed a period of service with H.M. Forces or have been rejected for such service. Applications should reach the Medical Superintendent at the Sanatorium by February 14, 1948.

SURREY COUNTY COUNCIL
ST. LUKE'S HOSPITAL, Guildford (450 beds)
ASSISTANT SURGICAL OFFICERS (A) and (B2)

Applications are invited from registered medical practitioners for the above two appointments which are for a period of six months. Salary for either post £250 per annum, plus bonus and full residential emoluments valued at £150 per annum. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply for the A post and those now holding A posts may apply for the B2 appointment. Enquiries about the posts should be made to the Medical Superintendent of the hospital, to whom applications by letter should be sent by February 14, 1948.

SURREY COUNTY COUNCIL
EPSOM COUNTY HOSPITAL
Dorking Road, Epsom (450 beds)
Resident Assistant OBSTETRICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the above appointment. The duties will be mainly in the Obstetric and Gynaecological Unit (total beds approx. 100) but will also include duty in the general wards of the hospital as required by the Medical Superintendent. The hospital is recognized by the Royal College of Obstetricians and Gynaecologists for Obstetrics part of the M.R.C.O.G. qualification. Candidates must have had previous experience in a House appointment. Commencing salary £350, £400, or £450 per annum, according to qualifications and experience, plus bonus and full residential emoluments. Appointment is for six months, renewable for a second period of six months. Suitably qualified R practitioners now holding B2 posts may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have completed a period of service with H.M. Forces or have been rejected for such service. Enquiries relating to the appointment should be made to the Medical Superintendent of the hospital, to whom applications by letter should be sent by February 21, 1948.

SURREY COUNTY COUNCIL
BROOKWOOD HOSPITAL, Knaphill, near Woking
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A appointments, for the post of House Physician (B2) at the above Mental Hospital. The appointment, which provides facilities for gaining experience in Psychiatry and the modern methods of treatment, is tenable for six months in the first instance and may be renewed for a further period of six months, unless held by an R practitioner. The salary is at the rate of £350, £400 or £450 per annum according to previous experience, with full residential emoluments. Applications to be sent to the Physician Superintendent, Brookwood Hospital, Knaphill, Woking, Surrey, as soon as possible.

STAFFORDSHIRE COUNTY COUNCIL
TAMWORTH BOROUGH COUNCIL
LICHFIELD CITY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited for the combined whole-time appointment of an Assistant County Medical Officer for the Administrative County of Stafford and Medical Officer of Health of the Tamworth Borough and Lichfield City (estimated populations, 12,300 and 10,500 respectively) at a salary at the rate of £960 per annum, plus cost-of-living bonus. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to provide a motor car, the allowances for which will be in accordance with the County Council scale. Applicants must be fully qualified medical men with experience in public health duties, and must hold the Diploma of Public Health. The candidate appointed will, as regards his duties as Assistant County Medical Officer, act under the direction of the County Medical Officer of Health and will be required to perform such duties as may from time to time be prescribed. As regards his duties as District Medical Officer of Health, he will be subject to the sole control and direction of the local Sanitary Authorities. The appointment is subject to the approval of the Ministers of Health and Education, and also, as far as the offices of District Medical Officer are concerned, to the provisions of the Sanitary Officers' (Outside London) Regulations, 1935. The combined appointment will be subject to three calendar months' notice in writing on either side, which, as far as the offices of District Medical Officer of Health are concerned, will also be subject to the consent of the Minister of Health. The successful candidate will be required to pass a medical examination and produce his birth certificate. Forms of application may be obtained from the Clerk of the County Council, County Buildings, Stafford, and should be returned to him by first post on February 23, 1948, together with copies of not more than three recent testimonials.—T. H. Evans, Clerk of the County Council; H. Wood, Town Clerk, Tamworth; A. N. Ballard, Town Clerk, Lichfield, County Buildings, Stafford.

STAFFORDSHIRE COUNTY COUNCIL
STANDON HALL ORTHOPAEDIC HOSPITAL
near Eccleshall, Stafford (120 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from suitably qualified registered medical practitioners for the above-mentioned post, to become vacant shortly. The appointment, which will be subject to one calendar month's notice in writing on either side, will be for a period of one year, with salary at the rate of £455 per annum, plus full residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications must reach the undersigned by February 16, 1948.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford.

STAFFORDSHIRE COUNTY COUNCIL
BRIERLEY HILL URBAN DISTRICT COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited for the joint whole-time appointment of an Assistant County Medical Officer for the Administrative County of Stafford and Medical Officer of Health of the Brierley Hill Urban District (est. population 46,190). The salary will be at the rate of £960 per annum, together with a cost-of-living bonus, and the appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to provide a motor car, the allowance for which will be in accordance with the County Council scale. Applicants must be fully qualified medical men with experience in public health duties, and must hold the Diploma of Public Health. The candidate appointed will, as regards his duties as Assistant County Medical Officer, act under the direction of the County Medical Officer of Health and will be required to perform such duties as may from time to time be prescribed. As regards his duties as District Medical Officer of Health, he will be subject to the sole control and direction of the local Sanitary Authority. The joint appointment is subject to the approval of the Ministers of Health and Education, and also, as far as the office of District Medical Officer of Health is concerned, to the provisions of the Sanitary Officers' (Outside London) Regulations, 1935. The joint appointment will be subject to three calendar months' notice in writing on either side, which, as far as the office of District Medical Officer of Health is concerned, will also be subject to the consent of the Minister of Health. The successful candidate will be required to pass a medical examination and produce his birth certificate. Forms of application may be obtained from the Clerk of the County Council and should be returned to him by the first post on February 16, 1948, together with copies of not more than three recent testimonials.—T. H. Evans, Clerk of the County Council. H. Hex, Clerk of the Brierley Hill Urban District Council, County Buildings, Stafford.

URBAN DISTRICT OF NORTON
RURAL DISTRICT OF NORTON
RURAL DISTRICT OF POCKLINGTON
EAST RIDING COUNTY COUNCIL
Combined appointment of
Whole-time MEDICAL OFFICER OF HEALTH and ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners possessing a Diploma in Public Health, or similar qualifications, for the following offices to be held as a whole-time joint appointment:—

(1) Medical Officer of Health for the Urban District of Norton and the Rural Districts of Norton and Pocklington (combined population 24,846; combined area 198,490 acres).

(2) Assistant Medical Officer of Health and Assistant School Medical Officer for the East Riding County Council within the combined area.

The total commencing salary for the combined appointment will be £1,040 per annum, plus cost-of-living bonus at the rate for the time being in force (now £59 16s. per annum), and a travelling allowance. Office accommodation, telephone facilities and necessary clerical assistance will be provided. The appointment will be subject to the provisions of Section 110 of the Local Government Act, 1933, and the Sanitary Officers' (Outside London) Regulations, 1935. Further particulars as to the duties and conditions of appointment may be obtained on application to the undersigned. Applications to be made on forms to be obtained from the undermentioned address and must be forwarded, together with copies of not more than three recent testimonials, so as to reach the undersigned not later than February 25, 1948.—T. Stephenson, Clerk of the County Council, County Hall, Beverley.

ACTON HOSPITAL
Gunnersbury Lane, Acton, W.3
CASUALTY OFFICER (A) and RESIDENT MEDICAL OFFICER

Applications are invited from registered medical practitioners, male or female (including practitioners within three months of qualification who are liable to service under the National Service Acts), for the appointment of Casualty Officer (A) immediately for three months, and Resident Medical Officer for a further three months. Salary at the rate of £150 per annum, with full residential emoluments. Applications, with copies of two testimonials, to be sent to the undersigned as soon as possible.—Donald C. D. Sword, House Governor.

BRADFORD ROYAL INFIRMARY
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male, single) for the post of Resident Surgical Officer (B1), vacant March 1, 1948. Twelve months' appointment. Suitably qualified R practitioners now holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by H.M. Forces. Preference will be given to candidates holding the F.R.C.S. Diploma. Salary £450 per annum with full residential emoluments. There are 372 beds and 13 resident officers. Applications should be sent, not later than February 14, to Hy. Trusson, House Governor and Secretary.

ANCOATS HOSPITAL, Manchester, 4
HOUSE SURGEON (A)
Orthopaedic and Fracture Department

Immediate vacancy. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Appointment for six months. Salary £160 per annum, with full residential emoluments. Applications should be addressed to the General Superintendent and Secretary as soon as possible.

ASHFORD HOSPITAL, Ashford, Kent
TWO RESIDENT HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners (male) for appointment of two Resident House Surgeons (A), which become vacant immediately, including R practitioners within three months of qualification. The appointments will be for a period of six months each. Salary at the rate of £200 per annum with full residential emoluments. Applications should be sent to the Secretary, Ashford Hospital, Kent, as soon as possible.

BURY INFIRMARY, Lancashire (161 beds)
(With post-operative unit to be opened during the next few months—190 approx.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from suitably qualified male practitioners for the above post which becomes vacant at the end of February. Possession of the Fellowship of one of the Royal Colleges will be an advantage, but applications from others (including those studying for this qualification) will be considered. The post is particularly suitable for those who are intending to take the F.R.C.S. examinations in due course, and its tenure is for one year in the beginning with the possibility of an extension for a further year. Applicants should have held a house appointment and R practitioners holding B2 posts are invited to apply. Applications from practitioners holding B1 posts can only be considered where the applicant is ineligible for H.M. Forces. Salary will not be less than £400 per annum to commence, and with full residential emoluments. Applications, stating whether married or single, to the undersigned immediately.—H. Wilkinson, Superintendent.

BROCKHALL CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Langho, near Blackburn, Lancs
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) including R practitioners holding B2 and (if ineligible for H.M. Forces) those holding B1 appointments for the post of Assistant Medical Officer (B1). Salary £465 rising by annual increments of £30 to £555 per annum, with full residential emoluments valued at £200 per annum. An additional £50 per annum is payable to holders of the D.P.M. or recognized equivalent, together with the current cost-of-living bonus. There is no accommodation at present for a married man. The appointment will be pensionable and the successful applicant will be required to pass a medical examination. The Institution is modern, fully equipped and accommodates 1,996 patients, affording extensive experience in mental deficiency practice. Applications giving the usual particulars should be sent to the Medical Superintendent as soon as possible.

BECKENHAM AND PENGE JOINT MATERNITY HOSPITAL (34 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B1) which will shortly become vacant. The post, which is limited to one year, carries a salary at the rate of £455 per annum, with full residential emoluments valued at £120. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The provisions of the Local Government Superannuation Act, 1937 will apply. Applications should be sent in writing to the undersigned not later than Tuesday, February 14, 1948.—C. Eric Studdon, Clerk of the Joint Committee, Town Hall, Beckenham.

BECKENHAM HOSPITAL, Beckenham, Kent
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A), to commence duty March 1 next. If held by a practitioner who is liable under the National Service Acts, appointment will be for a period of six months; otherwise it will be renewable, at the discretion of the Hospital, for a further period of six months. Salary is at the rate of £150 per annum, with full residential emoluments. Applications, stating age, nationality and qualifications, with full details of experience and copies of three recent testimonials, to be forwarded to the undersigned as soon as possible.—Gordon Easto, Secretary.

BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY
(248 beds—7 Residents)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) to become vacant on March 1, 1948, including R practitioners within three months of qualification. Salary at the rate of £175 per annum with full residential emoluments. Applications, together with three testimonials, should be sent to the undersigned.—T. Dewhurst, General Superintendent and Secretary, Royal Infirmary, Blackburn.

BRIGHTON MUNICIPAL HOSPITAL
TWO RESIDENT ASSISTANT MEDICAL OFFICERS (B1)

Applications are invited for the following appointments from suitably qualified male practitioners. Applications from R practitioners now holding similar appointments cannot be considered unless they have been rejected by H.M. Forces. The salary scale for both posts is £350 by £25 to £400 per annum, plus full residential emoluments, commencing salary according to qualifications and experience. The appointments will not exceed one year.

RESIDENT ASSISTANT MEDICAL OFFICER (B1) (Surgical). The duties are mainly in the surgical department of the hospital, but include certain routine hospital duties as required.

RESIDENT ASSISTANT MEDICAL OFFICER (B1) (Medical). The duties are in the medical wards but include certain routine medical duties as required.

Application forms may be obtained from Dr. S. J. Firth, Medical Director, Municipal Hospital, Elm Grove, Brighton, 7.

BOSTON GENERAL HOSPITAL
Boston, Lincs (95 beds)
RESIDENT MEDICAL OFFICERS

Applications are invited from registered medical practitioners (male or female) for:—

1.—The appointment of Senior Resident Medical Officer (B2), including R practitioners who hold A appointments. Salary £250 per annum with full residential emoluments.

2.—Appointment of Junior Resident Medical Officer (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Salary £200 per annum with full residential emoluments.

If held by practitioners who are liable under these Acts, the appointments will be for a period of six months only, otherwise they may be renewed for a further period. Applications should be sent immediately to the undersigned.—B. Haines, Secretary.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £225 per annum, with full residential emoluments. Applications should be forwarded as soon as possible to C. E. Lowndes, Secretary.

BIRMINGHAM AND MIDLAND EAR AND THROAT HOSPITAL
Edmund Street, Birmingham, 3 (76 beds)
HOUSE SURGEON (A)

Applications are invited for the appointment of a House Surgeon (A). Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts appointment will be for a period of six months. Duties to commence March 15, 1948. Salary at the rate of £250 per annum with full residential emoluments. Applications should be forwarded to the undersigned immediately.—W. H. Lomas, House Governor.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Resident Surgical Officer (B1), vacant immediately (including R practitioners who now hold B2 posts). Applications from R practitioners who hold B1 posts cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £300 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BOROUGH GENERAL HOSPITAL
Shirley Warren, Southampton
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from medical practitioners for appointment as Junior Resident Medical Officer, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months, otherwise twelve months. Salary is at the rate of £260 per annum, with full residential emoluments. Applications, giving full particulars, should be addressed to the undersigned.—H. C. Maurice Williams, Medical Officer of Health.

BOROUGH ISOLATION HOSPITAL
Millbrook, Southampton
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from medical practitioners for appointment as Junior Resident Medical Officer, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months, otherwise twelve months. Salary is at the rate of £260 per annum, with full residential emoluments. Applications, giving full particulars, should be addressed to the undersigned.—H. C. Maurice Williams, Medical Officer of Health.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
TEACHING HOSPITAL

The Board invites applications for the following posts:—

ASSISTANT PHYSICIAN
ASSISTANT SURGEON
ASSISTANT SURGEON to the Throat and Ear Department

Assistant Physicians are required to be graduates in medicine of a University of which the degree is recognized by the General Medical Council for registration and Fellows or Members of the Royal College of Physicians of London. Assistant Surgeons are required to be Fellows of the Royal College of Surgeons of England. An honorarium of £50 per annum is at present attached to the posts, but the conditions of service and remuneration to members of the Staff will be subject to such adjustments as may be necessary to conform with the National Health Service. Candidates should submit their applications to the undersigned, from whom all further information may be obtained. Applications, which must be received not later than Monday, February 23, 1948, will be considered in the first instance by a Special Advisory Committee representing the Hospital and the Faculty of Medicine of the University, and its recommendations will be submitted to the Board of Management of the Hospital.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
TEACHING HOSPITAL
DIRECTOR OF THE CASUALTY DEPARTMENT AND ASSISTANT SURGEON to the Traumatic Unit—General Hospital

Applications are invited for this full-time salaried superannuable post. Candidates must be Fellows of the Royal College of Surgeons of England. Commencing salary between £1,800 and £2,000 per annum according to qualifications and experience. The Officer appointed will be in charge of the large Casualty Department of the Hospital with charge of beds and will be given the opportunity of taking part in the general emergency work of the Hospital. Candidates should submit their applications, with copies of recent testimonials, to the undersigned, from whom all further information may be obtained. Applications, which must be received not later than Monday, February 23, will be considered in the first instance by a Special Advisory Committee representing the Hospital, and the Faculty of Medicine of the University, and its recommendations will be submitted to the Board of Management of the Hospital.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)

There are vacancies for the following posts:—For duty mainly at the General Hospital.

TWO WHOLE-TIME MEDICAL REGISTRARS (Non-Resident) (B1). Candidates must be Members of the Royal College of Physicians and have held a resident appointment in a Teaching Hospital. Salary £500 per annum.

ONE RESIDENT SURGICAL REGISTRAR (B1). Candidates must be registered medical practitioners and have held a resident appointment in an approved hospital. Salary £150, rising by £50 to £250.

Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications should be sent to the undersigned not later than Monday, February 23, 1948, from whom all further information can be obtained.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
ASSISTANT RADIOTHERAPIST

Applications are invited for the post of whole-time Assistant Radiotherapist. Candidates must be registered medical practitioners and should possess either a Diploma in Radiology or Radiotherapy or be Fellows of the Royal College of Surgeons who propose to take a Diploma in Radiotherapy. Salary £1,000 per annum, rising by annual increments of £100 to £1,500 per annum. Applications should be sent to the undersigned from whom all further information may be obtained, not later than February 28.—G. Hurford, Sec., Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

Have you read the notice at top of page 13?

Have you read the notice at top of page 13 ?

BOOTHAM PARK (REGISTERED MENTAL) HOSPITAL, York
JUNIOR ASSISTANT PHYSICIAN (B1)

Applications are invited for the post of Junior Assistant Physician (B1). Salary £455 per annum, with full residential emoluments, board, apartments and laundry, with annual increments of £25 to a maximum of £555, plus cost-of-living bonus of £59 16s. per annum. Should the successful candidate be married and living out an additional allowance of £200 per annum will be paid. An additional sum of £50 per annum will be paid to a candidate holding the D.P.M. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications, stating age, nationality, with copies of three recent testimonials or the names of two referees, should be sent to the Medical Superintendent, Bootham Park, York, and should reach him not later than February 28, 1948.

CUMBERLAND AND WESTMORLAND MENTAL HOSPITAL, Garlands, Carlisle
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the above appointment. Candidates must be registered medical practitioners and should have previous experience in mental hospital work. The commencing salary will be at the rate of £600 per annum, rising by two annual increments of £50 to £700 per annum, plus cost-of-living bonus. In addition the holder of a Diploma of Psychological Medicine will receive £50 per annum. Emoluments to the value of £150 are allowed. Married quarters are available. There would be an adjustment in the emoluments in the event of a married man being appointed. The post is subject to the provisions of the Asylum Officers' Superannuation Act, 1909. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications, accompanied by two testimonials, and the name of one referee, to be addressed to the Medical Superintendent, Garlands, Carlisle.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the position of House Physician (A). Practitioners within three months of qualification and liable for service under the National Service Acts may apply, in which case the appointment will be for six months, otherwise renewable. Salary £175 per annum with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth
REGISTRAR
in the Department of Obstetrics and Gynaecology

Applications are invited from registered medical practitioners with considerable experience in Obstetrics for the full-time appointment of Registrar in the Department of Obstetrics and Gynaecology. Salary £800 per annum, with emoluments. The hospital has a Maternity Unit of 60 beds and is the main centre for the treatment of abnormal midwifery in the county. It is also the main centre for Radiotherapy in Cornwall under the South-West Joint Cancer Organization. The duties may include attendance at the Consulting Antenatal Centres already established under the Cornwall County Council as deputy for the County Obstetrician. Applications should be addressed, by February 27, 1948, to the undersigned, from whom further details may be obtained.—J. C. Field, Secretary-Superintendent.

CHESTERFIELD AND NORTH DERBYSHIRE ROYAL HOSPITAL
(Beds, Hospital 287, Annexe 33)
SECOND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Second Casualty Officer (A). Salary £225 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications to be sent as soon as possible to M. H. Boone, House Governor and Secretary.

COSSHAM MEMORIAL HOSPITAL
Kingswood, Bristol

Applications are invited from registered medical practitioners, male or female, for the following two positions, each tenable for six months from March 1, 1948 :—

CASUALTY OFFICER, GYNAECOLOGY and E.N.T. HOUSE SURGEON (A), including practitioners within three months of qualification who are liable for service under the National Service Acts.

HOUSE PHYSICIAN (B2), including R practitioners who hold A posts.

Salary, with full residential emoluments, at the rate of £150 per annum. Applications to be sent to the undersigned as soon as possible.—E. N. Roper, Secretary.

COSSHAM MEMORIAL HOSPITAL
Kingswood, Bristol
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, preferably holding a higher surgical qualification or up to Fellowship standard, for the appointment of Resident Surgical Officer (B1). Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The position is tenable for twelve months from March 1, 1948, with optional extension to two years. Salary, with full residential emoluments, to be £400 per annum. Applications to be sent to the undersigned as soon as possible.—E. N. Roper, Secretary.

CITY MENTAL HOSPITAL
Winson Green, Birmingham, 18
SENIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Senior Assistant Medical Officer (B1). Candidates should possess the Diploma in Psychological Medicine and have practical experience of modern methods of treatment. Commencing salary £617 10s., rising to £667 10s., together with cost-of-living bonus at present £59 19s. and residential emoluments valued at £150. Holders of the D.P.M. will be paid £50 in addition. There will be a house available. Bonus, in cash, will be payable at reduced rates in accordance with the type of emoluments provided, the balance being added to the value of emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces may apply. Applications, accompanied by two testimonials, to be addressed to the Medical Superintendent not later than March 8, 1948.

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant now. Salary at the rate of £100 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent to the undersigned immediately. The successful applicant must be a member of a Medical Defence Society.—T. H. G. Gartland, Superintendent and Secretary.

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital, 200 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of House Surgeon (A). Resident—6 months. Salary £150 per annum. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL
RESIDENT FRACTURE AND ORTHOPAEDIC REGISTRAR (B1)

Applications are invited from medical practitioners (male) for the post of Resident Orthopaedic and Fracture Registrar (B1). Salary at the rate of £500 per annum, with full residential emoluments. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications should be addressed to the House Governor and Secretary, Coventry and Warwickshire Hospital, Coventry.

DEVONSHIRE ROYAL HOSPITAL
Buxton, Derbyshire
HOUSE PHYSICIAN (A)

Applications are invited from duly qualified and registered medical practitioners for the post of House Physician (A). Salary £200 per annum for the first six months and £250 per annum thereafter, if reappointed, including practitioners within three months of qualification who are liable for service under the National Service Acts. This post offers excellent opportunities to any medical officer desiring to prepare a thesis or wishing to undertake special work. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications, stating age, qualifications, experience and the names of three people to whom reference may be made, should be submitted without delay to A. Preston Turner, General Superintendent and Secretary.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
ANAESTHETIST

Applications are invited for the post of Anaesthetist for Tonsil and Adenoid Sessions on Tuesday mornings and Thursday afternoons and occasional emergencies. D.A. desirable. Payment is at the rate of £4 4s. per session of over 1½ hours. Applications to be sent by February 23, 1948, to Louise Gillespie, Secretary.

DURHAM COUNTY HOSPITAL
North Road, Durham City (120 beds)
RESIDENT HOUSE PHYSICIAN (B2) (Male)

Applications are invited from registered medical practitioners for the immediate appointment of a Resident House Physician (B2) (male), including R practitioners who hold A posts. The appointment is for six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to be sent immediately to the Secretary-Superintendent.

DISTRICT INFIRMARY, Ashton-under-Lyne
(Normal capacity, 200 beds)

Applications are invited for the following positions, including R practitioners who hold A posts, viz. :

RESIDENT ANAESTHETIST (B2). Salary £250, plus certain fees. The hospital is recognized by the Royal College of Surgeons for the Diploma in Anaesthetics. If held by an R practitioner the appointment will be limited to six months.

CASUALTY OFFICER (B2). Salary £200. Six months' appointment.

Full residential emoluments in each case.

Apply at once to Frank Oliver, General Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement : 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DERBYSHIRE ROYAL INFIRMARY, Derby
HOUSE SURGEON (A) for Gynaecology

Applications are invited from registered medical practitioners for the post of House Surgeon (A) for Gynaecology, vacant immediately, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Recognized by R.C.O.G. Salary £200 per annum, with full residential emoluments. Six months appointment. Applications should be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DERBYSHIRE ROYAL INFIRMARY, Derby
OPHTHALMIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the post of Ophthalmic House Surgeon (B2), vacant immediately. Previous experience desirable but not essential. Recognized for D.O.M.S. Salary £200 per annum with full residential emoluments, six months' appointment. Ex-Service medical officers eligible under Government Postgraduate Scheme may apply, when salary may be augmented Applications should be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

DERBYSHIRE ROYAL INFIRMARY, Derby

Applications are invited from registered medical practitioners for the following posts :—

HOUSE SURGEON (B2), E.N.T. and Neuro-Surgical Department, recognized for D.L.O., vacant immediately.

HOUSE SURGEON (B2), General Surgery, vacant March 1, 1948.

HOUSE SURGEON (B2), Orthopaedic and Accident Service, vacant March 9, 1948.

Salary for each post £200 per annum with full residential emoluments. Six months' appointments. Applications to be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

EAST SUFFOLK AND IPSWICH HOSPITAL
(389 beds)
HOUSE SURGEON TO GENERAL SURGEON (A)

Applications are invited from registered medical practitioners liable to service under the National Service Acts and within three months of qualification for the post of House Surgeon to a General Surgeon (A). Vacant February 10. Appointment will be for six months. Salary at the rate of £250 per annum, with full residential emoluments.—Arthur Griffiths, Secretary, The Hospital, Ipswich.

EVELINA HOSPITAL FOR SICK CHILDREN
Southwark Bridge Road, London, S.E.1
HOUSE SURGEON (B2)

Applications are invited for the post of House Surgeon (B2), vacant on March 1, 1948. The duty for the first two months will be in the Casualty Out-patient Department. The post is tenable for a period of six months at a salary of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply. Applications should reach the undersigned not later than Friday, February 13.—W. H. Sidnell, House Governor.

FINCHLEY MEMORIAL HOSPITAL
Granville Road, London, N.12 (84 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Medical Officer (B2), vacant March 1 next, including R practitioners who now hold A posts. Appointment will be for a period of six months at the rate of £200 per annum, with full residential emoluments. Applications should be sent immediately to the undersigned.—T. E. Jarvis, House Governor and Secretary.

FRENCH HOSPITAL AND DISPENSARY
172, Shaftesbury Avenue, W.C.2
ORTHOPAEDIC SURGEON

Applications are invited for the post of Orthopaedic Surgeon with charge of beds. A higher surgical qualification and a working knowledge of the French language are essential. Applications should be sent with names of three referees to the Secretary on or before March 6.—J. Knecht, Secretary.

EAST END MATERNITY HOSPITAL
384-398, Commercial Road, London, E.1
(Training School for Pupil Midwives)
RESIDENT OBSTETRICAL OFFICER (B2)

Applications are invited for the post of Resident Obstetrical Officer (B2) for a period of six months with possibility of extension for a further six months. Practitioners who hold B2 appointments are invited to apply. During the first three months he will act as Junior Obstetrical Officer at a salary of £200 per annum and subsequently as Senior at a salary of £350 per annum with certain private fees in addition. Applications should be forwarded immediately to the Secretary.

GLOUCESTERSHIRE ROYAL INFIRMARY
Gloucester
HOUSE PHYSICIAN (A)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female), including those within three months of qualification who are liable for service under the National Service Acts, for the posts of House Physician (A), vacant February 13, 1948, and House Surgeon (A), vacant March 29, 1948. The appointments are for a period of six months in the first instance and the salary in both cases is £200 per annum with full residential emoluments. Applications to be sent immediately to C. J. Adams, House Governor and Secretary.

GUY'S HOSPITAL MEDICAL SCHOOL, S.E.1
SURGICAL REGISTRAR or ASSISTANT
Department of Thoracic Surgery

Applications are invited for the post of Surgical Registrar or Assistant in the Department of Thoracic Surgery at Guy's Hospital. Previous experience in thoracic surgery is desirable. Salary on the scale £600 to £750 per annum or, in the case of a candidate with exceptional qualifications, £750 to £1,000 per annum. Forms of application, obtainable from the Dean, Guy's Hospital Medical School, should be lodged, together with the names of three references, not later than February 19, 1948.

GENERAL HOSPITAL, Nottingham
(589 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male), including R practitioners who hold A appointments, for the appointment of a House Surgeon (B2) for the above Hospital. Duties to commence about February 10. If held by an R practitioner the appointment will be for a period of six months. Salary at the rate of £300 per annum with full residential emoluments. Applicants should be interested in Urology. Applications sent to the undersigned.—Henry M. Stanley, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham (589 beds)
JUNIOR CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification who are liable to service under the National Service Acts, for the appointment of Junior Casualty Officer (A) for the above hospital. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned. Duties to commence about February 24.—Henry M. Stanley, House Governor and Secretary.

GUEST HOSPITAL, Dudley (153 beds)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the following resident appointments. Full residential emoluments apply to all posts, which are tenable for six months:

TWO HOUSE SURGEONS (B2). £200 per annum. Vacant immediately.

ONE RESIDENT ANAESTHETIST (B2). £200 per annum. Now vacant. (Successful candidate may be called up to undertake other Medical duties).—H. Raymond Hurst, House Governor and Secretary.

GREAT YARMOUTH AND GORLESTON HOSPITALS
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) (male), now vacant, including practitioners within three months of qualification, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £250 per annum, with full residential emoluments. Applications should be sent to John S. Egerton, Secretary-Superintendent, immediately.

GERMAN HOSPITAL, Dalston, London, E.8
HONORARY PAEDIATRICIAN

The Committee of Management invite applications for the post of Honorary Paediatrician to the Out-patients Department. Candidates holding the D.C.H. should make written application to the undersigned, stating full particulars of experience, age, etc. with testimonials.—C. W. Kratz, Secretary.

GERMAN HOSPITAL, Dalston, London, E.8
HONORARY ANAESTHETIST

The Committee of Management invite applications for the post of Honorary Anaesthetist. Candidates should make written application to the undersigned, stating full particulars of experience, age, etc. with testimonials. The Anaesthetist who has held the post temporarily, will be a candidate.—C. W. Kratz, Secretary.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)

RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty on April 1, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

HOUSE PHYSICIAN AND HOUSE SURGEON (B2) to the Ear, Nose, Throat and Eye Department (combined appointment). R practitioners who now hold A posts may apply. If held by an R practitioner, appointment will be limited to six months. Duties to commence April 1, 1948. Salary at the rate of £187 10s., with full residential emoluments.

HOUSE SURGEON (A) required to commence duty on March 18, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required to commence immediately. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £200, with full residential emoluments. Applications to be sent to the undersigned.—H. J. Johnson, General Superintendent and Secretary.

HARTLEPOOLS HOSPITAL
Hartlepool, Co. Durham
(126 beds, including Maternity Unit)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the post of House Physician (A), including practitioners within three months of qualification and who are liable under the National Service Acts. The appointment is for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications to be sent immediately to the Superintendent, Hartlepools Hospital, Hartlepool, Co. Durham.

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ABSTRACTS OF WORLD MEDICINE

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ABSTRACTS OF WORLD SURGERY, OBSTETRICS AND GYNAECOLOGY

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Have you read the notice at top of page 13 ?

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts :—

(a) **RESIDENT SURGICAL OFFICER (B1).** Previous surgical experience essential. R practitioners holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary £250 per annum.

(b) **RESIDENT JUNIOR HOUSE SURGEON (A).** In charge of Casualty, Ear, Nose and Throat, and Fracture Department. Salary £200 per annum.

(c) **HOUSE PHYSICIAN (A).** Salary £200 per annum.

Practitioners within three months of qualification and liable to service under the National Service Acts are invited to apply.

The appointments are for (a) twelve months and (b) and (c) six months respectively. Applications should be sent to T. W. Upton, Secretary.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
Assistant RESIDENT MEDICAL OFFICER (B1) at the Country Branch Hospital, Tadworth, Surrey

There is a vacancy for an Assistant Resident Medical Officer (B1) at the Country Branch Hospital, Tadworth, Surrey, 101 beds; duties to commence on April 15, 1948. Salary £200 per annum, with full residential emoluments. R practitioners now holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Further particulars, and form of application, which must be returned not later than Monday, March 8, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1

There will be vacancies on April 15, 1948, for the following:—

TWO HOUSE PHYSICIANS (B2)
ONE HOUSE SURGEON (B2)
ONE HOUSE SURGEON (B2)
to the Ear, Nose and Throat Department

All appointments are tenable for six months at a salary of £100 per annum with full residential emoluments. R practitioners now holding A posts and practitioners of either sex, ineligible for military service or rejected by the R.A.M.C., may apply. Further particulars and form of application, which must be returned not later than March 8, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)

Applications are invited from registered medical practitioners for the following posts :—

RESIDENT MEDICAL OFFICER (B2), vacant March 1, 1948. This appointment is for six months at a salary of £225 per annum, with full residential emoluments. R practitioners holding A posts may apply.

HOUSE SURGEON (A), vacant March 1, 1948. Salary £175 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications, with testimonials, to E. Barber, Secretary.

HOSPITAL OF ST. JOHN AND ST. ELIZABETH
60, Grove End Road, N.W.8
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) to become vacant on Monday, March 15, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. Appointment will be for a period of six months. Salary is at the rate of £150 per annum with full residential emoluments. Applications should reach the undersigned on or before Thursday, February 26, 1948.—F. Dudley Hobbs, M.A., Secretary.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HULL ROYAL INFIRMARY
FIRST HOUSE SURGEON (B2)

Applications are invited for the post of First House Surgeon (B2), vacant now. Suitably qualified R practitioners who now hold A posts may apply. Salary £200 per annum with full residential emoluments. The appointment will be for six months in the first instance, but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

HARROGATE ROYAL BATH HOSPITAL AND RAWSON CONVALESCENT HOME (146 beds)
National Hospital for the Treatment of Rheumatic and Allied Diseases
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B2), vacant now, including R practitioners who hold A posts. As this hospital is recognized as having an authorized Physical Medicine Department, time spent in the above post, which affords good experience in physical medicine and orthopaedics, would count towards the qualifying twelve months for the Diploma in Physical Medicine. Salary will be at the rate of £250 per annum. The appointment will be for a period of six months. Applications should be sent to the Secretary, Royal Bath Hospital, Cornwall Road, Harrogate, immediately.

JOINT COUNTIES MENTAL HOSPITAL
Carmarthen
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) from candidates with previous experience of Mental Hospital work. Salary £555 by £25 to £655 per annum, with full residential emoluments valued at £156 per annum, plus £50 per annum for D.P.M. An unfurnished flat is available for a married man, in which case the salary and value of emoluments will be adjusted accordingly. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment is subject to the Asylums Officers' Superannuation Act, 1909. Applications, giving full particulars as to age, experience, and accompanied by names and addresses for reference purposes, to be sent to the Medical Superintendent.

KING GEORGE HOSPITAL, Ilford
HONORARY ASSISTANT PHYSICIAN

The Board of Management invite applications for the appointment of an Honorary Assistant Physician. Candidates should hold the M.B., or M.D., degree of a British University, and should be Fellows or Members of the Royal College of Physicians of London. Applications should be addressed to the undersigned on or before March 6, 1948.—T. J. Rose, Deputy Secretary.

KING EDWARD MEMORIAL HOSPITAL, Ealing
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B2), to become vacant on March 11, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Appointment recognized for Diploma in Anaesthetics. Applications, together with copies of two recent testimonials, should be sent to the undersigned by February 20, 1948.—R. A. Mickelwright, House Governor.

KING EDWARD VII HOSPITAL
Windsor (200 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, including R practitioners who hold A posts, for the appointment of Resident Medical Officer (B2), to become vacant on March 1, 1948. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the Secretary as soon as possible.

KENT AND SUSSEX HOSPITAL, Tunbridge Wells

Applications are invited from registered medical practitioners for the following appointment to the Honorary Medical Staff :—

HONORARY ASSISTANT PHYSICIAN for Psychological Medicine. Candidates must be engaged solely in the practice of the specialty and will be expected to be Fellows or Members of the Royal College of Physicians (London), or hold the Diploma in Psychological Medicine. The successful candidate will be expected to hold a weekly Outpatient Clinic. Personal canvass of the Committee is not allowed. Twenty copies of the application and testimonials for the use of the Selection Committee must be sent to the undersigned not later than Saturday, March 13, 1948.—E. A. Wagstaff, Superintendent-Secretary.

KIDDERMINSTER AND DISTRICT GENERAL HOSPITAL
CASUALTY HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of Casualty House Surgeon (A), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months. Applications should be sent immediately to C. M. Smith, House Governor and Secretary.

LYMINGTON AND DISTRICT HOSPITAL
Hampshire (107 beds)
HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Appointment for six months. Salary £175 per annum, full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Applications immediately to, N. P. Wood, Secretary.

LONDON HOMOEOPATHIC HOSPITAL
(Incorporated by Royal Charter)
Great Ormond Street and Queen Square, W.C.1
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification and liable under the National Service Acts, for appointment as Resident Medical Officer (A), vacant March 1, 1948. The appointment will be for a period of twelve months, four months Surgical, four months Gynaecological and four months Medical. Salary commencing £180 per annum, increasing to £250 for the last four months, with full residential emoluments. Selected candidates will be required to attend a meeting of the Medical Committee for interview.—L. J. Knowles, Secretary.

LONDON CHEST HOSPITAL, Victoria Park, E.2
HOUSE SURGEON (B2)

House Surgeon (B2), male or female, required April 1, 1948, with previous surgical experience, preferably thoracic. Salary £150 per annum with full residential emoluments. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications should be sent by February 21, 1948, to the Secretary.

LIVERPOOL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST
Mount Pleasant, Liverpool, 3
HONORARY ASSISTANT PHYSICIANS

Applications are invited for the following positions on the Honorary Medical Staff:—Two Honorary Assistant Physicians. The present temporary Hon. Assistant Physicians are applying for the posts. Applications with names of three referees to be sent not later than February 21, 1948, to the Secretary, Mount Pleasant, Liverpool, 3.

MANCHESTER ROYAL INFIRMARY

The Board of Management invite applications from registered medical practitioners, male and female, including R practitioners within three months of qualification, for the following A appointments :—

ONE HOUSE SURGEON for the Aural, Gynaecological and Dermatological Departments
ONE HOUSE SURGEON for the Orthopaedic Department

Both posts are vacant at present. Appointments are for six months, subject to the provision of the Bye-laws as to notice, etc., and the salary in each case is at the rate of £75 per annum, with residence. Applications should be sent to the Chairman of the Medical Board as soon as possible.—F. J. Cable, General Superintendent and Secretary.

MANCHESTER VICTORIA MEMORIAL JEWISH HOSPITAL (Non-Sectarian, 102 beds)
Cheetham, Manchester, 8
HONORARY SURGEON

Applications are invited for the post of Honorary Surgeon on the Staff of the above hospital. Applicants must be recognized Consultants and be Fellows of the Royal College of Surgeons of England. Applications to be submitted to the undersigned by February 28. By order of the Board of Management.—Charles D. Drake, General Superintendent.

METROPOLITAN HOSPITAL
Kingsland Road, London, E.8
PART-TIME SURGICAL REGISTRAR

The Committee of Management invite applications for the appointment of Part-time Surgical Registrar. Candidates should hold the F.R.C.S. The successful candidate will be required to attend five sessions a week and also be on duty at alternate week-ends. He will be paid on a sessional basis at the rate of 1½ guineas a session. The candidate appointed will be required to start his duties as soon as possible. One copy of the application, together with testimonials, should be sent to the undersigned immediately.—Frank Chambers, House Governor.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), male, now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £220 per annum, with full residential emoluments. Applications should be sent as soon as possible to A. Ashworth, House Governor and Secretary.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required to commence duties end of February. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

MAIDA VALE HOSPITAL FOR NERVOUS DISEASES, London, W.9
HOUSE PHYSICIAN (B2)

House Physician (B2), R practitioners who hold A posts are invited to apply. The appointment is for six months from April 1. Salary at the rate of £200 per annum with board and residence. Applications should be addressed to the Secretary by February 25, 1948.

METROPOLITAN HOSPITAL
Kingsland Road, London, E.8
DEPUTY RESIDENT ANAESTHETIST AND SECOND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the post of Deputy Resident Anaesthetist and Second Casualty Officer (A) (combined post). Salary will be £150 per annum, with full residential emoluments. The appointment will be for six months and practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be sent immediately to the undersigned. —Frank Chambers, House Governor.

METROPOLITAN EAR, NOSE AND THROAT HOSPITAL, 1838 Inc., 14-16, Granville Place, W.1
RESIDENT HOUSE SURGEON (A)

Resident House Surgeon (A) required immediately at the In-patient Department, 5, Collingham Gardens, S.W.5. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. If held by an R practitioner the appointment will be limited to six months. Salary £150 per annum. Applications to be sent to the Secretary at 14-16, Granville Place, W.1.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of full-time Pathologist at the above hospital. Applicants should be exclusively engaged in the practice of Pathology, with wide training in Clinical Pathology and Morbid Anatomy. The post will be non-resident, with a commencing salary of £1,100, the successful candidate being permitted to engage in private practice, restricted to the private wing of the hospital, at present 23 beds. Applications should reach the Secretary not later than February 28, 1948.

NUNEATON GENERAL HOSPITAL
(130 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon to the Casualty, E.N.T. and Ophthalmic Departments, vacant on March 1, 1948. The appointment is for six months at a salary of £250 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.—H. W. Williams, House Governor and Secretary.

NUNEATON GENERAL HOSPITAL (130 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited immediately for the post of Resident Surgical Officer (B1). Candidates should have held house appointments and have had surgical experience. Suitably qualified R practitioners holding B2 or A appointments or medical practitioners recently discharged from H.M. Forces may apply. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for one year at a salary of £450, with full residential emoluments. Applications to H. W. Williams, House Governor and Secretary.

NOBLE'S ISLE OF MAN HOSPITAL
Douglas, Isle of Man (137 beds)
SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for appointment of Second House Surgeon (A). Salary £250 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months, otherwise twelve months. Applications, with copies of two recent testimonials, to be sent to C. H. Spence, Secretary-Superintendent, by February 21, 1948

NEW SUSSEX HOSPITAL FOR WOMEN
Windlesham Road, Brighton (72 beds)
(Officered by Women Doctors)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (female) for the appointment of a House Physician (B2), to become vacant at the beginning of April. The appointment is for a period of six months. Salary at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the undersigned by March 8.—Percy F. Spooner, Secretary.

NEW SUSSEX HOSPITAL FOR WOMEN
Windlesham Road, Brighton (72 beds)
(Officered by Women Doctors)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (female) for the appointment of a House Surgeon (B2), to become vacant immediately. The appointment is for a period of six months. Salary at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the undersigned.—Percy F. Spooner, Secretary.

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)
to the Gynaecologist and the Aural Surgeon

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply and the appointment will be for six months. The person appointed will act as House Surgeon to the Gynaecologist and the Aural Surgeon, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)
to the Ophthalmic Surgeon and Orthopaedic Dept.

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Ophthalmic Surgeon and Orthopaedic Department, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OSTERHILLS HOSPITAL, St. Albans
RESIDENT HOUSE PHYSICIAN (B2)
Paediatric Department

Resident House Physician (B2 post) required at Osterhills Hospital, St. Albans, Herts, for general duties in paediatric department. Salary £240 per annum, together with full residential emoluments. R practitioners holding A posts may apply. If an R practitioner is appointed the appointment will be limited to six months. Application by letter to Mr. E. J. Burgess, Osterhills Hospital, St. Albans, Herts.

PRINCESS LOUISE KENSINGTON HOSPITAL FOR CHILDREN
St. Quintin Avenue, North Kensington, W.10
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of Resident Medical Officer (B2), required to start duties shortly, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited for six months. The salary is at the rate of £200 per annum, with full residential emoluments. Applications should reach the undersigned as soon as possible.—Frank Hart, Secretary-Superintendent.

PRINCESS ALICE MEMORIAL HOSPITAL
Eastbourne
HOUSE SURGEON (A)

Applications are invited from male registered medical practitioners for appointment as House Surgeon (A), vacant February 18, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary at the rate of £250 per annum for the first three months and £275 per annum for second three months, with full residential emoluments. Applications to the Secretary as soon as possible.

PRINCE OF WALES'S HOSPITAL, Plymouth
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male and female, preferably with the D.A., for the appointment of Resident Anaesthetist (B2), including R practitioners who now hold A posts, vacant April 13. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications to reach the undersigned by February 28.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL, Plymouth
CASUALTY OFFICER (A)
(Ear, Nose and Throat)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (A), with Ear, Nose and Throat, vacant March 17, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments. —Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL, Plymouth
HOUSE OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of House Officer (A) post, Surgery with casualty, for duty at the Devonport Section, vacant immediately, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PONTYPOOL AND DISTRICT HOSPITAL
Pontypool, Mon.
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Resident Medical Officer (A) medical and surgical beds Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be limited to six months. Salary £200 per annum and full residential emoluments. Apply to Secretary-Superintendent.

PUTNEY HOSPITAL
Lower Common, S.W.15 (106 beds)
ASSISTANT SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners, (male), including R practitioners who hold A posts, for the appointment of Assistant Surgical Officer (B2) for a period of six months from March 1, 1948. Salary £450 per annum, non-resident. Applications should reach the undersigned not later than Tuesday, February 17, 1948.—A. J. Ellicott, Secretary.

Have you read the notice at top of page 13 ?

THE Medical Defence Union

Established 1885

MUSeum 1337

Annual Subscription £1 **MEMBERSHIP EXCEEDS 31,500** *Assets exceed £170,000*

THE UNION protects, supports, and safeguards the character and interests of registered medical and dental practitioners. Members are fully INDEMNIFIED against actions undertaken on their behalf.

IMMUNITY from medico-legal actions, from slander or the receipt of accusatory letters does not exist; The Union proffers financial assistance, legal advice and defensive measures at a minimal annual cost.

THE UNION PROVIDES each Member with ample financial indemnity against legal action, resolute defensive measures, and sympathetic legal advice.

PROTECTION is also provided on special terms to medical and dental practitioners resident and practising overseas.

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Sq., London, W.C.1

Have you read the notice at top of page 13 ?

PRESTON COUNTY OF LANCASTER ROYAL INFIRMARY
HOUSE PHYSICIAN (A)

Applications are invited for the appointment of House Physician (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be limited to six months. Salary at the rate of £175 per annum with usual residential emoluments. Applications should be sent to the Superintendent, Royal Infirmary, Preston.

REVISED ADVERTISEMENT

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, E.15
CLINICAL ASSISTANT (Ophthalmic Department)

Applications are invited for the above post which is tenable for a period of six months for two sessions per week with an honorarium of £2 2s. per session. In addition there will be fees in respect of V.H.O.C. patients. The successful candidate will be required to attend on Tuesday afternoons and Friday mornings to assist the Honorary Ophthalmic Surgeon. Applications should be sent to the undersigned forthwith.—M. J. Huntley, House Governor and Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, E.15
ASSISTANT SURGEON

The General Committee invite applications to fill the appointment of Assistant Surgeon without beds. Any candidate must be a Fellow of the Royal College of Surgeons of England. Applications must reach the undersigned not later than February 14, 1948. The present Surgical Registrar is a candidate for this appointment.—M. J. Huntley, House Governor and Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (323 beds)
HOUSE SURGEON (A)
to the Gynaecological Department

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) to the Gynaecological Department, including practitioners within three months of qualification who are liable under the National Service Acts. Appointment in the first instance for six months at a salary of £175 per annum with full residential emoluments. Application is being made to the Royal College of Obstetricians and Gynaecologists for this appointment to be recognized by the Examining Board for the M.R.C.O.G. This is an additional appointment to the existing resident medical staff; the post is therefore vacant and applications should be sent immediately to R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
THE ROYAL HOSPITAL UNIT
ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of Orthopaedic House Surgeon (A), including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Otherwise it may be extended. Salary is at the rate of £120 per annum, with full residential emoluments. Applications and copy testimonials to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, at the Royal Hospital, Sheffield, 1.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
FIRST ASSISTANT (B1)
to the Orthopaedic Department

Applications are invited from registered medical practitioners for the post of First Assistant to the Orthopaedic Department (B1) at a salary of £650 per annum non-resident. Recently demobilized members of H.M. Forces or practitioners holding B1 appointments who are ineligible for H.M. Forces may apply. Previous experience in Orthopaedics is desirable and preference will be given to applicants who are Fellows of the Royal College of Surgeons. Applications to be forwarded to the General Superintendent, Royal Infirmary, Sheffield.

ROYAL UNITED HOSPITAL, Bath

Applications are invited from registered medical practitioners for the following appointments:—

HOUSE PHYSICIAN (A). Duties to commence from March 15.

HOUSE SURGEON (A), General. Duties to commence March 6.

HOUSE SURGEON (A), Gynaecology and Obstetrics. Duties to commence March 1.

Salary at rate of £150 per annum, with board, residence, etc., in each case. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointments will be for a period of six months. Applications by February 14, 1948, to J. Lawrence Mears, Secretary-Superintendent.

ROYAL FREE HOSPITAL
Gray's Inn Road, London, W.C.1
EAR, NOSE AND THROAT REGISTRAR (B1)

Applications are invited from registered medical practitioners of not more than ten years since qualification for the whole-time appointment of Ear, Nose and Throat Registrar (B1) (Non-resident) for one year in the first place to become vacant April 1, 1948. Preference will be given to candidates with the Fellowship of England, Edinburgh or the D.L.O., qualifications. Suitably qualified practitioners now holding B2 appointments are invited to apply. R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications and a photograph should be sent to the undersigned on or before February 20, 1948.—R. G. Heppell, A.C.A., House Governor.

ROYAL FREE HOSPITAL
Gray's Inn Road, London, W.C.1
OBSTETRIC AND GYNAECOLOGICAL REGISTRAR (B1)

Applications are invited from registered medical practitioners, men or women, for the appointment of Obstetric and Gynaecological Registrar (B1) at the above hospital for one year commencing April 1, 1948. Salary £400 per annum, resident. Suitably qualified practitioners holding B2 appointments are invited to apply. R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications, stating age, qualifications and accompanied by copies of three recent testimonials and a photograph, should be sent to the undersigned on or before February 20, 1948.—R. G. Heppell, A.C.A., House Governor.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton
HONORARY PLASTIC SURGEON

The Board of Management will meet on Friday, March 5, 1948, at 3.15 p.m., for the purpose of electing an Honorary Plastic Surgeon. All candidates are required to transmit their applications and testimonials under cover to the undersigned not later than Saturday, February 21, and must hold themselves in readiness to attend the Meeting of the Board on the day of election. The Committee does not bind itself to appoint any candidate.—Percy F. Spooner, Secretary-Superintendent.

ROYAL HOSPITAL, Wolverhampton (500 beds)
Paid Specialist Appointment
Ministry of Health Circular 202/46
SUPERNUMERARY PATHOLOGIST

Applications are invited from ex-Service Specialists who have held Class III appointment for the post of Supernumerary Pathologist at the Royal Hospital, Wolverhampton. The appointment has been approved by the Ministry of Health under the above Circular, and will be for the interim period before the establishment of the National Health Service. Salary £1,000 per annum. Applications, together with copies of three references, should be sent immediately to W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch, 310 beds
SENIOR RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident Anaesthetist (B1), vacant now. The Royal Hospital is an associated hospital of the University of Birmingham. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary is at the rate of £400 per annum, with full residential emoluments, or according to experience and qualifications. The appointment will be for a period of six months.—W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch, 310 beds
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), vacant now, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts appointment will be for a period of six months. Salary is at the rate of £150 per annum, with full residential emoluments.—W. Cockburn, House Governor.

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL, Southampton (291 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners (male) with previous experience in Anaesthetics for the post of Resident Anaesthetist (B2), including R practitioners who hold A posts. The appointment is recognized for the D.A. The salary will be at the rate of £200 per annum, with full residential emoluments. Applications should be sent immediately to Frank Jennings, House Governor and Secretary.

ROYAL PORTSMOUTH HOSPITAL, Portsmouth
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (male) including R practitioners holding A posts, for the appointment of House Physician (B2) vacant on or about February 25, 1948. Salary £225 per annum, with full residential emoluments. Six months' appointment. Applications to be sent immediately to G. A. Hughes, Secretary.

ROYAL GWENT HOSPITAL, Newport, Mon
(255 beds)

Applications are invited from registered medical practitioners (male or female) for the following appointments:—

HOUSE SURGEON (A) for the Fracture and Orthopaedic Department, vacant now. Practitioners within three months of qualification and liable under the National Service Acts may apply. Salary at the rate of £175 per annum, with residential emoluments.

CASUALTY OFFICER (A) or (B2), vacant on March 8, 1948, for a period of six months. R practitioners who now hold A posts may apply. Salary at the rate of £175 (A) or £210 (B2) per annum, with residential emoluments. Applications should be sent to the undersigned.—T. A. Jones, Secretary-Superintendent.

ROYAL BERKSHIRE HOSPITAL, Reading

Applications are invited from registered medical practitioners, male, for the following posts:—

TWO CASUALTY OFFICERS (A). Salary is at the rate of £150 per annum, with full residential emoluments. Duties will involve alternating with each other in the Casualty Department, Fracture Clinic and Accident Wards, and assisting in the treatment of all cases of traumatic origin. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL BERKSHIRE HOSPITAL
Reading
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A) as from March 6, 1948. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Anaesthetist (B2), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. R practitioners who now hold A posts may apply, when the appointment will be limited to six months. Applications, stating present post, should be sent immediately to H. E. Ryan, House Governor.

ROYAL EYE HOSPITAL
St. George's Circus, S.E.1
FULL-TIME ASSISTANT
in the Professorial Unit

Applications are invited for the post of full-time Assistant in the Professorial Unit at a salary of £750 per annum, or half-time at £375 per annum. Candidates would be expected to assist in clinical and laboratory research. Applications are to be submitted by March 1.—F. E. D'Alton, Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester
RADIOLOGIST

Applications are invited for the full-time salaried post of Radiologist at the Royal Hampshire County Hospital, Winchester. Salary £1,800 per annum, plus two-thirds of fees paid by or for hospital patients seen by the Radiologist. For further particulars apply to the undersigned with whom applications, giving three names for reference, should be lodged.—R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary, Royal Hampshire County Hospital, Winchester.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (323 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (men or women) for the appointment of House Surgeon (A), vacant March 29. Salary at the rate of £175 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be for a period of six months. Applications should be sent to R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary.

ROYAL INFIRMARY, Sunderland (312 beds)
ORTHOPAEDIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners who now hold A posts, for the post of Orthopaedic House Surgeon (B2) vacant immediately, which is tenable for six months. Salary £250 per annum, with full residential emoluments. Applications to be forwarded to the House Governor and Secretary as soon as possible.

ROYAL HALIFAX INFIRMARY
(283 beds, Resident Medical Staff 6)
HOUSE PHYSICIAN (A) (Male)

Applications are invited for the post of House Physician (A) (male), including practitioners within three months of qualification who are liable for service under the National Service Acts, for a period of six months from February 27, 1948. Salary £200 per annum, with full residential emoluments. Applications should be sent to R. W. Ranson, Secretary.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan

Applications are invited from registered medical practitioners for the following posts :—

HOUSE SURGEON (A), vacant February 12, 1948. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months, otherwise it may be extended for a further period.

SENIOR HOUSE SURGEON (B2), vacant March 1, 1948. This appointment is for six months at a salary of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply.

Applications should be sent to the undersigned as soon as possible.—A. Stanley Brunt, General Superintendent and Secretary.

ROYAL SUSSEX COUNTY HOSPITAL
Brighton, 7
PART-TIME ASSISTANT MEDICAL OFFICER to the Treatment Centre for Venereal Diseases

Applications are invited from registered male practitioners for the appointment of (part-time) Assistant Medical Officer to the Treatment Centre for Venereal Diseases, vacant about March 1, 1948. Salary at the rate of £500 per annum. The successful candidate will be recommended to the West Sussex County Council for election also as Assistant Medical Officer to the Worthing V.D. Clinic. Salary £150 per annum. Any appointment made by the Board of the Hospital will be subject to approval by the Brighton County Borough and East and West Sussex County Councils. Applications, stating age, qualifications and experience, must reach the undersigned (from whom further particulars of the post may be obtained) not later than 14 days after the publication of this advertisement.—F. G. Dawes, Secretary-Superintendent.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL INFIRMARY, Sheffield
HOUSE SURGEON (A) to the Neurosurgical Dept.

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A) to the Neurosurgical Department now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner under these Acts, appointment will be for a period of six months. Salary is at the rate of £120 per annum, with full residential emoluments. Applications should be sent forthwith to Joseph Griffith, General Superintendent, The Royal Infirmary, Sheffield, 6.

RUNWELL HOSPITAL
near Wickford, Essex
(East Ham and Southend-on-Sea Joint Mental Hospital, 1,032 beds)
THREE HOUSE PHYSICIANS (B2)

Applications are invited from registered medical practitioners, male or female, for the post of House Physician (B2) (three vacancies) to the above hospital. R practitioners holding A appointments may apply. If held by an R practitioner the appointment will be limited to six months. There are excellent opportunities for up-to-date psychiatric experience and postgraduate work. Salary at the rate of £300 per annum for the first six months and £350 per annum thereafter, plus cost-of-living bonus and full residential emoluments. Applications should be sent to the Physician Superintendent as soon as possible.

REEDYFORD MEMORIAL HOSPITAL
Nelson, Lancs
HONORARY CONSULTING SURGEON

Applications are invited for the appointment of Honorary Consulting Surgeon to the above hospital. Practitioners serving in H.M. Forces are invited to apply. The Honorary Surgeon appointed will be permitted to act as Consultant in private cases and would be expected to commence his duties at the hospital as from April 1, 1948. Applications should be addressed to the Secretary, Reedyford Memorial Hospital, Nelson, Lancs, not later than February 29, 1948. Envelopes to be endorsed "Honorary Surgeon."

ROYAL HALIFAX INFIRMARY (283 beds)
CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2) (one post) (male). R practitioners who hold A posts may apply. Six months post, vacant immediately. Salary £250 per annum with full residential emoluments.

Applications, accompanied by copies of three recent testimonials, and the names of three referees to be sent to the Secretary as soon as possible.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM
(Whole-time Temporary Assistant Medical Officer of Health (male).)

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
February 3, 1948. Secretary.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch 310 beds
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1) to become vacant March 1. The appointment will be for six months, eligible for re-election. Applicants should have held house appointments and had major surgical experience. Preference will be given to candidates holding Diploma of F.R.C.S. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £350 per annum or according to qualifications.—W. Cockburn, House Governor.

ROYAL SALOP INFIRMARY, Shrewsbury
(235 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months, otherwise it may be extended. Salary is at the rate of £200 per annum with full residential emoluments.—J. P. Mallett, Secretary-Superintendent.

ROYAL NORTHERN HOSPITAL, Holloway, N.7
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners for the appointment of House Physician (B2), to become vacant on March 1, 1948, for a period of six months. R practitioners who now hold A posts may apply. Salary and emoluments £150 per annum, with board, residence and laundry. Applications should be sent to the undersigned not later than February 13, 1948.—Gilbert G. Panter, Secretary.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch 310 beds

Applications are invited from registered medical practitioners for the following appointments :—

SENIOR PATHOLOGIST at a salary of £1,100 to £1,400 per annum according to experience, resident or non-resident; £100 in lieu of subsistence if non-resident.

JUNIOR ASSISTANT PATHOLOGIST. Resident at a commencing salary of £650 to £1,000 per annum according to experience.

The Laboratory is recognized for the purpose of the D.C.P. of the University of London. Applications, accompanied by copies of two recent testimonials, must be received on or before March 6, and should be sent to W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton (500 beds)
(Women's branch, 64 beds)
RESIDENT OBSTETRIC AND GYNAECOLOGICAL REGISTRAR (B1)

Applications are invited for the post of Resident Obstetric and Gynaecological Registrar (B1) at the Women's Branch of the Royal Hospital, vacant April 16. The appointment will be for six months, eligible for re-election. Salary £350 per annum, with full residential emoluments. Candidates should have special experience and preference will be given to those holding the special Diploma or working for the M.R.C.O.G. Demobilized Officers of H.M. Forces and suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, are invited to apply. Applications should be sent to W. Cockburn, House Governor.

ST. GEORGE'S HOSPITAL, S.W.1
(in association with The Victoria Hospital for Children, Tite Street, Chelsea)

Applications are invited for the following appointments to the Victoria Hospital for Children, where all the paediatric work of St. George's Hospital is now carried on :

ONE GENERAL SURGEON
ONE OPHTHALMIC SURGEON
(A member of the staff of St. George's Hospital is a candidate for this post)
ONE DENTAL SURGEON
(Specialist in Orthodontics)
(The present Assistant is a candidate for this post)
ONE PSYCHIATRIST

Applications, with the names of three referees, should be sent to the undersigned, from whom further information can be obtained, not later than February 23, 1948.—P. H. Constable, House Governor.

ST. GEORGE'S HOSPITAL, S.W.1
(in association with The Victoria Hospital for Children, Tite Street, Chelsea)
FIRST ASSISTANT (Part-time)
(a) to the Orthopaedic Department
(b) to the E.N.T. Department

Applications are invited for the post of First Assistant (part-time) (a) to the Orthopaedic Department, (b) to the E.N.T. Department, at Victoria Hospital for Children where all the Paediatric work of St. George's Hospital is now carried on. Duties will involve attendance on three or four half-days a week; payment will be at the rate of £125 per annum for one weekly attendance. Applications with the names of three referees should be sent to the undersigned, from whom further information can be obtained, not later than February 29, 1948.—P. H. Constable, House Governor.

SALFORD ROYAL HOSPITAL (256 beds)
HOUSE SURGEON (B2) to Orthopaedic Department
HOUSE SURGEON (B2) to Special Departments
(Ear, Nose and Throat, and Gynaecology)

Salary £175, plus full residential emoluments. Appointment for six months.

CASUALTY HOUSE SURGEON (A)

Salary £175 per annum, plus full residential emoluments. Limited to six months to R practitioners. Applications should be made at once on a special form obtainable from the undersigned, accompanied by copies of three testimonials.—H. B. Shelswell, General Superintendent and Secretary.

(Continued on page 30)

Have you read the notice at top of page 13 ?

THE MEDICAL PROTECTION SOCIETY LIMITED

Founded 1892. **Assets exceed £100,000.**

Members receive advice and assistance in all matters affecting the practice of their profession and are afforded COMPLETE INDEMNITY against costs and damages in cases undertaken on their behalf.

Subscription £1. **No entrance fee to those joining within twelve months of registration.** **Entrance fee, 10/-.**

Full Particulars from the **Secretary, VICTORY HOUSE, LEICESTER SQUARE, W.C.2.** **Gerrard 4553 and 4814.**

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To all other advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d.; or 30 words 22s.; and 3s. 6d. for each six words *or less* thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 25s. (minimum); or 24 words, 31s.; or 30 words, 37s.; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To ALL advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.
Telephone: Euston 2111.
Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 13.

PERSONAL

ADOPTION OF CHILDREN.—To overcome the risk inherent in privately-arranged adoptions, the Church of England Children's Society, which is a registered Adoption Society, is ready at all times to help those wishing to offer a child for adoption, and who deserve such assistance.—Church of England Children's Society, Old Town Hall, Kennington, S.E.11.

DAIMLER 17 SALOON, 1938, MILEAGE 15,683, perfect condition, must sell. Inspection by appt. Phone Laindon 3306 or write Kinross, High Road, Laindon, Essex.

DOCTOR (GRADUATE) shortly retiring from G.P. requires position Medical Officer School or Institution, with or without accommodation. Additional teaching, secretarial work considered. Southern counties.—Box 7854, B.M.J.

SHOREHAM-BY-SEA. One Convalescent Patient taken, private house on the Downs, every care. Good references given. 5 guineas weekly.—Mrs. Swinburne, Withybrook, Old Shoreham, Sussex.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

NATIONAL HEALTH SERVICE. Parliamentary Reports—giving extracts from "Hansard" on the above subject—available from Industrial Advisory Bureau. Ten Reports supplied for one guinea (specimen report 1s.). Other Reports issued on Housing, Agriculture, Transport, Economics, etc. Full particulars from Industrial Advisory Bureau, 12, Buckingham Street, W.C.2.

EX-I.M.S. OFFICERS, CANADIAN.—Retired Canadian officers of the Indian Medical Service, in or passing through the U.K., are advised to contact the Senior Canadian Air Force Liaison Officer, 11, Hill Street, London, W.1, regarding employment in Canada with the Royal Canadian Air Force.

THE HUNSTANTON CONVALESCENT HOME, Norfolk, will reopen this year. The adults' wing will open on March 1 and the children's wing on May 1. Secretaries and almoners are requested to note these dates.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

LIBRARIAN, knowledge of continental languages an advantage, **REQUIRED** to develop and maintain pharmaceutical medical library in London. Applications will be treated in confidence and should be submitted with details of qualifications and experience to Medical Executive, British Schering, Ltd., 167-169, Great Portland Street, London, W.1.

LONDON MANUFACTURERS OF MEDICAL PREPARATIONS require the services of a **BACTERIOLOGIST.** Salary £1,250 per annum, rising by annual increments of £50 to £1,500. At higher initial salary would be considered if experience and qualifications justify it.—Box 7843, B.M.J.

STANDARD TELEPHONES & CABLES LIMITED require a full time **MEDICAL OFFICER** for their factory at New Southgate. Applicants should not be more than 35 years of age and preferably have experience of general practice. Salary not less than £1,000 per annum, subject to periodic review. Applications containing full particulars must be sent in before February 16, 1948, to Chief Personnel Manager, Standard Telephones & Cables, Ltd., Connaught House, Aldwych, W.C.2.

THE WELSH NATIONAL SCHOOL OF MEDICINE. UNIVERSITY OF WALES. Appointment of **CLINICAL BACTERIOLOGIST.**—Applications are invited for the full-time post of Clinical Bacteriologist (with the status of Lecturer) in the Department of Pathology and Bacteriology. The salary of the appointment will be £1,200 per annum with participation in the Superannuation Scheme. Further particulars may be obtained from the undersigned, by whom applications should be received within fourteen days from the date of this advertisement.—S. C. Edwards, Secretary, 10, The Parade, Cardiff.

UNIVERSITY OF LEEDS. CHAIR OF PSYCHIATRY.—The Council invites applications from registered medical practitioners for the appointment of a full-time **PROFESSOR OF PSYCHIATRY,** at a salary of £2,500 per annum. The holder of the Chair will be required to join the Universities Federated Superannuation Scheme, and will retire at the age of 60, but may be invited to continue up to the age of 65. The Professor will take up duties at a date to be arranged but it is hoped that this will be not later than October 1, 1948. It is expected that the Professor will be appointed Physician to the General Infirmary at Leeds and Consultant to Hospitals in the region. Further particulars may be obtained on request from the Registrar, The University, Leeds, 2. Applications (20 copies), giving the names of three referees, should be received not later than March 22, 1948. Applicants who are overseas may apply by cablegram, giving the names of three referees in the United Kingdom.

UNIVERSITY OF DURHAM. THE MEDICAL SCHOOL, KING'S COLLEGE. Newcastle-upon-Tyne.—The Council of King's College will shortly proceed to the appointment of one or more **SENIOR and JUNIOR LUCCOCK RESEARCH FELLOWSHIPS.** The minimum annual value of the Fellowships will be £600 and £300 respectively, but the actual stipend of each Fellow will be fixed with due regard to qualifications and experience. Fellows are required to pursue full-time research in the University in an approved subject in the Faculty of Medicine (including Dental Surgery). Senior Fellowships are open to any person who, by publication or otherwise, has proved himself able to carry out original research. Junior Fellowships are open to any person holding medical, dental, or scientific qualifications, and are intended to provide opportunities for training in research. Applications, giving a statement of the proposed research, and giving the names of not more than two persons prepared to act as referees, should be sent, not later than March 31, 1948, to the undersigned, from whom further particulars may be obtained.—G. R. Hanson, Registrar of King's College.

EXAMINING SURGEONS: FACTORIES ACT, 1937.—The following appointment as Examining Surgeon under the Factories Act, 1937, is vacant: Caterham, in the County of Surrey. Applications, which should be sent not later than February 21, 1948, should be sent to the Chief Inspector of Factories, 8, St. James's Square, London, S.W.1.

UNIVERSITY OF LONDON.—The Senate invite applications for the **CHAIR OF OBSTETRICS and GYNAECOLOGY** tenable at the Postgraduate Medical School of London (salary £2,500). Applications must be received not later than April 15, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF SHEFFIELD.—Applications are invited for the post of **RESEARCH ASSISTANT** in the Department of Child Health, to carry out original investigations under the Professor, which will be mainly in the clinical field. Experience in laboratory work would be an advantage. Salary in the range £500 to £700 per annum, according to qualifications and experience, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. Candidates must possess a medical qualification, and have had clinical experience. The successful candidate will be expected to begin duties as soon as possible. Applications (three copies), with the names and addresses of referees and, if desired, copies of testimonials, should reach the undersigned (from whom further particulars may be obtained) by February 24, 1948.—A. W. Chapman, Registrar.

UNIVERSITY OF LONDON, BRITISH POSTGRADUATE MEDICAL FEDERATION. INSTITUTE OF ORTHOPAEDICS (In association with the Royal National Orthopaedic Hospital), 234, Great Portland Street, London, W.1.—Applications are invited for the appointment of **PART-TIME DIRECTOR OF STUDIES** of the Institute. The successful candidate will also be appointed a member of the Staff of the Hospital and Clinical Director, and will be permitted private practice, for which consulting facilities will be provided in the Hospital. The salary will be £2,250 per annum, of which £1,500 is paid by the Institute and £750 by the Hospital. Applications (nine copies) giving full particulars and the names of three referees should be sent to the Dean of the Institute at 234, Great Portland Street, W.1, by April 15, 1948, from whom further particulars can be obtained. The Committee reserve the right to appoint by invitation.

UNIVERSITY OF ST. ANDREWS.—The University Court of the University of St. Andrews invites applications for appointment as **LECTURER IN ANATOMY** in University College, Dundee. The salary attached to this appointment is £700 per annum rising by annual increments of £25 to £850 per annum together with F.S.S.U. benefits. A Family Allowance of £50 per annum for each child is also payable and a grant towards expenses of removal may be made. Further particulars may be obtained from the undersigned, with whom one copy of the application together with the names of three referees should be lodged not later than March 15, 1948.—David J. B. Ritchie, Secretary, The University, St. Andrews.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN PHYSIOLOGY.—Applications are invited for a Lecturer in the Department of Physiology. Candidates must hold medical or scientific qualifications. Salary £600 to £750 or £750 to £900, according to qualifications and experience. In addition a children's allowance is payable. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than February 21, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN PATHOLOGY.—Applications are invited for a **LECTURER IN PATHOLOGY.** Salary £750 to £900 according to qualifications and experience. In addition a Children's Allowance is payable. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than February 29, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

POSTGRADUATE STUDY. Diploma in Anaesthetics; Diploma in Psychological Medicine; Diploma in Ophthalmology; Diploma in Radiology; Diploma in Laryngology; Diploma in Child Health; F.R.C.S.Eng. and all Surgical Examinations; M.R.C.P.Lond. and all Medical Examinations; M.D. Thesis of all Universities; Courses for all Qualifying Examinations. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested. Address: Secretary, Medical Correspondence College, 19, Welbeck St., London, W.1.

CHILDREN'S DISEASES (E.N.T.). February 28 and 29. All day Saturday and Sunday. Metropolitan E.N.T. Hospital, W.1. Limited.—Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

COACHING FOR M.B., M.D., M.R.C.P., D.C.H.—Individual tuition. Evenings, including weekends, by London grad., honrs. medicine, M.D., M.R.C.P., D.C.H.—Box 7848, B.M.J.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment, 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

EXAMINING BOARD IN ENGLAND
by the
ROYAL COLLEGE OF PHYSICIANS OF LONDON
and the
ROYAL COLLEGE OF SURGEONS OF ENGLAND

Notice is hereby given that the following Examinations will commence on the dates stated below:—

PRE-MEDICAL EXAMINATION
(Chemistry, Physics, and Biology)
Thursday, March 4
FIRST EXAMINATION
(Anatomy, Physiology, and Pharmacology)
Thursday, March 11
FINAL EXAMINATION
(Pathology, Medicine, Surgery, and Midwifery)
Tuesday, April 6

Candidates who have fulfilled the necessary conditions, and who desire to present themselves for examination, must give notice in writing to the Secretary, Examination Hall, 8-11, Queen Square, London, W.C.1, at least 21 days before the date of the Examination, transmitting at the same time such certificates as may be required by the regulations of the Board, together with the full amount of the fees due for the subject or subjects for which they desire to enter.—F. M. Stent, Secretary.

UNIVERSITY OF LEEDS. Department of Preventive Medicine and Public Health.—A SIX MONTHS' COURSE for Health Visitors will commence on October 5, 1948. The Course will be planned in accordance with the requirements of the Royal Sanitary Institute. All applicants for the Course will be required to hold the qualifications prescribed by the Ministry of Health and by the Royal Sanitary Institute before being admitted to the Course. Candidates who wish to take advantage of schemes for financial assistance by Local Authorities should apply to the Medical Officer of Health of the Local Authority concerned. Candidates wishing to take the Course should write to the Registrar, The University, Leeds, 2, for an application form.

LECTURES

EMPIRE RHEUMATISM COUNCIL

The Spring Week-end Course will be held at THE APOTHECARIES' HALL, BLACKFRIARS LANE, QUEEN VICTORIA STREET, E.C.4 (Blackfriars Tube Station), on Friday, Saturday, and Sunday, March 12, 13, and 14, 1948.

LECTURES

FRIDAY, MARCH 12		
4.30–5.30 p.m.	Introductory Lecture	PROFESSOR L. S. P. DAVIDSON F.R.C.P., F.R.S.E.
5.30–6.30 p.m.	Gout	G. D. KERSLEY, ESQ., F.R.C.P.
SATURDAY, MARCH 13		
10–11 a.m.	Osteoarthritis	ERNEST FLETCHER, ESQ., M.R.C.P
11.15 a.m.–12.15 p.m.	Spondylitis	W. S. TEGNER, ESQ., M.R.C.P.
2–3 p.m.	Juvenile Rheumatism and Still's Disease	R. E. BONHAM-CARTER, ESQ., M.R.C.P.
3–4 p.m.	Non-Articular Rheumatism and Sciatica	W. S. C. COPEMAN, ESQ., O.B.E., F.R.C.P.
4 p.m.	Tea	
4.30–5.30 p.m.	Rheumatoid Arthritis	OSWALD SAVAGE, ESQ., O.B.E., M.R.C.P.
SUNDAY, MARCH 14		
10–11 a.m.	Physical Treatment in the Rheumatic Diseases	H. A. BURT, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Orthopaedic Aspects of the Rheumatic Diseases	W. D. COLTART, ESQ., F.R.C.S.

The fee for the course will be One Guinea, limited to 100 entries, to be received with remittance, at least one week before, by the General Secretary, Empire Rheumatism Council, Tavistock House (N), Tavistock Square, W.C.1.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES—FEBRUARY, 1948

The following Lectures will be delivered at the College in Lincoln's Inn Fields, London, W.C.2, at 5 p.m. on each day:

		HUNTERIAN LECTURES	
Mon.	2	PROF. A. W. BADENOCH	Congenital Obstruction at the Bladder Neck
Tues.	3	PROF. A. DAVIS BEATTIE	The Treatment of Peptic Ulcer by Vagotomy
Wed.	4	PROF. DENIS BROWNE	Hare Lip and Cleft Palate
Fri.	6	PROF. R. GUY PULVERTAFT	Repair of Tendon Injuries in the Hand
Mon.	9	PROF. VICTOR RIDDELL	Carcinoma of the Breast
Tues.	10	PROF. FRANCIS E. STOCK	The Surgical Approach to Hypertension
Wed.	11	PROF. A. HEDLEY VISICK	A Study of the Failures after Gastrectomy
Fri.	13	PROF. STANLEY WAY	The Anatomy of the Lymphatic Drainage of the Vulva and its Influence on the Radical Operation for Carcinoma
Tues.	17	PROF. M. C. WILKINSON	Some Observations on the Pathogenesis and Treatment of Skeletal Tuberculosis
		BERNHARD BARON LECTURE	
Thur.	19	PROF. JOHN BEATTIE (Bernhard Baron Research Professor)	Hormonal Changes after Injury

The Lectures are open to those attending Courses in the College and also to all other Medical Practitioners, Dentists and advanced students.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES IN PLASTIC SURGERY, FEBRUARY, 1948

The following Lectures in Plastic Surgery will be delivered at the College in Lincoln's Inn Fields, London, W.C.2, at 5 p.m. on each day:

Thurs.	12	MR. RAINSFORD MOWLEM	Bone, Cartilage and Fascia Transplants
Mon.	16	SIR HAROLD GILLIES	Skin Flaps: Indications and Technique
Wed.	18	MR. A. B. WALLACE	Free Skin Grafting: Methods and Application
Fri.	20	MR. R. P. OSBORNE	Burns and their Early Treatment
Mon.	23	PROF. T. POMFRET KILNER	Cleft Lip and Palate Repair
Tues.	24	MR. P. H. JAYES	Fractures of the Facial Skeleton
Wed.	25	MR. J. N. BARRON	Hand Injuries
Thurs.	26	MR. J. B. CUTHBERT	Hand Deformities: Reparative Surgery
Fri.	27	SIR ARCHIBALD MCINDOE	External Genitalia: Treatment of Congenital Deformities

The fee for the whole course is £4 4s. or 10s. for one lecture.

Fellows and Members of the College and Fellows and Licentiates in Dental Surgery will be admitted to the whole course on payment of a fee of £2 2s., or to one lecture on the payment of 7s. 6d.

Applications, accompanied by a cheque for £4 4s. or £2 2s., should be sent to the Secretary, Postgraduate Education Committee, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

EDUCATIONAL

OBSTETRICS (D.OBST.R.C.O.G.).—February 16 to 21. All day. West Middlesex County Hospital, Isleworth. Limited.—Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

POSTAL COACHING for all Medical Examinations. Examination Successes, 1901-47; M.D.Lond., 454; M.B., B.S.Lond., Final, 436; F.R.C.S.Eng., Primary, 411; F.R.C.S.Eng., Final, 308; M.R.C.P. Lond., 427; M.R.C.S., L.R.C.P., Final, 891; D.A. (1936-47), 143; F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The next **EXAMINATION** for the **MEMBERSHIP** will commence on Tuesday, March 30, 1948. Prospective candidates are asked to note that entries accompanied by the certificates and testimonials required by the Bye-Laws must reach the College not later than first post on Tuesday, March 2, 1948. Candidates who propose to submit published work under the regulations are required to give twenty-eight days' notice, and should apply in writing to the Registrar, without delay, for detailed instructions as to the procedure they should follow. The last day for receiving completed entries for published work is also Tuesday, March 2, 1948.—H. E. A. Boldero, D.M., Registrar, Pall Mall East, London, S.W.1

SOCIETY OF APOTHECARIES OF LONDON.—Surgery: March 8, April 12, May 10. Medicine and Pathology: March 15, April 19, May 18. Midwifery: March 16, April 20, May 18. Mastery of Midwifery: May and November. Diploma in Industrial Health: July and December. For regulations apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

SOCIETY OF APOTHECARIES OF LONDON.—DIPLOMA IN INDUSTRIAL HEALTH.—The next Examination will begin on Monday, July 5, 1948. The following Examination will be held in December, 1948. For regulations apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE. Postgraduate Academic Diploma in Bacteriology.—The **COURSE** for the **POSTGRADUATE DIPLOMA IN BACTERIOLOGY** for the Session 1948-49 will commence in October, 1948. This is a full-time day course extending over one academic year. The course may be taken by: (a) Graduates in Medicine or Veterinary Science desiring to study Bacteriology as applied to Medicine and Hygiene. (b) Graduates in Science with a First or Second Class Honours degree in Chemistry, or its equivalent. For such students, the course covers the fields of General Bacteriology, Chemical Microbiology and Industrial Microbiology. Applications for admission to the Diploma course must be received not later than the end of March. Further information and application forms can be obtained from the Registrar, London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1

THE GROCERS' COMPANY OFFER EACH YEAR.—ONE SCHOLARSHIP for the encouragement of **ORIGINAL MEDICAL RESEARCH** into the **CAUSATION, PREVENTION** or **TREATMENT of DISEASE.** The award, which is tenable for two years from September 1, is of £350 for the first year and £400 for the second year, in addition to which the Court will grant up to £150 a year towards the cost of special apparatus, etc., required by the scholar. Candidates should not be more than 35 years of age, and should submit their applications to the undersigned before June 1. —L. Hickman Barnes, Clerk, Grocers' Hall, E.C.2.

THE ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE.—THE CERTIFICATE AND THE DIPLOMA IN PUBLIC HEALTH AND THE DIPLOMA IN INDUSTRIAL HEALTH.—The next **COURSE OF INSTRUCTION** for the Certificate in Public Health (C.P.H.) will commence on Tuesday, March 23, 1948, for the Preliminary Examination of the Conjoint Board of the Royal Colleges of Physicians and Surgeons. The Courses, both for the Certificate and for the Diploma in Public Health, can be taken either whole- or part-time. A Course of Instruction, part-time or whole-time, is also provided for the Diploma in Industrial Health, Part I is the same as, and commences concurrently with, the C.P.H. Course. Those already holding a Certificate in Public Health are exempt from that part. A Course for Part II (D.I.H.) commences in July, 1948. Prospectuses, enrolment forms, and full details of both may be obtained from the Secretary, 28, Portland Place, W.1. (Telephone, LANgham 2731-2.)

UNIVERSITY OF MANCHESTER. FACULTY OF MEDICINE. DIPLOMA IN DIAGNOSTIC RADIOLOGY (R.C.P.&S. Eng.)—A course of instruction for the above Diploma will commence in mid-April 1948 and extend over eighteen months. The course is full-time, non-resident. Inclusive fee 50 guineas. Applications are invited from registered medical practitioners who fulfil the requirements as to previous medical experience laid down by the Examining Board in England (D.M.R.D. Regulations, December 1945, obtainable from the London Conjoint Board, 8-11, Queen Square, W.C.1). Further information may be obtained from the Dean of Postgraduate Medical Studies, University of Manchester, to whom all applications must be sent before February 28, 1948.

UNIVERSITY OF BIRMINGHAM. DIPLOMA IN PUBLIC HEALTH.—The next **COURSE OF INSTRUCTION** for the **CERTIFICATE and DIPLOMA IN PUBLIC HEALTH** of the University of Birmingham will begin in October 1948. Candidates eligible for admission are registered medical practitioners who have been qualified for not less than two years. Since arrangements include provision for special instruction for candidates who wish to work in the fields of Child Health, Industrial Health, or Tuberculosis, as well as in Public Health Practice, the numbers are limited to approximately twenty. A syllabus giving details of courses, admission, fees, etc., and forms of application, may be obtained from the Dean, The Medical School, Hospitals Centre, Birmingham, 15.

LECTURES

ASSOCIATION FOR MORAL AND SOCIAL HYGIENE. The THIRD ALISON NEILANS MEMORIAL LECTURE followed by a Conference will be held on Monday, February 16, 1948, 2.30 to 5 p.m., Livingstone Hall, Broadway, S.W.1. Subject: The Solicitation Laws. Chairman, Sir Charles Grant Robertson, C.V.O., LL.D. (health permitting). Speaker, Mrs. Franklin Lefroy, M.A., J.P.

ANAESTHETICS. March 1 to 13, Dept. of Anaesthetics, Radcliffe Infirmary, Oxford. Course of lectures. Limited.—Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

GRESHAM COLLEGE, BASINGHALL STREET, LONDON, E.C.2.—Four Lectures by Professor H. Hartridge, M.A., M.D., ScD., M.R.C.P., F.R.S. (Gresham Professor in Physic) on "Similarity and Individuality," on Monday to Thursday, February 9 to 12. The Lectures are free and begin at 5.30 o'clock.

UNIVERSITY OF LONDON.—A lecture on THE EPIDEMIOLOGY OF POLIOMYELITIS will be given by Dr. A. M. McFarlan (Public Health Laboratory Service, Cambridge) at the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C.1, on Wednesday, February 11, at 5.15 p.m. Admission free, without ticket.—James Henderson, Academic Registrar.

ASSISTANTSHIPS

VACANT

Wanted, Married Assistant with a View to Partnership in a small country town in South-west England. Furnished accommodation available. Car essential, and also interest in midwifery. Salary including car allowance £1,000 a year. Please apply giving full particulars as to nationality, religion and qualifications, including copies of any recent testimonials to Box 7855, B.M.J.

Wanted, Male Assistant, single or married, outdoor, long term, mixed general practice, Bristol. Commence March 1. Good references essential. Usual bond. Car supplied. Salary by arrangement. —Box 7829, B.M.J

Wanted immediately. Young male indoor Assistant, Irish, able to drive, car provided. Salary £650, all found. Newcastle-upon-Tyne area.—Box 7856, B.M.J.

Wanted, March 1, English Male Outdoor Assistant, East Anglian country practice. Car essential. Salary and car allowance by arrangement.—Box 7565, B.M.J.

Wanted, Young Assistant for old-established Essex East Coast Practice. Hospital and various appointments, good salary and definite Partnership prospects for energetic and suitable man. Car essential. Full details, experience, etc., immediately to Box 7831, B.M.J.

Wanted, married Assistant, with or without View, Yorkshire town. Unfurnished house provided. Good salary and car allowance.—Box 7806, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Assistant with View to Partnership, Industrial Practice N.W. England. Excellent prospects.—Box 7830, B.M.J.

Keen, hard working and reliable Assistant for industrial practice (Essex side London). Vacant flat unfurnished over branch surgery. Must have own car. Good salary.—Box 7807, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

WANTED

Wanted, Assistantship by Glasgow M.B., Ch.B., aged 26, married, one child, one year hospital, 2½ years R.A.M.C. Furnished accommodation essential. Driver. Long engagement preferred.—Box 7801, B.M.J.

Wanted, Assistantship with or without View by M.B., Ch.B., aged 27, ex-R.A.M.C., married, one child. Obstetric and gynaecological house appointments since demob. Available now.—Box 7862, B.M.J.

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Wanted, in or near Oxford by B.M., F.R.C.S., Part-time Assistantship, or accommodation in exchange for part-time work Own car. G.P. experience.—Box 7857, B.M.J.

Wanted, Assistantship, with or without View, good class country practice by M.R.C.S. 1939, aged 33. House appointments in medicine, casualty, surgery, paediatrics, obstetrics. Married, three children. House with garden essential.—Box 7832, B.M.J.

Wanted, Assistantship with View, Scotsman, aged 32, married, own car. Hospital and good G.P. experience. Unfurnished accommodation essential. Free March 1. Southern England preferred.—Box 7808, B.M.J.

Wanted, Assistantship by woman M.B., B.S., North East England. Good hospital and G.P. experience. Own car.—Box 7812, B.M.J.

Assistantship, preferably with View, by Scot, M.B.E., M.B., Ch.B. (Glasgow), 32, married, no children, own car. Army, hospital, G.P. experience. Scotland preferred.—Box 7860, B.M.J.

Assistantship with View, M.B., B.Chir. (Camb), M.R.C.S., L.R.C.P. (Bart's), 29. Own car. Army, hospital and G.P. experience. South-west England preferred.—Box 7858, B.M.J.

Assistantship with definite View, Southern England or Wales, single graduate, H.P. H.S., ex-Major R.A.M.C. Two years G.P.—Box 7811, B.M.J.

Assistantship, with View or Succession by experienced practitioner (Dublin) ex-R.A.V.F.R., aged 36, married, own car. Keen midwifery. Country or country town. House to rent. Some capital.—Box 7810, B.M.J.

Assistantship wanted by Scottish woman graduate. Hospital and G.P. experience. Own car.—Box 7809, B.M.J.

Experienced woman doctor desires Assistantship, Permanent or with View to Partnership, N.E. England preferred, but not essential. Small house or flat appreciated. Car owner. Capital.—Box 7802, B.M.J.

Married woman doctor available for Part-time Work, morning and/or evening surgeries, in Bristol. Ten years' experience hospital and G.P.—Box 7861, B.M.J.

Ophthalmic Surgeon, highest qualifications, English, married, aged 34, would be glad to hear of opening in practice with chance of hospital appointment.—Box 7859, B.M.J.

LOCUMS

VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars. —British Medical Bureau, 33, Cross Street, Manchester, 2.

Locum Resident Surgical Officer required April, May, June, July, August. Salary £630 per annum, resident Newcastle area.—Box 7863, B.M.J.

AVAILABLE

Wanted, Locum Work by experienced G.P. who has just sold his own practice. British. Own car. Available February 15 onwards.—Ailcock, Crowhurst, Sussex. 'Phone: Crowhurst 11.

Wanted, Locums by medical woman. Experienced. Car available.—Box 7833, B.M.J.

Middle-aged experienced graduate with D.P.H., widower, tolerant, plays piano but not bridge, available Locums or Friendly Assistance, and/or P.H work, West Country.—Box 7834, B.M.J.

Woman, Two years' experience G.P. Free long or short term Locums. Preferably London or South. —Box 7864, B.M.J.

PARTNERSHIPS

OFFERED

Wanted Third Partner after preliminary Assistantship if wished, in old established mixed practice, Devon market town. House to rent. Gross receipts over £5,000. 1¼ years' purchase.—Box P7813, B.M.J.

A well qualified partner, aged 30-40 required in a good class practice in London. No panel but some industrial medicine and hotel appointments. Good scope for an able and pleasant man. Share worth about £2,000 gross. Terms to be arranged at interview. Some previous experience of general practice an advantage.—Box P7515, B.M.J.

Essex Rural. Partnership in old established practice, income over £2,500 per annum, panel 2,200. Good house with garden available.—Box P7867, B.M.J.

London, S.E. Gross receipts £6,000. Panel over 5,000. Half share for sale at two years' purchase.—Box P7816, B.M.J.

Midlands City. Two-fifths share in established good class practice. Panel 900. Gross receipts 1947, £5,000. House to rent.—Box P7868, B.M.J.

Partner or Assistant with View to Partnership wanted for high-class London private practice. M.D. or M.R.C.P. Applicant should be over 30 years of age. Entry into the Service not contemplated. Write with full particulars and copies of two recent references to Box P7815, B.M.J.

Scotland, easy reach of Edinburgh, main road and rail. Partnership (preliminary short assistantship) of 1/4 to 1/2 share of £3,000 at two years' purchase. Good panel, private, and appointments. House with surgery, garage and garden to rent. Commence April, early application essential.—Box P7835, B.M.J.

South West Suburban London. Well established One third partnership share. Gross income £7,500 to £8,000. Central surgery. House freehold, £2,000 optional. Panel about 6,000. Price 1½ years' purchase.—Ramsay Brown, C.A., 430, Strand, W.C.2.

Would high-class London Physician contemplate amalgamating with another in order to acquire more liberty for travelling and postgraduate work? Write with full particulars and copies of two references to Box P7814, B.M.J.

WANTED

M.B., B.Chir., Cambridge and Westminster, aged 36, wants Partnership in country town or country with one experienced doctor or firm. Will need £2,000 share. Mixed practice preferred, with good hospital facilities and prospect of a house with character. Single-handed practice considered only if mutual help arrangements exist. London possible, but not suburbia. English. 12 years' experience of hospital, R.A.M.C., and general practice. Now Medical Registrar. Married, one boy 7½. Own car and furniture. Against unamended State scheme. Midwifery, no expert, but interested. Can give anaesthetics. Replies treated in confidence.—Thomas E. Johnson, 4, Keats Close, Keats Grove, N.W.3.

M.D., D.R.C.O.G., ex-Army medical specialist, experienced G.P., age 34, desires Partnership or Practice, £2,500 to £3,500 in pleasant town. Good panel essential.—Box P7254, B.M.J.

MEDICAL POSTS

VACANT

The North-West London Women's Welfare Centre (Birth Control Clinic), 84, Princess Road, N.W.6.—Applications are invited for the post of Medical Officer (woman) at the above Centre. One session weekly, Tuesdays, 10.30 to 11.30 a.m., fee £2 2s. Applications accompanied by full particulars and testimonials should be forwarded to the Superintendent at the above address as soon as possible.

WANTED

Experienced Anaesthetist, M.B. (Cantab.), D.A., former House Anaesthetist London teaching hospital, ex-Major R.A.M.C., aged 29, urgently requests information about good opening, available hospital appointment essential, for specialist anaesthetic practice in non-industrial town.—Box 7866, B.M.J.

Ex-Army Officer, capable, experienced, willing undertake Part-time Medical Work for industrial concern West London or Middlesex.—Box 7865, B.M.J.

M.B., D.P.H., aged 61, married, G.P. many years, requires light Medical Post, Institution, or other light Medical Work. Married quarters or flat. Moderate salary.—Box 7512, B.M.J.

PRACTICES

EXCHANGE

Established Practice for Sale, Cardiff, receipts £2,500, panel 1,800, with freehold house, garage and small garden in exchange for practice or good nucleus in London, or environs. Capital adjustment arranged.—Box P7799, B.M.J.

FOR SALE

A non-panel practice with some hotel work in a good class residential part of London for sale. Accommodation occupied by vendor would be available for successor. Practice doing over £4,000 and increasing. Premium for practice, accommodation and some furnishings, £7,000.—Box P7516, B.M.J.

Birmingham. Old Practice. Panel 1,500. Residen-tial, industrial. Receipts £2,000. Good house, garage. Large garden, rent £75 per annum. Owner going abroad.—Box P7871, B.M.J.

Cheshire. Private and Panel (800). Practice. Re-ceipts 1947 £2,500. House, garden and garage. Cottage hospital. Premium. Practice and house, £6,000 cash. Owner specializing.—Box P7837, B.M.J.

Excellent Mixed Practice, South West City, old-established. Certified accountant's figures 1946-7 £5,900. Panel 1,370. Great scope. Particularly suitable for two, but could be run by one energetic man. Very nice house and garden for sale freehold. Good schools. Premium 1½ years' purchase.—Box P7256, B.M.J.

Edinburgh. Receipts £1,000. Panel 620. With or without house. Large house (price £4,500) part of which might be separately let. House and practice £6,000.—Apply British Medical Bureau (Scottish Branch), 21, Alva Street, Edinburgh.

For Sale. Well established Practice in East Lanca-shire town. Receipts about £2,200, panel 1,491. Good house and surgery. Little opposition. Practice can be increased. Premium 1½ years' purchase. —Box P7874, B.M.J.

For Sale. Very old established Practice, indus-trial town 12 miles from Manchester. Panel 1,960. Gross receipts £3,500. House and practice £7,500.—Box P7545, B.M.J.

Growing nucleus medical woman's Practice Essex coastal town to be sold with or without house newly decorated and perfect for nursing home.—Box P7873, B.M.J.

London, N.W. Old established small non-panel Practice in thickly populated area. House on lease at £75 per annum. Offers invited.—Box P7817, B.M.J.

N. London. Mixed private and panel practice, increasing. Gross takings last year £4,706. Panel units 2,700. Various public appointments. Large family house, in own grounds. Pleasant district. Dispenser kept. Immediate settlement necessary.—Box P7269, B.M.J.

North Lincs. Panel 2,500. Income £4,000 to £5,000. Large modern house, three garages and land. Suit two friends. Practice, house and land, £11,000. —Box P7872, B.M.J.

Old-established Private Practice for sale, Birm-ingham. Unfurnished leasehold house with garden available. Gross receipts £1,800. Good scope for panel. Sale necessitated by illness.—Box P7819, B.M.J.

Old-established Medical Practice for sale in North London. Panel 1,600. Income £2,667. House, surgery and garage combined on low rental. Vendor going abroad. Premium £5,200. Capital essential. —Box P7822, B.M.J.

Old-established panel, club Practice for sale N.E. Coast. Panel approx. 1,200, club £800 to £900 per annum. Income approx. £2,000. Magnificent modern, detached, freehold, centrally heated house with large garden. Separate entrance surgery. Premium house, practice £7,500, for quick sale, vendor joining partnership.—Box P7870, B.M.J.

Old-established Practice in pleasant suburb, south London, close to Dulwich village, 8 minutes by train from Victoria. Large panel and good private, with much scope.—Box P7836, B.M.J.

Practices and Partnership Shares for sale in Midlands and Northern Counties. Full details free on request.—British Medical Bureau, 33, Cross Street, Manchester, 2.

Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool. Telephones: Royal 8116 and Royal 7480 Telegrams: "Organic," Liverpool.

South East London. Sound Practice. Panel 1,500. Receipts 1945 £1,933, 1946 £2,180, 1947 £2,650. Leasehold house for sale. Price £4,500. House and practice.—Box P7818, B.M.J.

South East London, cash and panel practice for sale, 20 minutes Piccadilly, panel about 3,500. House to rent.—Box P7504, B.M.J.

West Riding, compact Industrial Practice £1,200 per annum. Panel 1,050 units, great scope, house to rent, surgery, waiting room, separate entrance, good schools, garden, garage.—Box P7800, B.M.J.

WANTED

Wanted immediately, Practice, Panel, Private or Nucleus with scope. South Coast, preferably Worthing, Hastings, Eastbourne, Bexhill. House or bungalow, modern, leasehold, freehold. Capital available.—Box P7823, B.M.J.

Wanted, Mixed Practice, anywhere, minimum panel 1,000, income £2,000 or over, by experienced practitioner sold own practice during war. Equal partnership or sole charge with succession considered. Good detached house with garden, rent or purchase. Early settlement. Own capital. Strictly confidential.—Box P7876, B.M.J.

Wanted immediately, Panel Practice, receipts about £1,500 or so with house to rent. Strictly confidential.—"Doctor," C/o 284, Southbourne Grove, Westcliff-on-Sea, Essex.

Wanted by M.B., B.S. (London), Panel and Private Practice S.W. London, preferably within two mile radius Hammersmith. House not essential. Capital up to £4,000 available.—Box P7803, B.M.J.

Wanted, Northern Ireland, Practice or Partner-ship by young experienced R.C. Replies in confidence.—Box P7820, B.M.J.

Wanted, Practice in Midlands or South or West. Income £1,500 to £2,000. Sound panel and house.—Box P7525, B.M.J.

Wanted, Practice with good House and garden, garage, preferably coast or suburb of industrial town. Replies strictly confidential. Capital available. —Box P7583, B.M.J.

Central London or suburbs, Practice or Nucleus required by ex-Army doctor. Partnership considered. Accommodation not essential.—Box P7875, B.M.J.

Experienced practitioner requires mixed Practice or Nucleus. London, North-west, West or South-west. Modern house, garage and garden. Immediate capital available.—Box P7798, B.M.J.

Hampstead. Doctor practising Hampstead, Lon-don, wishes to acquire additional private and panel practice.—Box P7505, B.M.J.

M.B., ex-Major R.A.M.C., urgently requires Practice. Income £1,500-£1,800. Panel 1,000 upwards. Ample capital available for immediate settlement.—Box P7222, B.M.J.

Practice or Partnership with good Panel desired in good part of London. Capital available.—Box P7840, B.M.J.

Practices and Partnerships wanted anywhere, England, Scotland, Wales. Purchasers waiting. Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

Small town or good suburban Practice, south Midlands. M.B., M.R.C.S., D.R.C.O.G., aged 28, wife M.B. Capital and references. Hospital and G.P. experience since demobilization.—Box P6920, B.M.J.

Small Mixed Practice in Isle of Wight by young experienced M.B., Ch.B. House to buy or to rent. —Box P7877, B.M.J.

Somerset or adjoining county. Death or Retire-ment Vacancy or Partnership wanted by practitioner, extensive general and hospital experience. Immediate cash transaction. Now or April.—Box P7838, B.M.J.

Seaside resort Practice wanted by well qualified, experienced doctor.—Box P7821, B.M.J.

V.D. General Practice or Partnership with V.D. appointment wanted by experienced practitioner.—Box P7839, B.M.J.

DIETITIANS, DISPENSERS, NURSES

VACANT

Dispenser-Bookkeeper required middle of March. Country practice, eight miles from Peterborough.—Drs. Hobson, Fraser and Douglas, Market Deeping, Peterborough.

Dispenser Bookkeeper required by partnership in country practice 20 miles London. Free every week-end.—Box 7824, B.M.J.

Experienced Lady Dispenser wanted for G.P. in Croydon Apply stating age, experience, and full particulars.—Drs. Hudson and Lane, 391, Lower Addiscombe Road, Croydon. Addiscombe 2100.

Lady Dispenser required immediately by large partnership. Three secretaries and two dispensers employed in modern surgery. Kindly state age and experience.—Dr. Eberle and Partners, 163, Dunstable Road, Luton.

London College of Pharmacy for Women supplies Dispenser-Bookkeeper or Laboratory Technician. Training for Apothecaries' Hall Assistants' Examination, and in Clinical Pathology.—Secretary, 7, Westbourne Park Road, W.2. (Bayswater 0969).

Lady Dispenser with Hall qualifications, required. Previous experience not essential. Three dispensers and secretarial staff kept. Please give full particulars with first application.—Drs. Alcock, Ratcliff, Reid, Salzmann, Keeling & Tait, 317, Oxford Road, Reading.

Radiographer wanted for Midland city. Private practice.—Box 7841, B.M.J.

TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

Required by Gynaecologist, Part-time Secretary with knowledge of medical terms and preferably some nursing. Monday to Friday, 1.30 to 5.30 p.m. —Phone: Langham 3796.

TYPISTS, SECRETARIES, RECEPTIONISTS, HOUSEKEEPERS, ETC.

AVAILABLE

The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

All types Receptionists, Secretaries, Dispensers, Med. Aux., etc., again wanted and supplied. No fee to employer.—Medical Services Employment Bureau, 23, Mount Park Road, W.5. Tel.: Perivale 1976.

Appointment as Secretary-Receptionist desired by lady, 25. Good education and qualifications in shorthand and typewriting. Can drive car. Four years' experience as doctor's secretary. Liverpool area preferred.—Box 7804, B.M.J.

Doctor's daughter, well educated, with good appearance, desires Post with doctor as Receptionist, West End or North London.—Box 7844, B.M.J.

Doctor's daughter, recent experience Wimpole Street, knowledge laboratory technique, nursing, typing, requires Post as Doctor's Receptionist.—Box 7825, B.M.J.

Ex-Meteorological Wren with previous secretarial experience requires position Secretary-Receptionist to doctor near London, or preferably abroad.—Miss Foxlee, 149, Croftside Avenue, King's Park, Glasgow, S.4.

Ex-W.A.A.F. Sgt., 25, good education with Domestic Science and Red Cross training, seeks Receptionist or Similar Post.—Box 7849, B.M.J.

"How beautifully you type." It is pleasing to have this said of any one of my staff. I hope you, too, will think the same if ever you have occasion to write to the Professional Typewriting Service, 11, Caroline Place, Bayswater, London, W.2. Personal attention given to all work received, however small the job.

Lady (40), good personality, accustomed to respon-sibility requires post as Receptionist-Secretary to Central London doctor or dentist.—Box 7796, B.M.J.

Medical Secretaries supplied permanently, temporarily and by the hour. Professional papers copied. Highest references.—Cavendish Secretarial Service, 13, Princes Street, Cavendish Square, W.1. MAYfair 2772.

Secretarial Services. All branches of Secretarial work undertaken. Prompt, accurate and confidential work at reasonable prices. Private room available for dictation. Secretaries, with or without machines, supplied temporarily.—The Curzon Secretarial Bureau, 2, Queen Street, Mayfair (rear ground floor, upstairs). Tel.: GROsvenor 4670.

Typewriting, Duplicating, Printing, Addresso-graphing. Theses accurately and quickly undertaken. Greeting Cards, Calendars, etc., 200 letterheads with envelopes, 20s.—Apply Freshfield, 15, Triangle, Clevedon, Somerset.

MISCELLANEOUS

PRIVATE

Atlas of Anatomy, Spalthoitz, urgently required. State price. Details to Dr. Ball, 167, Park Grove, Barnsley.

Complete Skeleton with one side articulated. Good condition, £18. Over 100 Histology Slides in box £3.—Box 7805, B.M.J.

For Sale. Reichart Microscope, oil immersion, adjustable substage, £40. Hanovia A.C. Prescription lamp, portable model, hardly used, £17. Hala Infra-red lamp, £5.—Box 7797, B.M.J.

For Sale. Fitted Midwifery Bag, axis traction forceps, etc., excellent condition, £15 or near offer. —Box 7826, B.M.J.

For Sale Excellent Weighing Machine, £15. Adjustable Couch for consulting room, £15.—Manson-Bahr, 92, Harley Street. Welbeck 0194.

For Sale. Old type Cambridge table Electrocardio-graph, D.C. 230 volts, suitable for hospital. In excellent condition. Also Electric Centrifuge, D.C. 230 volts, in perfect order. Low price for quick sale.—Box 7846, B.M.J.

Skull required by medical student. State con-dition and price.—R. A. Gregory, 34, Falkner Square, Liverpool, 8.

Typewriter urgently needed, under £25. Dr. Lush, 63, Murray Road, S.W.19; Tel. Wim. 7218.

Microscope (Leitz 1907), detachable, sliding stage, condenser, in mahogany case, mahogany carrying stand, having brass oil lamp. Seven different eyepieces, six objectives (two No. 3), including Leitz Object Marker. What offers over £70?—Box 7845, B.M.J.

Oxford Medicine, loose leaf, for sale, complete 1947. What offers carriage forward?—Dr. W. G. Swann, 11, Deramore Park, Belfast.

Sale. Doctor's Platform Scales. Measuring Rod. Examination Couch in mahogany and leather. Good quality, reasonable. Tel.: Worcester 2722.—Box 7851, B.M.J.

Trial Case, wooden polished, 220 38mm. lenses trial frame, two oak-framed reversed card type and mirror, £30. Also Trial case much older pattern 220 lenses, £16.—Box 7850, B.M.J.

Zeiss Microscope, objectives 2/3, 1/6, 1/12 oil immersion. Mechanical stage, condenser. As new. Offers over £100. View London.—Box 7827, B.M.J.

Electrocardiographic machine (static). Offers of secondhand apparatus invited. Write Medical Officer of Health, Public Health Department, Johnston Terrace, Edinburgh.

For Sale, Newton and Wright Diagnostic X-ray Unit, single-valve, 100 m.a., non-shockproof, with combined screening stand and Potter-Bucky couch and one spare X-ray tube. Best offers over £150.—Apply Savernake Hospital, Marlborough.

For Sale. Victor self-rectified 30 m.a./90 k.v.p. x-ray set, single focus tube, in perfect condition.—Apply, Hon. Secretary, East Cornwall Hospital, Bodmin.

TRADE

Wanted, Second-hand Surgical Instruments, furniture for surgery and consulting room, blood pressure apparatus, electric diagnostic sets, ophthalmoscopes, auriscopes, microscopes, etc.—Particulars to A. Fleming & Co. (Succrs.), 51, Mortimer Street, London, W.1. (Telephone: Mus. 6292.)

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire.

Doctors' Watches.—Franklands can still supply your requirements in watches. Write for particulars.—E. J. Frankland & Co., Ltd., Marle House, South Godstone, Surrey; or London Showroom, New Bridge Street House, 30-34, New Bridge Street, Ludgate Circus, E.C.4.

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept. B.M.J.), 3, Railton Road, London, S.E.24.

Microscopes Readily Turned into Cash. Highest prices paid for modern instruments and accessories. Send apparatus for valuation to Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. MAYfair 7511

Parker-Knoll Easy Chairs can now be supplied to doctors for surgeries, waiting rooms, etc., by D. Matthews & Son, Ltd., 14/16, Manchester Street, Liverpool, 1.

Savile Row Overcoats, Suits, etc. Purchased direct from all the eminent tailors, viz., Hawes & Curtis, Davies & Son, Huntsman, etc. New or slightly worn. Regent Dress Co., 17, Shaftesbury Avenue, 2nd Floor, next Café Monico. Coupons required. No post orders. Ladies' Department, 1st Floor. GERrard 7180.

Wigmore's, Ltd., 63, Baker Street, London, W.1. (Welbeck 5668.) Dispensing Opticians by appointment to Western Ophthalmic Hospital, Marylebone Road, London, N.W.1. Doctors' prescriptions accurately dispensed.

APARTMENTS, BOARD, ETC.

AVAILABLE

Bedroom, Bedroom and Sitting, or Bed-Sit. in Flat half minute from Harley Street and London clinic. Apply stating requirements and terms.—Box 7852, B.M.J.

Four Bedrooms, furnished, to let, suit medical men students, English.—13, Chatsworth Road, N.W.2. 'Phone: Willesden 2315.

Gentlewoman offers Partial Board-Residence (private sitting-room). Large garden. Euston 45 minutes.—122a, Aldenham Road, Bushey. Tel.: Watford 5740.

Hampstead Heath. Bed Breakfast, well furnished rooms. Collector's unique quiet house. On heath 300 ft. up, magnificent views.—50, Parliament Hill, N.W.3. Hampstead 8844.

WANTED

Dental Surgeon at present final year medical student and wife (doctor's secretary) require Furnished Flatlet or Rooms convenient to West End within two months.—Box 7878, B.M.J.

R.A.F. Medical Officer, soon demobilized, doctor wife, urgently need Unfurnished Flat, moderate rent, no premium.—Box 7828, B.M.J.

HOTELS

"A Model Hotel in Miniature" (Press), Chequers, Pulborough, Sussex. One hour London, near station. Unusual comfort, old-world charm. Central heating, log fires, etc.—really warm. Delightful sunny location. Farm and garden produce; varied and appetizing meals—invariably commended. Excellent golf and riding; lovely walks. Licensed. Telephone: Pulborough 86.

Aileen Paterson Hotels, Ltd. Osborne Hotel, Exeter Road, Bournemouth. Tel.: Bournemouth 3055. Close to pier and shopping centre. H. and C. and gas fires in all bedrooms Centrally heated. Moderate charges. Resident director.

Old Red Lion Hotel, Stow-on-the-Wold, Glos. (Tel.: 66). Cotswolds, easily reached by train, well heated, good cooking, own poultry, garden, magnificent country, restful. Winter terms from 3½ gns. Summer 5 to 6½ gns.

Recuperate in the lovely Eden Valley. Charming country house. Every modern comfort. Log fires. Books. Fishing. Appetizing menus. Own produce. Main line. Taxi.—Salkeld Hall, near Penrith. Telephone: Langwathby 224.

St. Ives, Cornwall, Porthminster Hotel. Winter at sunny St. Ives and enjoy the charm and first-class service and comfort at this noted hotel, from 6 gns. for extended visits. Overlooks sea. Fully licensed. Tel.: 321.

Seaton, S. Devon. Seaton Beach Hotel. A.A.**,** R.A.C. Just the place for Easter and Spring. Faces due South on sea front. Cheerful, warm and very comfortable—it's one of Devon's best hotels. Cocktail lounges and bar. Billiards, golf. Tel.: 17.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild, allowing visitors to be out in the wonderful air. The Hotel is central heated, individual heating in bedrooms. H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

Wroxall, Grafton Road, Torquay. Small Private Hotel, with homely atmosphere and personal welcome. H. and C., central heating, overlooking sea, moderate terms. Booking now Easter onwards.

HOUSES, CONSULTING ROOMS

Wanted, Consulting Room in Harley Street or district by a Physician. Part-time only.—Write, Advertiser, 22, Wimpole Street, London, W.1.

Admirably suitable for Nursing Home or Sanatorium (Surrey, near Camberley) amidst pine and heather country, high and healthy position on light soil, fine substantial house with modern annexe in chalet style with balconies. Accommodation for 41 patients, exclusive of nursing staff, including mostly single rooms; 7 bathrooms, theatre, x-ray room, ample lavatory accommodation, sluice rooms, etc. Main electricity, gas and water, main drainage, central heating and constant hot water supplies, lavatory basins in bedrooms (h. and c.). Cottage, garage and stabling. Grounds of about 11½ acres. Freehold for sale £22,500 or near offer. Sole agents: Ralph Pay & Taylor, 3, Mount Street, W.1. Telephone: Grosvenor 1032.

Brook Street, W.1. Consulting Rooms to let, first-class establishment. Day and night telephone service. Luncheon room. Further particulars apply, Allsop & Co., 21, Soho Square, W.1. Gerrard 5847.

Consulting Room available shortly in W.1 district with unfurnished flat. 1 b.r., 1 rec., kit. and bath.—Box 6984, B.M.J

Birmingham, Edgbaston, near Ivy Bush, Hagley Road. Excellent ground floor consulting room in first-class professional house. To be let on three or five years' lease. Rent, including services, also heating, lighting and joint use of waiting room, £175 per annum. Ref. A/377. Edwards, Son & Bigwood & Mathews, 158, Edmund Street, Birmingham, 3.

For Sale. Well equipped and Furnished Private Home for elderly guests. In excellent order, well staffed, and occupied. Three reception, 12 bedrooms, 3 bath., two floors, facing south, central heating, easily adapted for nursing home with excellent scope. Productive garden (5 acres), gardener's cottage with resident gardener. Hampshire coast, main line, near Bournemouth.—Box 7842, B.M.J.

For Houses and Consulting Rooms in Harley Street and the medical area apply to C. E. Bedford & Co., Ltd., 10, Wigmore Street, W.1. Telephone: Langham 3927 and 3928.

House, six rooms and basement, moderate rental to Ophthalmic Surgeon. Half share of practice with View. Good district, London S.W. Practice £1,000 per annum. Tel.: Ken 7683 after 8 p.m.

Furnished Consulting Rooms to let full- or part-time. All amenities, 9, Queen Anne Street, Harley St., W.1. Also large basement suitable laboratory.

MOTOR CARS

MILHALL MOTOR CO., LTD.

1934 Bentley 3½-litre sports saloon. Thrupp and Maberley. Serviced Bentley's.

1946 (first registered) Rolls Royce Phantom III DL series 7-seater limousine Mulliner. 6,500 miles. New throughout.

1939 Standard 12 saloon.

1940 Morris 10 h.p. saloon. Speedometer reading 25,000.

1938 Rover 20 sports saloon.

1934 Rolls Royce 20/25 sports saloon. Thrupp and Maberley.

Showrooms: 5, ST. JAMES'S STREET, S.W.1 (Whitehall 1952-4)

Service: 55-57, South Edwardes Square, W.8 (Western 2269)

Bentley 6½ litre. Speedometer mileage only 45,000. Flywheel teeth unworn. Superb saloon body. Independently examined by engineers.—Dr. Leyton, 10, Harley Street, W.1. Lang. 4280.

For Sale, Rolls Royce Phantom III, 7-seater, 51 h.p. sports limousine by Thrupp and Maberley. Beautiful condition. Chauffeur driven. Under 26,000 miles. View Surrey. Offers.—Box 7853, B.M.J.

Gentleman urgently requires 1946/7 car, earlier model considered if condition exceptional.—Cutmore, 34a, Burnt Ash Hill, London, S.E.12. (Imperial 3527).

Gentleman urgently requires 1946-7 Car or low-mileage pre-war model.—King, The Crest, Raggleswood, Chislehurst, Kent. Imperial 3527.

Motourists (London), Ltd., of Great North Road, East Finchley Station, N.2, urgently require late model cars of all makes, any h.p. Representative will call by appointment. Tudor 2301-2.

1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

1945 Austin 10 de luxe saloon, new engine fitted in 1946. Regularly serviced and in excellent condition.—Box 7847, B.M.J.

1938 (September) Humber Sixteen 4-door Saloon, reconditioned engine fitted February, 1947, recellulosed olive-green, re-chromium plated, new carpets, appearance and mechanical condition to 1947 standards. A.A. inspection invited, £720.—George Clarke (Motors), Ltd., 276/278, Brixton Hill, London, S.W.2.

NURSING HOMES

Arkley Lawn Nursing Home, Arkley, Barnet. Medical and Convalescent Patients. Single, double and treble rooms from 6 gns.—Barnet 5454.

Nursing Home, run on private house lines, for chronic (not mental), convalescent, and rest cases. —Weir, Molesey 3165.

Whistley House, Axtown Lane, Yelverton, South Devon (Tel. 149), L. B. Reeves, L.R.C.P.&S.Ed. Lovely modern residence run as first-class Nursing Home (registered) for convalescents and aged gentlefolk. Excellent cuisine. Resident doctor and wife. Further particulars on request.

FOR SALE

Convalescent Sanatorium near Ventnor. Established 39 years. 30 patients taken. 5 staff. Beautiful property and attractive buildings in 2 acres of delightful grounds with sea views. Well equipped wards and private quarters. £9,300 freehold property, contents, equipment and goodwill. Folio No. 2586. Write Ashcroft & Taylor, Estate Agents, Ventnor, I.W.

Nucleus of General Practice and Maternity Home, borders Herts and Essex. Freehold house 11 rooms. 2 bathrooms, licensed for 6 patients (bookings till July). With all furniture, lino, beds, and full equipment, owner retiring for health reasons.—Box 7879, B.M.J.

APPOINTMENTS

(Continued from page 25)

Have you read the notice at top of page 13 ?

ST. JOHN'S HOSPITAL, Lewisham, S.E.13
HOUSE SURGEON (A)

There is a vacancy for a House Surgeon (A) as from March 1, 1948, for which applications are invited from registered practitioners, including those within three months of qualification, who are liable for service under the National Service Acts. The appointment is for six months at a salary of £150 per annum, with full residential emoluments. Applications should be sent to the undermentioned. —J. C. Gilbert, Secretary-Superintendent.

SEVERALLS MENTAL HOSPITAL, Colchester
HOUSE PHYSICIAN (B2)

Salary at the rate of £300 per annum during first six months, and if renewed for second six months at rate of £350 per annum, with full residential emoluments. If held by an R practitioner the appointment will not be renewed after six months. R practitioners now holding A posts may apply. Previous general hospital experience is desirable but not essential. Applications to the Medical Superintendent.

SOUTHEND-ON-SEA GENERAL HOSPITAL
JUNIOR CASUALTY OFFICER (B2)

Applications are invited for the post of Junior Casualty Officer (B2), vacant now. Salary will be at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply when the appointment will be limited to six months. Applications to reach the undersigned immediately.—John Williams, House Governor and Secretary.

SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common, S.W.4
HOUSE SURGEON (A)

Applications are invited from registered women medical practitioners for the appointment of House Surgeon (A), now vacant. The appointment will be for a period of six months. Salary is at the rate of £150 per annum with full residential emoluments. Applications should reach the Secretary at the Hospital as soon as possible.

SCARBOROUGH HOSPITAL, Yorkshire
(140 beds)
HOUSE SURGEON (A)

Applications are invited from male or female registered medical practitioners for the post of House Surgeon (A). The appointment is for six months commencing March 3, 1948, and the salary is at the rate of £175 per annum, with board residence, laundry, etc. Practitioners within three months of qualification may also apply. Applications to sent immediately to the Secretary.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the post of House Physician (A), including practitioners within three months of qualification who are liable for service under the National Service Acts, which will become vacant on February 17, 1948. If held by an R practitioner, the appointment will be limited to six months. Salary £250 per annum, with usual emoluments. Applications should be submitted to the undersigned immediately.—A. E. Collins, Secretary.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2), vacant immediately. Salary is at the rate of £300 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications, stating age, qualifications (with dates), nationality and accompanied by copies of three recent testimonials, should be sent to the Secretary, H. F. Donald, The Infirmary, Stamford.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant. Salary is at the rate of £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent immediately to the Secretary. H F. Donald, The Infirmary, Stamford.

SOUTH EASTERN HOSPITAL FOR CHILDREN
321, Sydenham Road, S.E.26
RESIDENT MEDICAL OFFICER (B1)

Resident Medical Officer (B1) required. Preference will be given to Candidates holding the Diploma of Child Health. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Appointment for six months in the first instance, renewable for a further period of six months at the discretion of the Committee of Management. Salary £350 per annum. Applications should be forwarded to the Secretary.

ST. THOMAS' HOSPITAL, London, S.E.1
REFRACTIONIST

Applications are invited for the post of Refractionist for afternoon sessions. Salary is at the rate of 3 guineas per session. Applications, stating age, qualifications, with dates, details of experience, and the names and addresses of three referees to whom the Hospital may write, should be sent by February 21, 1948, to the Clerk of the Governors, to whom further enquiries should be addressed.

TORBAY HOSPITAL, Torquay (177 beds)

Applications are invited from registered medical practitioners, male and female, for the following posts:

HOUSE PHYSICIAN (A) for February 18 (possibly earlier).

HOUSE SURGEON (A) for February 23.

CASUALTY OFFICER (B2), with charge of cases admitted to Special Departments, for March 22.

Salaries: (A) posts at rate of £175 a year; (B2) post, £250 (six months' hospital experience necessary). Each with full residential emoluments

Practitioners within three months of qualification and liable under the National Service Acts may apply for an A post and R practitioners holding A posts for the B2 post. Appointments are for six months. Applications to be sent to the Secretary.

VICTORIA HOSPITAL, Pettits Lane, Romford
RESIDENT SURGICAL OFFICER (B2)

Resident Surgical Officer (B2) wanted immediately. Salary £200 per annum. Full residential emoluments. R practitioners who hold B2 appointments are invited to apply when appointment will be limited to six months Applications should be forwarded to the Secretary.

TAUNTON AND SOMERSET HOSPITAL
HOUSE SURGEON
to one General Surgeon and an E.N.T. Surgeon

Applications are invited from registered medical practitioners for the post of House Surgeon to one general surgeon and an E.N.T. surgeon. A appointment, or B2 if suitable applicant. Salary £175 per annum (B2, £200 per annum), with full residential emoluments. If held by R practitioner the appointment will be for six months and is recognized by R.C.S. In connection with the resident surgical posts required of candidates for the Final Fellowship Examination. Applications to the Secretary

VICTORIA HOSPITAL, Blackpool (315 beds)
HOUSE SURGEON (B2) to the Surgical Unit

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) to the Surgical Unit, vacant March 12, 1948, including R practitioners who now hold A posts. The appointment is for a period of six months and the salary is at the rate of £200 per annum, with full residential emoluments, plus £150 per annum in the case of the successful applicant being a medical officer released from H.M. Forces who desires postgraduate education and rehabilitation as recommended by the Ministry of Health. The post is recognized for the F.R.C.S. Examination. Applications, stating age, qualifications with date, nationality and present post, and accompanied by copies of three recent testimonials, should be sent immediately to Walter R. Smith, General Superintendent.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
HOUSE OFFICER (A) to Special Departments
(Children, E.N.T., Eyes and Skin)

Applications are invited for the above appointment from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for six months from March 1, 1948, and may be terminated by one month's notice on either side. Salary at the rate of £100 per annum, with the usual residential emoluments. Applications, with particulars of age, nationality, medical school, qualifications (with dates) and experience, accompanied by copies of three testimonials, should reach me not later than first post, Wednesday, February 18, 1948. Please state 'phone number (if any).—C. R. Lockhart, Secretary.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
CHILD PSYCHIATRIST (Male or female)

Applications are invited for this post. Adequate premises, equipment and full staff available. The post has honorary status but sessional payments will be made. At least two attendances per week will be required. Responsible experience of child guidance essential. Applications (without testimonials) should be sent to the undersigned by March 6, 1948, giving full particulars of age, qualifications and experience and the names and addresses of two referees.—C. R. Lockhart, Secretary.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
HOUSE SURGEON (A)
General and Orthopaedic

Applications are invited for the above appointment (General and Orthopaedic) from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for six months from March 1, 1948, and may be terminated by one month's notice on either side. Salary at the rate of £100 per annum, with the usual residential emoluments. Applications, with particulars of age, nationality, medical school, qualifications (with dates) and experience, accompanied by copies of three testimonials, should reach me not later than first post, Wednesday, February 18, 1948. Please state 'phone number (if any).—C. R. Lockhart, Secretary.

WARRINGTON INFIRMARY AND DISPENSARY
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Physician (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Apply at once to the Superintendent.

WHITE LODGE HOSPITAL
Newmarket, Suffolk
HOUSE PHYSICIAN/ANAESTHETIST (A)

Applications are invited for the post of House Physician/Anaesthetist (A) at the above hospital. Salary at the rate of £150 per annum. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months. Applications should be sent to the Medical Superintendent.

WREXHAM EMERGENCY HOSPITAL
ASSISTANT PATHOLOGIST

Applications are invited from medical practitioners for the post of Assistant Pathologist at the above-mentioned hospital. Candidates must have had experience in clinical pathology. The post is in the Emergency Medical Service under the Ministry of Health on a salary range of £750, rising to £1,000 per annum, payable by the Ministry of Health. This salary is assessed on a non-resident basis and will be at the rate of £100 per annum, less if full board and lodging are provided. The appointment is terminable by a month's notice on either side. Applications, stating age, qualifications with dates, present appointment (if any), previous experience, and three recent testimonials, should be addressed to the Medical Superintendent, Wrexham Emergency Hospital, Wrexham, Denbigh, not later than February 21, 1948

WILSON HOSPITAL
Cranmer Road, Mitcham, Surrey
(72 beds—Resident Medical Staff 2)
RESIDENT SURGICAL OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (A), to become vacant from March 6 1948. Salary at the rate of £150 per annum, with full residential emoluments. Practitioners within three months of qualification, who are liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications to be forwarded immediately to the Chairman, Medical Committee, Wilson Hospital Mitcham.

WEST HAM HOSPITAL FOR NERVOUS AND MENTAL DISORDERS
Goodmayes, Ilford, Essex
ASSISTANT MEDICAL OFFICER

Applications are invited for an Assistant Medical Officer for the above hospital. Candidates must be experienced in methods of modern psychiatric treatment, and possession of the Diploma of Psychological Medicine will be an advantage. The commencing salary is £602 10s., rising by one increment of £25 to £627 10s per annum, plus £50 for the D.P.M., plus cost-of-living bonus. There are emoluments consisting of board, apartments and laundry valued at £150 per annum. The successful candidate will be required to pass a medical examination, and to contribute to the Asylum Officers' Superannuation Act, 1909, at the rate of three per cent. Applications should be sent to the Medical Superintendent as soon as possible.

WESTON-SUPER-MARE GENERAL HOSPITAL
(100 beds)
HOUSE SURGEON (A) and
HOUSE PHYSICIAN (A)

Applications are invited from medical practitioners for the appointments of House Surgeon (A) and House Physician (A). Duties to commence as follows: House Surgeon, immediately, and House Physician from March 1, 1948. Salary for both posts at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary

WIMBLEDON HOSPITAL
Thurstan Road, Copse Hill, S.W.20
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Medical Officer (B2), including R practitioners who now hold A posts. The appointment will be limited to six months. The salary is at the rate of £250 per annum, with full residential emoluments. Vacancy end of February. Applications to the Hon Secretary.

WHITE LODGE HOSPITAL, Newmarket, Suffolk
ORTHOPAEDIC HOUSE SURGEON (A)

Applications are invited for the post of Orthopaedic House Surgeon (A) at the above hospital Salary at the rate of £150 per annum. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months Applications should be sent to the Medical Superintendent.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL, Watford, Herts (206 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A) vacant February 17. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be limited to six months. Salary is at the rate of £200 per annum with full residenual emoluments Applications, together with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M Maskell, Administrator.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

WEST CORNWALL HOSPITAL
Penzance (116 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) vacant February 23. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent to K. I. Newell, Secretary-Superintendent.

WHITEHAVEN AND WEST CUMBERLAND HOSPITAL (110 beds, 3 Residents)
HOUSE SURGEON (A)

House Surgeon (A) required immediately. Salary £200 per annum with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. The appointment is for a period of six months. Applications to be forwarded to the Secretary-Superintendent as soon as possible.

WORKINGTON INFIRMARY (capacity 60 beds)
HOUSE SURGEON (B2) (male)

Applications are invited for the appointment of House Surgeon (B2) (male), vacant now, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications should be sent immediately to Dr. T. T. Graham, Honorary Medical Secretary.

YORK COUNTY HOSPITAL
(222 beds)
SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of Second House Surgeon (A) with Orthopaedic duties, now vacant, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL
(222 beds)
RESIDENT CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of a Resident Casualty Officer (B1), vacant now. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £350 per annum with full residential emoluments. Applications should be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B1), now vacant. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. The Hospital is recognized for the D.A. Salary £350 per annum with full residential emoluments. Applications should be sent to the undersigned immediately. —J. R. Mackrill, Secretary.

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY FEBRUARY 14 1948

THE AFTERMATH OF GASTRECTOMY*

BY

NORMAN C. LAKE, M.D., M.S., D.Sc., F.R.C.S.
Senior Surgeon, Charing Cross Hospital

A survey of the treatment of peptic ulceration during the present century must of necessity recall those high points of enthusiasm associated with such methods as the old Lenhartz and Sippy diets with bismuth and mild alkalinization, the reintroduction of intensive alkalinization by MacLean, Aron's (1933) work and the resulting histidine treatment, the introduction of adsorptives (colloidal aluminium hydroxide, magnesium trisilicate, etc.), intragastric drips, intensive belladonna, and hyoscyamus; while on the surgical side there are gastro-enterostomy (with or without exclusion), pyloroplasties, gastric ligations (Somervell, 1942; Hey, 1947), vagal denervations, and the various types of gastrectomy. The increasing recognition of the importance of the psychological side of these cases must also be mentioned to complete the picture.

From my experience I do not think it can be regarded as too surgically biased a statement to say that of all these methods the only one which has steadily and consistently become more popular is gastrectomy. The ultimate method of treating peptic ulceration will almost certainly not be surgical, but at the present day gastrectomy gives better, and especially more permanent, results than most other methods, whether surgical or medical. Ogilvie (1947) has recently summed up the position by stating that "it runs the operation for haemorrhoids [which he regards as uniformly successful] a close second." For my part I should hope that it wins this race handsomely. If this be so, however, it becomes very important that the relatively small number of cases which have post-operative complications and complaints should be most carefully considered and investigated.

For a long time I have been interested in the outcome of these operations, and have followed some cases for over twenty years. The great movements of population during the war seriously upset this follow-up, but nevertheless I have records of several hundred cases of long duration. From the statistical point of view the total number could have been considerably increased if I had been willing to include cases of other operators, but such collected or group statistics are always equivocal and lacking in personal scrutiny, and so apt to be misleading. The smaller number of cases which are here analysed are all personal ones, and the surgical tragedies and complications which have occurred are due to my own bad surgery or to errors of judgment.

Consideration of 615 Personal Cases

The total number of such cases under review is 615, extending over a period of twenty-three years but not including any cases of less than one year's duration. The conditions for which operation was undertaken are shown in Table I, and the type of operation performed is shown in Table II. It will be seen that the great majority of these cases were done by a modified Polya—i.e., end-to-side—method, which has been variously attributed to Finsterer, Hofmeister, myself, and others, although there appears to be no doubt that that fine old surgeon Von Eiselsberg performed an end-to-side anastomosis with restricted orifice but without a valvular aperture (that is, of the Hofmeister type) as long ago as 1888; while in the previous year Krönlein, of Zurich, on the suggestion of Von Hacker performed the first end-to-side anastomosis of the so-called Polya type. However, as Ogilvie (1935, 1947) correctly emphasizes, it is the formation of a valvular opening which constitutes the most valuable and essential part of this technique. He also gives a very diverting summary of the position when he says: "If we must have names let credit be properly attributed and call the operation the high posterior Finsterer–Lake–Lahey modification of the Mikulicz–Krönlein–Hofmeister–Reichel–Polya improvement of the Billroth II gastrectomy with a large valve and a small stoma."

TABLE I.—*Conditions for which Operation was Undertaken*

Carcinoma	87
Sarcoma	3
Linitis plastica (non-malignant)	2
Jejunal (anastomotic) ulceration	35
Primary peptic (duodenal and gastric)	488

TABLE II.—*Type of Operation Performed*

Total gastrectomy	12
Billroth I	4
Billroth II	40
Polya (full aperture)	44
Polya (modified, restricted aperture)	502
Sleeve resection	11
Others	2

In my own technique the suturing for the anastomosis and the closure of the upper part of the stomach aperture is done at one and the same time with a continuous suture which also applies the proximal jejunum over the closed portion of the stomach, thus not only producing a valvular type of restricted aperture but providing an extra barrier against leakage. In a very few unusually high or difficult cases the stomach closure may have to be done as a separate procedure before the anastomosis is performed. The junction is retrocolic, the final result being seen in Fig. 1. Usually about two-thirds of the stomach is removed, but at times this may be increased to three-quarters or

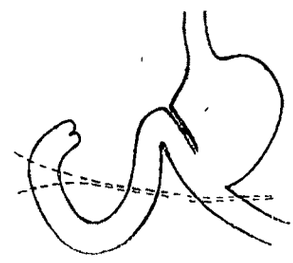

FIG. 1.—End-to-side anastomosis with restricted valvular orifice. The anastomosis is retrocolic and about two-thirds of the stomach is usually removed. The broken line indicates the level of the transverse mesocolon.

* Summary of a lecture given at the British Postgraduate Medical School.

four-fifths. I first operated by this method in 1926, and, as the results were so satisfactory, increasingly year by year, until by 1930 all but the most exceptional cases were so dealt with. For the past seventeen years high spinal anaesthesia has been used for over 90% of the cases. Light "nupercaine" 1/1000, given by a method which I have described elsewhere (Lake, 1938), has proved very satisfactory. It is necessary to mention these details, since it appears not improbable that some of the conditions about to be described may bear a close relationship to the type of operation performed.

In considering the aftermath of this operation I shall in regard to most aspects limit the inquiry to cases of ulceration. It is also obvious that there are two types of sequel—the early, usually spoken of as complications of operation, and the late results. Here I am particularly concerned with the latter, but to enable us to assess the operation fully the early complications must in all fairness also be briefly mentioned.

Complications of Operation

Clearly, the most serious early sequel is death. The mortality of gastrectomy as given by different surgeons varies enormously, as great a difference as 0.8 to 25% being recorded, but all are agreed that the more extensive dissection and removal required in malignant cases and in anastomotic ulcers, with patients often in poor general condition, adds considerably to the risk. Over the whole period of twenty-three years my average mortality figures are disappointingly high. They are: carcinoma, 14%; anastomotic ulcers, 12%; duodenal and gastric ulcers, 5.7%. These figures include all deaths from all causes up to three months from the date of the operation. For the same period total gastrectomy gave a mortality of 41%. The difficulty in arriving at a fair assessment of the risk is that unless large numbers—i.e., several hundreds—of cases are included the figures are likely to be misleading, for it is common experience that a considerable sequence of successful operations is apt to be followed by a group of fatalities which would be missed in a small series. On the other hand, with improving techniques the risk is continuously getting smaller, but any large series of individual cases must of necessity include all those done in the earlier period of higher mortality. Bearing these points in mind, it is some mitigation to know that the recent mortality rate for 130 ulcer cases has been a little over 3%, whereas in the early days it was 9%. It is of some interest to inquire how the reduction has been brought about. It is certainly not due to any increased skill in technique or to a more discriminating choice of patients; indeed, the cases dealt with tend to become more rather than less severe. I attribute the improvement mainly to better preparation of the patient by blood transfusions, breathing exercises, and, for the last three years, the routine use of the sulphonamides as suggested by Tanner. Credit must be given also to biochemistry for its help in assessing the patient's various capacities. The most important factor has been the avoidance of lung complications, as is well seen in Table III. Whereas chest complications

TABLE III.—*Causes of Death after Gastrectomy*

Previous Figures (Lake, 1937) (320 cases)		Recent Figures (200 cases)	
Chest complications and embolism	12	Chest complications and embolism	3
Leakage and peritonitis	6	Leakage from duodenal stump and anastomosis	4
Haemorrhage	4	Uraemia	1
Pulmonary tuberculosis	2		
Uraemia	2		
Other causes	6		

were the chief cause of mortality in 1937 they now fall to second place. One further factor which has perhaps had some effect upon the mortality has been a greater readiness to reopen cases when early signs of peritoneal irritation or of bleeding have occurred.

The immediate complications of the operation have often been dealt with, so I will do no more than list those I have encountered, with a few comments when indicated. These complications are: (1) operative shock; (2) leakage—duodenal stump or anastomosis; (3) bleeding—anastomosis or belly wall; (4) collapse of lung; (5) pulmonary embolism; (6) subphrenic abscess and empyema; (7) cardiovascular failure; (8) bursting of abdominal wound; (9) flare-up of tuberculosis and of thyrotoxicosis; (10) necrosis of omentum; (11) intussusception; (12) asthma (curare); (13) post-spinal complications, retention, headache, sixth-nerve palsy; (14) uraemia.

Before examining the items seriatim it should be recorded that gastrectomies have been performed with the object of increasing the patient's ability to take plenty of food in three cases of active tuberculosis of a non-pulmonary type, in five cases of fairly severe diabetes, in two cases of tabes dorsalis, and in one of disseminated sclerosis, all without any trouble. In six ulcer cases the spleen was removed at the same time; in two of these it was enlarged as a result of thrombosis of the splenic vein in the floor of a penetrating ulcer. In two of eight cases of gastro-colic fistulae a local resection of the colon was necessary. In three cases the transverse colon became retroperitoneal in the middle of its course and the anastomosis had to be antecolic. In nearly 20% of the total ulcer cases there had been a previous operation upon the stomach quite apart from those listed as jejunal or anastomotic ulcers. Unsuccessful gastro-enterostomies, local excision of ulcers, denervations, and of course perforations constitute the majority of these, but in two cases a higher resection was performed on previous gastrectomies where the first line of section had been too distal and further ulcers had formed proximal to the anastomosis.

In the whole series no death occurred within forty-eight hours of the operation, so that it would seem that shock is not severe—anyhow, when spinal anaesthesia is employed.

Leakage, when it occurs, is usually from the duodenal stump, and occasionally from the upper end of the anastomosis. Closure of the duodenum is probably the most important point in the technique of the operation. Nissen (1945) emphasized this and devoted the major portion of his book to details of methods advocated in difficult cases. I am not now dealing with operative details, but would mention that any obstruction to the drainage of duodenal contents across the anastomosis is as great a factor in causing leakage as any failure of proper closure of the duodenal stump.

Post-operative bleeding into the stomach is commonly insignificant; in more severe cases, as already mentioned, early reoperation is recommended. In two cases serious bleeding due to erosion of an epigastric vessel has occurred from the abdominal wall.

Collapse of the lung in some degree is common, but massive collapse is rare. We have investigated this complication, and the conclusions reached were published by Stringer (1947). Since the routine use of the sulphonamides the effects have been slight. Pulmonary embolism, as in all abdominal surgery, remains a bugbear. I know of no effective method of preventing it. The thrombosis usually arises in the abdominal wall or, as in two of these cases, from extension of thrombosis of haemorrhoids possibly produced by the administration of an enema pre-operatively.

Subphrenic abscess and empyema are probably usually due to slight leakages; they are not of necessity fatal if dealt with in their earliest stages, but it is not then easy to make a sufficiently accurate diagnosis. Bursting of the abdominal wound has occurred in five cases; this is nearly

always due to violent coughing or vomiting; the latter, however, is very uncommon after gastrectomy if spinal anaesthesia is employed. Four cases recovered after resuture, and one died from exacerbation of the lung complication.

I draw attention to necrosis of the omentum, which I have not previously found noted as a complication. I have had three cases proved by exploration and a further three in which the diagnosis was reasonably certain but not proved by operation. I believe that in smaller degree it occurs more often than we imagine, since the operation must at times interfere with the variable blood supply to the omentum and lead to considerable thrombosis therein, but I will not discuss the pathology here. All these cases recovered.

Intussusception of the upper part of the anastomosis into the lower part might sound almost impossible, but it was discovered post mortem in one case where I was at a loss to explain the patient's symptoms. It must be a very rare event. The post-spinal-anaesthetic sequels have not been serious, but in two cases a sixth-nerve palsy was persistent; one of these was a case of tabes with ulcer, and the other cleared only after a period of six months.

The uraemic cases listed here were true kidney uraemias and not secondary to fluid depletion.

Late Results

We now pass to the main thesis—namely, the late sequelae or aftermath. These may be considered under the following headings: (1) Blood picture; (2) test meal; (3) barium meal; (4) weight; (5) appetite; (6) bowel action; (7) jejunal anastomotic ulceration; (8) distension of the afferent loop; (9) loss of energy, faintness and lassitude after food; (10) nausea in the early morning; (11) adhesions; (12) ventral hernia; (13) gall bladder symptoms; (14) colospasm.

Blood.—It was at one time confidently predicted (Hurst, 1928; Lake, 1928) that cases of extensive stomach resection would develop a macrocytic anaemia. We have had large numbers of blood examinations carried out up to ten years after the operation, but in no single instance has there been an anaemia of this type. The average of a large number of counts gave the following figures: red cells, 5,190,000; white cells, 9,390; haemoglobin, 95%; colour index, 0.88. A few cases revealed a definite microcytic anaemia with spoon nails which yielded to the usual treatment with iron.

Test Meal.—Post-gastrectomy test-meal curves are always open to criticism, since it is not easy to determine that the tube end lies properly in the stomach. However, with special precautions a large series have been done (Figs. 2–7). With a complete Polya anastomosis there is practically always achlorhydria. With the restricted valvular orifice a small amount of free acid (10 to 20 degrees) is present in a few cases at one hour, but the general reduction is profound. Even the completely achlorhydric cases will respond to histamine stimulation, although this power is lost with the passage of time. Three of these cases still show considerable acid: they are obviously candidates for a possible anastomotic ulcer.

Radiographs—The radiographic results of the different types of gastrectomy were studied by Shanks (1934). Of my cases he says: "This modification, judging by the radiographic appearance, controls the efflux of the gastric contents better than any other of the Polya type. In addition to preventing 'dumping' into the jejunum, it renders reflux into the afferent loop very improbable. . . . The gastric stump fills reasonably well in the erect position, and the stoma is clearly seen at the lower pole. The right border of the stump is formed by the remaining portion of the lesser curve and the sutured end of the stump above the stoma. This largely loses its initial angularity and becomes more or less straightened out."

Weight.—The general tendency is to gain weight, especially when as a result of dyspepsia the patient is much under weight before operation. Not all of the cases gain, however: as is well recognized, many hypersthenic duodenal cases are quite well covered despite the ulcer.

Appetite.—There seems to be little qualitative change in the appetite; the patient's likes and dislikes are unaffected. Quantitatively there is usually an improvement in the gastric cases, with small change in duodenal ulcers, when the appetite is often good before operation.

Bowel Action.—It might be expected that with more rapid emptying of the stomach there would be increased activity of the colon, but experience shows that if anything there is some tendency to constipation. In some cases this is due to colospasm, which we shall consider later.

Jejunal Ulceration.—In this series there have been six cases in which anastomotic ulceration was suspected. In four of these it was proved by exploration (in one by perforation); in the other two the symptoms are mild but the suspicion remains. As is well known, it is difficult to get reliable radiological confirmation in post-gastrectomy cases. The incidence does not seem to exceed 1%.

Distension of the Afferent Loop—i.e., the duodenum—is a possible cause of symptoms, and occurs when there is some obstruction to the free passage of duodenal contents across the anastomosis, or when the stomach efflux is

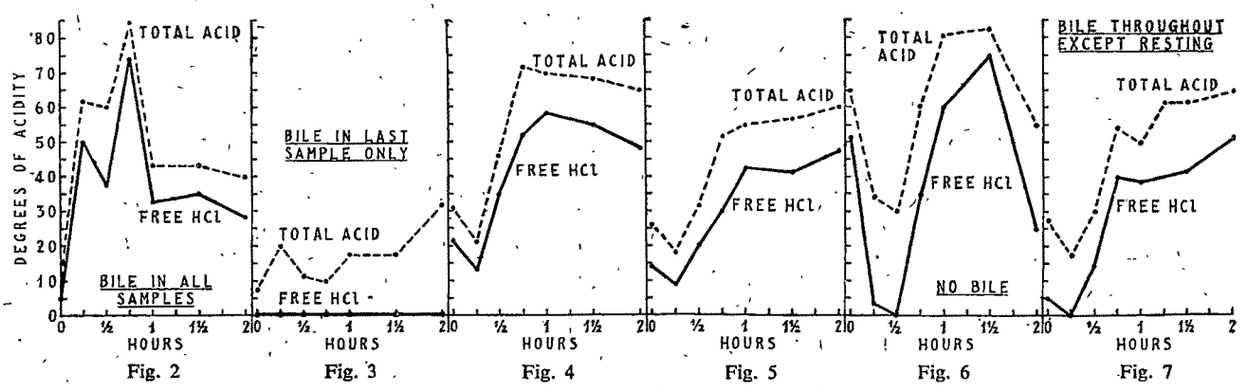

FIG. 2.—Test meal after gastro-enterostomy for duodenal ulcer. FIG. 3.—Same case as Fig. 2. Test meal after subsequent partial gastrectomy. FIGS. 4 and 5.—Test meals before and after vagotomy. This operation was done 15 years ago, therefore division of nerves was subdiaphragmatic. Higher division, whether performed by transthoracic or transdiaphragmatic approach, gives somewhat better results. FIGS. 6 and 7.—Test meals before and after the so-called "physiological gastrectomy"—that is, ligation of vessels and nerves. It will be noted that gastrectomy produces much more profound changes in acid secretion than the other procedures.

directed into the afferent loop by a badly designed anastomosis or obstruction of the efferent loop. It has proved to be very rare in cases done by the method here described: only two definite cases—i.e., radiologically proved—have been met with. As has already been remarked, overdistension of this loop is one of the most potent factors leading to leakage from the duodenal stump in the early stages.

The "Dumping" Syndrome.—The loss of energy and feeling of faintness and lassitude after heavy meals has interested me for many years, and despite the article by Gilbert and Dunlop (1947) I feel that the complete understanding of it remains a problem. They report that no fewer than 17 of 45 gastrectomies had evidence of this syndrome and suggest that rapid emptying of the stomach is the primary cause; this produces a transitory rise in the blood sugar, followed by a rapid fall to very low levels due to excessive insulin production. The lassitude is thus due to a hypoglycaemia and is a concomitant of the so-called dumping stomach. It is, however, of some importance to note that they record it as occurring after both the ordinary Polya and the restricted stoma operations. My own series shows a much lower incidence of this syndrome—only twenty cases, and some of these quite mild in degree. In searching for the cause I have considered four possibilities.

1. Dumping of the stomach contents into the jejunum with reflex effects, via the splanchnic innervation, from overdistension.—This has not seemed likely, since the condition is painless, and, furthermore, there is no radiographic support, as Shanks's studies show, in the case of the operation here described.

2. Hypoglycaemia.—The blood-sugar curves which I have had done in these cases have not given powerful support to this idea; but since the publication of the article by Gilbert and Dunlop I recognize that this may have been due, as they suggest, to the fact that the samples were not taken often enough. In some cases the administration of sugar has seemed to give some relief, and I am therefore inclined to think that this may be the explanation. It is surprising, however, that these observers failed to detect any difference in the results of the full Polya and the restricted stoma operations, for this would certainly be expected.

3. Vagal stimulation.—There can be no doubt that many vagal fibres are included in the ligature of the vessels of the lesser curve and must be involved in the scar. They may therefore be stimulated by the pull on the lesser curve when the stomach is loaded. I have unsuccessfully looked for postprandial changes in the blood pressure and have failed to find other supporting evidence.

4. Neurosis.—This is always a possibility after an extensive abdominal operation, but, in my inexpert opinion, it is not a likely explanation of the phenomenon.

Morning Nausea.—Another interesting syndrome, unassociated with the last, is a sensation of nausea the first thing on awaking in the morning. It nearly always disappears quickly when the patient assumes the upright attitude or with the first mouthful of food or drink. I have also noted that it is inclined to occur in those who sleep on the left side and may be relieved if they sleep on the right. I believe it is due to bile entering the stomach through the comparatively large orifice, devoid of sphincteric control, at night, which it does more easily with the patient on his left side and recumbent. The upright posture or the taking of a little food or drink empties the bile out of the stomach and so the nausea immediately disappears. Luckily it can be added that both the dumping and morning nausea syndromes tend to improve with the passage of time.

Adhesions have been thought to be responsible for post-operative symptoms in a fractional percentage of cases, and in these there had been one or more previous operations for perforation.

Ventral hernia has necessitated further operation in two cases; four other bulges are adequately controlled by a light belt.

Gall-stones.—Subsequent operations for gall-stones have been undertaken in four cases—a very much smaller percentage than was found by Majoor and Suren (1947), who reported six cases after 174 gastrectomies, apparently especially after the Billroth II operation. They suggest a post-operative aetiological relationship; but I am not impressed, since in my own series the figure is very small and points to a chance association. I have on several occasions removed a pathological gall-bladder, with or without stones, at the time of the resection, and of course it often happens that an ulcer is adherent to the gall-bladder, sometimes densely to the point of perforation.

Colospasm.—It is perhaps not surprising that in ulcer cases, when the patient is often of the sthenic vagotonic type, there should frequently be noted some degree of colospasm and its associated diverticulosis. Nearly half of the gastrectomy patients who return complaining of abdominal symptoms have been shown to be cases of colospasm, and, as I have previously mentioned, this is probably the cause of the constipation which may follow the operation. It should therefore always be borne in mind when investigating an apparently unsuccessful gastrectomy.

Summary

Gastrectomy is probably the most permanently satisfactory method of dealing with chronic peptic ulceration at the present day.

A type of end-to-side anastomosis with a restricted and valvular orifice has been found to give good results in the vast majority of cases.

The risk of the operation is being steadily reduced, chiefly as a result of greater pre- and post-operative care.

Sulphonamides, used as a routine, have proved valuable in the prevention of infective lung complications.

The early and late sequelae of over 600 cases are analysed.

Omental necrosis and early morning nausea are noted as after-results not previously described.

The incidence of anastomotic ulceration after this operation appears to be a little under 1%.

The syndrome of post-operative hypoglycaemia associated with a "dumping" stomach is discussed.

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The *British Orthoptic Journal*, which is published under the auspices of the British Orthoptic Society, has now opened its pages to contributions from overseas. In its issue No. 4, 1947, Dr. Walter B. Lancaster, of Boston, Massachusetts, explains "What is Orthoptics?" and Miss Diana Mann, of Melbourne, Australia, contributes a paper entitled "The Role of Orthoptics," which was read before the Australian Ophthalmological Society in 1946. Another new departure is the publication of case notes of special interest.

CURARE IN OIL IN THE TREATMENT OF SPASTIC CONDITIONS

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The therapeutic possibilities of curare in diseases of the central nervous system have been considered for nearly a century, but because of the dangers of the drug it was originally used only in desperate cases of tetanus and hydrophobia. Progress towards a more specific use was made when Hartridge and West (1931) and others, between 1927 and 1931, demonstrated conclusively that, in doses which did not produce general paralysis, curare had a selective action, abolishing decerebrate rigidity in cats and tetany in dogs. The mode of action was not clear, but Bremer (1927, 1928, 1931) suggested from animal experiments that weak solutions of the drug blocked nerve-endings which were continuously in action more than those which were at rest; because of this it was possible to reduce muscle tone without greatly affecting voluntary power.

In 1932 West described 17 cases of severe pyramidal or extrapyramidal rigidity in man, due to various causes, treated with crude curare obtained 30 years earlier from South America. He found that, given hypodermically in doses of 2 to 20 mg., the drug produced a definite measurable reduction in spasticity, the effect being produced in from 10 to 40 minutes and lasting 2 to 48 hours. Clinical improvement coincided with the registrable changes, and he found that massage and physical exercises were facilitated under the influence of the drug. Most of the patients complained of giddiness, headaches, and a feeling of drunkenness (but no diplopia) 10 to 30 minutes after the injection, but there was a tendency for all these symptoms to diminish as treatment continued. Objectively, a temporary nystagmus and a fall in blood pressure were noted, the latter being corrected by subcutaneous adrenaline, which also relieved the headache. West concluded that the drug was of some use in reducing the spasticity of pyramidal disease, but was not so good as hyoscine in Parkinsonian rigidity.

Interest in the drug from a neurological point of view was revived with increasing experience of its effect in anaesthesia and psychiatry. Harvey and Masland (1941) used it intravenously (in doses of 1 to 2 mg. per kg. of body weight) in the treatment of a variety of spastic conditions (23 cases), but they concluded that it was of no real use because of the inconvenience of the side-effects and the shortness of its action. They suggested that a drug which lasted longer might be of some value. While their conclusions were negative they were unable to explain the cause of the lasting relief which a few of their patients reported.

Bennett (1941) arrived at different conclusions, using similar doses of the drug, also intravenously, in 12 spastic children. The majority of his patients were improved over a period of months, mainly because the muscle relaxation effected made it easier to carry out more extensive physiotherapy. Side-effects were not very troublesome, but Bennett admits that the disadvantage of the treatment is that the action of the drug is not sustained. Denhoff and Bradley (1942) reported even more favourably, also on spastic children. They used an extract of curare ("intocostrin"—Squibb), and the drug was given intramuscularly in doses of from 0.9 to 3.3 mg. of curare per kg. of body weight. The relaxation produced lasted approximately four days, and they were very much impressed with the way in which the educational programme could be accelerated by the drug.

Schlesinger (1946) described the use of a 3% suspension of *d*-tubocurarine chloride in a peanut-oil–white-wax, mixture in 11 cases of extreme spasticity secondary to injuries of the spinal cord. He gave it intramuscularly in doses of 30–45 mg. of the alkaloid (1–1.5 ml. of the suspension) every four days, and claimed that the action of the drug given in this form was prolonged often up to three days. The undesirable effects of aqueous curare were absent except that during the adjustment of the dosage slight blurring of vision was noted. In his series of cases (details of four being given) he found that flexor spasms were relieved, spasticity was decreased, and during the period of relaxation physical exercises could be given.

Present Investigation

It seemed possible that a great advance had been made, and the present investigation was conducted with a view to confirming Schlesinger's conclusions in general neurological cases. Seventeen patients were selected for treatment, the only criteria being that their spasticity should be of the pyramidal type and that it should be their chief disability. The series comprised one case of traumatic quadriplegia, one of spinal cord compression, one of motor neurone disease, one of subacute combined degeneration, and 13 of disseminated sclerosis. Six of the patients were definitely bedridden, four could walk only a few steps with the greatest difficulty, and the remainder had varying degrees of locomotive disability. No special apparatus was used to test the degree of spasticity, and response to treatment was assessed so far as was possible on unequivocal clinical findings—for example, did the injections enable a bedridden patient to walk or allow an ambulatory one to discard a stick?

The curare employed was "tubarine" (oily) (Burroughs Wellcome and Co.), and the usual maintenance dose was 20–40 mg. given intramuscularly (1 ml. = 30 mg. of *d*-tubocurarine chloride).

Case Reports

Traumatic Quadriplegia

Case 1.—A man aged 56 suffered damage to his cervical cord on Dec. 7, 1946, following a blow. The resultant spastic quadriplegia was thought to be due to a haematomyelia. As this cleared up a partial Brown-Séquard lesion was found, there being gross spasticity of the right arm and leg, with sensory loss in the left arm and leg. Four months after injury flexion-spasms appeared which were associated with severe pain in the right leg. A dose of 15 mg. of curare in oil produced diplopia, a feeling of drunkenness, vomiting, and slight diminution of spasticity for a few hours in both the arm and the leg. The next dose of 30 mg. produced, after 10 minutes, diplopia which lasted approximately one day, necessitating the use of an eye-shield. After five minutes tone in the limbs was considerably reduced, but 30 minutes later it had started to increase again and the limbs went back to their original stiffness after a few hours. Flexor spasms were not reduced, several taking place during the two hours after the injection of the curare. Several further administrations of curare in oil in 30-mg. doses did not produce any appreciable change in muscle tone, but tolerance from side-effects developed. Some six weeks later the flexor spasms became much worse and were extremely painful. It was therefore decided to try the effect of curare in oil together with quinine sulphate, 10 gr. t.i.d., Harvey (1939) having shown the latter drug to possess curare-like qualities. The effect of the combination was remarkable in that the spasms disappeared within a few days and morphine could be discontinued. The treatment was stopped after a month and the flexion spasms did not reappear.

Paget's Disease of the Spine

Case 2.—A man aged 62 had had pains in the legs and increasing difficulty in walking for the past three years. On admission to hospital in April, 1946, he showed evidence of a spastic paraplegia thought to be due to a spinal tumour. Laminectomy performed on May 14 showed extreme sclerosis of the vertebrae, with ossification of the dura due to Paget's disease, for which nothing could be done. For seven months after operation the story was one of increasing stiffness of the legs, so that on readmission in December, 1946, he was unable to stand and the picture was one of a severe spastic paraplegia, with pain and flexor spasms beginning to be a prominent feature. It was decided to try the effect of curare with a view to lessening the spasticity. The drug was at first given as aqueous tubocurarine intramuscularly in doses of 20 mg., later increasing to 30 mg. every third day. It was found that the drug produced definite lessening of the spasticity and voluntary power became better for a few hours, but at no time was the patient able to stand. The side-effects of the drug were diplopia, nausea, and a feeling of drunkenness. Injections of tubocurarine in oil intramuscularly were then substituted, beginning with a dosage of 20 mg. and increasing up to 40 mg. on alternate days. These injections produced minimal improvement; his pain and flexor spasms were not improved, and, although side-effects were slightly less noticeable than with ordinary curarine (probably because of increased tolerance), yet relief from the spasticity was also less and did not materially help the patient's condition. With neither type of curare was he able to walk. The spasticity became so extreme that adductor tenotomy was performed and the patient was put in a plaster-of-Paris spica. Unfortunately decubitus ulcers developed and he died suddenly from heart failure three months after operation. He had been under treatment with curare intermittently for five months. Post-mortem examination confirmed the diagnosis of Paget's disease of the spine.

Motor Neurone Disease

Case 3.—A woman aged 45 suffered from typical motor neurone disease. She showed a bulbar palsy of mixed pseudo and true types, an exaggerated jaw-jerk, a spastic tongue, wasting of the intrinsic muscles of the hands, increased tendon reflexes in the arms, and gross spasticity in the legs, rendering her bedridden. The administration of 30 mg. of curare in oil every third day produced a slight reduction in spasticity, but the patient remained bedridden and her speech was unaltered. She insisted, however, on keeping up the injections, as she was sure the drug was doing her good—in particular her legs felt warmer. No disagreeable side-effects occurred.

Subacute Combined Degeneration of the Cord

Case 4.—This patient, a woman aged 58, was admitted with very spastic legs, bilateral extensor plantar responses, and pronounced diminution in joint sense due to subacute combined degeneration. She had suffered from pernicious anaemia for many years and had been on liver therapy; her blood picture at the time of admission was normal. The administration of curare in oil up to 45-mg. doses produced no effect whatsoever.

Disseminated Sclerosis

Case 5.—A woman aged 56 had had a spastic paraplegia, nystagmus, dysarthria, and euphoria due to disseminated sclerosis for over 10 years. She had one month's history of flexion spasms, which were very painful, and on admission she was found to be bedridden and to have 20% of flexion contracture in both knees. Doses of curare in oil daily, increasing from 10 to 30 mg., produced marked diplopia and a feeling of drunkenness. There was slight diminution in tone in the legs but no relief of flexion spasms, and no diminution in the flexion contracture despite additional active physiotherapy.

Case 6.—A woman aged 29 was admitted with a spastic paraplegia and nystagmus, having been bedridden for three months. She volunteered the statement that her stiffness was worse in cold weather. Doses of curare in oil up to 30 mg. and exercises produced some subjective improvement, and she managed to get out of bed. Her condition three months later was much the same as on discharge from hospital, although she had had no further curare.

Case 7.—A woman aged 51 had had difficulty in walking for 10 years and on examination was found to have spastic legs, R > L, very brisk arm reflexes, exaggerated knee-jerks, left ankle clonus, and extensor plantar responses. The C.S.F. Lange curve was 4321000000 and the W.R. was negative. Curare in oil in doses ranging from 15 to 40 mg. produced a definite decrease in spasticity, and for the first three-quarters of an hour after injection reversal of the plantar responses was noted. There were no side-effects, and the patient could walk reasonably well—certainly better than on admission.

Case 8.—A woman aged 67 was admitted with diplopia and spastic paraplegia with bilateral ankle clonus and extensor plantar responses. She had been almost bedridden for six months. The Lange curve was 5543321000 and the W.R. was negative. Repeated injections of 30 mg. of curare in oil produced some diminution in muscle tone but no alteration in reflexes. The change was not enough to aid the patient's walking materially.

Case 9.—A woman aged 34 complained of dragging of the left leg for the past five weeks. She was found to be euphoric and to have a spastic paraparesis with bilateral extensor plantar responses. Curare in oil in doses up to 20 mg. produced considerable improvement in the gait, both subjectively and objectively. There were no side-effects. This case was the least severe of the series.

Case 10.—A man aged 36 had dragged his left leg for four years and now had great difficulty in walking after a few minutes. He was found to have very brisk tendon reflexes, bilateral ankle clonus, and bilateral extensor plantar responses. Tubarine in oil in doses of 22.5 mg. produced no change: doses of 30 mg. caused blurring of vision in half an hour, and rather less foot drag; doses of 45 mg. produced diplopia + +, drunken feeling +, and reeling gait. His gait was definitely no better 30 hours later.

Case 11.—A woman aged 36 had had spastic ataxic gait, brisk reflexes, and extensor plantar responses for four years. Tubarine in doses of 45 mg. produced slight improvement in gait and no side-effects. Objectively there was little improvement.

Case 12.—A woman aged 39 had had difficulty in walking for four years. Her legs were ataxic and spastic, R > L, reflexes brisk, plantars extensor. Tubarine in doses of 22.5 mg. and 30 mg. produced mistiness of vision, but no objective signs or side-effects. Doses of 45 mg. produced misty vision, sensation of drunkenness, and great ataxia. Twenty-four hours later there was no subjective improvement, but she was possibly walking a little better.

Case 13.—A woman aged 36 had been ill for 10 years, but when admitted she was undergoing a spontaneous remission. Her legs were slightly spastic, tendon reflexes brisk, plantar responses extensor; she was walking quite well. After 22.5 mg. of tubarine she felt a bit dithery, and had a feeling of warmth in her hands and feet. After 30-mg. doses she had ptosis, a feeling of detachment, and was walking worse. Her hands went warm and then cold within an hour. After 45-mg. doses she felt drunk and muzzy, her legs were cold, and she was more ataxic. Next day walking was better.

Case 14.—A woman aged 63 had been ill for five years. She managed to take a few steps round her room by holding on to the furniture. She had very spastic legs and bilateral extensor plantar responses, but no anaemia or sensory changes. Tubarine in 22.5-mg. doses had no effect of any kind. Doses of 30 mg. produced blurring of vision in 50 minutes; after one hour her legs became more spastic than before the injection; there were no side-effects. Two hours after 40-mg. doses she was still very spastic, and the plantars were extensor. No objective improvement was seen and there were no troublesome side-effects.

Case 15.—A woman aged 26 had had for two years diplopia, spastic legs, very brisk reflexes, flexor plantar responses, and gross ataxia on heel-to-knee tests, but her gait was fairly good. Tubarine in doses of 22.5 mg. produced drunkenness, "wobbly when walking." Doses of 30 mg. produced diplopia + + and nystagmoid jerkings; jerks still brisk. She was walking very badly indeed, and was more ataxic than ever. The drug was discontinued because of the side-effects.

Case 16.—A man aged 42 had had a dragging left leg and slightly ataxic gait for six years. He was found to have left ankle clonus, brisk reflexes, and bilateral extensor responses. Tubarine in doses of 20 mg. and 30 mg. produced severe side-effects, blurring of vision, and drunkenness, great ataxia, but no objective improvement in gait. The drug was discontinued at patient's own request.

Case 17.—A woman aged 44 had had disseminated sclerosis for 10 years. Brisk tendon reflexes, bilateral extensor plantar responses, and spastic paraplegia were present. She was able to walk a few steps, but had not been out of her house for three years. Tubarine in 30-mg. doses did not give any relief but made the patient giddy and more ataxic.

Discussion

While we are in agreement with previous authors that curare temporarily diminishes the tone in spastic muscle without producing general paralysis, we have not been able to substantiate Schlesinger's claim that curare in oil has overcome the disadvantages of the drug in aqueous solution, nor have we been impressed with it as a therapeutic agent in our series of patients.

Side-effects.—Troublesome symptoms occurred in 10 of our 17 cases (so severe in two that the drug had to be discontinued), but we found, as West did with aqueous curare, that a tolerance usually developed on continued administration.

Length of Action.—In general the relaxation of muscle tone was apparent in 10 minutes, maximal in 20–30 minutes, began to wear off in an hour, and was completely absent in 24 hours. This action is no longer than that of aqueous curare, although, as with that drug (West, 1932; Harvey and Masland, 1941), some of our patients thought that relief lasted several days.

We have no satisfactory explanation to offer for the temporary reversal of plantar responses noted in Case 7 and merely record it as a matter of interest.

Therapeutic Value.—Reviewing our 17 cases, we find that in 11 the treatment either produced no improvement (7) or the patients were actually worse (4). The reason for definite deterioration appears to be that curare by lessening spasticity sometimes unmasks previously concealed posterior column loss. Turning to the cases in which improvement was noted, the only remarkable success was in Case 1. Here curare in oil was of no use until it was reinforced with quinine, but the combination of the drugs resulted in cessation of the flexion spasms, which did not return when the drugs were stopped a month later. (It may be worthy of note that all cases in which favourable results were reported by Schlesinger were traumatic in origin.) In the remainder of our cases which were thought to be improved the benefit was slight and usually only apparent to the patient. It was very difficult to assess minor fluctuations in muscular power, and interrogation of patients showed that there was considerable natural variability: thus hot weather and previous exercise both resulted in temporary improvement. Another factor which had to be borne in mind, particularly in dealing with disseminated sclerosis, was natural remission (Case 13). Even more important was the psychological aspect of the treatment. Most of our patients had been chronically ill for long periods, and when fresh hope was engendered by the new drug, intensive physiotherapy, and the encouragement of being a centre of interest once more, there was a natural tendency to think the treatment was doing good.

Bearing all these factors in mind, we do not feel that the improvement noted in six of our cases can with any certainty be attributed to tubarine, particularly as 11 showed no benefit whatever. In our opinion, therefore, curare in oil is not the hoped-for advance in reducing spasticity in neurological disease, and we do not feel that our results justify the expense of the treatment, at any rate so far as adults are concerned. We have not used the drug in children, but it seems likely that the same disadvantages would obtain, and a recent communication (Collis, 1947) on the subject of reablement in Little's disease makes no mention of its use. Further investigation is necessary to see whether a combination of drugs is any more successful.

Summary

The value of curare in oil in reducing spasticity of pyramidal type in 17 cases of neurological disease has been investigated.

In our opinion the drug has not proved superior to aqueous curare, and has been of little use in the rehabilitation of our patients.

Our thanks are due to Dr. H. S. Pemberton and Dr. Leslie Cunningham for help in providing some of the cases, and to Messrs. Burroughs Wellcome and Co. for the initial supply of tubarine.

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LOUSE-BORNE RELAPSING FEVER IN PERSIA

BY

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An epidemic of a recurrent fever occurred in Abadan between November, 1945, and June, 1946—1,087 cases being admitted to the isolation hospital. We intend to show that this was in fact an epidemic of louse-borne relapsing fever, and to give an account of its symptomatology and the results of treatment with arsenicals.

In reviewing the available literature no report has been found of louse-borne relapsing fever in Persia. Current text-books do not mention the disease as occurring there, although Rogers and Megaw (1944) say it is common in most parts of India. The present epidemic was undoubtedly part of the widespread epidemics described in the Mediterranean and North Africa during 1943–5—e.g., Algeria (Grenoilleau, 1946), Morocco (Sicault, 1944), Cairo (Wolman, Omar, and Abu-Taleb, 1945), and Abyssinia (Charters, 1945); and reviewed by Stuart (1945), who also mentions Tunisia, France, Greece, Rumania, and Turkey.

The tick-borne disease is found all over the Middle East and Central Asia—namely, Cyprus (Wood and Dixon, 1945), Palestine (Adler, Theodor, and Schieber, 1937), Azerbaijan (Popow and Achundow, 1936), Persia (Delpy and Rafyi, 1939), Caucasus (Maruashvili, 1945), Afghanistan (Avanessov, 1938), Kazakhstan (Andreev, 1944), and Tashkent (Kassirsky, 1933)—but it has, of course, different characteristics from louse-borne relapsing fever.

The Epidemic

The first case was detected in the first week of November, 1945; other cases followed quickly, and 50 to 60 were being admitted weekly in January. The epidemic followed closely the degree of coldness of the weather as shown by the average minimum daily temperature until the end of January, 1946, when the active measures taken by the Health Department, who began disinfesting the population with D.D.T. on a big scale, caused a considerable drop in the incidence of the disease, although the minimum temperature remained about 45° F. (7.2° C.) until the end of February. As soon as the general temperature began to rise the epidemic quickly declined; it was no longer necessary for the poorer classes to crowd into houses for shelter, and the heat of the sun soon killed off the lice carried in their clothes. The critical temperature was reached at the end of May, with an average daily minimum of 80° F. (26.7° C.), an average maximum shade temperature of 105° F. (40.6° C.), and an average maximum sun temperature of 150° F. (65.5° C.). The last case was admitted on June 24.

It is interesting to compare Chart 1 with Chart 2, which is compiled from statistics of the typhus epidemic here in the

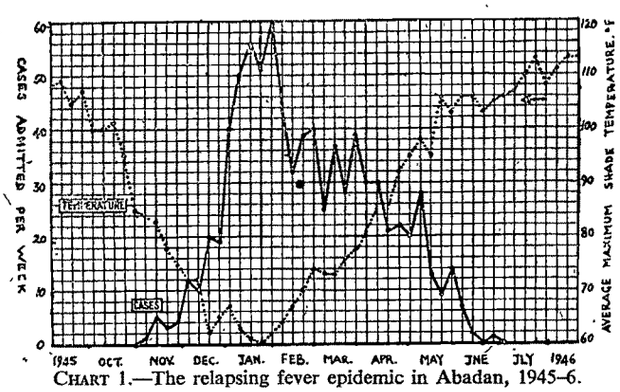

CHART 1.—The relapsing fever epidemic in Abadan, 1945–6.

winter of 1943, the critical temperatures for the termination of the epidemics being almost identical.

The disease was first diagnosed by one of us (I.S.S.) when *Spirochaeta recurrentis* was found on routine examination of blood slides from the out-patient department. Suspecting the vector to be the louse, the next 50 cases were examined; 36 of these were found to be infested with *Pediculus humanus*. The lice were crushed in saline and examined under dark-ground illumination. The *Sp. recurrentis* was demonstrated in six lice. The dark-ground microscopical examination of a drop of blood under a cover-slip was found to be the quickest way of diagnosing the disease; but as it was not possible to exclude concomitant malaria by this method routine diagnosis was made by staining a blood smear with Leishman's stain.

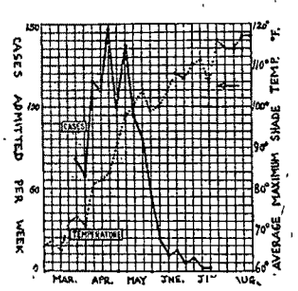

CHART 2.—The typhus epidemic in Abadan, 1943.

The following reasons do not fulfil all Koch's postulates, but they convincingly demonstrate that the relapsing fever was in fact louse-borne: (1) The Health Department has never found any tick focus in Abadan, and is of the opinion that there are no human ticks in the town. (2) Of the patients admitted to the isolation hospital 87.85% were found to be infested with lice. (3) *Sp. recurrentis* was demonstrated in lice taken from the bodies of patients. (4) The epidemic form of the disease and its relationship to the average temperature are characteristic of a louse-borne disease. Comparison with the previous epidemic of typhus is very significant. (5) The drop in the weekly admissions following the mass disinfestation of the populace with D.D.T. powder.

Symptomatology

The last 214 male cases admitted to the isolation hospital were examined clinically by one of us (R.I.B.). (Very few women were admitted. The proportion was 19 men to one woman. This is certainly not a true figure for the incidence of the disease, but an indication that women were unwilling to apply for treatment.) All these cases were diagnosed by positive blood smears at the out-patient department before admission to the isolation hospital.

No account is given here of the preventive work carried out by our Health Department. All the cases came from the labouring and unemployed class of the community. The great majority were young adults, the age incidence being: under 8 years, 1 case; 8–15 years, 9 cases; 15–30 years, 117; over 30 years, 87.

Onset.—All these patients could recall the day on which the attack started; most of them could fix the time within a few hours. The attack began with a splitting frontal headache, which very soon was followed by a high fever and in many cases a rigor. The fever was maintained for an average of 4 to 5 days.

Course.—During the initial attack the temperature was usually raised to 103° or 104° F. (39.4° or 40° C.) and remained at this height until the crisis, when it fell to normal within a few hours. At this time the patient sweated profusely and was often weak and exhausted. During the next few days he quickly regained his strength and demanded to be discharged from hospital. The period of apyrexia lasted about nine days, although it was found that the most constant time-relationship was from the day of onset to the day of relapse—an average period of 14 days. During the relapse the patient's temperature was raised to 102°–103° F. (38.9°–39.4° C.) for about two days.

Symptoms.—During the initial fever patients complained of headache and pain in the back. Percussion over the lower thoracic and upper lumbar spine revealed tenderness, and the muscles of the arms and legs were also painful and tender to deep pressure. Anorexia was common, and some complained of epigastric pain after taking food. Vomiting was frequent; the bowels were usually constipated. Epistaxis was not uncommon; a non-haemorrhagic herpes febrilis occurred in a small number of cases. Many patients complained of a cough. During the apyrexial period all symptoms abated and the patient was quite well unless he had respiratory trouble.

Physical Examination

The patient was usually seen on the third or fourth day of the disease, and presented the appearance of a high fever. No rash was seen in the majority of cases, but a few had a definite petechial rash on the trunk only; in these the Weil-Felix reaction showed only a slight agglutination with OX K—e.g., 1/25 +, 1/50 ±. A number of cases were jaundiced; these were classified as: +, conjunctival coloration; + +, skin coloration; + + +, marked skin coloration. The colour was easily demonstrated in the serum of many cases in which the Wassermann test was carried out. Nine cases had a marked jaundice, and this was found to be a bad prognostic sign; two of these cases were fatal (see below). The spleen showed all degrees of enlargement—down to the umbilicus; the liver was sometimes enlarged and often tender. No change was found in the cardiovascular system,

but minor respiratory complications were very common. The reflexes were normal, and there were no significant signs.

Incidence of Symptoms

Fever	98·07%	Epistaxis	14·02%
Headache	90·65%	Anorexia	92·52%
Backache	77·57%	Vomiting	56·07%
Pains in limbs	71·50%	Constipation (2–6 days)	51·40%

Incidence of Signs

Jaundice	9·81%	Enlarged spleen (1–4 fingers)	76·63%
Herpes	7·48%		
Rash	3·22%		

Complications

Respiratory complications were by far the commonest. Minor respiratory complications occurred in 49.07%, and major respiratory complications in 11.21%—a total of 60.28% with pulmonary disturbances varying from a "cough" to bronchopneumonia. The most usual symptom was a characteristic dry irritative tracheitis which often went on to a bronchitis. These cases were classified as minor complications. Sulphonamide treatment was given in 10.75% of the major complications. Bronchopneumonia was treated as a major complication.

There was a non-specific arthritis in four cases (1.87%)—two in the knee and two in the shoulder. These were treated with kaolin poultices. Perisplenitis due to the size of the spleen occurred in two cases (0.94%); these were successfully treated with repeated subcutaneous injections of adrenaline.

Complications in the central nervous system were found in three cases (1.40%).

Mental Cases.—Two patients developed obsessions that the other patients in the ward were plotting against them and wanting to kill them; both had to be put under restraint. One managed to escape in spite of being under careful guard and committed suicide; the other eventually recovered completely.

Case of Transverse Myelitis.—This was a very interesting case of a lesion of the spinal cord almost certainly due to relapsing fever. The patient was admitted to the isolation hospital on March 31, 1946, as an ordinary proved case of relapsing fever and given 0.45 g. of N.A.B. He developed a cough and bronchitis, for which he was treated with a full course (five days) of sulphonamides. He did not have a relapse. About 10 days after admission he complained of pain over the lumbar spine; this was more severe than the backache described by other patients and was not relieved by sedatives. After 15 days he was found to be developing a spastic paralysis in both legs and soon he was unable to walk. On examination the knee-jerks were R. + + +, L. + +, and the ankle-jerks were normal, Babinski's sign was positive, and the abdominal reflexes were exaggerated. There was some skin hypersensitivity around the lower abdomen. He was now transferred to the general hospital. The Wassermann reaction was negative. Spinal puncture unfortunately was unsuccessful owing to the rigidity of the back. The patient was examined by a surgeon, who could find no evidence of injury or disease of the vertebra. A radiograph of the spine revealed no abnormality. He was discharged from the hospital on June 25. He was then able to walk very precariously with a pair of crutches and was invalided as permanently unfit. On Aug. 7 he returned to the hospital applying for a certificate of fitness for re-employment; he was examined and found to be without any residual disability. This case was almost certainly a myelitis due to the relapsing-fever spirochaete; it was a pity the case could not be proved by lumbar puncture.

In view of the research carried out recently by French workers into the neurotropic character of the louse-borne *Sp. recurrentis* in rats, it is interesting to note that the central nervous system is affected more than other systems in the human body. Of our patients 90.65% complained of headache and 77.57% of severe backache in the thoracic and upper lumbar regions—i.e., over the spinal cord. Two cases suffered severe mental derangement, one resulting in death. One case of myelitis was almost certainly due to *Sp. recurrentis.*

Deaths

The death rate among all the cases of relapsing fever admitted during the epidemic was 1.11%. In the series of 214 cases specially studied, five (2.34%) deaths occurred—one from an unrelated disease (infected amoebic abscess), two from bronchopneumonia complicating the relapsing fever, and two from relapsing fever.

Treatment

The 214 cases under special study were divided into two groups for the purpose of treatment. Group 1, consisting of 97 patients, were treated with an injection of 0.45 g. of N.A.B. intravenously immediately on admission—11 (11.34%) suffered one relapse and no case relapsed a second time.

As we were very short of N.A.B. at this time and the epidemic appeared to be mild we decided not to give the drug on admission, but to wait, as some authorities recommend, until the case relapsed. There were 117 cases in group 2; 75 (64.10%) of them relapsed. As soon as the relapse was detected they were given 0.45 g. of N.A.B. Not only did this save the use of the drug in 35.9% of cases—those that did not relapse—but it demonstrated how effective the N.A.B. treatment had been in group 1, when only 11.34% of cases relapsed.

All the cases in group 1 which relapsed received a further 0.45 g. of N.A.B.; none relapsed a second time. In group 2 only one case relapsed a second time, and was treated with a further 0.45 g. of N.A.B.—thus demonstrating that the drug is more effective when used later in the disease.

Few reactions followed the injections of N.A.B.; sometimes the patient's temperature would be raised for 24 hours. No definite time interval was detected between giving the injection and the crisis.

Another interesting point emerged during the course of treating the two groups: nine patients developed a marked jaundice. Three of these did not receive N.A.B. on admission, as it was thought that it would be dangerous to give arsenic to patients whose liver was already damaged; it was also believed that a dangerous crisis might be provoked. However, two of these three died. The remaining six received N.A.B. on admission and none of them died.

Summary

An epidemic of louse-borne relapsing fever, believed to be the first reported in Persia, is described.

A detailed clinical description, demonstrating the mildness of the epidemic and the low death rate, is given.

The effect of treatment with N.A.B. is quantitatively assessed.

We wish to thank the Health Department for co-operation in this report, and in particular Mr. C. Brooking, chief health inspector, for the graph of the typhus epidemic, 1943. This paper is submitted by permission of the chief medical officer, Anglo-Iranian Oil Co., Abadan.

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WHAT THE MEDICAL PRACTITIONER WANTS TO KNOW

BY

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Readers of the *British Medical Journal* study with interest the section devoted to "Any Questions?" In addition to the information to be obtained from individual questions and answers, it is felt that when they are viewed as a whole some indication is given of the problems which are uppermost in the minds of the medical profession. A classification of the questions would therefore be of interest and value, but this task was found more difficult than might be imagined. It is most unlikely that any two people would adopt the same subdivisions, and it is often doubtful into which of these a particular question fits.

All the questions (2,018) published in 1943–6 were taken for analysis. Some questions required answers to more than one problem on the particular topic, but in order to prevent undue weighting of some subjects each question was counted once only and an endeavour was made to determine the main problem of the questioner. It sometimes happened that both the treatment and the aetiology of a disease were asked for, but the doctor's main concern seemed to be the treatment of his patient.

In the first place it was found convenient to divide the questions into two main groups. Group A relates to specific diseases, whereas Group B includes the remaining questions belonging to the field of medical science generally. These may be classified as follows:

Group A	
Medicine	899
Surgery	186
Midwifery and gynaecology	143
Dermatology	165
E.N.T. and eyes	74
	1,467

Group B	
Pharmacology	130
Sex problems	82
Forensic medicine	69
Public health	44
Dietetics	43
Preclinical sciences	30
Anaesthetics	27
Pathology	18
Rhesus factor	12
Eugenics	10
Industrial medicine	10
Blood transfusion	5
Miscellaneous	71
	551

Group A

These questions can be further subdivided (Table I) to demonstrate the aspects of the subjects which are the main concern of the doctor.

TABLE I

	Heredity	Aetiology and Diagnosis	Treatment	Prevention	Prognosis	Other Aspects	Total
Medicine	15	170	503	86	35	90	899
Surgery	4	30	106	8	13	25	186
Midwifery and gynaecology	—	15	104	2	8	14	143
Dermatology	1	9	142	6	3	4	165
E.N.T. and eyes	6	9	49	4	3	3	74
Total	26	233	904	106	62	136	1,467

The table shows quite clearly that the commonest problems are medical ones, and that treatment is the main concern. This is what one would expect, assuming that the bulk of the questions came from general practitioners. It is revealing that so much interest is centred on dermatology.

Table II shows that the nervous system is the source of many of the medical problems; in this subdivision there were 21 questions concerned mainly with epilepsy. It would seem that the preclinical and clinical student's worry over the nervous system follows him after qualification. Conditions such as cerebral haemorrhage have been included in the nervous system group, although it may well be argued that they would be more appropriate under the heading of the cardiovascular system: such are the difficulties of classification, which even international commissions have not surmounted. Into this group have been placed questions on migraine (6), neuralgia (6), vertigo (5), and post-encephalitic Parkinsonism (3); these conditions have a psychological as well as an organic aspect. Psychological issues are also raised by questions in other groups, particularly in the "sex group," but it would be confusing, and largely guesswork, to try to give a comprehensive picture of the extent to which medico-psychological problems enter into the queries not specifically classified above under "mental diseases."

TABLE II

	Heredity	Aetiology	Diagnosis	General Treatment	Penicillin Treatment	Sulphonamide Treatment	Hormone Treatment	Dietetic Treatment	General Prevention	Specific Prevention	Laboratory Tests	Prognosis	Statistics	Technique	Others	Total
Nervous system	3	7	18	60	1	—	1	2	—	—	6	3	—	—	—	101
Cardiovascular system	1	10	10	51	—	2	4	3	—	—	3	2	1	2	—	89
Blood diseases	3	3	1	19	—	—	—	—	1	—	12	4	1	—	—	44
Respiratory system	—	6	4	11	2	4	—	—	1	—	2	—	—	1	—	31
Allergy	1	7	1	31	1	2	—	1	—	—	1	2	—	—	1	48
Alimentary system	1	8	10	44	1	2	—	4	1	—	6	1	—	1	1	80
Genito-urinary system	—	4	6	14	—	2	—	3	—	—	4	2	—	—	—	35
Ductless glands	1	5	8	24	—	—	5	1	—	—	3	1	—	1	—	49
Drug addiction, poisoning	—	—	—	7	—	—	—	—	—	—	1	5	—	—	—	13
Rheumatism, arthritis	—	7	3	31	—	2	—	2	—	—	—	1	—	1	—	47
Paediatrics	2	5	7	36	1	1	—	17	2	—	—	4	—	—	1	76
Dermatology	1	8	1	137	2	—	2	1	6	—	—	3	—	—	4	165
Mental diseases	2	1	7	12	—	—	—	—	—	—	3	2	—	—	—	27
Infectious diseases	—	14	4	47	4	4	—	—	17	58	8	3	3	3	2	167
Tuberculosis	1	4	4	17	—	—	—	1	3	2	3	2	5	1	1	44
Venereal diseases	—	—	6	17	6	3	—	—	1	—	7	3	1	1	3	48
Surgery	2	5	7	35	2	—	2	1	5	—	—	4	—	9	3	75
Orthopaedic surgery	1	4	3	25	2	1	—	—	—	—	—	5	—	—	1	42
First aid	—	1	—	12	—	1	—	—	2	—	—	1	—	6	1	24
Varicose veins, haemorrhoids	—	—	2	12	1	—	—	—	1	—	—	2	—	3	—	21
Cancer	1	6	2	6	—	—	6	—	—	—	2	1	—	—	—	24
Obstetrics	—	2	5	28	—	—	1	5	2	—	4	4	—	3	4	58
Gynaecology	—	2	3	37	—	—	12	—	—	—	—	4	—	2	1	61
Abortion	—	2	—	4	—	—	—	—	—	—	—	—	—	—	—	6
Breast-feeding	—	—	1	9	—	1	4	3	—	—	—	—	—	—	—	18
E.N.T., eyes	6	6	3	40	5	2	2	—	4	—	—	3	—	1	2	74
Total	26	117	116	766	28	27	39	44	46	60	65	62	11	35	25	1,467

An analysis of the 165 questions in the dermatology group is of interest:

Fungous infection	15	Excessive sweating	6
Psoriasis	9	Acne	5
Urticaria	9	Alopecia	5
Seborrhoeic dermatitis	7	Scabies	4
Pruritus	7	Other (miscellaneous and ill-defined conditions)	86
Verruca	6		
Occupational dermatitis	6		

It may well be that fungous infection of the skin heads the list because of its wartime frequency in the Services, particularly overseas. Most of the questions in this group are concerned with treatment.

The tables show that there is an interest in the prevention of diseases: no fewer than 60 questions (Table II) sought information regarding specific methods of preventing infectious diseases. This also is probably due to the increased risk of such diseases in wartime and to the extensive propaganda on the subject. It would be of interest to know the proportion of such questions which came from medical officers serving in the Armed Forces.

Group B

Anaesthetics play only a small part in the questions, owing no doubt to the increasing specialization in this branch of medicine. Heredity and eugenics form interesting groups—a total of 36 questions—reflecting, perhaps, an increased interest in this matter by the general public, which seeks guidance from the medical profession. Indeed, if a similar column were opened for questions from the general public the result might be revealing.

The sex problems in Group B form a large subgroup, and even though wartime conditions may be partly responsible, especially for the questions on impotence, it is felt that the size of this subgroup is significant when one remembers how negligible was the instruction on this subject received by the student at his medical school.

Sex Group

General problem of fertility	3	Frequency of coitus	5
Male " "	28	Artificial insemination	2
Female " "	9	Pre-marital medical examinations	3
Contraception	13	Others	3
Frigidity	8		82
Sex education	3		
Masturbation and abnormal sex behaviour	5		

The subgroup of questions entitled "pharmacology" is a large one, and it must be stated that in some ways it is artificial, in that into it were placed any questions concerning drugs if at the same time a specific disease or clinical picture was not mentioned. As was to be expected during the period to which this analysis applies, the questions on sulphonamides and penicillin were numerous (33) in Group B, and in addition 55 questions are to be found in Table II relating to treatment of specific diseases—so that the grand total was 88.

Out of a total of 2,018 questions 71 have been found impossible to classify into any definite subgroup. Some of these required information on the choice, care, and sterilization of instruments. There were others relating to such diverse conditions as nail-biting, sea-sickness, doctors' expectation of life, and the susceptibility of cows to rheumatic endocarditis.

Analysis of the Questioners

Having reviewed the questions, one wonders whether the questioners form a representative sample of the medical profession. They may, for example, be the more enthusiastic practitioners, or, on the other hand, the less-well-informed doctors. The questions may come from the recently qualified or from the well established. The latter may feel a greater need for advice on recent advances in treatment. Again, are the questioners the isolated practitioners?

In an attempt to answer some of these problems information, entirely anonymous in character, was kindly supplied by the Editor of the *British Medical Journal*, and an analysis was made of the questioners from England and Wales during 1945. They were first grouped according to their date of qualification, giving the following results:

Date of Qualification	No.	Date of Qualification	No.
1880–9	8	1920–9	117
1890–9	24	1930–9	94
1900–09	43	1940–5	47
1910–19	63		

It was found impossible to relate these figures to any comparable ones giving the total number of practitioners, particularly since during the period under consideration many of the more recently qualified were in the Services.

The localities of the questioners were studied in relation to the distribution of doctors as a whole. For convenience each questioner was placed in his or her B.M.A. division. It will be remembered that these divisions were divided into three types—urban, mixed, and rural—for the purpose of recruitment to the Armed Forces. The results obtained are summarized in Table III.

TABLE III

	Urban	Mixed	Rural
Total no. of practitioners	11,777	8,913	1,497
" " general practitioners	7,202	5,308	1,044
" " questions	198	158	40
No. of questions per 1,000 practitioners	16·8	17·7	26·7
$\chi^2 = 7·5$ $0·05 > P > 0·02$: significant			
No. of questions per 1,000 general practitioners	27·5	29·8	38·3
$\chi^2 = 3·9$ $0·20 > P > 0·10$; not significant.			

The proportion of the questioners who were actually in general practice is unknown, but, if it be assumed that all of them were, then while the figures show a tendency for rural general practitioners to submit questions more readily than their urban colleagues the differences are not greater than could have arisen by chance; but when the questioners are related to the total number of registered doctors, then statistical tests show that doctors, whether general practitioners or not, are more likely to submit questions if they live in rural areas than if they reside in more thickly populated areas.

This may well be due to their comparative isolation and the difficulty in obtaining assistance from colleagues and guidance from hospital centres. Four large provincial centres where there are medical schools (Birmingham, Cardiff, Bristol, and Liverpool) had a total of 1,746 practitioners, of whom 953 were general practitioners; but they submitted only 20 questions, which represent rates of 11.4 questions per 1,000 practitioners and 21.0 per 1,000 general practitioners. These rates, though not significantly lower than for those of urban areas as a whole, yet nevertheless favour the view that questions are not submitted so often when there are ample consultant and specialist facilities available locally.

Conclusions

The numerical value of the questions is a factor to be carefully considered, because some of the answers supply the requirements of large numbers of would-be questioners, and therefore do not need repetition, whereas others may be of interest only to the individual questioner.

Why do people ask questions? Is it because of the lack of knowledge? If so it would seem that many changes are necessary in the curriculum at medical schools. The large number of questions relating to dermatology is in marked contrast to the rather minor part this subject plays in the prequalification period. It may, on the other hand, be desirable that there should be better facilities for the

treatment of resistant skin diseases by specialists in dermatology. It would seem that sex problems and the method of immunization require additional stress either in student days or in postgraduate courses.

A number of questions relate to the treatment of conditions not normally seen in the wards of teaching hospitals—e.g., epilepsy, skin conditions, and Parkinson's disease. Hospital experience in the treatment of these conditions is often to be obtained only as a house-physician or house-surgeon in out-patient departments. It may be that the student does not see enough of the routine work in out-patient departments, but rather looks upon the departments as places where typical clinical signs are demonstrated and where differential diagnosis is learnt.

Questions may indicate excessive interest in certain aspects of medicine, but would it be correct to assume the converse? It is probably true to say that the average doctor takes little interest in statistics. "General preventive measures against disease" (46) is a small group compared with "treatment of disease" (904). Is this as it should be? Or should medical schools stimulate a greater interest in the prevention of disease and the maintenance of positive health?

There is no doubt that large numbers of the questions are attempts by questioners to keep pace with the rapid growth of medical knowledge and methods. This is exemplified by the interest shown in sulphonamides and penicillin, which have come into their own during the period under review. Such questions reveal the need for postgraduate refresher courses.

I wish to express my thanks for helpful criticism to Prof. R. M. F. Picken, Provost, Welsh National School of Medicine, at whose request this investigation was made; to the Editor of the *British Medical Journal* for information concerning the distribution of questioners; and to Dr. Lewis Faning for his statistical advice.

BRODIE'S ABSCESS OF THE TIBIA

ITS TREATMENT BY SURGERY, PENICILLIN, AND SULPHADIAZINE

BY

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Brodie's abscess was first described by Sir Benjamin Brodie in 1824. According to Muir it is "a local abscess of chronic nature usually situated in the metaphysis of a long bone. It is, as a rule, surrounded by dense bone and may give rise to external swelling. The contents of the space may be pus, but in very chronic cases are often a clear fluid, which may be sterile."

In all, some 342 cases of Brodie's abscess have appeared in the literature. In 1906 Thompson described an abscess of the lower end of the tibia. This specimen is preserved in the Royal College of Surgeons in Edinburgh. The abscess has a capacity of some 500 ml., and the patient, a sailor, was reputed to drain the abscess from time to time by removing a wooden plug he kept in the sinus. It is recorded that he led an extremely active life. Thompson also reported 161 cases from the literature. In 1924 Henderson and Simon reported 13 cases from the literature. In 1928 Piquet and Cynau described 9 cases of Brodie's abscess. In 1938 Wagner and Hanby reported 12 cases. In 1945 Downey and Simon, in the United States, described 2 cases and reviewed most of the above.

Site.—From the above cases the most common site for Brodie's abscess would appear to be shared equally by the upper and lower end of the tibia. The next site, which is only half as common, is the lower end of the femur. The third commonest site is the humerus (position not stated), followed by the upper end of the femur, the middle of the tibia, and the radius (position not stated).

Aetiology

Sex.—Brodie's abscess occurs almost twice as often in males as in females, and in about 90% of the cases in which the age was mentioned it occurred below the age of 40.

Trauma.—The fact that males are as a rule subject to a greater amount of trauma than females is significant. It will also be noticed that Brodie's abscess occurs during the age period of greatest physical activity. It also occurs commonly after compound comminuted fractures.

Osteomyelitis.—Brodie's abscess often follows acute osteomyelitis. In his series of 145 cases Thompson elicited a history of acute osteomyelitis in 122. It is noticeable that Brodie's abscess frequently follows an acute osteomyelitis which has passed into the chronic stage. This is becoming increasingly less common since the advent of chemotherapy and penicillin therapy.

Acute Infections.—Brodie's abscess has been seen after acute infections—principally typhoid and paratyphoid fevers—otitis media, staphylococcal skin infections, and abscesses.

Case History

J. D., a miner aged 62, attended the out-patient department of Ayr County Hospital on March 19, 1947. He had been complaining for the past six weeks of an intense, continuous, deep-seated pain situated in the lower end of the left tibia. The pain, which was much worse at night, had gradually got more severe over these six weeks, and when seen the patient complained of feeling feverish at night, with marked malaise, anorexia, and vomiting. Two weeks before coming to hospital the left ankle began to swell, and the skin became red, glazed, and distended over both malleoli. These swellings were extremely painful, and the pain was continuous in character.

There was a history of a compound fracture of the lower third of the left tibia and fibula some thirteen years previously. This fracture had united, but there was considerable thickening of both the tibia and fibula at the junction of the middle and lower thirds.

On examination gross swelling of the left ankle was seen, particularly over both malleoli, where two large abscesses were pointing; these were approximately 2½ in. (6.25 cm.) in diameter, and appeared to be about to rupture. The whole swelling was extremely tender on palpation, particularly over the lower anterior aspect of the tibia. The slightest movement of the ankle-joint caused excruciating pain. Lymphangitis was pronounced up to the level of the knee, and both the popliteal and the superficial inguinal groups of glands were enlarged and tender.

Radiographic examination revealed an egg-shaped cavity of the lower third of the tibia, about 2½ in. long vertically, by about 1 in. (2.5 cm.) in breadth, and 1 in. in depth. There was a small bead-like pocket connecting with the lower aspect of the cavity; this was about 1/4 in. (0.6 cm.) in diameter. The whole was surrounded by dense sclerotic bone. A diagnosis of Brodie's abscess was made. The white-cell count was 22,000 per c.mm. (90% polymorphonuclear leucocytes). The erythrocyte sedimentation rate was 20 mm. and 45 mm. at one and two hours, respectively.

Treatment

At first the main object was to deal effectively with the superficial abscesses and to prevent their rupture and the formation of subsequent sinuses, as this would impede any operative treatment of the bone abscess itself. The superficial abscesses were therefore aspirated on March 19 by means of a wide-bore needle which was inserted through healthy skin on either side, and 35 ml. of thick yellow pus was taken from the medial abscess and 30 ml. of similar-looking pus from the lateral abscess. Sodium penicillin in a dosage of 50 000 i.u. was injected into each abscess after aspiration. The needles were

then removed and the puncture wounds were sealed with collodium flexile. The ankle was lightly bandaged. The patient stated that the pain was greatly relieved.

Bacteriological examination revealed numerous Gram-positive cocci and pus cells. On culture profuse colonies of *Staphylococcus aureus pyogenes* were obtained. These were found to be penicillin-sensitive.

Aspiration of the abscesses was repeated, and the introduction of similar amounts of penicillin was carried out on March 21, 23, and 24. By the 25th the superficial abscesses were completely healed except for slight discoloration of the skin and the needle-puncture marks. In addition to the above local treatment the patient had a course of sulphadiazine (2 g. followed by 1 g. four-hourly) together with three-hourly intramuscular injections of sodium penicillin (20,000 i.u.); this parenteral treatment was started on March 19.

On March 25 the administration of sulphadiazine was discontinued, the patient having had 30 g. The three-hourly administration of sodium penicillin was now changed to penicillin in beeswax (Glaxo), as the patient was rather apprehensive regarding continuous three-hourly injections. The dosage was changed to 60,000 i.u. given in two 12-hourly doses.

Operation

On March 28, under nitrous oxide, oxygen, and "trilene" anaesthesia, a 6-in. (15-cm.) curved incision was made vertically from the junction of the middle and lower thirds on the medial side of the leg to within 1/2 in. (1.25 cm.) above and behind the medial malleolus. The incision was made through healthy skin down to bone. The soft tissues were retracted and the tibia explored over its medial aspect; the extent of the abscess was gauged and the bone saucerized over this area by means of a gouge. All bone chips were carefully preserved in warm normal saline. The lining membrane of the abscess cavity was soon exposed; this was found to be dark grey in colour. After exposure of the membrane all further bone chips removed were discarded. The abscess was now fully laid open along its whole length, and the grey pus which formed its contents was removed and retained for examination. The lining membrane was carefully curetted with a Volkmann's spoon and all debris removed. The cavity was then packed with the previously preserved bone chips.

An ordinary wide-bore intravenous needle was introduced into the cavity, the base of the needle being sutured to the wound edges, which were closed by means of interrupted silk-worm-gut sutures. The dressing was arranged so that the base of the needle would protrude through the dressing without interference with the wound itself, thereby enabling three-hourly injections of penicillin to be carried out. Bacteriological examination of the pus from the bone abscess revealed numerous Gram-positive cocci, which on culture gave profuse colonies of *Staph. aureus pyogenes.*

Subsequent Progress

The patient's condition after operation was extremely good. Sodium penicillin (30,000 i.u. three-hourly) was injected into the bone cavity. This was painful, but the pain passed off after two days. At first there was a tendency for the needle to become blocked with clotted blood, but this was countered by inserting a sterilized stylet before the injection of penicillin. The patient continued to have 60,000 i.u. of penicillin in beeswax twice daily by the intramuscular route. All local pain disappeared after three days, the patient felt extremely well, and he moved his ankle-joint freely. On April 4 penicillin was discontinued. The needle was removed, also alternate sutures. The wound was satisfactory. On April 7 all sutures were removed; the wound appeared to be very healthy, and there was no evidence of wound infection.

Radiological examination on April 9 and 15 showed considerable and increasing bony union between the tibia and the bone chips. The patient was discharged from hospital on April 19, feeling in the best of health and walking with the aid of two sticks. He reported to the orthopaedic clinic on May 7, walking with a slight limp and using only one stick. Radiological examination showed further bony union between the chips and the tibia. The abscess cavity was being gradually obliterated by new bone formation. The patient returned on June 6, and was walking extremely well without a stick. He said that he had no discomfort in walking five miles and was keen to resume work. He was in excellent health and had absolutely no disability. He was advised to report in a month. On July 7 radiological examination revealed almost complete obliteration of the abscess cavity. The patient said that he was in perfect health and thought of returning to work. He could now walk an unlimited distance and had no limp. Ankle movements were full and painless.

Dosages of Sulphadiazine and Penicillin

1. Sulphadiazine (March 19–24), 30 g.
2. Penicillin (sodium): (*a*) Locally to superficial abscesses (March 19–24), 400,000 i.u. (*b*) Intramuscular (March 19–24), 800,000 i.u. (*c*) Direct to abscess (March 28–April 4), 1,680,000 i.u.
3. Penicillin (beeswax) (March 25–April 4), 1,200,000 i.u.

Total penicillin administered, 4,080,000 i.u.

Summary and Conclusions

A successful method of dealing with Brodie's abscess of the tibia by means of surgery, sulphonamides, and penicillin is detailed.

Cavities in the shaft of the tibia are notoriously difficult to deal with if an aesthetically satisfactory result is to be obtained.

By the method suggested, obliteration of the bone cavity is secured, with first-intention healing of the wound and retention of the shape and symmetry of the limb.

Medical Memoranda

Folic Acid Therapy in Coeliac Disease

The following case of coeliac disease may be of interest because of the rare macrocytic anaemia present and its rapid response to folic acid therapy.

CASE HISTORY

The patient, a small girl of 10, was admitted to hospital on Aug. 21, 1947, with a history of vomiting and diarrhoea with loss of weight for the past three years. The motions were described as being large and white on occasion. She had been in hospital earlier in the year, and when she was discharged the stools were normal and she was gaining weight.

On admittance the child was apathetic and miserable. She was markedly anaemic and emaciated. The abdomen was protuberant, and the buttocks and thighs particularly were wasted. The motions were large, formed, pale, and offensive. A blood count on Aug. 21 showed: haemoglobin, 16%; red cells, 550,000 per c.mm.; colour index, 1.5; white cells, 5,000 per c.mm. Blood film: macrocytosis, anisocytosis, and poikilocytosis all pronounced; several megaloblasts and normoblasts present.

After treatment with 2 ml. of liver extract intramuscularly and two tablets (10 mg.) of folic acid ("folvite") daily, combined with supplementary vitamins and but little dietetic restriction of fat, the haemoglobin rose to 27% in two days, and since then has risen steadily. There was also a steady gain in weight, as the following figures show.

Date	Haemoglobin	Weight
21/8/47	16%	2 st. 12¾ lb. (18·48 kg.)
23/8/47	27%	—
28/8/47	35%	—
1/9/47	37%	2 st. 13 lb. (18·59 kg.)
8/9/47	40%	3 st. 1½ lb. (19·73 kg.)
15/9/47	49%	3 st. 2 lb. (19·96 kg.)
23/9/47	58%	3 st. 5 lb. (21·32 kg.)
2/10/47	60%	3 st. 6½ lb. (22 kg.)
10/10/47	68%	3 st. 7½ lb. (22·45 kg.)
20/10/47	74%	3 st. 7½ lb. (22·45 kg.)
4/11/47	80%	3 st. 8 lb. (22·68 kg.)

The stools are normal in appearance and number, the abdominal distension has disappeared, and the patient's appearance is that of a healthy normal child.

A megalocytic hyperchromic type of anaemia is rare in coeliac disease, but has been noted to occur in cases that continue into adult life. In these cases the anaemia responds rapidly to folic acid treatment as it does in the sprue syndrome in adults.

My thanks are due to Dr. T. A. Kean for permission to publish this case.

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Reviews

ARTHRITIS AND RHEUMATISM

Diseases of the Joints and Rheumatism. A Book for Students and Practitioners. By Kenneth Stone, D.M., M.R.C.P. (Pp. 362; fully illustrated, 16 coloured plates. 30s.) London: William Heinemann Medical Books. 1947.

This well-produced and rather important book is hard to review. It is not a textbook, although it is labelled as such, for in parts the author is far too speculative; yet it is not a monograph designed to convey his ideas on certain aspects of a difficult subject, for he covers the whole field. Perhaps its keynote may be described as "academic." The first chapter on classification, for instance, is also an essay on etymology; and most of Book II comprises an ingenious but unorthodox hypothesis whereby the author shows that muscular rheumatism may be due to imbalance of the autonomic nervous system. In the last chapter he makes a determined effort to change the descriptive term, "sciatica" to "Cotugno's disease" in honour of the eighteenth-century Neapolitan physician who first wrote on *nervous sciatica.*

The chapters on anatomy and pathology are among the best in the book, and those on "How to Examine Joints" and "Rest and Movement" are also welcome. The author gives a good account of rheumatoid arthritis in which his belief in its virus aetiology is manifest. However, he does not mention certain useful though possibly minor therapeutic measures such as transfusions and insulin, and omits reference to modern work on muscle biopsy in this condition. There is also no reference to the value or otherwise of intra-articular injection of lactic acid and kindred substances in the treatment of osteoarthritis, which he otherwise discusses fully. An excellent innovation is a chapter on painful joints in children, where he includes important discussions on tuberculosis, congenital deformities, syphilis, and haemophilia. He describes well spondylosis, spondylitis, and tuberculosis in a chapter on "Diseases of the Spine." When discussing gout, however, he does not show the same individual approach as in the previous chapters, and one gets the impression that he has taken less interest in this disease and its treatment. He considers fibrositis only in the penultimate chapter, which includes a paragraph on the important experimental type in animals reported by Mervyn Gordon to be caused by virus. In discussing fibrositic nodules he accepts the existence of those of fibrotic type such as were originally described by Stockman, as well as the possibility that localized muscle spasm may be responsible for other types. He does not mention recent work on those which have been found in association with the deep fibro-fatty tissues ("fatty hernia").

The historical introduction to each chapter is welcome and interesting, but it is noticeable that there are very few references to work published since 1942. It is also somewhat irritating to find that only about half the authors quoted are distinguished by initials. Throughout the book the descriptions applicable to the various categories of rheumatic diseases are adequate and clear, and there is a short but valuable chapter on chronic ligamentous strain: he includes there an account of the common postural defects of childhood which lead to so much trouble in later life. The illustrations are beautifully reproduced and the format of the book is pleasing.

W. S. C. COPEMAN.

THE FIRST M.O.H.

Duncan of Liverpool. Being an Account of the Work of Dr. W. H. Duncan, Medical Officer of Health of Liverpool 1847–63. By W. M. Frazer, M.D., D.P.H. (Pp. 163; illustrated. 8s. 6d.) London: Hamish Hamilton Medical Books. 1947.

Dr. Duncan, as a general practitioner, saw Liverpool during its expansion to a prosperous port, when its population was swollen by thousands of labourers imported for dock construction. He liked little that he saw in his daily round of visitation. His patients lived in "court" houses, cellar dwellings, and overcrowded common lodging-houses wanting all but the most primitive sanitary arrangements and reached by narrow insanitary roads where sewers and scavenging were alike unknown. Their children were schooled in cellars. Amidst appalling poverty, more appalling habits of living, and orgies of the basest description, with three-quarters of a million persons living per square mile in the worst parts of the town, with 40,000 of the total quarter-million persons in stagnant cellars and 55,000 in airless courts, he watched typhus and typhoid carry off thousands to the overcrowded cemeteries, where graves were emptied of their contents to make way for fresh arrivals.

This and much more Duncan told in outspoken addresses to the town council and the Literary and Philosophical Society of Liverpool. He made his outstanding contribution in 1843 under the title of "The Physical Causes of the High Rate of Mortality in Liverpool," where he quoted Farr's mortality figures—for example, an infant mortality of 229 and an expectation of life, when averaged with Manchester, Leeds, and Bolton, of 19 years. There is little doubt that his fearless exposition of these horrible conditions did much to rouse the Liverpool citizens to a sense of danger and was largely responsible for the promotion of the private Bill (to become the Liverpool Sanitary Act, 1846) which preceded by two years the first great public health statute and created the first statutory post of medical officer of health. Duncan, then 42 years of age, almost as a matter of course filled this position, and his sixteen years of service are a model to all medical officers of health. An account of them shows how difficult must then have been the lot of the pioneer, forced to contend with circumstances probably worse than anything which could be imagined to-day, without staff other than his colleague the inspector of nuisances.

Virtually single-handed he strove to limit the disastrous cholera outbreaks which began in 1849, when over 5,000 people succumbed in the year. His explanation of the scourges and pestilences which ravaged his diocese was wrong by modern knowledge, for he blamed the vitiation of the atmosphere by poisonous emanations, and he had no understanding as we have to-day of the importance of personal hygiene. Yet his hypothesis was sufficiently near the truth to ensure success, and his efforts brought to what he had called "the most unhealthy town in England" the distinction of being a "leader and pioneer in the sphere of sanitation." All those interested in the pioneer efforts of this great humanitarian, whose strong sympathies for the downtrodden poor fathered the British public health service, should read Prof. Frazer's *Duncan of Liverpool.* It is a good book, entertaining to read, and most opportunely celebrating a notable centenary.

C. FRASER BROCKINGTON.

SURGICAL PATHOLOGY

Surgical Pathology. By William Boyd, M.D., Dipl. Psychiat., F.R.C.P., F.R.C.S. Sixth edition. (Pp. 858; 530 illustrations, including 22 colour figures. 50s.) Philadelphia and London: W. B. Saunders Company. 1947.

"Surgical" pathology is of course not a science but only an arbitrary selection of those parts of pathology that a particular author considers to be of practical interest to surgeons. The selection of what is "surgical" from pathology in general is, like an anthology, essentially personal, temporary, and debatable, and all books on "surgical" pathology are therefore open to criticism on these grounds. Boyd's selection emphasizes gross and microscopical morbid anatomy, and contains adequate descriptions and illustrations of most of the lesions removed or explored by surgeons. To this extent his book will, like others of its kind, serve to make young surgeons more attentive to pathology and will help them to recognize most of the ordinary diseases that they encounter. Most of the 530 illustrations show plainly what is intended, though in only a few of the 22 coloured figures does the colour help our understanding. The photomicrographs are clear and their magnifications are given. The book is beautifully produced.

There are, however, some serious omissions. It contains nothing about toxaemia and its effects, fever, immunity, the general results of haemorrhage, the regeneration of blood, anhydraemia, or the mechanism of oedema, all of which are pathological topics surely of fundamental interest to surgeons; and, while the author promises in the preface a chapter on surgical bacteriology and directions for the collection of pathological material, these promises are not fulfilled. The text

contains so many statements open to criticism that not a few pathologists will doubt whether the book is a sound guide for a young surgeon. For example, the account of the discovery of carcinogenic hydrocarbons is incorrect in many particulars; so also is that of hydatid disease. The account of bone resorption is a muddled mixture of halisteresis, osteoclasis, and Leriche and Policard's erroneous hypothesis. The three pages devoted to "status lymphaticus" contain some extraordinary statements. "Cell-rests" figure largely as the source of ovarian tumours; and the usual antiquated views about teratomas are promulgated. The author describes rodent ulcer as "one form of squamous-celled carcinoma," and omits discussion of adamantinoma from the chapter on tumours and includes it in that on cysts. He states that branchial cysts arise "from remnants of the thymic duct," and designates both carotid-body tumours and argentaffin carcinomas of the bowel as "chromaffinomas." Ganglioneuroma is said to arise "from mature nerve ganglion cells."

"All the malignant tumors [of the testis] cause the excretion of excessive amounts of gonadotropic hormone." "The thymus is never found in a normal condition in persons who have died from disease." In the developing nervous system "the medullary epithelium gives rise to two main types of cells, the spongioblast and the germ cell. . . . The germ cell gives rise to two types of cell, the neuroblast and the medulloblast," and "the medulloblast . . . gives rise to an adult type of neuroglial cell known as oligodendroglia." Adult bone cells "are end-products incapable of proliferating." In osteoclastomas "predominance of the fusiform cells indicates quiescence of the growth and a tendency to healing"; myeloid epulis is an "odontoclastoma"; and of the giant-cell tumours of tendon sheaths, "the calcified structures with the removal of which they are concerned are the sesamoid bones." Anti-teleologists may pass as figurative "the defensive fibrosis" around cancerous lymphatics, and the statement that in regenerating nerve "the axis cylinder grows out as a bulbous process in search of the missing distal end"; but they will object to being told that in inflammation "the fibrin endeavours to limit the process by attempting to shut off the inflamed area." "The sword of Damocles continually suspended over his [the patient's] head" seems anatomically scarcely the right metaphor for the tuberculous epididymis. Proper names which are misspelt include those of Hansemann, Casoni, Gömöri, Kümmell, and Jonathan Hutchinson.

RUPERT A. WILLIS.

GENERAL ANAESTHESIA

Essentials of General Anaesthesia. By R. R. Macintosh, D.M., F.R.C.S.Ed., D.A., and Freda Bannister, M.D., D.A. Fourth edition. Illustrated by Miss M. C. McLarty. (Pp. 358; 244 figures. 30s.) Oxford: Blackwell Scientific Publications. 1947.

The fourth edition of this well-known book remains substantially the same as the third. The authors have rewritten the chapter on endotracheal anaesthesia and it is now excellent. They give more information on intravenous methods of administration, and include a short chapter on trichlorethylene. We regret that in revising the book they have not taken the opportunity to insert the official names of drugs instead of their proprietary titles, such as "avertin," "evipan," and "pentothal." The terminology is not always uniform; for example, the term analgesia is used often correctly but sometimes as though it were synonymous with anaesthesia.

The book retains its original character of being an admirable introduction to general anaesthesia, with dental aspects considered in great detail. It is unsuitable for the medical student, however, since it lacks practical advice on the management of anaesthesia in common operations. It is rather surprising that no mention is made of curare or other specific relaxants of muscle.

C. LANGTON HEWER.

An Atlas of Dental Histology, by Edgar B. Manley and Edward B. Brain (Blackwell Scientific Publications, Oxford, 12s. 6d.), is a concise and well-illustrated book intended primarily for students; the practitioner or research worker will also find it useful to refresh his memory of normal appearances. The book is divided into two sections, the first containing excellent photomicrographs of normal dental tissues with explanatory notes, the second devoted to histological technique. This is a short but excellent book.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

Manual of Medical Parasitology. By C. Courson Zeliff, M.S., Ph.D. (Pp. 153. $3.75.) Pennsylvania: State College. 1947.

A summarized account, with illustrations, of parasites that infest man.

Children's Eye Nursing. By J. H. Doggart, M.A., M.D., F.R.C.S. (Pp. 135. 8s. 6d.) London: Henry Kimpton. 1948.

A manual for nurses.

Anatomical Pattern as the Essential Basis of Sensory Discrimination. By Prof. W. E. le Gros Clark, F.R.S., F.R.C.S. (Pp. 16. 1s.) Oxford: Blackwell Publications. 1947.

The 49th Robert Boyle Lecture.

The Foot and Ankle. By Philip Lewin, M.D., F.A.C.S. 3rd ed. (Pp. 847. 55s.) London: Henry Kimpton. 1947.

The diagnosis and treatment of diseases and deformities are described with many illustrations.

Die Pathologie des Stammhirns. Wolfgang H. Veil and Alexander Sturm. (Pp. 444. No price.) Jena: Verlag von Gustav Fischer. 1946.

The author investigates the relation of certain diseases to injury to the hypothalamus.

Anales de la Catedra de Clinica, Medica. By E. S. Mazzei. Vol. I (1946). (Pp. 367. No price.) Buenos Aires: Editor "El Ateneo." 1947.

The greater part comprises a number of papers on pulmonary embolism.

Grundbegriffe der Inneren Medizin. By Professor Dr. med. Alexander Sturm. (Pp. 287. No price.) Jena: Verlag von Gustav Fischer. 1946.

An introductory textbook of medicine for medical students.

For the Parents of a Mongol Child. (Pp. 20. No price.) Issued by Sunfield Children's Homes. Clent. 1946.

A pamphlet to help parents in the bringing-up of a mongol child.

Parents' Questions. By the Staff of the Child Study Association of America. (Pp. 286. 10s. 6d.) London: Victor Gollancz. 1947.

Answers over 200 questions that parents commonly ask about bringing up their children.

Happiness and Our Instincts. By R. D. Lawrence, M.A., M.D., F.R.C.P. (Pp. 71. 4s. 6d.) London: C. and J. Temple. 1948.

An essay on human desires and needs.

The First Baby. Gwen Barton, B.Sc., M.R.C.S., L.R.C.P. (Pp. 82. 4s. 6d.) London: William Heinemann. 1948.

A manual of instructions for the laywoman.

Change Your Life Through Prayer. By Stella Terrill Mann. (Pp. 104. 7s. 6d.) London: Skeffington. 1948.

A discussion of the specific methods and purposes of prayer.

Burning Gold. By Robert Hardy Andrews. (Pp. 383. 12s 6d.) London: Hurst and Blackett. 1948.

A novel of a doctor in an eighteenth-century setting of piracy.

Les Dérivations Précordiales. By L. Deglaude *et al.* (Pp. 143. No price.) Paris: J. B. Baillière. 1947.

An account of electrocardiography with precordial leads

Die Lungentuberkulose Beim Erwachsenen. By Dr. Hermann Weber. (Pp. 417. 75 Swiss francs.) Vienna: Verlag Wilhelm Maudrich. 1948.

A general clinical account of pulmonary tuberculosis.

Child Guidance. By William Moodie, M.D., F.R.C.P., D.P.M (Pp. 48. 4s. 6d.) London: Cassell. 1947.

A short account for the general practitioner

Vegetarian Recipes. By Ivan Baker. (Pp. 83 1s 6d.) Manchester: The Vegetarian Society. 1947.

A collection of food recipes for vegetarians

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THE DEBATE ON THE ACT

The Government took an unprecedented course in arranging for a debate in the House of Commons to approve the provisions of an Act passed in 1946. The debate was obviously timed to take place before the end of the plebiscite, with a view, no doubt, to influencing those medical men who have not yet returned their forms. As the *Manchester Guardian* put it: "The Government and the Labour Party are more upset by the attitude of the British Medical Association to the National Health Service Act than by any campaign conducted by any other organization against provisions of Labour legislation introduced during this Parliament." Mr. Bevan's colleagues have hastened to give him support. The Minister of Defence's attack on the doctors was followed by some disturbing observations by the Chancellor of the Exchequer, Sir Stafford Cripps, on Feb. 7. "There is," he said, "a dangerous spirit abroad among certain groups who seem to think their own interests and opinions ought to overrule the decisions of the nation. Such an attitude appears to be adopted by the leaders of the doctors at this moment, and it is a very unfortunate attitude because it strikes at the very root of democracy." In our correspondence columns this week Mr. Reginald Payne draws attention to what Sir Stafford Cripps's ideas of democracy are. We note in particular this statement: "It would probably be better and more conducive to the general peace and welfare of the country for the Socialist Government to make itself temporarily into a dictatorship until the matter could again be put to the test at the polls." These were the words of Sir Stafford Cripps in a volume of essays called *Problems of a Socialist Government*, and now we find his observations as Chancellor of the Exchequer on the doctors last week immediately followed by this sentence: "It is essential that we should get a general agreement among our people to act on sound economic lines; the alternative is likely to prove to be some form of totalitarian Government." And he goes on: "This deplorable development, so contrary to our national character, is one that the present Government will use every endeavour to prevent—as it can be prevented if wise action is taken." This was a threatening prelude to the debate on Monday of this week, especially as Mr. Bevan had previously asserted the right of the medical profession to make vocal its individual and collective opposition to the Act, and the Act itself gives the medical man the right not to enter the National Health Service.

Mr. Bevan, opening the debate for the Government, continued to show the intransigent mood in which he met the Negotiating Committee on Dec. 2. He said that during the past eighteen months there had been in various papers a spate of propaganda misrepresenting the facts of the National Health Service Act. There had, he asserted, been a campaign of personal abuse by a small body of persons who did not really represent the doctors of this country. He accused the B.M.A. of having failed to inform the medical profession of the facts of the National Health Service Act, and made a vicious attack upon what he described as "a small body of politically poisoned people" who had decided to oppose the Act. He said that the matter had been obscured by a smoke of personal misrepresentation, and that when he met the Negotiating Committee he was presented with a printed circular rejecting every important provision in the Act. He was dealing with a body offering wholesale resistance to the implementation of an Act of Parliament. "It looks," Mr. Bevan said, "like a squalid political conspiracy." He referred also to "organized sabotage," and accused the B.M.A. of exceeding its just constitutional limitations.

It is difficult to reconcile this fierce and unjust attack on the Negotiating Committee and the B.M.A. with Mr. Bevan's remark in the speech that he was desperately anxious to get doctors into the scheme harmoniously and enthusiastically. Mr. Bevan's accusation of misrepresentation is unfounded. The contents of the Bill and then of the Act have been fully described in this *Journal*, and we published in December last, as well as the statement of the Negotiating Committee, the Minister's two-part reply to it. Indeed the B.M.A. issued both these documents to every doctor in the country. The medical profession has been given the fullest opportunity for understanding exactly what is in the Act, and was informed of Mr. Bevan's financial proposals put before the Negotiating Committee on Dec. 3. The assertion that he is the victim of "a squalid political conspiracy" and that the profession is being misled by a small clique in the B.M.A. is complete nonsense. As he will probably not believe any assertion on our part that the B.M.A. is organized on sound democratic lines, we may give him the evidence of Sidney and Beatrice Webb in their Fabian report on professional associations.[1] "The British Medical Association," the Webbs stated, "is, alike in its constitution and in its functions, one of the most highly developed and most efficient of all British professional organizations. . . ." In 1902 "a complicated constitution was adopted including all the devices of advanced democracy; not only a carefully devised representative body and an elaborately constituted Executive Council, but also provision for the Referendum, the Initiative, and the Recall. The supreme body is now the representative meeting. . . ." It is necessary to state again that the Representative Body is the policy-making organ of the British Medical Association and that the function of the Council is to execute the policy it lays down.

Although Mr. Bevan wants the enthusiastic and harmonious co-operation of the medical profession he still refuses to go even half-way to meet their wishes. He asserted that the ownership of goodwill—referring to this as "patients to be bought and sold"—was "a blot upon our medical system." He again defended the universal small basic salary as providing an opportunity for young

[1] *New Statesman*, Special Suppt. on Professional Organizations, April 21, 1917, 9

doctors to live decently while establishing practice. He argued that it was constitutionally impossible to give doctors the right of appeal against dismissal from the Service, and in this, it may be noted, he was supported by the speaker for the Opposition, Mr. R. A. Butler. On partnership agreements, he said that with the help of the Lord Chancellor and the Attorney General he was setting up a Committee to look into the question and was prepared to have an amending Bill on this. This is a concession he has made, and it was a pity that he missed the opportunity of making it when he met the Negotiating Committee in December. Mr. Bevan claimed that there had been a long series of concessions on his part and not one on the part of the medical profession. In saying this he ignores the fact that the medical profession has made two large concessions by agreeing to take part in a public medical service open to the whole community, and in agreeing to the operation of a State hospital service.

In speaking for the Opposition Mr. Butler stressed that the main issue of the controversy was not on financial terms: "If the doctors stay out it will be due to conscience"; and he added later, "You cannot nationalize conscience." The Minister, Mr. Butler said, was misleading the country and was approaching July 5 without the co-operation of the medical profession. That things had been allowed to drift so far was another example of the incompetent administration of the present Government. He ended by pleading for good will, tolerance, and common sense.

The results of the plebiscite will soon show whether or not collective opposition is to be offered to the Act in its present form. If the Noes are in the sufficient majority the organized medical profession will have a duty to offer such opposition. If Mr. Bevan chooses to call this sabotage he might reflect upon this Fabian advice given by Sidney and Beatrice Webb. What they describe as the most important function of all professional organizations is this: "This is the function of independent, authoritative criticism of the Government of the State, alike in its central and its local administration, and of responsible advice both to the Legislature and the Executive, on matters in which the profession has special competence. One of the gravest drawbacks of the bureaucratic administration which is involved in all enterprise on a large scale, and therefore especially in Government and in Consumers' Co-operative Societies, is the immunity from expert criticism which is now secured by official secretiveness and departmental discipline, and the practical monopoly of access to the mind of the Minister or governing committee possessed by the departmental chiefs. We know of no effective organ of criticism except that which might be afforded by professional organization."

As the main professional organization of the medical profession the B.M.A. will continue to voice authoritative criticism of the Act and continue to oppose it in its present form if the profession by its vote instructs it to do so. What Mr. David Eccles described in the debate as "the British experiment to combine national planning with individual freedom" is not being helped to a successful conclusion by the present Minister of Health.

ATOMIC ENERGY AND INDUSTRIAL HAZARD

Although the original Smyth report on atomic energy[1] provided much information on the more picturesque side of industrial health services within the Manhattan Project, little was said at the time about the large amount of physical and biological research which lay behind the routine precautions established. We were told of pocket radiation meters shaped like fountain-pens, of a device known as "Sneezy" which measured the concentration of radioactive dust in the air, and of exit gate alarms which would call attention to passing contamination. Also, and in the interval, the recording instruments designed for use in British atomic energy establishments have been exhibited.[2] On the other hand, there has until very recently been a general lack of information regarding the biological basis of the safety standards adopted, although research directed towards the generation of useful energy from nuclear sources is already proceeding, and some supplementing of wartime biological researches is clearly desirable. The recently published report for 1946 of the Chief Inspector of Factories repeats the accepted statement that the complete enclosure of processes for the chemical separation of radioactive substances must be accepted as necessary, and it has been earlier indicated that such processes will be carried out where required by the Atomic Energy Establishment. But on the wider medical and radiological questions which must also have been receiving consideration little information has been allowed to emerge, apart from such reports as have lately been published of detailed, mostly wartime investigations in the United States.

There appear to be three main sources of potential danger. The first is the effect of long periods of whole-body exposure to various types of irradiation. This is a subject, as Dr. R. S. Stone pointed out in summing up a symposium lately held by the Radiological Society of North America,[3] on which previous information has been very limited. The second risk is the accidental ingestion of minute quantities of radioactive substances of long life with effects similar to those known already to be produced by radium. This is a new problem only in the sense that the absorption pattern for each radio-element must be different in some degree from that of all others, and therefore a large volume of detailed investigation has been necessary. It was to these two problems, and mainly the first, that the reports comprising the symposium already mentioned were devoted. The third risk, about which little information has so far been published, is a combination of these two. It is evident that if the radioactive substance ingested is either uranium or plutonium, the atoms of which may be split by exposure to slow neutrons, as in the normal working of a nuclear pile,[4] then subsequent exposure of the body to slow neutron irradiation may produce internal effects of a special character. This is equivalent to the statement that the sum of the first two risks may be more

[1] *Atomic Energy*, 1945, p. 90, H.M.S.O.
[2] *Catalogue of Thirty-first Exhibition*, 1947, p. 258, Physical Society.
[3] *Radiology*, 1947, 49, 364.
[4] Chadwick, J., *British Medical Journal*, 1947, 1, 263.

than simply additive. Against all these possibilities routine precautions can be and have been taken, and in relation both to the urgency of wartime work and to the total number of personnel employed the two fatal cases which have been mentioned in the U.S.A. must be judged to represent an extremely high standard of industrial medicine. The reports now to be examined represent part of the contribution of biological and medical research to this result.

The normal working of a nuclear pile, as Dr. Stone has reminded us, "produces recoil nuclei, alpha rays, beta particles, fast neutrons, and gamma rays in intensities never before dreamed probable or possible." Beginning with the most familiar of the many types of radiation studied, Bloom[5] concludes that the alleged stimulating effect of sufficiently small doses of *x* rays can now be dismissed as legendary. In the related case of gamma radiation the most important practical conclusion from a long series of experiments by Lorenz and others[6] at the National Cancer Institute, with mice, guinea-pigs, and rabbits as their test material, is that no satisfactory biological test of early damage is yet available. "The blood picture," Lorenz states, "is of little value in detecting damage. Carcinogenic action and sterility effects dominate the picture of radiation injury." As applied to human beings the latter statement might perhaps still be queried on the score of insufficient evidence. In the meantime it is of biological interest at least that damage to the ovaries of mice should be irreversible and cumulative, whereas that to testes is "reversible and cumulative only to a certain degree." And on the main issue of the non-reliability of haematological effects for early diagnosis Jacobsen and Marks[7] are in agreement. In those liable to repeated exposure any departure from the normal should, they consider, be interpreted as "serious."

A wider survey by Prosser and others[8] at the Metallurgical (better known as the Argonne) Laboratory, Chicago, leads to the at first sight comforting conclusion that "every kind of ionizing radiation is similar in its clinical action, whether penetrating external radiation or internal radiation from deposited material." The only exception is external radiation with beta particles—that is, electrons—which "probably kill by a different mechanism," and which Raper[9] has shown are absorbed to the extent of 80% in the rabbit by approximately the depth of the hair follicles. It has also been established by the same investigator that beta particles and gamma radiation are additive in their effects to the extent of about 50%.

Clearly, however, it is quite one thing to accept Prosser's general conclusion upon the general similarity of effects and quite another to compare quantitatively the effects of different types of radiation. Zirkle[10] has attempted this in a series of experiments in which mice, in batches of twenty-four, were exposed in special bismuth containers introduced on mechanically controlled trolleys into two tunnels within the concrete shielding of a nuclear "pile." Here he had to contend not only with slow neutrons, which through the disintegrations they produced in body tissues made the biggest contribution to mortality, but also with fast neutrons, gamma radiation, and with radioactivity induced in the mice by the radiation to which they were exposed. It was accordingly necessary to subdivide these different effects by a mixture of theory and assumed biological equivalence, and then to compare the whole with those produced by a single known source of radiation. Numerical agreement was as good as could be expected, and is taken "to exclude the possibility or fear" that there might be some unknown further mechanism of greater hazard. None the less, the final impression both from this contribution and a second by Henshaw and others[11] at the Clinton Laboratories must be that further work is badly needed on the numerical factors relating these different types of radiation.

The most important work on the ingestion of plutonium, other artificially produced radioactive elements, and the radioactive fission products formed in nuclear piles has been that of Hamilton[12] at the Crocker Radiation Laboratory, California. Some of his results have already been demonstrated in London under the auspices of the Medical Research Council, and the published record strongly confirms the great potential interest of this type of investigation to knowledge of, for example, bone growth and structure. This arises from small but apparently significant differences between the autoradiograph patterns resulting from the bone absorption of different radio-elements. But in relation to probable clinical effects the most important findings are that a large proportion of the elements lanthanum, cerium, americium, and curium find their way to the liver; and that, with the exception of strontium, deposition within the bones is not in the mineral structure but appears to be localized in, or adjacent to, the osteoid matrix. This implies that radiation, thus locally produced, could readily enter the marrow cavity. A further point that might affect the future use of the shorter-lived radioisotopes, which alone can be used therapeutically, is that the physical state of the ingested material—for example, as a colloidal emulsion—may affect appreciably its distribution within the body.

For further information under the last main heading—the disintegration by neutron irradiation of fissionable material previously ingested—it will be necessary to await publication of further reports. For the present it is possible only to quote a single experiment[13] in which the injection of colloidal uranium, followed by neutron irradiation, led to the virtually total destruction of the spleen of a mouse. The significance of this result is that uranium, although much less intensely radioactive than either plutonium or radium, must be regarded as an equally dangerous contaminant for the atomic energy worker and also the nuclear research worker for whom neutron exposure may be a possible contingency. The whole matter is clearly of great complexity. And although the health record in American work has been such as to command confidence in the system of physical measurement which was adopted from the first, it must appear also that wartime biological research requires to be consolidated and extended.

[5] *Radiology*, 1947, **49**, 344.
[6] Ibid., 1947, **49**, 274.
[7] Ibid., 1947, **49**, 286.
[8] *Radiology*, 1947, **49**, 299.
[9] Ibid., 1947, **49**, 314.
[10] Ibid., 1947, **49**, 271.
[11] *Radiology*, 1947, **49**, 349.
[12] Ibid., 1947, **49**, 325.
[13] *Science To-day*, 1947, **2**, 338.

TUBERCULOSIS OF THE FEMALE GENITAL TRACT

Tuberculosis of the female pelvic organs is one of the most baffling of all the major gynaecological problems. It occurs mainly in young women in the childbearing years. Diagnosis is often far from easy and the treatment best adapted to give a cure with the minimum of disturbance of function may be hard to attain. The Swiss journal *Gynaecologia* devoted a recent number entirely to this problem. There are two review articles, the first and longer, by Held,[1] dealing with the aetiology, pathology, clinical features, and diagnosis, and the second, by de Meuron,[2] discussing treatment.

The first description of the disease was apparently given by Morgagni in 1779, when he recorded a case of peritoneal and genital tuberculosis in a girl aged 14. Held has collected some figures on the incidence of the disease. In necropsies on females the incidence is 1.5 to 3%, and in histological material taken from females suffering from all forms of tuberculosis it is 4 to 6%. Of patients admitted to hospital for gynaecological disorders 1 to 2% are affected as against 10 to 15% of patients operated on for swellings of the adnexa. The Fallopian tubes are affected in 80 to 90% of cases of pelvic tuberculosis, the uterus in 50 to 70%, the ovary in 30% ; infection of the uterus alone is seen in 10 to 15% of such cases. Held agrees with the accepted view that primary infection of the genital tract occurs very rarely, if ever, in women, and goes on to discuss the relation of pelvic tuberculosis to tuberculosis elsewhere in the body. On this point some of his figures are unconvincing owing to the small numbers quoted.

His description of the pathological anatomy is along conventional lines, and a more interesting section is that on diagnosis. The woman with pelvic tuberculosis is almost invariably sterile. Work by Sharman[3] and others is quoted to show the relatively high incidence of tuberculosis of the genital tract in females complaining of primary sterility. Menstrual disturbances of all types from amenorrhoea to menorrhagia and metrorrhagia are common. Held concludes that on the diathesis, other tuberculous lesions, and the local findings, diagnosis can be made with certainty on the clinical findings alone in 37% of cases. Bacteriological and histological examinations are necessary to establish the diagnosis in the remaining cases.

De Meuron gives figures collected from the literature to show that the results of surgery compare unfavourably with those of the more conservative methods. Operation carries a fairly high initial mortality, and owing to bowel adhesions the formation of a fistula is a common complication. In his opinion the chief indication for surgery is to establish the diagnosis where there is uncertainty ; it is also useful in evaluating the type and extent of the lesions and for dealing with such localized foci as pyosalpinx and hydrosalpinx and excising masses of caseating tissue. Among conservative measures he favours heliotherapy. Prof. Rollier gives a brief description of his method of treatment and the results obtained at his clinic at Leysin. Favourable results are also claimed following *x*-ray therapy, though these are considered inferior to those of heliotherapy and have the further disadvantage of causing more constitutional disturbance. De Meuron considers that tuberculin treatment is losing favour, though he is a supporter of prophylactic vaccination with B.C.G. His conclusion is that the main aim of treatment must be to obtain a permanent clinical cure, since it is rarely possible with the means at present at our disposal to obtain a perfect anatomical or functional cure.

1 *Gynaecologia*, 1947, **123**, 265.
2 Ibid., 1947, **123**, 319.
3 *J. Obstet. Gynaec. Brit. Emp.*, 1944, **51**, 85.

These are both highly competent articles. It is doubtful if the average clinician is sufficiently aware of the high incidence of female genital tuberculosis, though the disease is important from many aspects. It affects an important section of the community, the women of childbearing age, and it is a far from negligible factor in female sterility. Endometrial biopsy to exclude tuberculosis should indeed be a routine investigation in cases of sterility. There are also important implications in the field of hygiene, social medicine, and epidemiology. Many of these infections are undoubtedly milk-borne and serve to emphasize yet again the importance of providing a safe milk supply.

SULPHONAMIDE ALLERGY

As early as 1937 Hageman and Blake[1] recognized that untoward reactions to the sulphonamides might be of an allergic nature. It was later suggested by Erskine[2] that such reactions might be mediated by the combination of sulphonamides with serum proteins, and this has since been confirmed by other workers.[3,4] In 1942, French and Weller[5] described the appearance of interstitial myocardial lesions rich in acidophilic cells in subjects known to have received one of the sulphonamides within 30 days of death. Similar focal lesions were found in other tissues and comparable reactions were produced experimentally in animals.

More, McMillan and Duff[6] have recently reported that in a series of 375 necropsies performed on patients who had received sulphonamides 22 cases were found with lesions attributable to sulphonamide medication. Many of the lesions were identical with those previously described in the literature—namely, focal necrosis of the bone marrow, aplasia and immaturity of the bone marrow, agranulocytosis, massive hepatic necrosis, focal necrosis of the liver with hepatitis, interstitial myocarditis, nephrosis, and inflammatory lesions in arteries and arterioles. In addition they found a granulomatous reaction in thirteen of the cases, and a splenic trabeculitis in six. The lesions consisted of tissue destruction and proliferation of the reticulo-endothelial cells, differing only in the phase and intensity of the reaction. From a comparison with a control series of 400 necropsies performed in the pre-sulphonamide years, the authors conclude that the changes described were all caused by sulphonamide therapy. Clinical evidence of hypersensitivity was associated with all the types of lesions discovered. Their close similarity to those produced by foreign protein sensitization is considered proof that they are allergic in origin. These reactions alone were responsible for the death of seven of the patients and were a major factor in the death of a further seven.

French[7] has also recently published his findings in 76 necropsies and 2 skin biopsies of patients apparently sensitized to the sulphonamides. In practically half of the cases there had been symptoms of sensitivity, especially in the skin. Lesions similar to those previously described were found in most organs, but more frequently in the heart, liver, and kidneys. French is surprised that so little attention has been paid to the possible effect of the sulphonamides on the heart. From his series it is justifiable to conclude that any skin reaction other than simple erythema should contraindicate the continued use of any sulphonamide drug.

1 *J. Amer. med. Ass.*, 1937, **109**, 642.
2 *Brit. J. vener. Dis.*, 1939, **15**, 260.
3 Wedum, A. G., *J. infect. Dis.*, 1942, **70**, 173.
4 Davis, B. D., *Science*, 1942, **95**, 78.
5 *Amer. J. Path.*, 1942, **18**, 109.
6 Ibid., 1946, **22**, 703.
7 Ibid., 1946, **22**, 679.
8 Ibid., 1946, **22**, 665.

French emphasizes the danger of the indiscriminate use of the sulphonamides for prophylaxis or in the treatment of minor infections.

These views on the dangers of sulphonamide therapy are confirmed by Lichtenstein and Fox,[8] who found necrotizing arterial lesions resembling periarteritis nodosa with focal visceral necrosis at the necropsy of a patient who died after treatment with sulphathiazole. Approximately 0.5 g. of sulphathiazole had been introduced into a clean surgical wound; the subsequent development of fever and vesicular rash had been attributed to infection, and further sulphathiazole was administered orally for six days before the true nature of the condition was recognized and the drug stopped.

PHYSIOLOGY IN THE FOREST

In Sweden the number of men entering the lumbering trade has gradually been falling off, and so the familiar problem of making better use of smaller numbers is assuming more and more importance. Lumbering is an extraordinary job in many ways: it includes the actual felling of the tree and all the subsequent manipulations such as pruning and sawing into appropriate lengths, with subsequent stacking of the wood. The work is individualistic, and it has always been left to the lumberman himself to decide how many hours a day he works or whether he even works at all. He may live at a very varying distance from where felling is going on, and in the winter, or dark period of the year, there may be fewer than five hours a day in which any work can be done at all. Lumbering is probably the hardest physical job in the world, and it needs an energy output of 5,000–6,000 calories per day, so that it is clearly impossible to transfer the ordinarily accepted industrial regime of work to a job like this. It was therefore decided to institute a study into the industrial health of lumbermen, and a paper by Lundgren[1] is the first instalment of this work.

Two questions were posed: can lumber work be done all the year round, and what should be the length and organization of the working day? Lundgren's study does not pretend to be anything other than purely physiological. He took five trained lumber workers whose ages ranged from 26 to 55 years and put them to work on a fixed time schedule for from 9 to 14½ months. Each day was planned so that they spent defined lengths of time eating and working, and the total time which they spent in the forest varied from 7½ hours on the shortest type of experimental day to 10 hours on the longest. The findings showed that there was a slight improvement in the functioning of the oxygen transport apparatus as judged by the daily resting pulse, arterial blood pressure, and the Schneider index, thus suggesting that physiological learning or training was still going on. There was a slight rise in the pulse rate as the day's work went on, which was greatly accentuated if the subject had a chill or drank alcohol. The body temperature was found to have its usual diurnal rhythm, but no seasonal variation could be detected. Untrained men, moreover, had a higher temperature for a given amount of work than trained. Estimation of the blood sugar showed that there was no relation between its height and physiological exhaustion, but one of the most interesting positive findings, which incidentally is omitted from the author's summary, was that throughout the experimental period, notwithstanding some short-term fluctuations, the weight of each of the five subjects gradually rose.

Purely physiological measurements of this kind, valuable though they be, are but a relatively crude way of assessing human health, and should not form a basis for any executive action until they are matched by the more delicate criteria of attitude, performance, and morbidity; but so far as it goes this study suggests that lumbering can be done all the year round, and that even a ten-hour day is within a trained man's physiological capacity.

[1] *Acta physiol. scand.*, 1946, **13**, Suppt. 41.

URETHANE AS AN ANTISEPTIC

The treatment of wounds infected with Gram-negative organisms still presents a difficult problem. Phenoxetol has not been uniformly successful. Streptomycin, though often strikingly successful, is not yet generally available. Urea and its derivatives are among the few substances with a greater action on Gram-negative bacilli, such as *Ps. pyocyanea* and *Proteus* and coliforms generally, than on the Gram-positive pyogenic cocci. Weinstein[1] showed that both urea and urethane, the latter being the more active, are bacteriostatic and to a limited extent bactericidal to Gram-negative bacilli. Their effect is enhanced by sulphonamides and they neutralize the sulphonamide-inhibiting effect of *p*-aminobenzoic acid. More recently Weinstein[2] has studied propyl and butyl carbamate on similar lines. They exert the same effects to an even greater degree, being about three and six times, respectively, as active as urethane, which is more than twice as active as urea.

Urethane has now been given a clinical trial as a wound antiseptic by Howe and Weinstein.[3] A solution containing 10% of urethane and 1% of sulphanilamide was used in 33 cases; 10% urethane alone appeared to give equally good results in six cases. The usual method was to saturate dressings with the solution; more solution was applied every four hours, without removing the gauze in contact with the wound. Bacteriological studies showed that this treatment was usually successful in eliminating Gram-negative organisms and particularly *Proteus* or *Ps. pyocyanea*. Gram-positive organisms were unaffected as a rule, but Weinstein has pointed out previously that urea derivatives and penicillin can be combined in a single application if necessary, and clinical studies of its usefulness are projected. Urethane does not seem to delay wound healing and has no undesirable systemic effects, except that if applied to a large area it may be absorbed in sufficient quantity to cause nausea and vomiting.

THE HALF-YEARLY INDEXES

The half-yearly indexes to Vol. I of the *Journal* and the *Supplement* for 1947 have been printed. They will, however, not be issued with all copies of the *Journal* but only to those readers who ask for them. Any member or subscriber who wishes to have one or both of the indexes can obtain what he wants, post free, by sending a postcard notifying his desire to the Accountant, B.M.A. House, Tavistock Square, London, W.C.1. Those wishing to receive the indexes regularly as published should intimate this.

We announce with regret the death, on Feb. 4, of the Rt. Hon. the Earl of Derby, K.G., P.C., G.C.B., G.C.V.O. Lord Derby was an Honorary Member of the British Medical Association, being elected on July 19, 1912, when he was Lord Mayor of Liverpool and Chancellor of the University of Liverpool.

[1] *J. Immunol.*, 1946, **54**, 117, 131, 145.
[2] Ibid., 1947, **56**, 195, 203.
[3] *Surg. Gynaec. Obstet.*, 1947, **84**, 913.

NURSING AND HUMAN RELATIONS

THE TASK OF THE NURSE-ADMINISTRATOR

Nurses to the number of 250 from all parts of the country assembled at the Royal College of Nursing in London on Feb. 2 for a three-day conference at which matrons, senior administrators, and psychologists discussed matters relating to administration and human relations. At each session, after a few remarks from about three announced speakers, the members split up into small groups according to region and services, each appointing a speaker and drafting a number of questions, which afterwards, in full session, were put to the openers, who acted as a kind of "brains trust." In this way a real exchange of ideas was obtained.

Lord Chancellor's Tribute

Lord Jowitt, the Lord Chancellor, who opened the conference, said that the nursing profession was the finest into which any woman could enter. There were only two sets of people in this country who commanded universal admiration—the nursing profession and His Majesty's judges. "I am an elderly man and, like most elderly men, encrusted with prejudices, and I should not be happy if the doctor who attended me was not a man; but, God knows, I should be in utter misery if the nurse who attended me was not a woman." To remedy the nursing shortage, the Lord Chancellor continued, there were two possibilities: to reduce the potential number of patients, and to increase the number of nurses. The achievement of the first objective depended on the work of scientists and doctors and all who had the sense to realize that prevention was better than cure. How to increase the number of nurses he did not know. It had been stated that there was a considerable wastage among girls who, having gone in for hospital nursing, found that they were called upon to do things which were really no part of nursing training at all; also that the freedom of nurses during their off-duty time was liable to interference. He believed that there was little or no ground for those criticisms to-day, but, as in other industries, the mistakes of the past carried their shadow into the future. If those evil traditions which had attended nursing service in the past had now been broken he thought that the fact should be proclaimed in some dramatic way.

Running a Hospital

Of the various speeches by directors of business training, personnel managers, education secretaries, and hospital governors, one of the most stimulating was by Prof. James M. Mackintosh, dean of the London School of Hygiene and Tropical Medicine. There had always been a sharp distinction, he said, between the clinical and administrative sides alike of medicine and of nursing, though there was no reason why rivalry should become acute conflict. The hospital was primarily an institution for the sick. Its object was to restore the sick to health, and for that purpose the clinical side was supreme. The ward sister was an indispensable part of the clinical unit. With the physician or surgeon, as the case might be, she bore the responsibility for the patient. But the hospital in addition was a business organization, involving innumerable problems of business management—maintenance of structure and equipment, purchasing and catering, financial responsibilities (which would not disappear, and might not even grow less onerous, under the National Health Service), public relations, and so forth.

It must be realized, said Prof. Mackintosh, that the hospital administrator was a specialist in his or her own sphere. The career of the administrator was parallel with that of the clinician, highly specialized, and requiring intensive postgraduate training. Speaking as a member of a Regional Board, he said he thought the aim of the Boards would be to place the administrator neither above nor below the clinician. Much of the controversy as to whether the administrator should be basically a doctor or a nurse was quite sterile, because no one decided that he or she was going to be an administrator at eighteen. It was not the basic education, whether in medicine or nursing, which made the administrator. The gift of administration was a later discovery, to be developed by postgraduate training. "The more I see of the regional hospital system the more I discover a widening scope for the nurse-administrator. The creation of an administrative division in nursing, having to do not with one hospital but with a group of hospitals, will soon become an urgent necessity."

Hospital Staff Relations

The opening of the conference to general discussion let loose a flood of questions. How far did the new ideas of human relationships in hospitals cut across professional etiquette? How could the democratic spirit be maintained without undue familiarity? Was it true that strict discipline was the result of a feeling of insecurity on the part of the disciplinarian? How was loyalty to a committee to be reconciled with what the matron or sister or nurse considered necessary for the patients? Was the common resentment against authority the result of the frustration of the desire to assist in the creation of such authority?

As for the nursing shortage, it was suggested from the platform and warmly applauded by the nurses that more might be done in the way of idealistic appeal. A lot of people, said one speaker, wanted to work in hospitals because those were places where the sick were made well. Let the staff, down to the floor scrubbers, be told what the hospital was doing, and about their part in it.

Negotiating Machinery under N.H.S.

The final session was devoted to the subject of negotiating machinery. Lord Rushcliffe, who was chairman of the Nurses' Salaries Committee, said that that committee was the best example of negotiating machinery he had ever known. Each of its panels put its case with skill and conviction, and the underlying feeling was that what mattered was not whether this point was gained or lost but the welfare of the profession as a whole. He supposed that under the new Act the committee would come to an end and something in the nature of a Whitley Council would be set up. He hoped that such a council would be permeated by the same spirit as the body over which he had had the honour to preside. Of all the things that he had ever done in his public life none had given him more satisfaction or pleasure than his association with that committee.

Mr. Stanley Mayne, Assistant Secretary, Ministry of Health, who is in charge of the Whitley arrangements for the National Health Service, explained the present and future position. The negotiating machinery existing in the hospital field at the moment consisted of a national council for the staffs of hospitals and allied institutions—a piece of Whitley machinery which covered the domestic grades; a joint negotiating committee for some of the smaller professional groups, such as physiotherapists, radiographers, psychiatric social workers, and almoners; another small negotiating committee for the laboratory technicians; and a number of professional bodies—not trade unions—on the one side and the hospitals associations on the other. So far as the administrators and the medical staff were concerned no formal machinery had been established, but special committees had been set up occasionally, like the Askwith Committee of 1929. For the nurses there had been the Rushcliffe and, in Scotland, the Guthrie Committees, organizations somewhat on Whitley lines, but with outside chairmen and making decisions which were advisory only, though commonly accepted.

While the National Health Service Bill was passing through the House of Commons, said Mr. Mayne, the Minister made it clear that he wanted to develop negotiating machinery whereby people within the "industry" would have a real voice in the determination of the conditions under which they would work. What was now proposed was a series of ten councils, nine of which would be Functional Councils, grouping people of common interests and common salary ranges, and the tenth a Central Council. There would be one council for medical staff, one for dentists, one for opticians, one for pharmacists, two to cover other professional and technical grades, one for administrative and clerical employees, one for ancillary grades such as domestic workers, laundresses, and cooks, and one for nurses and midwives, covering not only the hospital service but

the related parts of the National Health Service which came under the local authorities. Each of these councils would have power to determine remuneration and all other conditions concerning people within its group. The Central Council would have no kind of suzerainty over the others, but it would deal with any question which directly concerned more than one functional group. One of the first things to be done under the Whitley procedure would be to agree about arbitration arrangements to deal with what it was hoped would be the exceptional cases in which agreement was not obtained within the council organization itself. In the nurses' and midwives' council there would be, on the employers' side, representatives of the Ministry of Health, the Department of Health for Scotland, the Regional Hospital Boards, the local authorities associations, and the boards of governors of teaching hospitals; on the employees' side the Royal College of Nursing would have twelve seats, the Royal College of Midwives six, and the major trade unions four, with appropriate representation for some of the smaller groups.

In answer to questions Mr. Mayne said it was definite that no condition would be attached to the contract under the National Health Service whereby members of the nursing profession would be required to join a trade union organization. Asked about the position of the matron, he said that at the hospital level, where the matron was a departmental head, she would be on the employers' side of the council, but at regional level the employees' side would be represented by the Royal College, which embraced all grades, including matrons, and the matron there would be on the employees' side. The Whitley Councils, he hoped, would deal with more than remuneration; they would have generally in view the increased efficiency of the public service combined with the well-being of those employed. The Civil Service had had 27 years' experience of "Whitleyism," and many suggestions had come from the staff side concerning the running of the Service. In industry, however, this aspect had been detached from the negotiating machinery and had taken the form of joint production committees.

The work of the conference was summed up by its chairman, Mr. Raymond Parmenter, director of the Administrative Staff College, to whose skill in the conduct of the proceedings was due much of the success of the conference.

DENTAL SERVICES

DISPUTE WITH THE MINISTER

The Representative Board of the British Dental Association on Jan. 31 adopted a resolution advising all members of the Association to exercise their right under the National Health Service Act, 1946, to refuse to enter the Service until the Act and its regulations had been so amended as to include the principles advocated by the Association as essential to the provision of "a satisfactory dental service for the nation." This resolution was adopted by 85 votes to 4, and a further resolution expressed the willingness of the B.D.A. to continue its discussions with the Minister to enable the Act and its regulations to be amended.

The findings of the Dental Spens Committee have not yet been announced and so the B.D.A. has not considered details of remuneration. Its objections are based entirely on points of principle. In a statement issued on the same day by the B.D.A. it was asserted that the provisions of the Act would curtail the dentist's clinical freedom and cause a lowering of the standard of treatment. The Association objected to the Minister's power to dispense with any requirements of the regulations governing the general dental service, and it insisted that there should be a right of final appeal to the High Court against the removal of a dental practitioner's name from the list. The Association suggested that the method of remuneration on which the Minister insists—payment of a fixed fee for each item of treatment, irrespective of any special skill employed or the amount of time involved—would put a premium on hurried and shoddy work. The Association would prefer a system of grant-in-aid with a fixed payment from the Ministry for each operation and complete freedom for the patient and dentist to arrive at an additional fee "according to the standard of skill, effort, experience, and amenities provided."

In the light of the experience of the Negotiating Committee a significant part of this statement is: "The way in which the Minister of Health on Nov. 25, 1947, refused all concessions on principles advanced by the profession makes it evident that he intends to enforce a system of panel dentistry for all."

Memorandum by the Minister

In reply to this statement by the B.D.A. the Ministry of Health sent to the 15,000 dentists in England, Scotland, and Wales a Memorandum by the Minister. The Memorandum is not as elaborate as that which was sent to the medical profession, but follows much the same lines of argument. There is an appeal to individual dentists and a broad outline of how the scheme will work. Local Dental Committees constituted by the profession itself for the same areas as the Executive Councils will appoint dentists to serve on those Councils. Any dentist can take part in the Service or not, as he wishes. He will also retain the right to private practice. Patients will have complete freedom of choice of dentist. When the patient approaches a dentist the first record will be on a "dental estimate form" which will include the patient's signature to a statement that he desires treatment under the Service; the dentist's formal acceptance of the patient; a chart of the patient's mouth; and an estimate of the treatment required. All normal conservative treatment will not need any prior authority. Prior authority will have to be obtained from the Dental Estimates Board for the provision of dentures, extensive and prolonged treatment of the gums, gold fillings, inlays, crowns, special appliances, and oral surgery. The Dental Consultative Committee suggested that all applicants for dental treatment should be required to undergo all the treatment needed to make them dentally fit. The Minister does not agree that it would be right "to deprive a person who is unwilling to undergo full treatment of a service which is designed to be available to the whole community and which is provided at the expense of public funds." Dentists will be asked to keep records, and dental officers of the Ministry "must be able to inspect surgeries and waiting-rooms after giving due notice."

The Memorandum by the Minister also outlines the procedure for dealing with complaints and disputes. There is provision for the setting up of a tribunal consisting of a lawyer as chairman, a dental member, and a lay member. If the tribunal decides against the dentist he may appeal to the Minister.

Rejoinder

Replying to this Memorandum the B.D.A. stated that "until Mr. Bevan retracts from his intransigent and inflexible attitude the dental profession will exercise its right to refuse to enter a service which will lower the high standard of dental treatment to a utility level." The B.D.A. in other words has reiterated its considered opinion that the general dental service outlined by the Minister "will not and cannot result in a satisfactory service for the public."

LADY TATA MEMORIAL TRUST

The Trustees of the Lady Tata Memorial Fund invite applications for grants and scholarships for research in diseases of the blood, with special reference to leukaemia, in the academic year beginning on Oct. 1. Grants of variable amount are made for research expenses or to provide scientific assistants to senior workers. Scholarships are awarded as personal remuneration; their normal value has been £400 per annum for whole-time research, with proportionate adjustment for work on a part-time basis where this has been approved. Applications must be submitted before March 31, and the awards will be announced by the Trustees in June. Further particulars and forms of application may be obtained from the secretary of the Scientific Advisory Committee, c/o Medical Research Council, 38, Old Queen Street, Westminster, London, S.W.1. The grants and scholarships are open to workers of any nationality, and in any country in which it will be possible to make payments in the coming academic year. The available information on this point regarding particular countries outside the sterling area will be supplied to intending applicants on request.

Reports of Societies

PRESSURE NEURITIS AND SCIATICA

At a meeting of the Liverpool Medical Institution on Dec. 4, 1947, with the president, Dr. H. WALLACE-JONES, in the chair, Mr. ROBERT ROAF and Mr. A. SUTCLIFFE KERR discussed pressure neuritis and sciatica.

Mr. Roaf said that two different mechanisms were commonly used to explain a sensation of pain for which there was no obvious local cause. True referred pain occurred when a deep-seated organ with a poor representation in consciousness emitted pain impulses which were interpreted as coming from a superficial area with the same segmental nerve supply. This pain was usually a severe one and was accompanied by local tenderness and increased muscle tone in the region to which the pain was referred. The second mechanism was when a nerve trunk was stimulated directly; this produced a characteristic syndrome—paraesthesia, tenderness along the nerve, hypersensitivity, muscle cramps, and ultimately wasting and weakness of muscles and anaesthesia. This syndrome might be called pressure neuritis, to distinguish it from true referred pain. Common examples were ulnar neuritis at the elbow, median neuritis at the wrist, plantar neuritis at the ankle, and the cervical rib syndrome. Most cases of so-called brachial neuritis were due not to neuritis but to referred pain from lesions in the neck and shoulder.

In many cases of sciatica the symptoms were due to referred pain from disorders of the lower part of the vertebral column; in the intervertebral-disk syndrome both mechanisms were at work. There was the severe shooting pain which was "referred" and there were also the characteristic symptoms and signs of direct pressure on a nerve. The aim of treatment was to restore permanent stability to the affected part of the spine, and this could nearly always be achieved by an adequate period of efficient immobilization.

Mr. A. Sutcliffe Kerr described the normal anatomy of the intervertebral disks and discussed the series of events which led to herniation or rupture of the nucleus pulposus through the annulus. The mode of production of symptoms was uncertain, but there was evidence that the issuing nerve root was subject to pressure by the herniated disk. If gross bone and joint changes were excluded, at least 90% of all cases of unilateral sciatica were due to disk lesions. The diagnosis could be made on the history, and the only physical signs might be limitation of straight-leg raising and spasm of the erector spinae. In the majority of cases, however, there was also some disturbance of sensation and some diminution of the ankle jerk. Gross neurological signs, such as complete anaesthesia and complete paralysis of the dorsiflexors of the foot, suggested some other pathological change.

Lumbar puncture was not necessary as a routine, and myelography was rarely performed. Both might be needed if there was any doubt of the diagnosis. Treatment was primarily conservative and not more than 10–15% of all cases needed surgical removal of the disk. The operation was best performed under spinal anaesthesia with the patient in the "knee-elbow" position on the table. The immediate results of operation were very good, and long-term results showed 60% good results, 25% fair, and 15% poor. Fusion of the lumbar spine was not recommended at the time of operation, and should only be considered subsequently if, as rarely happened, the patient had disabling pain in the back.

In conservative treatment, and for post-operative care, three weeks' complete rest in bed was essential. During the third week the patient was given exercises in bed. He was kept in hospital for one further week for physiotherapy and exercises and allowed to resume work after six weeks, but not to resume heavy work until three months later. Paraplegia might occur with complete retropulsion of the disk. The speaker had treated twelve cases. Manipulation under general anaesthesia was dangerous. Cervical disk lesions were briefly mentioned; the chief indication for operative intervention in these cases was the appearance of signs of pressure upon the spinal cord.

General Discussion

Mr. GORONWY THOMAS said a number of lesions in the lower part of the back could mimic the symptoms and signs of disk herniation and the former were far more commonly the cause of sciatica than the latter. It was always essential to rule out any deep-seated lesion such as tuberculosis, malignancy, and congenital anomalies in the lumbosacral region. Conservative treatment cured the great majority of patients with sciatica. There remained a small group which could be relieved only by removal of the disk, and in these cases the results were dramatic. He did not agree with Mr. Kerr that manipulative treatment was dangerous. Some years ago it was found that manipulations performed gently under an anaesthetic had cured 60% of cases of sciatica not associated with radiological changes in the spine.

Dr. ROBERT HUGHES said that the retropulsed disk could produce a certain syndrome. It did not follow that all cases of that syndrome were due to a retropulsed disk. The majority of cases of sciatica subsided under conservative treatment, and it would be unwise to assume that all or even the majority of them were due to disk lesions when the underlying pathology had not been demonstrated at operation. He did not agree that the presence of gross neurological signs was more suggestive of a cauda equina tumour than of a disk lesion; in the latter condition there might be considerable muscular wasting and weakness and even complete paralysis of muscles, in particular of the long extensor of the great toe.

Mr. E. N. WARDLE said that the patient with a true disk hernia gave a clear history and presented unmistakable clinical signs. There were two other syndromes which mimicked it: the torn lumbar aponeuroses with adhesions, distinguished by a history of definite injury, and the so-called osteoarthritic spine, distinguished by the age of the patient. He agreed with Mr. Roaf that conservative treatment was best, and quoted his own series of several hundred cases dealt with by suspension plaster jackets. Of those followed for more than five years 60% were cured. Removal of the disk was found necessary in only 10 cases out of 150. He agreed that manipulation under anaesthesia was dangerous in the presence of a known disk lesion.

NORTH OF ENGLAND OBSTETRICAL AND GYNAECOLOGICAL SOCIETY

The annual meeting of the North of England Obstetrical and Gynaecological Society was held in Manchester on Jan. 2, with the new President, Mr. J. E. STACEY, in the chair.

Dr. SCOTT RUSSELL (Manchester) discussed the repair of a vesico-vaginal fistula following radium treatment for carcinoma of the cervix. After mentioning the special difficulties in dealing with this type of fistula he gave details of a case in which he carried out a partial colpocleisis following the technique of Chassar Moir. The result was not quite perfect, but four months after the operation the patient was passing urine per urethram and had only a slight vaginal leakage from a tiny hole where the vaginal septum had partly broken down.

Dr. D. C. RACKER (Manchester) showed a specimen of a fibromyxoma the size of a large melon which was successfully removed from the left labium majus and the adjacent ischiorectal fossa.

Dr. J. W. A. HUNTER (Manchester) described a new operative procedure for the cure of vaginal vault prolapse following hysterectomy. The patient, aged 53, had suffered from prolapse for over twenty years, during which time she had had three operations without obtaining benefit. Dr. Hunter decided to attempt a modified fascial sling operation. A strip of the anterior sheath of the rectus was passed extraperitoneally down to and through the vaginal vault and was then brought up extraperitoneally and secured to the rectus sheath on the other side. The chief difficulty in the operation was the separation of the numerous pelvic adhesions which had followed the previous hysterectomy. The patient made a good recovery, and four months after operation the vagina remained well supported.

Mr. JOHN A. HADLEY (Lincoln) read a paper on torsion of a hydrosalpinx in pregnancy. This was based on the case of a primigravida, aged 23, who developed acute abdominal symptoms when four months pregnant. At first the most likely diagnosis appeared to be large bowel obstruction, but investigation from this standpoint gave negative results. Six days after admission a tumour was palpable in the left iliac fossa, and at operation this proved to be the left Fallopian tube distended with blood; it had undergone torsion at its inner end, but the ovary was normal. Left salpingectomy was carried out and the patient made a good recovery, having a normal confinement at the expected time. Mr. Hadley reviewed the literature which is concerned with torsion of the tube both in non-pregnant and pregnant women, and pointed out the difficulty of deciding whether the tube affected was originally normal or whether it was already converted into a hydrosalpinx. Many cases of torsion had occurred in young virgins, and if they had a hydrosalpinx it raised the possibility of this being sometimes the result of non-specific vulvo-vaginitis in childhood, attenuated tuberculous infection, or other conditions.

BONE CONDUCTION IN OTOSCLEROSIS

At a meeting of the Section of Laryngology and Otology of the Royal Academy of Medicine in Ireland on Jan. 2, with Mr. T. O. GRAHAM in the chair, Dr. R. R. WOODS read a paper on bone conduction in otosclerosis.

Otosclerosis, he said, had always been described as a typical conductive deafness. The reason for this was that until recently bone conduction had been measured only with low-pitch forks. When bone conduction was measured only with the audiometer it was seldom found to be normal in the higher frequencies except in very early cases. Otosclerosis therefore produced a conduction deafness in the early stages, later a mixed lesion, and in the later stages the perceptive element became much the more important of the two. It had been found that the fenestration operation was followed by an improvement in bone conduction in the ear operated on, the other ear being used as a control. All operated cases were surveyed, and after eliminating those whose preoperative bone conduction was normal 39 cases remained in which the average decibel gain by bone conduction in the conversation frequencies was 11.4 decibels. The figure for the unoperated ears was 1.1 decibels. A significant increase was shown by 35 cases (90%); the 4 cases with increases of 5 decibels or less were discussed. Cases showing an average preoperative loss by bone conduction of 11–20 decibels had an average post-operative gain of 10.9 decibels; those with a preoperative loss of 21.3 decibels showed a gain of 11.2 decibels; while those with a preoperative loss of 31.4 decibels gained an average of 15.5 decibels. When preoperative bone conduction loss was slight, hearing for bone conduction returned to normal. With greater degrees of loss, recovery was only partial. Audiograms illustrating all these points were shown.

There was no reason to doubt that this improvement in bone conduction was directly due to the fenestration operation. Part at least of the loss of bone conduction in otosclerosis was due to a change which was reversible and could not therefore be due to degeneration of the organ of Corti or of the cells of the spiral ganglion, or in fact to any of the usual causes of nerve deafness. It was suggested that stapes fixation *per se* caused a loss in bone conduction. Stapes fixation not only prevented vibrations from reaching the labyrinth but also impeded the response of the endorgan by limiting the mobility of the perilymph. There must be another factor involved to explain that part of the loss of bone conduction which was not reversible—perhaps a disuse atrophy. At any rate it was clear that, although bone conduction might be an indicator of the extent to which the cochlea could be stimulated under the conditions of stapes fixation, its value as an indicator of the potential maximum cochlear function was doubtful.

Some general discussion followed, and at the same meeting Mr. BRIAN O'BRIEN read a paper on 1,500 tonsillectomies in children performed in the Children's Hospital, Temple Street, and Mr. T. O. GRAHAM gave the clinical details of various cases of otitic meningitis and brain abscess.

BRITISH ASSOCIATION OF PLASTIC SURGEONS

The Annual General Meeting of the British Association of Plastic Surgeons was held in the Royal College of Surgeons on Nov. 14, 1947. The following officers were elected: President—Prof. T. Pomfret Kilner; vice-president—Sir Archibald McIndoe; honorary treasurer—Mr. R. P. Osborne; honorary secretary—Mr. J. N. Barron. This Association offers membership to those members of the profession who are interested in plastic surgery, and in particular would welcome anaesthetists and dental practitioners who might wish to join.

The Association is sponsoring the *British Journal of Plastic Surgery*, which will appear quarterly as from March of this year. It will be edited by Mr. A. B. Wallace, of Edinburgh, and published by E. and S. Livingstone, Ltd. Inquiries should be addressed to the honorary secretary at 45, Lincoln's Inn Fields, London, W.C.2.

The Chelsea Clinical Society held a dinner meeting on Jan. 13 at the South Kensington Hotel, S.W.7, with the president, Dr. Neil Maclay, in the chair. An interesting discussion on industrial medicine was opened by Dr. Langdon Lloyd, medical officer to the Ministry of Supply, and continued by Dr. Amor, chief medical officer to Imperial Chemical Industries. The discussion was added to by Drs. Keith, Eckenstein, Chadwick, Atkinson, Constad, Watney Roe, Deacon, Cutler, and Haydon. There was an attendance of over fifty members and visitors.

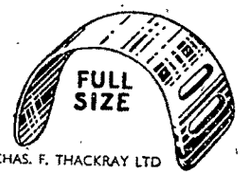
A meeting of the North Staffordshire Medical Society, with the president, Dr. Bruce Maclean, in the chair, was held in the Pathological Department of the North Staffordshire Royal Infirmary, Stoke-on-Trent, on Jan. 15. Dr. P. Stock showed a film demonstrating phase contrast microscopy. Dr. J. Ferguson, Mr. D. Wainwright, Mr. J. Grocott, Dr. J. Lindsay Boyd, and Mr. P. B. Roth showed some interesting cases. Dr. A. J. McCall and Dr. B. Godwin demonstrated a number of pathological specimens.

Preparations and Appliances

FASCIAL BODKIN FOR URETHRAL SLING OPERATIONS

Dr. WALTER CALVERT (Stockport) writes: Stress incontinence in the female is being increasingly treated by various types of sub-urethral fascial slings, introduced by the suprapubic route. I find that the actual passage of the strip of fascia is greatly facilitated by the small instrument here described.

As the illustration shows the instrument (actual size), its description can be omitted. The fascial strip is threaded first through the slot nearer the "point" and then through the end slot. The double slot is to produce sharp angulation and thus reduce the tendency of the fascia to slip out of the "bodkin," as I have called it. It can be held in most needle-holders or in a Spencer Wells forceps. Because of its thin but smoothly rounded "point" the bodkin can be trusted to dissect the urethra from the vagina without preliminary freeing, so that a cause of troublesome bleeding is eliminated. The only other special instrument required is a forceps, such as that used by Mr. C. McIntosh Marshall, of Liverpool, to hold the urethra. Other methods of passing the sling, by means of aneurysm needles, etc., seem to result in the production of a twisted rope of tissue rather than the flat tape required. The bodkin can also readily be passed through the rectus muscle in order to place the upper ends of the sling.



CHAS. F. THACKRAY LTD

I am indebted to Mr. McIntosh Marshall for trying and approving this instrument and also for introducing me to this type of operation. The bodkin is made by Chas. F. Thackray, Ltd., Park Street, Leeds, 1, who have been most patient and helpful in producing exactly what I required.

REFERENCE

Proc. roy. Soc. Med. (Sect. Obstet. and Gynaec.), 40, 7, 361–70.

Correspondence

Doctors and Dictators

SIR,—Sir Stafford Cripps has now joined Mr. Bevan and Mr. A. V. Alexander in the gravest misrepresentation of the doctors' attitude towards the National Health Service by suggesting that the will of Parliament is being flouted. The Act specifically gave all medical men in this country the right to give or to withhold their services as they think fit, and now the party politicians turn on the doctors and cry "sabotage"!

In the course of the same speech Sir Stafford used the following words:

"It is essential that we should get a general agreement among our people to act on sound economic lines; the alternative is likely to be some form of totalitarian Government. This deplorable development, so contrary to our national character, is one that the present Government will use every endeavour to prevent—as it can be prevented if wise action is taken."

It is best therefore that Sir Stafford should be his own witness as to methods of government. The following extract is taken from *Law and Orders* by Dr. C. K. Allen, formerly Professor of Jurisprudence in the University of Oxford:

"Let us compare some ideas propounded, under the title 'Can Socialism Come by Constitutional Methods?' by Sir Stafford Cripps in a volume of essays called *Problems of a Socialist Government*. The objective, we learn, is 'to seize power from the ruling class and transfer it to the people as a whole.' The manner in which popular government is to be vindicated is that 'from the moment when the Government takes control rapid and effective action must be possible in every sphere of the national life. . . . The Government's first step will be to call Parliament together at the earliest moment and place before it an Emergency Powers Bill to be passed through all its stages on the first day. This Bill will be wide enough in its terms to allow all that will be immediately necessary to be done by ministerial orders. These orders must be incapable of challenge in the Courts or in any way except in the House of Commons.' All opposition to the Government is to be treated as treachery and sabotage. If 'the capitalists' did not yield, the Government 'would be justified in overriding any obstruction it found placed in its way. . . . It would probably be better and more conducive to the general peace and welfare of the country for the Socialist Government to make itself temporarily into a dictatorship until the matter could again be put to the test at the polls.'"

The Sir Stafford of a few years ago and the Sir Stafford of to-day are speaking with but slightly different voices. It is precisely because the doctors of this country do not wish to become the unwitting or unwilling accomplices of a Government which seems determined to create National Socialism that their opposition to the National Health Act has become so strenuous. The doctors are now fighting for matters of principle and matters of conscience. Meanwhile we should do well to remember that, while Mr. Bevan would be medical dictator, Sir Stafford would have the ultimate responsibility for financial control.

If the State insists on making fantastic and monopolistic claims, then the medical profession will resist indefinitely in the interests of freedom and in the interests of the sick. Bigotry and fanaticism are not particularly English vices, but they have flourished temporarily here in the past and their political and economic counterparts are again seeking to take root. The present administration have yet to learn that the art of democratic government only begins after the verdict of the polls, and they have also to learn the truth of Spinoza's dictum that "the true end of government is liberty."—I am, etc.,

REGINALD PAYNE.

Right of Appeal

SIR,—In your report (Feb. 7, p. 264) of the meeting of consultants and specialists held at B.M.A. House on Jan. 27 you report (and correctly) Dr. H. B. Morgan as saying that I made no protest in the House of Lords against the clause of the Bill which denies the right of appeal against dismissal. I knew this statement to be untrue, but I had no copy of *Hansard* with me by which to confute it. Here is the confutation:

"The prohibition placed upon the buying and selling of a doctor's goodwill in his practice, the power of negative direction, and the refusal to allow a doctor the right of appeal to the High Court are surely matters that require amendment. *They seem to me . . . to be gross infringements of personal liberty.*" (*Hansard*, Official Report, Vol. 143, No. 128, Oct. 8, 1946.)—I am, etc.,

London, W.1. HORDER.

Telegram from Australia

Profession in Australia congratulates Council and Representative Body on its magnificent lead of Jan. 8 and hopes whole profession will stand firm in this struggle for freedom and independence.—H. S. NEWLAND, President of Federal Council.

Tell the Public

SIR,—Now that every doctor has decided upon his attitude to the National Health Service it is his duty to explain to his patients what he thinks the Act will mean to them, and how, on their behalf, he has recorded his vote in the plebiscite.

Whatever they may have read in their newspapers, it is our business, rather than the journalist's—for we know more about it than he does—to present the case to our patients. They respect our views and value our opinion on subjects other than their personal health, and they will insist, at the present time, on hearing what we think of the Health Service. But we must make our case clear. Few of us are eloquent, and most of us have difficulty in translating into words the sincere convictions in our hearts. Many of us will find ourselves unconvincing, or even inarticulate, when we try to explain a situation so complicated by strife and political controversy to patients with whom our conversation is usually homely and humanitarian.

It might be helpful if the various organizations which claim to represent the profession would issue a simply worded, short statement of what we should tell our patients. This should cater for the needs of doctors in different localities, for what the London doctor should say might not interest the inhabitants of John o' Groat's. Such pamphlets would therefore be better issued by local rather than central bodies of the various organizations.

There may be some of us who do not need, and indeed may resent, such instructions. But whether or not we welcome assistance in doing so, let us all from now onwards dutifully, conscientiously, and sincerely tell the people, for it is their concern even more than ours.—I am, etc.,

London, W.1. P. M. F. BISHOP.

Socialist Says "No"

SIR,—I have campaigned in favour of a National Health Service since I entered medical school in 1932. It is therefore with some regret that I have to cast my vote against entering into service under the present Act, and for the benefit of Socialists who, like myself, have long desired such a service feel that I must communicate some of my reasons for so doing.

First of all I see that the Act must lead fairly soon to a salaried State service, and that that in turn must lead to direction of patients as well as doctors. A Socialist service need not be a salaried service, for there are many methods of payment employed in a Socialist State better able to preserve professional freedom and the interests of the individual patient—e.g., organization into doctors' co-operatives, "piecework" (i.e., payment per item of service), or collective responsibility and a capitation payment *without* basic salary.

Secondly, I am unimpressed by the Minister's arguments against appeal to the Courts against a decision of the employing authority, a tribunal, or himself. It may be unprecedented for an employee to be able to appeal against a legal dismissal, but it is equally unprecedented for there to be only one potential employer (virtually) for the whole of any given trade or vocation, whose refusal of employment will within a very few years mean complete exclusion from earning a living by the practice of one's only profession. In these circumstances one cannot accept assurances of good will or of impartiality, but

must have a black-and-white right to appeal outside of and above the employing authority or its superior, the Minister. Especially is this so as Section 42 of the Act states only that a doctor must have the opportunity to appear before a tribunal but says nothing of the right to call witnesses or evidence, or to have representation by counsel. Again, it might be the intention, but would be better down in black and white.

Thirdly, negative or positive direction is incompatible with individual freedom, Socialist or otherwise. Each of us must have the right in law to starve wherever we might choose to try to make a living, even though that right may never be exercised and we go where there is a vacancy to which we can be appointed.

Fourthly, I see no good reason why doctors, who are in the best and most literal sense "workers by hand and brain," and very hard workers at that, should be given compensation at retirement or death, when capitalist coalowners and transport shareholders are paid out immediately in convertible stock or cash.

Finally, were I convinced I could sacrifice all these points I still could not enter into service under a man and a Ministry which has treated our elected representatives with a gross discourtesy and blank refusal to come to terms which if proffered by a capitalist board of directors to a shop-stewards' committee would probably have led to industrial dispute. The Minister has said we are fruit ripe for the picking. Let us then offer him a raspberry.—I am, etc.,

Leigh-on-Sea, Essex. A. M. GOLDTHORPE.

Whole-time Researchers and the Act

SIR,—We, who are at present engaged in whole-time medical research, have been asked to vote on Question A of the plebiscite and to state either that we approve or disapprove of the National Health Service Act, 1946, in its present form. If we reply that we disapprove, the implication to be drawn is that in greater or less measure we favour the campaign which is being conducted to prevent the Act being put into operation. Since we consider the campaign to be both ill conceived and undignified, and think that the proper approach of the medical profession should be to attempt to work the Act in a spirit of co-operation and to criticize and modify it at those points where *in practice* it is proved at fault, we cannot reply that we disagree.

Although, therefore, we do not regard the Act as perfect, we are forced by the manner in which the question is put to give it our complete approval. We hope that others faced with a similar dilemma will do the same.—We are, etc.,

J. H. HUMPHREY. E. D. BARLOW.
J. D. JUDAH. N. B. MYANT.

M.P.U. Members Resign

SIR,—The recent circular letter W.128 dated January, 1948, issued by the M.P.U. will not commend itself to those who support the B.M.A. policy. The letter is signed by Mr. L. W. Hefferman, and Drs. M. B. Bayly, Alfred Welply, and Alexander Crawford, but it has a familiar flavour reminiscent of the Minister's recent circular. We are invited to co-operate in operating and perfecting the National Health Service Act. Does any doctor really believe that when we have once espoused the new Service we shall have any power to bring about those modifications which we feel to be essential in the interests of public and profession alike?

We the undersigned have to-day resigned from the M.P.U. It is to be hoped that all other members of that Union who do not endorse its policy will do the same.—We are, etc.,

B. MCDOUGALL JOHNSON.
Gosport, Hants. TERENCE M. DORAN.

Tribute to Dr. Dain

SIR,—It does seem a little odd that in the spate of letters appearing in the *B.M.J.* there has not been one word of thanks to the Council of the B.M.A. and its Chairman. I do not know him personally any more than I had personal knowledge of Mr. Churchill whom I trusted and endeavoured to follow in 1940. Dr. Guy Dain's fearless utterance seems to me to be in the Churchillian tradition. Both are Englishmen who know how to answer a bully—even if his power is theoretically irresistible.—I am, etc.,

Ilford, Essex. R. M. NOORDIN.

Alternative Service

SIR,—I regard the plebiscite as a tragedy, in that the B.M.A. have lost the greatest opportunity they will ever see of getting for this country the health service it needs. We should not be voting pro or con for the Government Health Service. We should be voting either for the Government Service or for the B.M.A. Health Service. The B.M.A. could have proposed an amended service to which most doctors would subscribe, and such a weight of medical opinion would influence Press and Parliament, because it would be positive. If the vote against the Government Health Service is large, we are no further on—a negative vote cannot get us anywhere. I feel that the B.M.A. leaders are to blame for the present situation, and I should like to see a complete change in leadership, the present men being replaced by men with a capacity for looking forward as well as back.—I am, etc.,

Leeds, 7. R. A. MURRAY SCOTT.

An Alternative Wanted

SIR,—Having listened to several eloquent addresses by leading members of the profession and read the many communications from the B.M.A., all upon the subject of the National Health Service Act, 1946, I completely agree with the advice given that the profession should refuse to operate the Government scheme with all its difficulties, doubts, dangers, uncertainties and unsatisfactory conditions. But one also feels strongly that there is something lacking in our professional position in that we have not presented to the public, to the profession, and to the Government of the day a clear, concise, concrete alternative scheme which the profession could and would unanimously operate to the advantage and satisfaction of all those of the community who desire to avail themselves of such a National Health Service.

Surely after such a long and intense examination of the present Act it should not be beyond the ability of the profession, and of the B.M.A. especially, to quickly produce an attractive, acceptable, and workable alternative; for without such the position of many by July 5, especially of the younger members of our profession, will be untenable. With all their best intentions to remain loyal, they will be faced with the choice of turning down what to many may be an attractive appointment with professional and domestic security in which to many the advantages will outweigh the disadvantages and against which they have no alternative except the suggested B.M.A. relief fund for a few weeks.

If it is the desire of the country to have a National Health Service, let it be one designed by those who know the medical needs of the community and how best to supply them to the satisfaction of all concerned. Let us refuse to operate the present Act or any other scheme than that of our own design and provide the people with what they need, the profession with what they can unanimously undertake, and the Government with what they request—namely, a satisfactory, workable, efficient National Health Service. Let us leave the defensive negative attitude and take up an aggressively positive position, stating quite clearly that the country's health requirements can and will be provided for by a National Health Service which the medical profession has designed and will operate, and by no other, and demand that the Government implement its provisions, for the welfare of the country. Such an alternative scheme should be published as soon as possible, discussed, advertised, and if necessary voted upon before July.—I am, etc.,

Southport. E. CRONIN LOWE.

Wanted: Alternative to Salary

SIR,—Means must be found for the young doctor without money to live during his first few years of practice. We all agree with the Minister in this aim, but many do not like the proposed means—i.e., the salary. Let us then suggest an alternative means. If the Council can put before the Minister an effective scheme whereby the young doctor can practise unburdened with debt, the Minister should be willing to accept it. And if the scheme does not involve public money there would cease to be any case for "direction." In this way two

of the largest bones of contention might be buried. Let the Council not delay. Let us show statesmanship, and hope that the Minister will do likewise.—I am, etc.,

Cobham, Kent. F. A. RICHARDS.

Financing the Service

SIR,—As the shadows of the Socialist prison-house begin to close around our profession it would be well if, in addition to propounding principles, we took a hard look at some economic facts.

Even at the risk of appearing to accentuate the obvious, it must be pointed out that the National Health Service is not financially a self-balancing scheme. Contributions are collected and contractual obligations are entered into. Can the bargain be kept? It could, if the moneys were placed in a separate fund and that fund were sufficient to meet all claims. But this is not the case. Out of the £152 million which is the National Health Service budget, the sum of £32 million will be assigned out of Social Service contributions. The remainder will be a matter for Parliamentary vote, and may be revised with other Service votes according to the state of the country's finances and the political complexion of the Government of the day. Can anyone say what either will be in ten years' time? No Government binds its successors, and no profession or group of citizens could possibly enforce any rights if the State is in default on account of its having promised more than is in its power to give. It is therefore important that the medical profession should preserve the right to practise within the total national income (say £8,000 million) and not within what may turn out to be an exiguous Treasury allowance, subject to popular vote. The Government "pre-fab." which we are being asked to enter may have a floor below which we cannot fall, but the ceiling may be zero. If inflationary finance is to be the order of the day we must see that we remain free to float up with the tide, not anchored to some "rond de cuir" and thereby placed at a disadvantage compared with the second-hand dealers, ice-cream vendors, and "spivs."

It is difficult for an outsider to possess himself of sufficient red tape to measure all these financial matters, but it would appear that the Government estimate for the cost of the Hospital Service is £87 million. The present Hospital and Asylum Services are at the moment costing £60 million, and it would be reasonable to allow another 50% for extensions, making a sum of £90 million. Thus the budget is already exceeded before the staffs of voluntary hospitals have been paid at all. Has the cost of the payment of staffs, even on a modest sessional basis, ever been totalled up and included? I cannot think so.

Similarly, the allowance for general practitioner, dental, ophthalmic, and pharmaceutical services is £45 million, whereas the estimate of Colin Clark (1935) is that £45 million a year is paid in fees alone to doctors and dentists. From the latter sum specialists' fees should be deducted, as they will be charged to hospital services, but the cost of medicines, dentures, and spectacles (say at present N.H.I. figures multiplied by five), totalling perhaps £25 million, should be added. Thus a Service which might easily cost the Exchequer £70 million is to be compressed within a framework of £45 million, unless, of course, the balance can be juggled on to local rates by means of some variant of the well-known "weighting formulae," in which the number of illegitimate births is multiplied by the acreage of open spaces and divided by the number of earth-closets in the borough concerned.

I would suggest, if Mr. Bevan is finally persuaded to go back to Parliament with an Amending Act, that this should include at least an attempt at a detailed budget. This surely would be well within the capacity of the Government Statistical Department.—I am, etc.,

Bournemouth. T. R. AYNSLEY.

Compensation

SIR,—I have read all the available circulars sent to me with reference to the new National Health scheme, but I have failed to find information bearing on certain very important points: (1) What compensation or alternative arrangement has been made for the services of a doctor's wife? (2) What compensation or alternative arrangement has been made for the use of a doctor's home?—with special reference to (*a*) heating, (*b*) lighting, (*c*) cleaning, (*d*) depreciation. (3) What arrangement or alternative procedure has been made for dispensing both privately and to panel patients?

Special reference might here be paid to the dispensing fee for panel patients. This fee, with the addition of purchase tax on certain drugs, has become inadequate, and the rural practitioner finds that he is very definitely subsidizing the National Health Insurance dispensing at the present time.

(4) What arrangements have been made to compensate for telephone bills, which in a country practice can average £50 annually? (5) What arrangements has the Minister made for the supply and upkeep of Government vehicles for the practitioners in his new scheme?

All these items are and have been the sole concern of the general practitioner. It would be grossly unfair to expect him to shoulder these responsibilities without compensation.—I am, etc.,

Whalley, Lancs. CHARLES E. BROWN.

*** Dispensing is to be done by pharmacists or other authorized persons, not medical practitioners, except as ordered otherwise by regulation (N.H.S. Act, 1946, Sect. 39).—ED., *B.M.J.*

Remuneration in the N.H.S.

SIR,—Though they do not affect matters relating to the coming plebiscite, the following facts should become known to the Negotiating Committee in any future arrangements they may be called upon to make.

In the matter of remuneration under any Health Service it cannot be stressed too strongly that the same rate of capitation fee, or whatever method may be adopted, will not work in every district. Some districts are so constituted that it takes a long time to visit a few patients owing to distances. Other districts give the doctor a very hard day's work for a small number of patients—for example, a district containing retired and invalid people who require constant care. In these areas the doctor will not be able to live. He may not have more than fifteen hundred patients on his list and an expense account of over £500. It is to be hoped that these points may have the attention they deserve.—I am, etc.,

Colwyn Bay. REGINALD R. HALSALL.

Goodwill of Practices

SIR,—*The Times* (Jan. 31), in a special and leading article, suggests that the disciplinary procedure proposed in the Act will act more fairly and more favourably towards doctors than if the right of appeal to the Courts against dismissal were granted. Have our legal experts been asked to consider this?

The Minister in his recent reply to questions put by the *Lancet* has stated that the inclusion of a general basic salary makes no difference to his power to institute by regulation a full-time salaried service at any time that may be contemplated. Have our legal experts been asked to consider this? Would our case not then be answered if it were agreed that no Minister could alter a basic to a full-time salary except with the future consent of the majority of the medical profession and of Parliament?

The case for the abolition of the sale of goodwill appears to rest on the financial difficulty to be faced by most doctors in buying a practice under present-day conditions, and the sentimental difficulty in justifying private commercial transactions within a wholly National Service. Something has to be done to meet these difficulties; or I think our case falls on this particular issue.

If all practices were registered with a Medical Practices Committee or Subcommittee in each region, with up-to-date lists of practices, partnerships, assistantships, locum tenancies, and so on available, and backed by insurance companies or a medical fund, or both, then doctors could apply according to their own assessments of their requirements, receive financial aid, insure at reasonable rates, and be certain of the validity of the practices they seek to acquire. Thus the better features of goodwill could be retained, and the worst features of negative direction be removed. The Act at present gives to the Medical Practices Committee the power and favour of dispensing doctors in practices that may vary in income from £300 (*sic*) to over £3,000 per annum, as it is reasonable to suppose that most doctors, if they did not have to pay, would apply for the

higher-income practices, and a selection would have to be made. This procedure might have invidious repercussions, and it is doubtful if it would work so well as the present system, particularly if it could be modified on the lines suggested.—I am, etc.,

London, N.8. G. W. M. MACKAY.

Ownership and Appeal

SIR,—In view of the fact that the disposal of practices is one of the main issues in the present controversy, it is of interest to note that in the Questionary of '44 some 50% of the voters were of opinion that the sale of practices was undesirable. I know of one local study group which passed a resolution to the same effect.

As regards the question of appeal from the Minister to the courts, I can only wonder why this has not been brought to a head long ago in connexion with doctors struck off the panel list and the *Medical Register*, as under existing circumstances they have no redress.—I am, etc.,

Leicester. E. J. O'SULLIVAN.

"Owners" and "Workers"

SIR,—As a general practitioner who thoroughly approves of the technical aspects of the present Act, tolerates its finances, but abhors its administration, I wish to make the following point which has not so far received attention and which may be of some value when we are placing our case before the public, namely, that in the profession of medicine the "owners" and the "workers" are one and the same person. In occupations which have so far been nationalized, such as the coal mines and transport, the avowed object has been to alleviate the lot of the downtrodden worker at the expense of his capitalistic owner, so that the consumer shall eventually benefit. The owner is abased; the worker exalted and taken into partnership with the State. Such methods as this political theory demands cannot with justice be applied to general practice, where the same individual both owns his practice, sets out his daily target of work and carries it out, to stand or fall by his results as a worker, which is already the ideal of socialism—namely, a responsible worker reaping only where he has sown. The same argument holds good for other branches of the profession, and on this reasoning the Minister would be justified in asking us to be partners and colleagues, but is utterly wrong in expecting us to become his unthinking and obedient servants, as is implied by his blunt refusal to allow us to appeal to the courts or to elect the chairmen of our committees.—I am, etc.,

Cirencester, Glos. MATTHEW WESTWOOD.

Freedom to Publish

SIR,—The right to speak and publish freely is dear to all medical men whatever their political colouring. There is no doubt that on this issue the profession will always present a united front. But is this right really endangered by the National Health Service Act? Our status will not be that of Crown employees, and according to English constitutional practice a citizen may do anything within the law. As the law does not limit freedom of publication, we shall naturally enjoy that freedom. The Minister will of course be aware that if he attempted to limit it by regulation he would meet at any time in the near or the distant future with the most determined opposition. This opposition would take the form of mass resignations of the professional representatives on the regional boards and the executive councils, whose task it would be to enforce those regulations, and of a great public campaign.

In my opinion the present attitude of the Council of the B.M.A. towards the Health Act shows a total lack of statesmanship inasmuch as it tends to weaken public support for the medical profession in case we should be called upon in the future to defend concrete and read freedom. To safeguard for ourselves the public good will—and Mr. Colm Brogan (Jan. 31, p. 209) is in no way representative of the public at large—is a much more important task than opposing it now because of the fear of hypothetical dangers.—I am, etc.,

London, N.21. E. MONTUSCHI.

*** It is possible that our correspondent takes altogether too sanguine a view of the Government's attitude to freedom of publication. In reply to a Parliamentary question recently Mr. Bevan said: "In so far as I am concerned there will be no restriction whatsoever in the National Health Service on publication of *scientific or clinical* writings" (our italics). This may well imply that restriction will be placed on discussion of professional affairs in general. Such a ban already exists in the L.C.C. Medical Service. Free, responsible discussion of all aspects of professional and administrative work in a National Health Service will be essential if it is to evolve efficiently.—ED., *B.M.J.*

The Chain of Control

SIR,—Mr. Maurice Webb chides Lord Woolton because the latter champions individual enterprise which may lead to the development of monopolies and cartels. There is general agreement that such organizations can become antisocial. But with what does Mr. Webb intend to replace the monopolies? With State control. But once again the reins of power would be in the hands of the few. The plan in either case is the same. It is merely a change of the *men* in command. Provided that they sincerely have the good of the many at heart all should be well.

Any large-scale organization implies a chain of administrators, and a chain is as strong as its weakest link, be it the first, middle, or last. Many good plans have gone astray, not because of any defect in the plan itself, but because of a weak *individual* causing the whole chain of administration to snap.

Although we are being asked to vote for or against a plan, we should remember that a plan is an abstract conception which needs men to make it concrete. Thus the task of deciding how to mark one's plebiscite form is rendered very difficult. Certainly it is a task to approach rationally rather than emotionally.—I am, etc.,

London, S.W.19. BRANDON LUSH.

The Act or Liberty

SIR,—In the first place let me state that I am in favour of a new medical service but that I am very definitely not in favour of any service in which the control is vested in one man, be he Minister of Health or a professor of medicine. We must remain free men, and medicine must be free from outside control. Any service must be administered by some central authority, but this must be a body on which 75% of the members are representatives of the various groups of medical men in the service. All disciplinary control should be vested in the General Medical Council, but appeal against their decisions should be allowed before an appointed court.

Mr. Bevan, with the help of the left-wing press, is going all out to intimidate and hypnotize the profession. They say we have already lost the battle; they insinuate that we cannot withstand the economic effect of refusal to accept service under the Act; they are in fact waging an energetic war of nerves, while we are discussing the Minister's magnanimous reply to our efforts to negotiate with him. Our acceptance of service under the Act is not one of importance only to the present and future medical profession, it makes us individually and collectively the slaves of a dictator, pawns in a mad socialistic scheme for a Utopia which will eventually strangle British liberty, enterprise, and prosperity. The much-debated points concerning buying and selling practices, amount of capitation fees, etc., are relatively insignificant, obscuring the vital question by their prominence in discussions. The vital question is, Are we going to allow one Socialist Minister to browbeat our ancient and honourable profession into accepting servitude?—I am, etc.,

Wetherby. S. T. PYBUS.

Direction under N.H.S.

SIR,—In your leading article entitled "Money and Freedom" (Jan. 24, p. 153) you state that "the young man wanting to enter Mr. Bevan's service . . . will be able to work only in areas which are under-doctored, and these areas, we are told by Mr. Bevan, are at present few in number." However, Mr. Bevan has more than once stated that it is the *over*-doctored areas which will be few in number. This means that the young doctor wanting to enter Mr. Bevan's Service will have the choice of most areas in the country. For example, Mr. Bevan in his "General Comments Addressed to the Individual

Doctor," Para. 12 (*Supplement*, Dec. 20, 1947), states that "consent in respect of public practice will only be refused in those few areas where there is clearly no need for additional 'public' practice."—I am, etc.,

Bradford-on-Avon, Wilts. R. L. OSMASTON.

The New Despotism

SIR,—There are one or two passages in Lord Hewart's book, *The New Despotism*, which are worth quoting at the present time. In the chapter on "Administrative Lawlessness" he said:

"When it is provided that the matter is to be decided by the Minister, the provision really means that it is to be decided by some official, of more or less standing in the department, who has no responsibility except to his official superiors. The Minister himself in too many cases, it is to be feared, does not hear of the matter or the decision, unless he finds it necessary to make inquiries in consequence of some question in Parliament. The official who comes to the decision is anonymous, and, so far as interested parties are concerned, is unascertainable. He is not bound by any particular course of procedure, unless a course of procedure is prescribed by the department, nor is he bound by any rules of evidence, and indeed he is not obliged to receive any evidence at all before coming to a conclusion. If he does admit evidence, he may wholly disregard it without diminishing the validity of his decision. . . .

"To employ the terms administrative 'law' and administrative 'justice' to such a system, or negation of system, is really grotesque. The exercise of arbitrary power is neither law nor justice, administrative or at all. The very conception of 'law' is a conception of something involving the application of known rules *and principles*, and a regular course of procedure. There are no rules or principles which can be said to be rules or principles of this astonishing variety of administrative 'law,' nor is there any regular course of procedure for its application. . . .

"The public official is not independent. As a Civil Servant, he is liable to be dismissed at any time without notice, and without any enforceable right to compensation. One would have thought it perfectly obvious that no one employed in an administrative capacity ought to be entrusted with judicial duties in matters connected with his administrative duties. The respective duties are incompatible. It is difficult to expect in such circumstances that he should perform the judicial duties impartially. Although he acts in good faith, and does his best to come to a right decision, he cannot help bringing what may be called an official or departmental mind, which is a very different thing from a judicial mind, as anybody who has had any dealings with public officials knows, to bear on the matter he has to decide. More than that, it is his duty, as an official, to obey any instructions given him by his superiors, and, in the absence of special instructions, to further what he knows to be the policy of his department. His position makes it probable that he should be subject to political influences. . . .

"Save in one or two instances, none of the departments publishes any reports of its proceedings, or the reasons for its decisions, and as the proceedings themselves, if any, are invariably held in secret, even interested parties have no means of acquiring any knowledge of what has taken place, or what course the department is likely to take in future cases of the same kind that may come before it. A departmental tribunal, is, however, in no way bound, as a Court of Law is, to act in conformity with previous decisions, and this fact is commonly regarded as one of the reasons for the policy of secrecy. Others may think that the department is afraid to disclose inconsistencies and a want of principle in its decisions. . . . It is a queer sort of justice that will not bear the light of publicity."

The profession would indeed be mad if it accepted service with the right of disqualification remaining solely in the hands of the Minister, which in effect means the hands of an anonymous official. You express in your leading article (*B.M.J.*, Jan. 17) the reality of fear which some may have in refusing service under the Act as it now stands. The Minister has handed the velvet glove to the consultants: to the general practitioners he has revealed the cloven hoof.—I am, etc.,

Nottingham. PHILIP TURTON.

What Might Have Happened

SIR,—Few of the cases of exclusion of doctors from employment, following the introduction of the National Health Service in 1865, have aroused as much interest as that of Joseph Lister, formerly Regius Professor of Surgery at Glasgow.

Rising to answer a question by the Member for the Scottish Universities, the Secretary of State for Scotland stated that he had fully confirmed the findings of the Regional Hospital Board, and that the petition from the patients of Mr. Lister had received most careful consideration, but it must be realized that uninformed persons were apt to attribute a recovery to the surgeon's skill, whereas Nature and a strong constitution had in fact wrought the result in spite of the ill-advised efforts of the medical attendant.

In view of the implications of this case and the fact that Mr. Lister was English and qualified in London, the Minister of Health had been fully informed of this matter and had taken the advice of senior surgeons in London, who had all declared that the use of carbolic acid, since it prevented the formation of laudable pus, was inimical to the patient. As evidence of their unbiased frame of mind these surgeons had experimented with carbolic acid, one having placed bowls of the acid around his wards, and another had even injected a quantity into an abscess, but the results had on all occasions been detrimental.

The Minister of Health then rose to say that he was proposing to introduce regulations making the use of carbolic acid and similar substances, loosely described by Mr. Lister as "antiseptics" (whatever that might mean), illegal, and already a regulation had been issued making his sanction obligatory before any deviations from standard accepted treatment were employed by specialists or general practitioners. On being asked by an Opposition Member if he (the Minister) was aware that Mr. Lister had been accorded a public ovation on his arrival in Amsterdam, where he was working, the Minister replied, "Some people will do anything to obtain notoriety."—I am, etc.,

London, S.W.1. J. C. WATTS.

National Health Service

SIR,—The profession, to judge from correspondence, is clearly dissatisfied with the N.H.S. Act as it stands. Fear of capital or income loss may drive some—as Mr. Bevan hopes—into the Bevan net. Older practitioners know from experience that when dealing with the Minister or Ministry of Health nothing must be left to chance if the practitioner is to hold his own—and in this Act as it stands many things are obscure. As there can be no Service without us—law or no law—it seems we have the right to demand such terms in that Service as shall make it acceptable to the majority of the profession. There is a way within the law whereby that desirable result can be attained without incurring the risk of capital loss which many fear. I suggest as follows:

1. That we *all* sign on for the appointed day, and so qualify for compensation (as the law stands).
2. That we *all* sign an undated resignation from the Service and send it to the B.M.A. negotiators for dating and dispatch to the Ministry the day after the appointed day. This would *entitle* us, according to the law as it stands, to obtain immediate cash for our goodwill, should that become necessary.
3. We would then proceed to treat all patients on a cash basis per item of service—a form of service which both doctors and patients, but not bureaucrats, approve and prefer.
4. Having kept to the law and obviated the fear of capital loss, our leaders could then negotiate such terms of service (including the retention of goodwill of practices) as we require. It will then be the Minister's turn to come to heel.—I am, etc.,

Tyldesley, Manchester. PERCY GONSALVES.

'Pathies in a State Service

SIR,—In a letter dated Aug. 21, 1943 (p. 243), I tried to draw attention to the danger that a whole-time State medical service could be forced by Parliament to accept osteopathy, homoeopathy, and other practices not accepted by the profession on scientific grounds. I have seen no satisfactory reply to this, which is a good example of the way in which loss of the non-State half of the medical profession would weaken it as a whole. Perhaps a majority of members of Parliament have direct or indirect evidence of the symptom-removing power of the magician where medical science has failed. We can hardly blame the layman for thinking that removal of symptoms is the whole thing and acting on his beliefs. Is it not the profession alone that should be in a position to decide what its ranks include and exclude? The profession must actively support

the right of the unqualified practitioner to practise, on his own responsibility, at the same time absolutely protecting itself from the possibility of having its beliefs warped by political pressure.

Letters to the Press have substantiated my belief that this threat is not to be lightly dismissed—witness *The Times* of Jan. 31 :

Another point which concerns me closely is the position of homoeopathy. Over a million people in this country prefer to be treated by homoeopathic practitioners, and this has so far been largely denied them by the medical profession which is hostile to this method. Will a National Health Service take steps to secure for this very large number of people the qualification and training of enough doctors to satisfy their needs ? (From J. R. Sandy, Romford.)

Perhaps there is an official B.M.A. attitude to this matter.—I am, etc.,

London, W.1. D. W. WINNICOTT.

The Family Doctor

SIR,—What's really at stake in the Act ? We know that ostensibly it is to provide everyone with medical needs, but the things involved—double the doctors and nurses, double the accommodation, in order that thousands of Britons ailing with tuberculosis, ulcer, cancer, and other ills receive promptly the treatment whose efficacy depends on early rendering—these tangible things are not forthcoming, nor will they suddenly appear on July 5. The only significant content of the Bevan bag will be the tax.

While with steadfast hope we await the delivery of the goods, whether from this or succeeding Governments, something less materialistic in the realm of medicine yet ranking high in the community is jeopardized by the Act. It is nothing less than that symbol of the spirit of succour—the family doctor—who has given not only prescription but counsel in life's intimate problems and comfort to hearts in anguish. Medicine may not be pleasant whether from the doctor's house or the dispensary, and operations are worse, but we all regard with affection and high esteem a friendly and unfailing figure in our midst to whom we can always resort in time of trouble, which sometimes supervenes in the small hours and on Sundays. The spirit he embodies is neglected in this Act, in which obtrude forms and statistics, rigid regimentation of services, and rewards that are automatic. These are alien to the atmosphere of freedom and spontaneity that has characterized medical practice, favours the expression of ideals, fosters a feeling of common humanity, and encourages enterprise.

It is the *intangible* service of the family doctor that has endeared him to us, and the fate of a guide, philosopher, and friend that is at stake in the present issue. Our fight is for the common weal in the battle with Bevan's Act.—I am, etc.,

Bristol. A. WILFRID ADAMS.

Finance and Public Spirit

SIR,—Mr. St. George B. Delisle Gray (Jan. 31, p. 218) writes : "The overriding factor must be finance," but concludes with the high-sounding words, "Let us . . . show ourselves men of public spirit with our patients' (as opposed to our own vested) interests at heart." He cannot have it both ways. He seems more concerned with his own "vested interests" than the public spirit he extols, for if he considers the Act a good one there is no point in his letter, but if he considers it a bad Act surely, as a public-spirited doctor, he will oppose it even at risk of his capital assets, just as the majority of his colleagues are prepared to do.

The fact that failure to join the Service on July 5 will entail loss of compensation is the very negation of the freedom to choose given to every doctor and made so much of by Mr. Bevan.

What sort of heritage is he prepared to hand on to the future if he "cannot afford" to stand by the principles of a profession with a record of service to the community second to none ? This talk of "public spirit" as a reason for accepting something we do not like is merely an excuse for not taking a stand which may cost us some serious loss if we fail. No cause was ever worth fighting for which had no risk attached.—I am, etc.,

Rotherham. ALAN TAYLOR.

Fighting Points

SIR,—It appears to me that the B.M.A. is making its stand against the Minister of Health on a platform composed of four planks, two of which are rather rotten. Surely it would be sensible to cut away the weak wood and take a much firmer foothold on the sound planks. To deal with the rotten ones first :

1. The right to sell the goodwill of practices.—Our freedom is no more taken away from us by the abolition of this than the freedom of the railway shareholder or the coal-mine shareholder has already been taken away from him. The idea of nationalization is accepted as a political entity, and to oppose it is to introduce a political element into the discussion which is undesirable. Also, the retention of this "plank" makes the general public think we are merely interested in our financial arrangements.

2. Negative direction.—This is a catch-phrase and is largely meaningless. "Negative direction" exists at present and has always existed—apart from "squatters." You cannot buy a practice in the place of your choice unless there is one for sale.

The main point on which we should take a firm stand is our opposition to State medicine—not on political grounds but the reverse—because it is political and Medicine is not. If politics are introduced into Medicine by us or by anyone else the result will be the same—a lowering of the standard of Medicine in this country.

And, finally, in the interests of all free men we should fight for our right to appeal to the courts on matters of dispute.—I am, etc.,

Hatfield, Herts. KENNETH C. HUTCHIN.

State Medical Servants

SIR,—There is good reason to believe that the whole-time salaried State Medical Service is only just around the corner—probably not more than two years after the inauguration of the "Capitation cum Basic Salaried Service." My reason for saying this can be readily demonstrated.

New entrants to the Service will receive £300 per year, and be directed by Mr. Bevan's Central Committee to "squat" in various towns and country areas. Many will find life difficult, because the early years spent in waiting for patients are always tedious and depressing through idleness, no matter how zealous for work one might be. A few will be lucky and fall into dead men's shoes and rapidly earn three or four times as much as their less fortunate colleagues who sit and wait. It will be natural for these unfortunates to complain to the Minister and to all the Socialist M.P.s that they are just as good as the lucky ones who by accident of circumstance are doing so well in the new Health Service. No purchase money having passed, the rewards must be equal in Bevan's bountiful vineyard.

This will indeed be the signal for Mr. Bevan to introduce his State salaried service with equal remuneration for all according to length of service, irrespective of ability, popularity, or keenness for work in general practice. When incentive is destroyed and remuneration is not made in proportion to the amount of work done the doctor will be forgiven if he adopts the tone and mood of Mr. Bevan as shown to the General Practices Committee, and frowns upon the patients who come to see him under State serfdom. This will at least be in keeping with the long-established Socialist doctrine of more pay for less work.—I am, etc.,

Slough. N. C. HYPHER.

Trade Union Comparison

SIR,—On reading the voluminous correspondence and in discussing the N.H.S. with friends and colleagues, one has the strongest impression of confusion, a lack of unanimity and even of understanding in our ranks. The ethical and financial aspects do war with each other in many minds. The B.M.A.'s five points of objection are by no means all acceptable to all doctors. The denial of the right of appeal is, I believe, the only one on which there is full agreement.

Is it too late to take a simpler view, and one which would be expressed in language understood by Mr. Bevan, who is, after all, a politician and a Socialist and not a medical practitioner ?

1. We will not tolerate his dictatorial attitude. We are ready and willing to negotiate. No negotiations means no N.H.S.

2. Payment should be in accordance with accepted trade union standards. A miner can earn 5s. an hour in his 40-hour week, and the time includes "travel." At a comparable rate a G.P. is worth 10s. an hour, and we might work a 60-hour week. Overtime is paid at time and a half, so that any time on duty over the 60 hours would bring in 15s. an hour.

3. Full trade union rights and privileges—i.e., a position in which Mr. Bevan would have to negotiate.—I am, etc.,

Okehampton, Devon. E. P. JOWETT.

Unity of Profession

SIR,—There have been a number of letters recently on this subject, but it is one I fear that the profession has not considered adequately. Whether we decide for or against service under the present Act, unity must be something much more real than it is at present. If the Association decides on a line of action, all must follow or we shall never have any protection in the future. It is no use one man supporting the Association and three others down the street following the Government. You will say such a condition could not arise, but it is quite a possibility in certain areas.

Resistance and support for the Association must be organized, as in a military campaign, before we can bring about a successful issue. A proper liaison must exist between the doctors in each locality, who must support each other. If we do not do this we shall face a repetition of 1911. With an energetic and thorough organization now, many waverers will realize the benefit and necessity of the Association and will fall in line with the rest, and we shall succeed in preserving the future of our great profession.

A number of well-organized large centres of resistance are more likely to succeed than the method of *laissez-faire*, which is doomed to failure.—I am, etc.,

Aberdeen. H. D. N. MILLER.

Covenant between Doctors

SIR,—If the issue between the Minister and the profession were on principle alone the vast majority of practitioners would not accept service under the Act. It is the financial side which will cause many G.P.s and others to waver, and some to accept service. If we can, therefore, settle the fears of financial loss we shall have a much stronger front to present to the Minister.

The two ways in which the G.P. may lose if he does not accept service are, first, by the loss of the investment by which he bought his practice, and, secondly, by the loss of patients (and income) to any doctor in his neighbourhood who may have accepted service. The first cause of loss can only be avoided by the defeat of the Act as a whole, or by an amending clause to compensate the G.P. whether he enters or not, or to legalize the sale and purchase of practices—that is, by the concerted action of the profession as a whole. The second fear can only be removed by action of local groups of doctors. I suggest, therefore, that at local meetings of G.P.s and others we each sign an undertaking not to accept as a panel patient for, say, one year any patient of any other doctor in the neighbourhood without his previous written consent, indicating specific sums as liquidated damages in the event of violation of the agreement. This would effectively prevent any doctor in the scheme from enriching his practice at the expense of those who elect to remain outside. Even the most partisan upholder of the new Health Scheme could scarcely oppose such an agreement, as the normal free choice of doctor remains undisturbed.

Whatever our feelings towards the Act, we must not be divided by fear or suspicion. United, we can achieve a fine Health Service for the nation, and freedom and independence for ourselves. Divided, we will expose ourselves and our patients to a degree of bureaucratic control which is terrible to contemplate.—I am, etc.,

Conway. D. CRAWFORD LITTLE.

Yes

SIR,—At a recent meeting of the local B.M.A. I unconvincingly and most half-heartedly voted "with the crowd" condemning the Health Act in its present form. From accounts of other meetings and the reports in the correspondence columns, this meeting appears to be characteristic of the general opinion. The differences expounded from all quarters are in reality only minor aspects of the Act as a whole, differences which can be better solved from within the Service than from without—"growing pains" that will improve with development.

After careful reflection and consideration I am now convinced that on the appointed day I shall enter the Service, as should all other practitioners with a sense of moral obligations to the State.—I am, etc.,

Menai Bridge, Anglesey. O. VAUGHAN JONES.

The G.P.'s Wife

SIR,—Many correspondents have pointed out what the ultimate loss of goodwill, which the N.H.S. Act in its present form entails, will mean to us professionally.

From a domestic point of view there are difficulties which cannot be overlooked and which will affect most intimately that long-suffering individual the general practitioner's wife. Suppose that service under the present Act, or an amended Act with loss of goodwill, were accepted. An adequate number of Health Centres cannot be provided overnight on July 4, and we will run the practice from existing surgery accommodation. In cases where the surgery is attached to the residence, the practitioner's wife at present pays, out of her housekeeping allowance, domestic help which is essential for surgery cleaning and answering door-bell and telephone, etc. Who will pay for this if goodwill is lost? If no domestic help is available, these chores still have to be done and she does them herself—now! Will she be so willing to do these things for "the State"?

Take the goodwill away and the practitioner's wife has no interest in the practice, so that under a full-time State scheme the Minister must be prepared to provide and pay a legion of surgery cleaners and attendants. Why should a "State doctor's" wife be expected to have any more interest in the surgery than a Civil Servant's wife has in her husband's office?

In the event of her husband's death a practitioner's widow will at present cater for and provide accommodation for a locum tenens until it is possible to dispose of the practice plus goodwill. With loss of goodwill, can she be expected to make these provisions for a locum in a practice in which she has no interest?

From the domestic point of view the N.H.S. Act encounters numerous obstacles, of which I have mentioned a few, which must affect the majority of general practitioners to some extent.

The doctor will not strike, but if goodwill is lost on July 5 the general practitioner's wife probably will.—I am, etc.,

Ferryhill, Durham. R. CHESNUTT WILSON.

Test of Death

SIR,—The ophthalmoscopic sign of death—segmentation or fragmentation of the blood column in the retinal vessels—as described by Dr. E. A. Harris (Jan. 31, p. 226), may occur at the very instant of death, when the heart stops beating.

Fifty-six years ago (1892), when house-physician at St. Bartholomew's Hospital, I had the following somewhat startling experience. During the night another house-physician asked me to see a patient, who was comatose. I wished to examine the fundus oculi with an ophthalmoscope which I had with me; it was quite easy to see the disk and retinal vessels. Suddenly, while I was examining, segmentation of blood columns occurred: the patient was dead. After that, when called by nurses to confirm the death of patients, I had opportunities to make ophthalmoscopic examinations, and still have my notes on what I observed.

The broken blood columns were superficially not unlike the segmented mercurial column which sometimes occurs in a thermometer or in a (too thin) manometer tube. In 1892 I also noticed that the blood column segments could be moved forwards and backwards in the retinal vessels by intermittent pressure on the chest, somewhat like that in artificial respiration; this has apparently not been noticed by others. The segmentation of the blood columns did not always occur, at least not at once after death; for in certain cases I failed to find any segmentation while the cornea was still not sufficiently clouded to prevent the fundus being seen. In one case I noted that there was already distinct segmentation, the heart having ceased to contract, though the patient unexpectedly breathed once again while I was looking.

The sign by itself cannot of course be actually pathognomonic of death. In true embolism of the central artery of the retina segmentation of retinal blood vessels may doubtless

occur at the moment of the arterial occlusion, just as it may occur immediately when the heart ceases to contract at death; though it is unlikely that anyone has been making an ophthalmoscopic examination precisely when the central retinal artery became occluded. One may here ask, when segmentation of the retinal blood columns occurs (together with cessation of the heart's action), what would happen to the eyes if *in an exceptional case* the heart was successfully induced to contract normally again.

Since 1892 I have made no further observations myself, but a good deal of literature has been published, notably by M. H. Kahn (1913, 1924). After Dr. Kahn's work I published some short notes of my 1892 observations (1925).—I am, etc.,

London, W.1. F. PARKES WEBER.

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SIR,—Dr. E. A. Harris (Jan. 31, p. 226) makes reference, under the above title, to the appearances which may be seen in the retinal vessels after death, and observes, "I am not aware that this sign has been described." He will find it, and some of the other signs to be seen in the eye at death, in my book *Medical Ophthalmology* (2nd edition, 1925, p. 54), where reference is also made to earlier observations of Usher.

Dr. Harris's description of the at first finely granular appearance of the blood, becoming of a grosser texture later—a stage at which Usher believes individual corpuscles are visible—and, before movement ceases, the breaking up of the column of blood into small blocks separated by clear spaces, the so-called "cattle truck" appearance, is of course accurate; he does not make it clear, however, that this is a description of the veins only. The arteries are quickly emptied of blood in a reversed direction—i.e., towards the heart—and are reduced to fine threads which are seen with difficulty. The optic disk becomes white owing to its bloodlessness.

The eye becomes soft, owing to the stoppage of its blood supply, a phenomenon which can be easily demonstrated in the living subject by pressure on the carotid in the neck against the carotid tubercle. After ten minutes or so the cornea loses its transparency so as to prevent further observation.

I wonder whether one would find these changes in progress of development in patients who, being near to death, complain of all having gone black before them.—I am, etc.,

Salisbury, Wilts. R. FOSTER MOORE.

Localization of Deep Pain

SIR,—I welcome Dr. J. B. Harman's most interesting paper (Jan. 31, p. 188) first as a valuable contribution to this problem, and secondly since it supports certain views which I put forward some years ago in an article which may have escaped Dr. Harman's attention (*Journal*, 1942, 1, 543). I had always regarded with scepticism the prevalent theories on so-called "referred" or "radiated" pain, false localizations, etc., and expressed my belief that certain pains, such as appendicular colic, diaphragmatic pain, etc., are projected to a precise position rather than to a particular tissue, as claimed by Mackenzie and others. At the same time I wrote, "One suspects that some of those interested in this problem believe that if they knew 'precisely' or 'accurately' which tissues to anaesthetize in the painful area they could by induction of block anaesthesia prevent or abolish this so-called 'referred pain.' They will never succeed: they might as well try to anaesthetize the original position of the foot of the amputee who complains of pain in his lost foot."

I believe there is but one system of pain nerves, all of which have the same inherent physiological properties whether carried to the tissues by somatic or autonomic nerve pathways. They all respond to the same kind of stimuli, but vary in their degree of excitability. The intestine has a sparse supply of pain afferents, therefore a weak stimulus applied to a small area may not evoke pain. A strong stimulus—for example, sudden acute distension of the gut—will produce pain because a comparatively large number of pain afferents are involved, and more readily in certain conditions which lower the threshold.

My view as to why pain may be localized at a distance from the tissue in which it is produced is a simple one: I believe that localization of pain (and other sensations) is, like function, predetermined by anatomical structure. The question is, At what stage of development are future functions, future sensations, and future localizations determined? I should say, contrary to the generally accepted view, that the process is a slow and progressive one, that the reference map in the sensorium is completed at an early stage of embryonic life, and that—as far as the deeper structures are concerned—the map remains constant and unaltered since there are no channels through which the brain can be "re-educated." That is the basis for my belief that pain produced in an organ which has migrated from its primary relative position, and which has not acquired an additional nerve supply in its secondary or permanent position, is invariably localized in the primary relative position of that organ. Familiar examples of this rule are appendicular colic, testicular pain, diaphragmatic pain—all localized in the early embryonic position rather than in the permanent one. On the other hand, renal pain is located in the permanent position and not in the pelvis from which the kidney migrated. Here one assumes that the kidney acquires its nerve supply, like its blood supply, at a late stage of development.

All medical students know the permanent positions of the abdominal organs, but very few realize that it is equally important to know the embryonic positions if logical and accurate diagnoses are to be made. I was gratified to note that in an article on the subject of acute abdominal emergencies Ogilvie (1947) stressed the importance of the embryonic position.—I am, etc.,

Dundee. F. R. BROWN.

REFERENCE

Ogilvie, H. (1947). *Practitioner*, 158, 2.

Trichlorethylene in General Anaesthesia

SIR,—I should like to draw attention to one or two points in Dr. Gordon Ostlere's excellent summary (Jan. 31, p. 195) of the role of "trilene" in general anaesthesia. I agree with him that it is high time that the safety of this drug should be recognized and that comparisons with the dangers of chloroform, presumably because of their similarity in chemical structure, be abandoned. Although so alike in chemical and physical properties, there is very little similarity between the two in the type of anaesthesia which they produce, and I see no reason why the dangers of the one should be ascribed to the other. I am in agreement with Dr. Ostlere in never having seen any case of collapse attributable to trichlorethylene during a long series of administrations of the drug.

Providing that its limitations are recognized, trichlorethylene is a most useful drug; but its greatest drawback is that it has little or no place in abdominal surgery owing to the poor muscular relaxation obtained. Dr. Ostlere states that trichlorethylene may be used for almost all operations outside the peritoneal cavity, but nevertheless advocates its use in conjunction with curare for abdominal operations. I agree that trichlorethylene alone is useless for abdominal surgery, but even in conjunction with curare it presents certain disadvantages. First, I found that larger and more frequent doses of curare are necessary in combination with trichlorethylene than with thiopentone, cyclopropane or ether, giving rise to the dangers of prolonged post-operative curarization. The other obvious disadvantage of using curare in conjunction with trichlorethylene for abdominal operations is that one is debarred from using the closed circuit, which renders artificial respiration or "boosting" of breathing difficult, should this be necessary.

I have found that induction with thiopentone abolishes or minimizes many of the undesirable effects of trichlorethylene anaesthesia, such as tachypnoea; and I have never encountered cardiac arrhythmias in any case induced with thiopentone. Again, a greater degree of muscular relaxation can be obtained with the sequence thiopentone, nitrous oxide, oxygen, and trichlorethylene, than with nitrous oxide, oxygen, and trichlorethylene alone. Without the preliminary use of an intravenous barbiturate, anaesthesia with nitrous oxide, oxygen, and trichlorethylene alone may prove most unsatisfactory in the case of a muscular subject; tachypnoea may develop rapidly and muscular rigidity may occur which no amount of juggling with the proportions of gas, oxygen, and trichlorethylene may serve to abolish. Again, associated with this muscular rigidity there may occasionally occur isolated movements of a limb, usually athetotic in type, which may persist until a change is made to some other anaesthetic agent.

Much has been written in these columns recently of the convulsive properties of thiopentone; not only will trichlorethylene obviate these tremors and "shudder reflexes" as readily as any other volatile anaesthetic, but none of the abnormal move-

the **NEW** *analgesic . . .*

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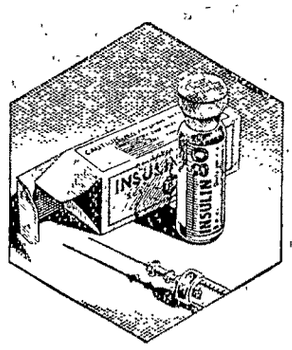

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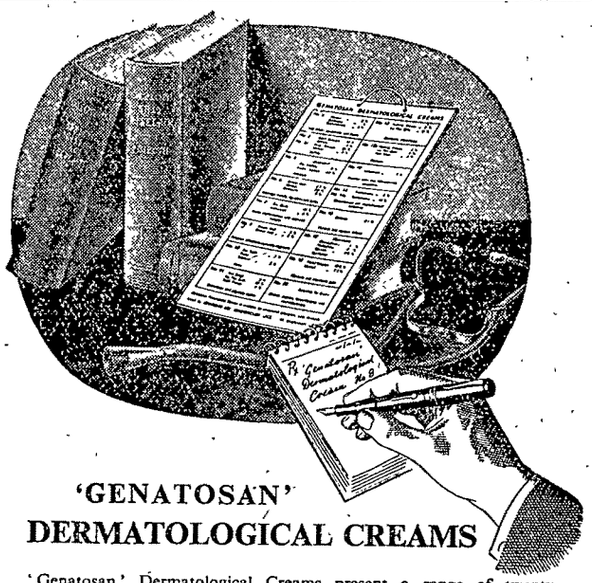

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ments occasionally associated with trichlorethylene may be expected to occur following induction with thiopentone. In this respect, therefore, the two are complementary in action. I feel that this point has not been sufficiently emphasized and strongly recommend that the administration of trichlorethylene with gas and oxygen be preceded whenever possible by intravenous thiopentone; in this way most of the undesirable side effects of trichlorethylene are eliminated and a smooth anaesthesia obtained with little post-anaesthetic vomiting.—I am, etc.,

Romford, Essex. GODFREY HERINGTON.

Natives of the Tropics

SIR,—It seems a pity at such a time to raise a century-old controversy, but since it has been raised I hope that I may be permitted to relieve a repression of at least thirty years' duration. Up to a point I can agree with Dr. M. V. Chari (Jan. 17, p. 126); nine times out of ten it is better to say "Indian" instead of "native." For example, a few years ago my repression was threatened with one of its periodic exacerbations, which as far as I remember I was able to sublimate in an editorial footnote, when in a case report on a patient in the old Tropical Diseases Hospital in Endsleigh Gardens a distinguished physician wrote, "The patient was a native (stop)." The logical interpretation of such a statement was that he was a native of the locality in which he was being treated—that is, of the Euston Road or at least of London—but there was other evidence against this interpretation. It was a matter of considerable interest whether the patient was in fact a native of the Euston Road or of Sierra Leone, of Chittagong, of Singapore, or of Canton, but the reader was denied this information by the writer's slovenly use of the word "native." This is a common failing of British writers which, with Dr. Chari, I deplore, but apparently for a very different reason.

But to return to Dr. Chari's example: "The natives suffer from beriberi more often than the Englishmen." The context of this example is not given, but the wording—the use of the article and the word Englishmen—is such that I would be surprised to hear it from the lips (or read it from the pen) of any Englishman, unless of course it referred to a particular group of persons or to a particular place, when the sentence would be beyond criticism. Robbed of its articles, as Dr. Chari possibly heard it, it is certainly a slovenly and meaningless sentence. But would it be improved by the substitution of the word "Indians" for "natives," if the speaker were not more specific and did not explain whether he meant Indians of the North-West Frontier Province, or Indians of the Northern Circars in Madras, or even North American Indians?

Dr. Chari continues, "When an Englishman therefore uses the word 'natives' he should by right refer to the natives of England," which of course he does a thousand times every day, except that he may be more specific and say "of Rochdale," "of Yorkshire," or "of Devon." When an Englishman refers to Sir Patrick Manson as having been a native of Aberdeenshire or says that Mr. Jones has returned to Merthyr Tydfil, of which he is a native, he does not use the word "native" with "contemptuous reference." The choice of the word neither indicates arrogance in the user, nor does it engender a "spirit of hatred" in the Scots or the Welsh.

A characteristic of the British rule in India was the respect shown for the religious and other prejudices of the natives of the country. During my sojourn of 26 years in India I respected their ridiculous prejudice against the word "native" and whenever possible substituted the horrible expression "indigenous inhabitant." India is no longer under British rule, and Indians should be proud to be natives of their free and independent country, whether it is India or Pakistan, as I am of mine. I therefore no longer feel compelled to inflict psychological trauma on myself by writing "indigenous inhabitant," and have ceased to do so.

A native of Preston (and proud of it), I am, etc.,

L. EVERARD NAPIER.

Prickly Heat and Tropical Asthenia

SIR,—Because the *Journal* reaches remote places, I would like to qualify in part your annotation (Nov. 15, 1947, p. 779) on my paper.[1]

The "lipoid response" is a most interesting phenomenon in that it sheds light on the important role that lipoids play in rendering the stratum corneum permeable to the skin secretions, especially sweat. However, your annotation does not make it clear that the response is elicited in the late anhidrotic phase of prickly heat (namely "tropical anhidrosis") and not in acute prickly heat itself. Indeed, in the latter case the application of lipoids to the skin, particularly when it is severely affected, does not facilitate the egress of sweat to a comparable degree and such applications may, in fact, aggravate the local symptoms. Nevertheless, it is significant that their application to normal skin does appear to increase the amount of sweat which is able to reach the surface. I interpret this observation to mean that, when sweat production is considered, even "normal" individuals in the Tropics have some skin lipoid deficiency.

Unfortunately I was unable to arrange a large field experiment, such as you mention, on the possible role of "degreasing" in precipitating miliaria. Such a trial would need to be carefully controlled and supervised, as many factors, including occupation, clothing, weather, age, and so on, are possibly concerned in aetiology. To my mind, the ideal test material would be afforded by a battalion engaged on a single task. One company, subjected to a routine of excessive degreasing by hot showers, soap, and powder, could serve as the test group. A second company, observing a contrary routine of conserving or even supplementing lipoids, could act as a control. Members of the third company could treat their skin as they wished and thus represent the present haphazard practice. In assessing the outcome, it would be necessary to take into account the chronic anhidrotic lesions of miliaria as well as acute miliaria itself.

As confirmed independently by the eminent authority Sulzberger,[2] active desquamation by keratolytics undoubtedly has a logical place in the treatment of miliaria. But my experiments showed that much care was essential during the acute stage of the disease. The precautions required to preserve the method from ill repute are given in my paper.—I am, etc.,

Sydney, Australia. J. P. O'BRIEN.

REFERENCES
1 *Brit. J. Derm. Syph.*, 1947, 59, 125.
2 *J. invest. Derm.*, 1946, 7, 53.

Prickly Heat: A Simple Remedy

SIR,—Fashions in medical treatment change and old treatments are oft forgot and it is often well that they should be rediscovered, so that I was glad to read Dr. C. J. Wilson's advocacy of the use of perchloride of mercury in this disease (Jan. 10, p. 76). Dabbing with merc. perchloride was the stock treatment for prickly heat very many years ago in Northern India (unless you could send your patient up to the cool of the hills, when of course the trouble usually disappeared almost by the time you had reached your hotel!) Where we learnt it from I scarcely remember; maybe it was from the late Colonel McLeod's lectures, or from an old edition of Patrick Manson. It certainly was in the latter, and still finds a place in the latest edition, though "afridol" soap (a mercurial compound) is preferred; and also in one of the small war manuals.

In those early days of the first "antiseptic era" $HgCl_2$ was very much in evidence, notably for hands and swabs at operations: it did no harm and discouraged the odd coccus, and so almost always ensured first intention. With reference to O'Brien's view that degreasing the skin to excess favours the occurrence of the disease I have often been struck by the fine texture and spotless velvety appearance of the skin of the average Sikh (compared to other races), who, I believe, frequently anoints himself with coconut oil after bathing. Whether prickly heat be due to Smith's monilia, or O'Brien's degreasing, or to overwork and consequent inflammation of the sweat glands, there is no doubt that relieving the latter of their overwork by moving into a cooler clime immediately dispels the symptoms and signs.—I am, etc.,

C. H. BARBER,
Thame, Oxon. Lt.-Col. I.M.S.Retd.

Treatment of Subacute Bacterial Endocarditis

SIR,—I read with great interest the report on penicillin in subacute bacterial endocarditis in the *Journal* of Jan. 3. I think penicillin merely clears off invaders for the time being and that unless the leucocytes are up to a certain standard of virility they may be unable to make use of this respite in devouring such bacteria as may have escaped the penicillin owing to too small a dose having been given for the numbers of bacteria present. Indeed it is conceivable that leucocytes might be so

injured by bacterial toxins, that any further addition to the blood of a foreign substance such as sulpha drugs (or perhaps even penicillin) might destroy them altogether—hence agranulocytosis.

I think vitamin C ought always to be given in large doses with the sulpha drugs and with penicillin, since "it is believed that patients with various infections, including rheumatism, require large amounts of vitamin C if normal levels are to be maintained in the blood" (Savill's *System of Clinical Medicine*, twelfth edition, p. 1102, London, 1944). Vitamin A might also be beneficial. Intravenous hydrolysates might be beneficial if there is much prostration. Vitamin C should if possible be given in the form of *fresh* tomato or orange juice. These patients should have most careful nursing—their feeble appetites tempted by chicken tea, meat essences, wine jelly, etc., with cream.—I am, etc.,

Gateshead. FLORENCE M. E. DAVIES.

Peptic Ulceration

SIR,—Mr. C. Jennings Marshall (Nov. 15, 1947, p. 791) puts the following proposition: Circum-ulcerous cellulitis→Interference with the musculature and the gastric tension→Pain. In doing this he makes acknowledgment to a group of workers, including Hurst and Ryle and Douthwaite. But there is a second group, which would interpose acid. The evidence collected by each of these groups is questioned and doubted, with good reason, by the other group. Mr. Jennings Marshall has already rejected the second group. May I suggest that he does likewise with the first? I make this suggestion because the middle term of his proposition introduces so many needless difficulties and so much obscurity. Its rejection would violate no facts. The proposition would then read: Circum-ulcerous cellulitis→Pain (just as in chronic congestive ulcer of the leg).

The advantages likely to result are too numerous to detail within the compass of a letter. I will, however, mention one, because it is of such recent interest. Dr. F. Avery Jones, in his instructive Goulstonian Lectures, stated that the mechanism of pain-relief from haemorrhage is unknown (*Journal*, Sept. 27, 1947, p. 477). I think that he could visualize the haemodynamic factors which are probably responsible (as in congestive dysmenorrhoea) if Mr. Jennings Marshall would leave out the middle term.—I am, etc.,

Sydney, Australia. V. J. KINSELLA.

Viability of Strangulated Bowel

SIR,—For many years, when I was more actively connected with general emergency surgery than at present, I used to demonstrate and teach that in my opinion the best method of proving the viability or otherwise of strangulated bowel was by cutting it to see if it would bleed. When there was any doubt as to viability it was my custom to make a small nick into the peritoneum and superficial muscle of the bowel and if fresh blood escaped then it was judged viable. I have never known any harm result from this procedure.

Up to the present I have never had the temerity to publish what sounds as though it may be a somewhat dangerous procedure. Probably the idea originated because at that time when dealing with a case of acute osteitis it was customary to remove, as far as possible, the dead bone, and the only way of telling the difference between the living and the dead was to cut into it and see if it would bleed.—I am, etc.,

Newcastle-upon-Tyne. W. E. M. WARDILL.

Herpes Zoster and Chicken-pox

SIR,—I have recently had the following experience, which may be of interest in the herpes-zoster–chicken-pox association.

A man aged 40 came to me on Nov. 19, 1947, complaining of two days' pain in his left sciatic nerve. Examination showed a herpetic rash of mild degree along the course of his nerve. I sent him home to bed. On visiting him on Nov. 25 he had a severe degree of herpes zoster from the sciatic notch down to the ankle. While I was there he told me his children often came into his bed in the mornings, and asked my advice. I strongly urged him not to do so.

On Dec. 8 a son aged 4 developed a few scattered varicella-like spots on his scalp, face, and body; they subsided by Dec. 11, but left a scar. On Dec. 20 he had a more severe crop appear, and he ran a small temperature and was decidedly a case of chicken-pox.

On Jan. 7, 1948, another son aged 3 developed a characteristic attack of chicken-pox, of medium degree, and all over his body.

I might add there were no known other cases of chicken-pox in the district, but there were several widely separated cases of herpes zoster.—I am, etc.,

Alcester, Warwickshire. C. C. H. CHAVASSE.

Penicillin in Scarlet Fever

SIR,—I have read Dr. Jane O. Millar's letter (Dec. 27, 1947, p. 1054) with the greatest interest. I agree with Dr. Millar the sulphonamides are of little or no value in the treatment of scarlet fever.

Dr. Millar requests a properly controlled therapeutic trial of penicillin in scarlet fever. I am pleased to be able to inform you that I have as early as June, 1946, published controlled series of scarlet-fever patients treated with penicillin or sulphanilamide (XX Scandinavian Congress of Internal Medicine, Göteborg, 1946).[1]

Since December, 1945, a total of 2,000 patients with scarlet fever have now been treated with penicillin at the Blegdams Hospital, Department of Epidemiology, University of Copenhagen, and followed up carefully. Intramuscular injections of 90,000–150,000 units of penicillin (according to the patient's age) twice a day will rid the nose and throat of haemolytic streptococci within 48 hours.

To prevent the reappearance of the streptococci the penicillin treatment should be continued for six days. During this treatment sore throat rapidly subsides. No complications (otitis, nephritis) develop. The average stay in hospital was only eight days. In patients admitted with a streptococcal otitis, treatment with penicillin in the same dosage gave very good results. Of 56 patients admitted with scarlatinal otitis only two required mastoidectomy (21–38% of patients with scarlatinal otitis in spite of energetic treatment with sulphonamides have to undergo mastoidectomy). In the control series 73% of the sulphanilamide-treated patients still harboured haemolytic streptococci at the end of treatment (eight days), and 53% at discharge from hospital (28 days or more). Complications appeared in 49.5% of this group (otitis, nephritis).

An extensive study of the subject will be published shortly in the *Lancet*, which may be referred to for further deails.—I am, etc.,

University of Copenhagen, Denmark. TORBEN JERSILD.

REFERENCE
1 Jersild, T. (1948). *Ugeskr. Laeg.*, 1, 110.

Varicocele of Canal of Nuck in Pregnancy

SIR,—Last year I had a similar case to that reported by Dr. Richmond McIntosh (Jan. 31, p. 225). The patient was aged 31 and expected her third child in August, 1947. Throughout pregnancy she had marked varicose veins of the right lower limb. At 30 weeks she was admitted to hospital on account of fairly severe pain in the left groin. The physical signs were those of a reducible left inguinal hernia. At operation, which was performed without delay, no hernial sac was found, but there was a large varicocele filling the inguinal canal. I excised the mass of veins, but carried out no repair of the canal. Post-operative progress was uneventful, and the pregnancy proceeded to term without recurrence of the pain. Delivery was normal. My impression was that the varicocele was part of the general venous stasis and engorgement, shown also in the varicose veins of the opposite leg. As such, it would probably have regressed considerably after delivery.—I am, etc.,

London, S.W.3. JANET BOTTOMLEY.

Relief of Pain in Midwifery

SIR,—In his zeal for analgesia Dr. C. A. Allan (Jan. 24, p. 175) is unjust when he charges his colleagues with callous indifference to distress associated with parturition. Many advances have been made and acclaimed by doctors practising midwifery. However, I would venture to suggest that gas-air analgesia is often inadequate. Some years ago Prof. Chassar Moir presented a reasoned case for the intermittent use of pure nitrous oxide in preference to the gas-air mixture, to be

inhaled when contraction of the uterus is heralded by a slight warning pain. My own experience has proved the great superiority of this method.

Some patients, however, of a robust and primitive type will tolerate no inhaler. For these, and for the others too, pethidine hydrochloride injected in adequate dosage is capable of giving extraordinary relief with safety.

As regards "telling the woman," it can safely be left to the women themselves who have experienced an easy labour to spread the good news. That at least has been my experience.—I am, etc.,

Sedbergh, Yorks. H. THISTLETHWAITE.

Collapse in Infantile Eczema

SIR,—In a previous communication (June 7, 1947, p. 808) I described two successive cases of sudden collapse in infantile eczema and suggested the administration of suprarenal cortical extract. Injection of this substance in a third case was, however, unsuccessful, and the child died in convulsions, the clinical picture being closely parallel to that in the first case. It was noticed, however, that on each occasion the temperature rose sharply to over 100° F. (37.8° C.), and the respiratory rate increased to over 70—often as high as 90 or 100 per minute—some 6–9 hours before the convulsions commenced. Since there was no cyanosis it appears possible that the hyperpnoea was an attempt to increase the CO_2 output, and that the whole condition was produced by an acidaemia. This picture received startling support from the fact that in the second case previously described sodium bicarbonate had been given about two hours before the convulsions commenced, and was not given in the third case.

Two further cases have occurred in which the temperature and respiratory rate have suddenly increased, and in each the clinical picture has closely resembled that in the early stage of the previous cases. A dose of sodium bicarbonate—1 dr. to 1 pint water (4 g. to 568 ml.)—has been given, with the return of temperature and respirations to normal limits, in one case within half an hour of administration. I think that it is incumbent upon me to draw attention to this altered outlook in the treatment of these cases.—I am, etc.,

Manchester. CECIL W. MARSDEN.

General Anaesthesia and Surgical Shock

SIR,—Dr. J. Walker Tomb's letter on this subject (Jan. 17, p. 123) provokes me to reply because I consider that he is trying to spread a mischievous doctrine with totally inadequate experimental and clinical support. In his various writings he has suggested the theory that surgical shock is due to sympathetic dilatation of muscle vessels, and advocates the administration of spinal anaesthesia or ergotamine preparations in the prevention and treatment of shock. In putting forward these views he has completely ignored much of the important experimental work done on shock, particularly the brilliant researches of Mann (1914), who showed that shock could be produced by intestinal manipulation after the destruction of all nervous pathways.

Large nerves such as the sciatic have frequently been stimulated electrically and mechanically without the production of shock. It is therefore wrong to suggest that the shock which follows wounding is due to strong afferent nerve impulses, particularly since many of the injured experience little or no pain. There is plenty of experimental evidence, for those who care to look, that afferent impulses have little or nothing to do with the production of serious shock. It is difficult to understand, therefore, why one still hears of anaesthetists teaching that deep anaesthesia is a safeguard against shock. On the contrary, there is good evidence that deep anaesthesia aids the production of shock, and Mann has shown that much less trauma is required to kill dogs under deep ether anaesthesia than under very light narcosis. Dr. Tomb's deduction that the reduced mortality consequent upon the introduction of general anaesthesia was due to the abolition of shock resulting from pain is unsound, because other factors, such as the more careful haemostasis possible under a general anaesthetic, must be considered. Many must have seen, as I have, the worsening of a shocked patient's condition on the administration of a spinal anaesthetic. The suggestion that this measure be used as a preventive and treatment for shock is, therefore, a pernicious doctrine which could easily lead to avoidable loss of life.

The sympathetic nerves are undoubtedly active in a state of shock, and are responsible for the cold, pale, sweating skin, but it seems almost certain that this is a protective mechanism designed to direct the reduced blood volume to the vital organs. Any post-mortem examinations which I have made on men and animals dying of shock resulting from injuries have shown the muscles to be pale and bloodless, not congested as Dr. Tomb's theory would require. As regards his suggestion that ergotamine should prove beneficial in shock by paralysing the sympathetic activity, I may say that I tried it about seven years ago in a series of rats, and found that small and moderate doses produced no protection from shock while large doses were quickly fatal. One would look for better experimental evidence than this before advocating its use in man.—I am, etc.,

Manchester. H. A. HAXTON.

Dogs and Poliomyelitis

SIR,—My attention has been drawn to Mr. Victor Bonney's letter (Dec. 27, p. 1054) in which he describes a nervous disorder in two dogs with signs indicating lesions of an anterior (ventral) poliomyelitis.

It is true that for the past year there has been an unusually large number of cases of motor-nerve defects in dogs occurrence of which suggests an infective origin. The aetiological agents responsible for these disorders are not, as yet, well established, but there is much clinical evidence to suggest that more than one virus with neurotropic properties is involved. The possibility that a virus causing poliomyelitis in man might be responsible for some of the syndromes in the dog has not been overlooked, but so far we have no evidence that these infective nervous disorders in the dog are associated in any way with viruses known to cause disease in man.—I am, etc.,

Canine Research Station,
Veterinary Educational Trust,
Newmarket.
S. F. J. HODGMAN,
Director

Dicoumarol

SIR,—Dr. H. Lempert (Jan. 17, p. 125) prefers acetone-dried rabbit or human brain to viper venom as he finds the results with the latter substance are often misleading and may cause an overdosage with dicoumarol. He appears to deprecate the necessity for perfectly fresh viper venom and multiplications of tests on one sample. If he attended to these points perhaps he would have better luck with the method. Carefully controlled and performed viper-venom estimations of prothrombin time are much more sensitive than acetone-dried brain methods. It is interesting that Drs. Canti and Robertson are satisfied with Quick's method (using "stypven"!) and report good results after careful control of dicoumarol. I suggest that Dr. Lempert's case who had 1,700 mg. dicoumarol in 8 days would have shown marked prolongation of the prothrombin time if the points noted in my letter of Dec. 20, 1947, p. 1009, had been attended to. Recently a general practitioner sent me a case to whom he had been giving 200 mg. dicoumarol "blind" *daily* for two days every week; I saw her after a fortnight and her prothrombin time was then 75 seconds (normal 11–12 seconds) and her clotting time much prolonged. She bled for some time from the needle hole when we took blood for the estimation. It was with the object of avoiding accidents such as I have described that my first letter was written. Prothrombin time estimated with acetone-dried brain is always longer than when estimated with viper venom and gives the brain method a spurious air of delicacy.—I am, etc.,

Epping, Essex. FRANK MARSH.

SIR,—It is of interest that in the correspondence which followed my letter (Dec. 6, 1947, p. 928) on dicoumarol three letters were published with as many modifications for estimating prothrombin. If one reads the literature, as many more are recommended by others. It is significant that the modification which Dr. G. Canti and Mr. D. J. Robertson (Jan. 17, p. 125) and Dr. Frank Marsh (Dec. 20, 1947, p. 1009) state as being satisfactory is criticized by Dr. H. Lempert (p. 125). Also, the two cases Dr. Lempert cites seem to have gone to the extent

of spontaneous bleeding, despite the fact that he had available both the original and Fullerton's modification of Quick's method.

In a conference on therapy, reported in the *American Journal of Medicine* (1947, 3, 234), the following statement is made in the discussion on dicoumarol: "It is difficult to get laboratories to do the test [prothrombin] accurately." Nevertheless, I appreciate the interest aroused, and can say that I have learned a few points which I shall try in the future.

Dr. Lempert states that my suggestion to use alterations in the clotting time by Lee and White's method as a gauge for therapy is not based on experimental evidence. That I do not deny; but I should like to point out that in the same conference others have considered using this. Apparently lucite tubes, and collodion- or paraffin-lined tubes, are more sensitive than ordinary glass. I have no experience with these. The report also states that even with these the results are unpredictable.

I am of the opinion that dicoumarol is a dangerous drug, and should not be used unless all the implications involved are realized. One wants more than the "intelligent anticipation" that Drs. Canti and Robertson mention. Its action is cumulative; the delay in prothrombin time follows a logarithmic curve, and it is very easy to "overshoot the mark." It seems to me capable of doing more than just diminishing prothrombin activity. Dr. Lempert in his letter mentions one case where, as a result of overdosage, "the operation scar was not healing." And why the haemorrhage? Can one put it down solely to minute trauma associated with diminished blood coagulability?

In conclusion, may I once more quote the conference on therapy: "There are several gaps in our knowledge of the action of dicoumarol . . . so our knowledge has to advance by *cautious* (the italics are mine) experiments on man."—I am, etc.,

Birmingham. M. J. PIVAWER.

Myanesin

SIR,—"Myanesin" would appear to be of some value in the treatment of spastic hemiplegias and paraplegias of the lower limbs due to cerebral haemorrhage, disseminated sclerosis, and other upper motor neurone lesions. After an intravenous injection of 10 ml. the relaxation of the muscles of the lower limbs and abdomen is immediate and pronounced—lasting for 5 or 6 hours. During this period the joints can be put through a wide range of movements; passive movements are free, and massage of all the muscles is facilitated.

The procedure is quite easy and straightforward. Such a dose of myanesin seems to have a conveniently selective action on the lower half of the body, while the muscles of the upper half, including the diaphragm and intercostals, are unaffected. Therefore the patient can breathe in a normal manner, his tissues remain well oxygenated, and there is no need for any aided respiration. He has full use of his arms, is able to speak, and his blood pressure and pulse rate are undisturbed. As there are no unpleasant subjective symptoms, the patient usually looks forward to his next injection.

All this is in sharp contrast to the use of curare on the conscious subject, which could of course be used for the same class of case. After an effective injection of curare, however, the patient lies there fully conscious but with every muscle relaxed including his arms and intercostals; he is unable to speak or to make any sign, and has an unpleasant feeling of suffocation. Aided respiration with oxygen usually has to be given. He can be brought round in a dramatic way with an intravenous injection of prostigmin, but the experience is unpleasant and he does not willingly subject himself to a repeat injection. This valuable drug should therefore practically always be combined with light general anaesthesia.

In addition to its physical effects, the use of myanesin has a valuable psychological effect on these unfortunate sufferers. They see that something additional is being done and feel that they are not altogether relegated to the limbo of lost things.—I am, etc.,

Lancaster. L. MATHER.

Estimation of Prothrombin

SIR,—Recent correspondence on the estimation of prothrombin has revealed disagreement on the best method for the routine laboratory. The use of Russell-viper venom, or of a venom-lecithin mixture, as a thromboplastin is common in this country in spite of Quick's belief that brain thromboplastin is preferable. The great advantage of the venom methods is the commercial availability of accurately dispensed portions of 0.1 mg. venom in sealed bottles, while brain thromboplastin must be prepared in the laboratory and deteriorates rather rapidly.

The convenience of the venom reagents must not blind us to the drawbacks inherent in their use, which appear to be due in the main to two facts. By choice of optimum conditions speeds of clotting can be obtained with venom reagents which are much greater than those obtainable with brain thromboplastin. At the same time the kinetics of the reaction are such that the maximum possible velocity cannot be attained by any convenient concentration of venom, and it must be remembered that it is usually considered essential for the one-stage method that all reactants other than prothrombin must be present in excess.

It is not in fact necessary that excess thromboplastin should be present provided that the plasma thromboplastin makes no significant contribution to the speed of the reaction. In order to fulfil this condition a very rapid coagulation must be accepted or else the plasma must be diluted, with the attendant inconveniences and doubts which complicate the construction of the standardization curve.

With these considerations in mind an investigation of the venom methods has been in progress in this laboratory for some time and the results will shortly be ready for publication. In the meantime it may be stated that it has been found impossible to devise an acceptable procedure using Russell-viper venom alone, but a method using a buffered venom-lecithin mixture has proved reasonably satisfactory for routine purposes.—I am, etc.,

The Pathological Laboratory, Royal Berkshire Hospital, Reading. C. A. MAWSON.

Drug Addiction

SIR,—Dr. F. R. Ellis (Jan. 24, p. 175) writes, "It is a sad but true fact that morphine addiction is incurable. . . ." I wonder! When I first took over a practice I "inherited" a morphine addict—an elderly State-registered nurse—for whom I had to sign, from time to time, a prescription for a tube of twenty-four 1/4 gr. (16 mg.) morphine sulphate hypodermic tablets (for self-administration).

This poor woman had sustained a series of abdominal operations, involving many months of suffering and hospitalization, and had acquired the habit. The case was well known to the Home Office. My patient co-operated with me valiantly in attempts to lower the dosage and frequency—but there was always the sad sequel of intolerable pain and distress. So eventually I went into a huddle with her chemist (whose name is available to you) and we embarked on the following conspiracy. He made up a tube of 1/6 gr. (11 mg.) morphine under the 1/4 gr. label, and all went well. We carried on with this benevolent swindle until the lady was getting no morphine content at all—just an inert tablet.

The lady carried on happily for years—until she died of senile decay.—I am, etc.,

London, S.E.12. ERIC COPLANS.

Injection Errors: A Suggestion

SIR,—Recently an inquest was reported in the Press on a patient who had died from an injection of adrenaline given for varicose veins—the adrenaline being mistaken for a colourless sclerosing fluid. A year or so ago there was an inquest on a patient who had died from an intravenous administration of methylated spirit which was thought to be concentrated saline.

Early in the war I injected methylated spirit instead of "novocain" as the local anaesthetic for an intravenous infusion; the result was a slough 2 in. (5 cm.) in diameter. On another occasion I inserted in error, but without ill effect, distilled water intrathecally instead of "nupercaine." The label had become detached during boiling; on comparison of the ampoules of distilled water used for mixing pentothal with those containing nupercaine, they were found to be almost identical.

Other errors occur in medical and hospital practice. Reports of them occasionally reach the newspapers from the High Courts or inquests. I think it is possible to avoid these incidents by vigilance, clear labelling and distinctive tinting of the fluids which are in common use—for example, chloroform in some hospitals is tinted red. I use local anaesthetic coloured blue, as

is also saturated sodium chloride but with a different shade. Carbolic acid injections are tinted pink. May I suggest that the time has come when the pharmaceutical authorities might give us a standard range of colourings for commonly used injection agents, such as morphine, atropine, "omnopon," pentothal, procaine, saline, "amethocaine," "ethamolin," etc.? Further, the practice of etching instead of labelling the contents of an ampoule would be another adjunct to accuracy.

These measures would avoid costly incidents to patients, occasionally to surgeons, and also smears on the good names of hospitals, nursing staffs, and the medical profession individually and collectively.—I am, etc.,

London, W.1. HAROLD DODD.

Sprained Ankle

SIR,—Thirty years ago practitioners knew how to treat sprained ankles. To-day they do not, and their ignorance instead of being corrected by hospitals is spreading into them. Nowadays reliance is placed on crepe bandages and "elastoplast." dressings, sometimes supplemented after an interval by inclusion in plaster-of-Paris. Our fathers strapped the ankle with zinc oxide adhesive plaster in a position to relax the injured ligament and made their patients walk. A cure resulted in a fortnight or less. A great amount of national effort is being wasted by the inefficient methods employed by the present generation of doctors in treating this very curable injury.—I am, etc.,

Birmingham. FAUSET WELSH.

Foreign Body in the Ear

SIR,—Dr. C. J. Gordon Taylor's case (Jan. 10, p. 76) of a foreign body in the vagina for 41 years reminds me of a case that has interest, perhaps, for E.N.T. colleagues.

A lady of 50 years came to me to have a piece of "slate pencil" removed from her left ear; she had pushed it in while at school at the age of 7, and was afraid to tell her mother until several years later, when she was laughed at for her pains. In the long period until she came to me she had no pain (only a slight occasional tickling sensation), no discharge, no tinnitus, and no noticeable impairment of hearing. I scoffed also, particularly when I saw a meatus filled apparently with nothing more serious than wax. Failure to clear this with hydrogen peroxide instillations, followed by syringing, made me less sceptical. Eventually I had to dissolve the wax with ether, and then could clearly see and feel a small metal-like foreign body lying anteroposteriorly across the meatus. One side lay against the drum and at first adhered to it, but as the solvent worked it became loose, until the body lay free in its bed. No attempt, however, could be made to remove it, as the slightest touch caused great pain. Fifteen minutes later, after a local anaesthetic had time to act, removal with aural forceps was easy enough. The body was cylindrical, a little over 1/8 in. (0.32 cm.) long, and somewhat less than this in diameter. For the benefit of those who may not have heard of slate pencils, these were pieces of flint-like stone used in a former generation for writing on slates, before lead pencils and copy-books came into general use. Following removal, except for hyperaemia of the drum, I could see no abnormality. Hearing was approximately normal.

The points of interest in this case, to my mind, are the absence of pain, of discharge, of tinnitus, or of any notable impairment of hearing. All these would be chiefly due to the lack of sepsis, and this in turn to the comparative cleanness and inertness of the foreign body.—I am, etc.,

Sligo. SEAN O'BEIRN.

POINTS FROM LETTERS

Doctors' Wives and the Service

A doctor's wife writes: Before long the position of wives of doctors within the National Health Service must be made clear. Cannot the B.M.A. organize to represent us and state our views speedily and forcefully to the Minister of Health? Until now doctors' wives have gladly helped in the domestic side of their husbands' practices, sharing the building and maintenance of an efficient service to the patients. Now we are to continue to answer bells at all hours of the day and night and to clean and heat surgeries and waiting-rooms, for the State Clinics will not come into being for many years. Perhaps Mr. Bevan, with one of his kindly gestures, will provide each house with a capable receptionist-cum-charlady to replace the doctor's wife, with whom he will have no contract. This is an important item which so far has been neglected, and steps should be taken without delay to avoid the creation of an army of unwilling women workers for Mr. Bevan's Service.

Fully Salaried Service

Dr. D. V. MILWARD (Slough, Bucks) writes: Mr. Bevan's bland assurances that nothing could be further from his mind than a fully salaried Service carry little conviction. The Government's plans to destroy the usefulness of the House of Lords, to abolish University M.P.s, to muzzle the Press, and to nationalize the steel industry at this critical time leave no doubts in the minds of any but the most ostrich-headed that they do intend to control our "most reactionary profession" for political rather than humanitarian reasons. All this accomplished, the Party could go on its totalitarian way rejoicing and untouched by criticism. . . .

Working Conditions in N.H.S.

Dr. J. E. KENNEDY (Glasgow) writes: There is no evidence that the Association has interested itself in working conditions for practitioners. Twenty-four hours a day is wrong and yet Representatives advocate it. Introduction of the N.H.S. in the summer will upset holidays, and persons joining the new "panels" will be less numerous at this season. . . .

Reduced Wages, More Work

Dr. D. W. REID (London, N.11) writes: With reference to diminishing capitation fee for the increasing numbers on one's list, what branch of the community would submit to reduced wages for more work and increased responsibility? . . .

Individual Freedom

Dr. THOMAS NELSON (London, W.4) writes: Once the practitioners part with their capital and its control they are bound to become State slaves whether they like it or not. Every evil thing will then be added unto them, and, kick as they may, they must be hounded into any form of compulsion the State may determine; so that the retention by the doctor of his goodwill remains the one essential goal in the fight. It is his only escape from chains to freedom. . . .

Combined Diphtheria and Whooping-cough Immunization

Dr. H. W. SWANN (Richmond, Surrey) writes: Since the introduction of the combined diphtheria and whooping-cough immunization it is well known that local reactions after injections occur more frequently than after diphtheria immunization alone. Having tried to avoid these reactions by different techniques I have come to the conclusion that the following method seems to give the least reaction and is also suitable when it is necessary to do a great number of injections during a session.

First of all I insist that the shoulder of the child is completely bare before the child enters the doctor's room. An all-glass 1 c.cm. syringe with a metal cap and with a No. 15 (1 inch) needle is most suitable. When filling my syringe with the immunizing fluid I pierce the rubber cap very superficially, only enough to introduce the bevel of the needle into the bottle. This almost completely obviates the possibility of some of the immunizing fluid clinging to the outside of the needle and being injected into the superficial layers of the arm, because if this happens it definitely produces some reaction. Having filled the syringe I grasp the child's arm from the axilla with my left hand, and gripping the arm all round with my fingers I cause the belly of the deltoid muscle to bulge upwards. I hold the syringe almost vertically between the thumb and the index finger of the right hand, steadying it with the first phalanx of the middle finger from underneath, pierce the skin and the subcutaneous tissues vertically with a quick stab and insert the needle until the cap touches the skin. Having got the syringe into that position I change the position of my fingers and press the piston down with my index finger, inject, and withdraw the needle quickly. In this way I am perfectly sure that the immunizing fluid has been injected completely intramuscularly. I have positive proof that superficial or even deep subcutaneous injections of the combined diphtheria and whooping-cough antigens often produce very severe local reactions, including a formation of a sterile abscess.

The Local Hospital and the G.P.

Dr. E. G. SIBLEY (Forest Row, Sussex) writes: I am sure it is not always realized by the authorities concerned or by the general public that the responsibility for maintaining or raising the standard of general medical practice in a locality rests to a large extent with the local hospital. This responsibility should be considered second in importance only to the treatment of the patient actually in the hospital itself. Consultants whose work brings them into contact with doctors who do, and with those who do not, look after their own patients in hospital find, I think, that the standard of work is higher among the former than the latter. It follows, therefore, that any development which tends to limit the opportunities for the G.P. to look after his own patients in the local hospital must tend to lower the standard of general practice in the locality. I believe that, in their efforts to simplify administration and even in some cases to make advances towards slick efficiency, some local hospital authorities have in the past failed in their task of maintaining the standard of general practice.

Obituary

ROSCOE GRAHAM, M.B., F.R.C.S.(C.)

Dr. Roscoe Reid Graham, a Toronto surgeon, died suddenly while ski-ing on Jan. 17. He was 58 years of age and the son of Dr. Peter Graham, a country doctor who practised for some fifty years in the small Ontario village of Lobo. He qualified in medicine in 1910 from the University of Toronto, and even as an undergraduate he had decided on surgery as a career. He spent his first two years after graduating studying pathology and bacteriology under the late Dr. George Naismith. After holding resident posts he was in London for some time, returning to Canada to start practice just before the outbreak of the first world war. After service in military hospitals in England he returned again to Toronto, being appointed at first to the staff of St. Michael's Hospital and later as a surgeon at the Toronto General Hospital, where his enthusiastic teaching was greatly appreciated. He was best known to his British and American colleagues as as abdominal surgeon. He was a Fellow of the Royal College of Surgeons of Canada, and an Honorary Fellow of the American College of Surgeons, the Mexican Academy of Surgeons, and the American Surgical Society. At the time of his death he was President of the Canadian Society of Clinical Surgery. He was fond of music and outdoor pursuits and was especially expert in photography. He leaves a widow and a married son and daughter to mourn his loss.

Sir Heneage Ogilvie writes: The many friends and admirers in Great Britain of Roscoe Graham, the famous Canadian surgeon, will have been deeply grieved to hear of his sudden death. Roscoe Graham combined with a charming personality and unusual simplicity of character all those qualities that make for real greatness in surgery—a high sense of duty, a deep love of his fellow men, indomitable energy and strength to work long hours without fatigue, courage, the ability to make quick decisions, skilled and gentle hands, originality of thought, and an uncommon gift for clear thinking and vigorous expression that made him one of the best teachers and writers of his time. He was a leader in abdominal surgery, and his writings had a profound influence on the progress of gastro-enterology. He was the first man successfully to remove an islet tumour of the pancreas, and as a result he attracted similar cases to Toronto from all over the world. At the time of his death he was senior surgeon to the Toronto General Hospital and assistant professor of surgery at the University of Toronto.

Roscoe was strikingly handsome, tall, with an upright athletic carriage and a pink boyish face contrasting oddly with hair that had been snowy white since early manhood. He seemed to radiate happiness. He did everything well, whether in work or sport, and delighted in doing it well. He was an expert skier, and fell dead in the snow at the end of a day during which he appeared to have been in perfect health, enjoying his favourite sport in the place he loved. Such a death is one that all might envy, but it came too soon. He had passed his fifty-eighth birthday only a few days before, and he was in his full vigour as an operator and a teacher, exercising that leadership which during the last thirty years has influenced so many young surgeons in Canada and Britain to their lasting good.

W. M. writes: His many friends in this country will have heard with great sorrow of the tragic death of Roscoe R. Graham, of Toronto, one of the great surgeons of the Empire. Just two months ago I saw him full of the joy of life and looking as though he had many years of it still in front of him. He went off for a week-end to Collingwood and had an hour or two on his skis. In the early afternoon he had his last run and at the top of the slope said, "I don't care whether I ever ski again. I'd just like to sit here and look at the view." Finishing the run, he slung his skis over his shoulder, walked through the gate of the grounds, collapsed, and died—another victim of coronary thrombosis.

His loss to surgery will be an irreparable one. All over North America he was recognized as a really great surgeon and was constantly in demand for addresses to medical schools, as well as to operate on some of the highest in the land. He was head of the surgical department of the Toronto General Hospital and was regarded with a devotion by his associates and the nursing staff amounting almost to reverence. Tall and handsome, with twinkling happy eyes and a warm sense of humour, he carried to the lecture-room a dramatic presence that won for him the rapt attention, and indeed the love, of his students. He was president of the Canadian Society of Clinical Surgeons, and had just been invited by the American College of Surgeons to give the John B. Murphy oration in San Francisco next spring.

Dr. CHARLES EDWARD MURPHY died at his home at Ethelbert Road, Canterbury, at the age of 77 on Jan. 17. A student of Trinity College, Dublin, he qualified in 1893, and a few years later settled in Dover, where he was in practice until the first world war. He took the F.R.C.S.I. in 1909, and soon after joining the R.A.M.C. he was appointed surgical specialist to the Canterbury Military Hospital. He was later senior visiting surgeon and finally consulting surgeon to the Royal Victoria Hospital, Dover, and he was a life member of the St. John Ambulance Association. Dr. Murphy was a keen sportsman and for many years an active member of the Royal St. George's and Canterbury Golf Clubs. For the last fifty years he had never missed a Canterbury cricket week, and in his early days he was also a first-class lawn tennis player and took part in a number of Wimbledon tournaments.

Mr. DUDLEY D'AUVERGNE WRIGHT, late consulting surgeon to the London Homoeopathic Hospital, and senior surgeon to the Manor House Orthopaedic Hospital, Hampstead, died on Jan. 22 at the age of 80. He was educated at Haileybury and University College Hospital, qualifying M.R.C.S., L.R.C.P. in 1888, and taking the F.R.C.S. in 1898. Apart from his long connexion with the Homoeopathic Hospital he was consulting surgeon to the Leaf Cottage Hospital at Eastbourne, and he was on the staff of the Leicester Homoeopathic Hospital and of the Phillips Memorial Hospital at Bromley, Kent. At one time Mr. Wright was president of the British Homoeopathic Association. During the 1914–18 war he was chief surgeon to the Hôpital de l'Alliance at Dieppe and later was in charge of the Allied Military Hospital at Yvetot, Seine-Inférieure.

Dr. JOHN ALOYSIUS MUSGRAVE died at his home in Greystones, Co. Wicklow, at the age of 56. A native of Alloa, from 1928 until his retirement in 1942 he was M.O.H. for Co. Louth. Qualifying at the Royal College of Surgeons in Ireland in 1915, he joined the R.A.M.C., and was mentioned in dispatches by General Milne for bravery in the field. He served in the Balkans, Palestine, and Transjordania, and was associated for some time after the war with the R.A.F. Dr. Musgrave contributed a number of papers to the medical press. His early retirement was due to ill health. He leaves a widow, a son, and four daughters.

Dr. GEORGE HAROLD LOWE died at his home in Middlesbrough on Jan. 31. Dr. Lowe graduated M.B., Ch.B. at Edinburgh University in 1907 and proceeded M.D. in 1912. After qualifying, he was house-surgeon at the North Riding Infirmary, Middlesbrough, and clinical assistant in the Ear, Nose, and Throat Department of the Edinburgh Royal Infirmary before entering into practice. He was an honorary consulting physician to the North Ormesby Hospital, and had acted as anaesthetist to that and to other hospitals in the area. He was for many years an active member of the British Medical Association. He was secretary of the Cleveland Division for ten years and chairman in 1930–1. He represented the Division at Annual Representative Meetings on nine occasions and was one of the best-known general practitioners in Middlesbrough.

D. I. R. writes: Although I knew Dr. Lowe only in the later years of his life, when increasing ill health had made it impossible for him to play as active a part in practice as he could have wished, I soon came to appreciate his sterling qualities. A distinguished manner and a dignified appearance, meticulous attention to detail, and a keen clinical acumen combined with a healthy contempt for modern tendencies to over-specialization made him an outstanding example of the best type of general practitioner, and in my association with him I came across many examples of the high regard and affection in which he was held by very many of his patients. To the end he maintained that keen interest in professional affairs which was evidenced in earlier years by his activities in the Cleveland Division of the British Medical Association. He had an unfailing helpmate in his wife, and her care and devotion to him were an inspiration to all who knew her. It was, I am sure, a great pleasure to him that his elder son had recently returned from war service to enter the practice with him. To his widow and to all his family we extend our deep sympathy.

Medical Notes in Parliament

COMMONS DEBATE ON THE NATIONAL HEALTH SERVICE

Comment on the main features of the debate on the National Health Service in the House of Commons on Feb. 9 will be found in a leading article at page 300.

The debate took place on a motion tabled by the Government: "National Health Service.—That this House takes note that the appointed day for the National Health Service has been fixed for July 5; welcomes the coming into force on that date of this measure which offers to all sections of the community comprehensive medical care and treatment and lays for the first time a sound foundation for the health of the people; and is satisfied that the conditions under which all the professions concerned are invited to participate are generous and fully in accord with their traditional freedom and dignity."

To this the Opposition moved the following amendment: "Leave out from 'people' to end, and add 'but declines to prejudice in any way the right of individuals in all the professions concerned to express their opinions freely, according to their traditions, and in the interest of their patients, upon the terms and conditions of service under the proposed National Health Scheme.'"

Minister's Attack

Mr. BEVAN, moving the resolution, recalled that the debate had been requested by Labour Members of the House and not by the Opposition, and said there was some significance in that fact. For the last six months there had been a sustained propaganda in newspapers supporting the Conservative Party which had resulted in grave misrepresentation as to what was the nature of the Health Service and of the conditions under which the medical profession were asked to enter the Service. There had been even worse misrepresentation sustained by a campaign of personal abuse (Ministerial cheers) from a small body of spokesmen who had consistently misrepresented the great profession to which they were supposed to belong.

He drew a distinction between the hard-working doctors who had little or no time to give to these matters and the small body of raucous-voiced people who were alleged to represent the profession as a whole. So much misrepresentation had been engaged in by the British Medical Association that the doctors voting in the plebiscite were doing so under a complete misapprehension as to what the Health Service was. It had been frightening to speak to some doctors and to learn the extent to which their representatives had failed to inform them about the facts of the case. (Ministerial cheers.)

It had been suggested that one of the reasons why the medical profession was so stirred up at the moment was because of personal deficiencies in the Minister. He was very conscious of his own deficiencies; they were very great. An absence of introspection was never regarded as part of Celtic equipment, and he was therefore conscious of his limitations. It could hardly be suggested, however, that the conflict between the B.M.A. and the Minister of the day was a consequence of any deficiencies on his part, because there had never been a Minister with whom the B.M.A. agreed. His distinguished fellow-countryman had had quite a little difficulty with them; he was a Liberal and they found him anathema. Mr. Ernest Brown, a Liberal National, they had found abominable; Mr. Willink, a Conservative, they had found intolerable; and now they had found him (Mr. Bevan) even more impossible. (Laughter.)

Yet it was to be assumed that doctors were taking up this attitude at the moment because of unreasonableness on his part. It reminded him of the famous argument between Chesterton and Belloc. They had been arguing as to the cause of drunkenness, and decided to apply the principles of logic. They met one night and got drunk on whisky and water, the following night it was brandy and water, and on the third night gin and water. They decided that, as the constant factor was water, it was obviously water that was responsible (loud laughter)—a conclusion which was probably most agreeable to Bacchic circles.

Suggestions that the disagreements with the medical profession were the consequences of the personal qualifications or disqualifications of the Minister concerned could be dismissed at once. He referred to them only to call attention to that sort of propaganda which seemed to be recurrent in British politics in which issues of principle were vulgarly personalized. It was becoming almost impossible for the people to see the differences of principle through the smoke of personal misrepresentation.

It had been suggested by the spokesmen of the B.M.A. that the Government had not negotiated with them sufficiently, that if they had been more approachable things would have been different. But there had been long negotiations with Mr. Ernest Brown and Mr. Willink, and on every occasion the B.M.A. rejected the advances made. He had met the Negotiating Committee eight times—three of them most irregularly while the Bill was in committee—and since August, 1945, officials of the Department had met representatives of the Negotiating Committee 28 times. There had been continuous discussions, but the Negotiating Committee was never in a position to negotiate. It had received—at its own request—instructions not to negotiate. When he met the Committee last December he was presented with a printed circular rejecting the Act before the final negotiations had taken place. He then asked the chairman what was the use of two days' discussion when one of the parties had already decided to reject the chief features. The answer was that they had already made up their minds.

They were not now dealing with a body which was seeking to bring about a modification of principles in what they considered to be the legitimate interests of the medical profession; they were dealing with a body organizing wholesale resistance to the implementation of an Act of Parliament. They had already rejected the Act before they knew the terms of remuneration to the practitioner. It began to look more like a squalid political conspiracy than the representations of an honourable and learned profession. One of the weaknesses of the B.M.A. position was that they had mustered their forces by misrepresentation; when the facts were known the forces would disperse.

Four Main Issues

The first of the four main issues on which the B.M.A. had joined issue was that they could not accept the abolition of the sale and purchase of practices. That was recommended by the profession's own Health Commission; the doctors voted for it in their own plebiscite; all the Government had done was to put into the Act the recommendations of the best medical opinion. The Government regarded it as inconsistent with a civilized community and a reasonable health service for patients to be bought and sold. That existed in no other country, and was a blot on our medical system. Did the Opposition accept or reject the sale of practices in the public service? So far as the Government was concerned, there could not be any question that the Health Service must not contain the buying and selling of public practices.

The second objection was that they would not accept the basic salary as part of their remuneration. But the first time that a full-time salaried general practitioner service was put before the profession was in 1943, during the Coalition Government, by Mr. Ernest Brown. This proposal, which was supposed to contain the seeds of Socialist regimentation, did not come from a Socialist Minister. The matter was argued during the passage of the Bill, and it was decided that young doctors ought to have the opportunity of living decently while they were building up their practices. The present system put the heaviest burdens on them—either through the limitations imposed by entering the profession as assistant to a principal, or by the heavy interest charges on money borrowed to purchase a practice—just at the time when they should be most free of burdens. The Government considered that a basic salary of £300 a year would be a financial defence for the young doctor. If a practitioner believed that the element of basic salary was repugnant and made him into a State-salaried servant he need not take it. But it would be interesting to see how many would regard it as so repugnant that they would hand it back.

Their third argument was that the partnership agreements would be rendered very difficult. The general practitioner's mind had been confused by the B.M.A. propaganda in this respect, but there was naturally anxiety among general practitioners as to the effect of the Act on partnership agreements. To try and clear it up he had decided, with the co-operation of the Attorney-General and the Lord Chancellor, to appoint a legal committee to inquire into it and recommend what they considered should be done. That was a most unusual proceeding: after Parliament had passed a Bill it was left for the Courts to construe it. However, if further light could be thrown on this matter, if legal minds could find any way in which this clause could be clarified, he was perfectly prepared to have an amending Bill to make it quite clear where the general practitioner stood.

The fourth matter was what the B.M.A. considered the removal of their legal rights, and here misrepresentation had reached staggering proportions. It had been said that the

doctor had had taken away from him his right of appeal against unlawful dismissal. That was entirely untrue. The doctor would have exactly the same right of appeal to the courts against unlawful dismissal as any other citizen. During the whole of his negotiations with the representatives of the medical profession they had never been able to show any part of the Act which took away that right. But some of them wanted to go further, and wanted the right of appeal against removal from the Service on the ground of misconduct or neglect.

It was perfectly competent to go to the courts against a Minister on the ground that he had unlawfully removed a doctor from the Service. It was entirely different if they wanted to take the Minister to court on the ground that he had acted wisely or unwisely; that was a matter for the House of Commons to determine, not the courts. If a doctor was to have the right to ask the courts to arbitrate not on a question of law but of merits, how could that be denied to anyone else?

The existing protection for the doctor under the National Health Insurance Act was merely an appeal to the Minister, and that was where it was left by Mr. Willink in the new Health Service. He (Mr. Bevan) decided that that was not sufficient, on the ground that the new Service would be universal, and that removal from it in the future would carry far heavier penalties. Therefore he put in a tribunal between the local executive council and the Minister. If a G.P. was in conflict with the local executive council—on which there were seven representatives elected by the doctors in the locality—and that body decided he should be removed, they reported to the Minister. All the Minister could then do was to refer the matter to the tribunal, consisting of a chairman appointed by the Lord Chancellor, a doctor, and a layman. If the tribunal decided the doctor should be retained the Minister could do nothing about it. The Minister was only brought into the picture if the doctor himself invoked the Minister against the decision of the tribunal. The Minister could then order another inquiry, public or private as the doctor desired, and the Minister could then decide whether the doctor's contention should be upheld or not. There was no professional body in the world in which greater protection existed than that.

Even supposing the doctors were given the right of appeal to the courts for which some of their so-called spokesmen were asking, what a weapon of tyranny that would put into the hands of the Minister. Not only the doctor but the Minister too would have the right of appeal, and could ask the court for the removal of a doctor. Any Minister would thus have a considerable power of intimidation over the doctor, whom he could force to undergo all the odium of publicity, and of having his professional reputation besmirched. If the medical profession could be given what they were asking for, in six months' time they would be cursing the people who asked for it.

He was desperately anxious to get the medical profession into the scheme enthusiastically and harmoniously. He deplored the atmosphere which had been created in the last six months. So anxious had he been not to enter into these polemics that he had made no public speech until January, when the B.M.A. decided to reject the Act. It might be that because of that the mis-education of the doctors was partly his responsibility. But if he was to be asked now to make some concession to assuage the feeling and bring about greater harmony between the Government and the doctors, he must point out that the negotiations had been a long series of concessions on the part of the Government and of none by the medical profession—not a single one.

Collection of Bromides

Coming to the amendment, he said at once that the Government were prepared to add the amendment to the motion. It was one to which all M.P.s could subscribe. A more innocuous collection of bromides he had never seen. Its sting was that it left out the last part of the motion. If the Opposition considered there was nothing in the Act which interfered with the freedom of choice, nothing which prejudiced the doctor–patient relationship, they should say so. So far they had not.

The Government did not object to the doctors expressing their opinions freely, nor to the B.M.A. recommending their members not to take service under the scheme. But they did take serious objection to organized sabotage of an Act of Parliament. Did the Opposition support the B.M.A. organizing resistance on July 5? The beginning of that road might look attractive, but the end would be exceedingly unpleasant. If there was one thing the House must assert it was the sovereignty of Parliament over any section of the community. B.M.A. House was not yet another revising chamber. The House of Commons could not be dictated to by any section of the community. Any section of the community had the right to try and persuade the House to change its mind. The Government took up the position that the B.M.A. had exceeded their just constitutional limitations and the best thing they could do now was to record their opinion that while they might disagree with the Act in this or that particular, or in general if they wished, nevertheless they would loyally accept the decision of Parliament and go on agitating for such revision as they thought proper. (Loud Ministerial cheers.)

Mr. Bevan's Bedside Manner

Mr. R. A. BUTLER, speaking first for the Opposition, said they had never thought that Mr. Bevan had a bedside manner, and his speech had done nothing to make a settlement of the dispute any more likely, with the possible exception of the small concession which ought to have been made long ago about medical partnerships. He had imported the term "squalid" into his arguments about the doctors because it was in the waters of squalid politics he enjoyed himself most, and he ought to examine his own conscience in view of the inept manner in which he managed the controversy. (Opposition cheers.)

The one issue before the House was how to reconcile the individual wishes and fears of doctors as to the manner in which they felt able to conduct their professional duties with the needs of a national health service which the vast majority wished to secure. It was not a case of a private wrangle between the Minister and a score of elderly doctors. The field was very much more extended. Doctors, dentists, and the optical profession were all concerned and anxieties were rising

Mr. BEVAN said that the dentists' objection was the old one of wanting more money, and the ophthalmic opticians were perfectly satisfied with the conditions of the scheme. (Opposition cries of "Oh.")

Mr. BUTLER said that that was not the information sincerely submitted to him. The point of the Opposition amendment, he continued, was that the debate should not be used as a means of intimidating the doctors (Opposition cheers), and that the doctors should be given an opportunity of expressing their views freely. In the second place the Opposition felt that the Minister's words "that the conditions under which all the professions concerned are invited to participate" were not in accord with the dignity of the professions, and they felt obliged to insert a safeguard for the doctors during the period of their voting.

The financial terms were not what was really at stake in this controversy. If the doctors came into the scheme it would not be due solely to financial inducement, but it would be due to conscience. The Opposition regarded the Act as part of the new social mosaic, and such a scheme could not be operated without the willing co-operation of all concerned. In the Education Act matters had been approached in a different spirit Had they desired to conduct their negotiations under that Act by the method of lightning and thunder, and the method of public controversy, there would have been no opportunity of reaching a settlement. (Opposition cheers.)

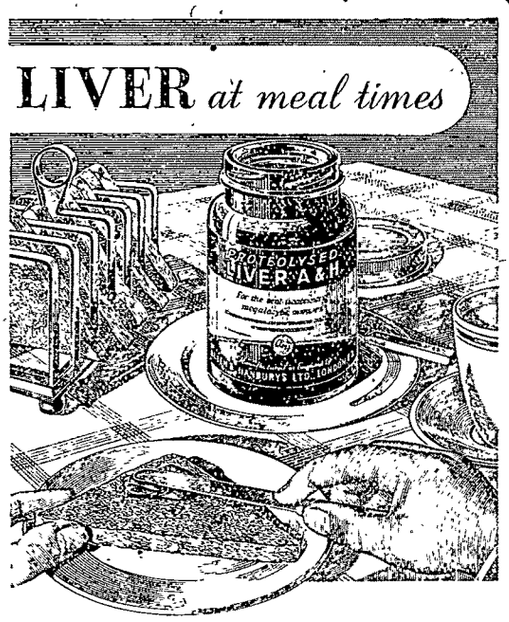
The Minister was misleading the country because the date was approaching for the introduction of the scheme and he had not secured the co-operation of the great medical profession This drift was another example of the irresponsible and incompetent administration associated with the Government, and the responsibility for the grave danger in which the health scheme now stood lay at the door of the Minister of Health. (Opposition cheers.) The whole stage was ready and set for this reform, and the only person who was unready and unset was the Minister. (Opposition laughter and Ministerial cries of "No.")

One of the main points of the Minister's speech had been the sovereignty of Parliament. Did the Minister feel that the doctors were sabotaging Parliament by expressing their opinions?

Mr. BEVAN denied that he had ever said that. Collective abstention from participation in the Act was being organized, and that was sabotage. (Ministerial cheers.)

Mr. BUTLER retorted that collective sabotage was an even stronger term. The doctors had been given by the Act an opportunity to state their views, and the Minister must know that unless he obtained their co-operation the scheme would not work.

It was the doctors who were going to suffer most, whatever happened in this controversy, because he did not believe that the doctors would withhold their work or their labour. They intended to go on working, and, so far as he could see, with the ending of the National Health scheme they would go on working for nothing. The Minister had taunted him with trying to be an honest broker, and was probably trying to prepare the way to prejudice his remarks. But he did not intend to pay the slightest attention to that part of the Minister's dialectics, nor did he wish that these issues of principle should be vulgarly personalized. The Minister had reached his present eminence by the art of vulgarly personalizing every principle (Opposition cheers). He declined to be misled by the Minister's herrings.



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Professional Freedom

The first principle on which the doctors rested their case was that they must be free to practise according to their accepted standards. They wanted freedom of professional judgment, speech, and action, and also freedom to write and publish. He understood from a recent Parliamentary answer by the Minister that a doctor would be able to write and publish in scientific journals what he liked without any prohibition whatever. Would the Minister confirm that?

Mr. BEVAN: Why should I confirm it? You first of all cast doubt. There never was any doubt whatsoever. The right honourable gentleman is leaving a trail of slime behind him.

Continuing, Mr. BUTLER said that the second principle on which the doctors insisted was that in the interests of the community the service of medicine should not become directly or indirectly a full-time service of the State. The real anxiety of the doctors was that the Minister had power in the regulations to extend the basic salary and make it eventually the main feature of the Service.

Mr. BEVAN: That is a power which has existed since 1911. It exists under the new Act no more than under the old Act.

Mr. BUTLER said that he was trying to remove the anxieties of the doctors that it was the intention of the Government to expand the basic salary so that the members of the profession became Civil Servants.

Mr. BEVAN: I said upon the Second Reading that it was the intention of the Government to pay the general practitioner mainly by way of capitation and the rest by a small element of basic salary. I repeated that in committee, and I repeat it now. There is no intention of extending it to make it a full-time salary.

Mr. BUTLER replied, So far so good, but the Minister would have to go further and remove the general basic element in all salaries (Labour cries of "Why?"). It was not the basic salary by itself which was causing alarm to the medical profession, but the fact that it might be expanded, and members of the profession might by that door be brought into the State Service. If the Minister could allay that apprehension he would have got one stage further.

On the question of appeal, he asked the Minister to think about that again, although on that point he thought the Minister had a stronger case. The Minister had set up the tribunal, and the fear of the doctors was that there was an ultimate political chief at the top. Mr. Bevan should leave his elaborate system of the tribunal to decide those matters, and simply allow an appeal on fact to the courts from the tribunal, that was to say, whether the different operations had been carried out in a fair way according to all the regulations laid down.

Mr. BEVAN indicated dissent.

Mr. BUTLER said that it would mean that the Minister would not actually come in as the final appeal. If Mr. Bevan would follow that line of thought it would keep him out of the picture but would retain the tribunal as the ultimate authority, and not the Minister. That would lead to a possible method of getting the two sides together.

There was very little that could not be settled by good will, toleration, and common sense (cheers) if the approach was broader than the party approach. They could not nationalize conscience (Opposition cheers), and it was no good trying to do so. Mr. Bevan would not get agreement unless he got the confidence of the profession. It was important that the health scheme should work by agreement and not by coercion. An extra effort should be made to meet the doctors' basic anxieties. What was wanted was a "victory for common sense" (Opposition cheers). They hoped and prayed that the spirit of the Act might be carried out. He did not believe that it would be the public who suffered as much as the doctors if the impasse continued.

He trusted that after the controversy was over, if the Government brought to it a little more toleration, patience, and common sense, the doctors would be able still to take their traditional oath. They would be able to feel that the traditions of 2,000 years would continue, and the art of healing might be practised not by helots of the State but by free men serving the interests of the State (Opposition cheers).

Direction

Dr. SANTO JEGER said that a doctor searching for a living was directed to-day. He went where there was a vacancy. That was all the Act was doing. He had never been able to see how the Act interfered in any way with the relationship between doctor and patient. If there was any interference he would be the first to object. The doctor's responsibility for and to his patients would be no less under the Act than it had been in the past. The Minister was not interfering or sending snoopers around the country. In the new Service doctors would get greater responsibility on their executive committees. Many doctors were now working for basic salaries, and no one would say that they were any the worse on that account. He confessed that he would have liked a full-time salaried service, "but, as we cannot have that, I am prepared to take the next best thing, which is a basic salary." The new Service would be flexible. Never before had doctors had such full consultation, and he could not see what they had to grumble about.

Mr. FRANK BYERS said that what mattered was that the dispute itself might prejudice the working of an efficient Service which so many millions had been looking forward to for so many years. The fact was that the doctors were voting "blind," and they had been grossly misled by a small clique in the B.M.A. The Conservative amendment was utterly puerile, but he could not absolve the Minister from complete blame. He would have been well advised to have made more public utterances in order to show to the average doctor the exact truth and to counteract the misrepresentations of the B.M.A. Much of the propaganda of the B.M.A. was a direct challenge to the Act, and Members of Parliament must resist that. The dispute had to be settled. The B.M.A. should take the initiative now. If not, the doctors should get rid of the people in the B.M.A. and appoint a new committee to negotiate with the Minister. The trouble with the plebiscite was that people did not understand the issues involved. There was very little substance indeed in the case put forward by the B.M.A. The main thing was to get the Service going in a spirit of good will, and that involved give and take on both sides.

Dr. STEPHEN TAYLOR said that if ever there was a badly bewildered profession it was the medical profession at the moment. The spokesmen of the B.M.A. had spoken in passionate terms, but the burden of the message ranged from a complete emotional denouncement to admissions that the bulk of the Act was good, except on four or five points.

There was only one possible reason for contemplating a full-salaried system, namely, on the assumption that the proposed machinery would fail. If the doctors made a success of the scheme they would have the full backing of Socialist members in resisting a full-salaried service.

Rooted Objections

Mr. LINSTEAD suggested that the Minister had failed to understand the root cause of the objection of the medical profession to the National Health Service Act. The conditions under which the dentists and pharmacists were to be invited to participate in the new Service had not yet been made known, and it was not right to ask the House to agree to a motion in advance of the supply of vital information.

If the Minister thought that a sufficient number of doctors would come into the Service over the head of the Negotiating Committee he had missed the essential points. This controversy could not be viewed otherwise than against the existing social and political background. In 1911 the direction of labour or the possibility of a full-time State Medical Service had not been thought of. Those things were very much in the public mind to-day, and therefore the Minister could not rely on the collapse of the opposition of the doctors as happened 37 years ago.

More and more the members of the various professions were becoming either directly or at one remove State employees. That was a completely new state of affairs which raised a whole series of new problems, which must be worked out in the British fashion of trial and error. All these considerations lay at the back of the differences between the Minister and the doctors.

Hitherto the doctors had been able to lay down their own professional standards. Rightly or wrongly they feared that there was now a danger that those traditions would go by the board. There was also a fear that doctors would lose the right to practise where they liked. The Minister would not get the good will of the medical profession until he convinced its members that their professional standards and traditions would be respected.

If the Minister's assurance that there was no intention of turning the medical profession into a whole-time State-salaried service was to be accepted, why could he not continue the capitation fee system which had worked for many years under the National Health Insurance Acts? Perhaps Mr. Bevan believed that he would be able to break the resistance of the doctors by means of the Government majority in the House of Commons and by the power of the purse. If he did so it would be a dearly bought victory, and the public would be the victims, because without the co-operation of the doctors no national health scheme could ever work successfully. It was still possible by an act of statesmanship to enable the scheme to be brought into operation with the co-operation of the medical profession.

Mr. LESLIE HALE said that the B.M.A. had never represented the medical profession in this matter, and the time had come to make that clear. The plebiscite asked the doctors not only to state whether they were willing to enter the new Service or not, but also to put the B.M.A. in a position to wreck the scheme and defy the will of Parliament.

The Profession and the B.M.A.

Sir ERNEST GRAHAM-LITTLE said that what mattered was not promises or statements by the Minister, but what was in the National Health Service Act. He contended that the requisite personnel and buildings could not be forthcoming to enable the Act to be brought into operation on the appointed day or any foreseeable future date.

After quoting the voting figures by consultants and specialists against the scheme, he said that those sections of the profession were not so important in this respect as the general practitioners, who were three times as numerous. The general practitioners were represented by the B.M.A. The position of that body had been widely misinterpreted, notably by the Minister himself. The Council of the B.M.A. was obliged to adopt the official policy of the Association expressed in resolutions passed by the Representative Body by not less than a two-thirds majority. The rejection of the 1946 Act was the policy of the Association, and it would have been entirely within their right to announce it at once. They had, however, wisely decided to consult not only their own members but all members of the profession.

The whole structure of the new National Health Service—and especially the general practitioners' section—was based on the provision of health centres for the whole community. But the Minister had announced that the provisions of those centres must be postponed. That made an enormous hole in the scheme, particularly as it affected the general practitioner. The shortage of dentists was even more serious than the shortage of doctors. The statement that the new Act established a sound foundation for a health service for the people would not bear examination. The position was extremely critical. The medical profession were extremely suspicious of the Government and the measures proposed. They were very reluctant to forgo their privileges, and he hoped that their fears would be diminished.

Mr. BAIRD thought that the position taken up by many doctors was due to ignorance of the Act resulting from the flood of propaganda to which they had been subjected during the past few months. He believed that the rank and file of medical and dental practitioners were worried because they had been led to fear that they would be subject to unnecessary bureaucratic control. Nothing could be further from the truth. No professions in the world were entrusted with more control of their own destiny than the medical and dental professions possessed under the new Health Act.

After Mr. LAW had wound up the case for the Opposition by moving the amendment, Mr. WOODBURN, Secretary of State for Scotland, ended the debate with a vigorous defence of the Minister of Health. Mr. Woodburn said that he came into the negotiations late in their progress with an objective mind. He had seen no indication that the B.M.A. and their associates were prepared to work the scheme : they seemed more keen to have a fight than to get a settlement. There would have been no need for the debate but for the fact that the matter had been muddied by the propaganda campaign of the B.M.A., which had perverted the whole discussion. The real issue was whether it was in the public interest that the doctors should be allowed to boycott the Act of Parliament. If it was a question of loyalties, doctors should be loyal to the needs of the patients, even if it meant disloyalty to the campaign of the B.M.A.

The closure was then applied, and after this had been carried by 341 votes to 177—Government majority, 164—the amendment was rejected by 337 votes to 178, and the motion was then agreed to.

Trade Union Membership and the N.H.S. Act

Mr. ATTEWELL on Jan. 29 asked the Minister of Health whether membership of a trade union would be required as a condition of employment in the National Health Service ; and whether existing professional bodies would have representation in the machinery for the negotiation of remuneration and conditions of service.

Mr. BEVAN replied, No, Sir. He hoped that persons employed in the National Health Service would be encouraged to belong to their appropriate organizations, but it would not be a condition of employment, and there would be no pressure upon anyone to belong to any organization, whether professional or trade union. With regard to the second part of the question, arrangements for setting up Whitley machinery in the National Health Service were well advanced, and for a large part of it provisional employees' sides had already been set up. No fewer that twenty-five professional organizations were represented on these sides, and there was no truth in the suggestion that such organizations would not have appropriate representation.

Organized Enlightenment

Wing-Commander HULBERT on Feb. 5 asked the Minister of Health if his attention had been drawn to the fact that medical consultants and specialists, at a meeting at the headquarters of the British Medical Association on Jan. 27, rejected his proposals for a National Health Service by 766 votes to 11 ; and what action he proposed to take to make the scheme acceptable to the medical profession.

Mr. BEVAN said he was aware of this. He thought that if professional men and women were allowed, at organized meetings of this kind, a little enlightenment as to the true facts of the new scheme, they would certainly find it acceptable to them.

Attempted Intimidation

On Feb. 5 Dr. S. JEGER asked the Minister of Health whether he knew that in the plebiscite of doctors now being held by the B.M.A. each doctor was required to disclose his identity on the ballot paper ; and whether in view of the fact that many doctors interpreted this violation of voting secrecy as an attempt to intimidate individual doctors, he would take steps to get a more accurate expression of the opinion of doctors on the question of their co-operation in the new National Health Service.

Mr. BEVAN, in reply, referred Dr. Jeger to the answer which he had given on Jan. 29 to Mr. Tiffany.

Mr. TIFFANY asked the Minister of Health to place in the Library copies of the two documents issued, by agreement between him and the Medical Negotiating Committee, to all doctors in the country.

Mr. BEVAN said he had done this.

Royalties in the N.H.S.

Colonel STODDART-SCOTT asked the Minister of Health on Feb. 5 for an assurance that the doctors and dentists who entered the National Health Service and published scientific or clinical articles and books would be permitted to retain fees and royalties that their writings earned.

Mr. BEVAN replied that both professions would in this respect be in the same position as they were now.

Universities and Colleges

UNIVERSITY OF OXFORD

In a congregation held on Jan. 22 the following degrees were conferred :

B.M.—J. F. Hale, J. E. Middleton, C. A. B. Clemetson, B. W. Cole, *D. C. Turk, *R. W. Emanuel, *I. Kelsey Fry, *G. L. T. M. Patey, *Christine L. Miller.

* In absence.

At a degree ceremony on Dec. 13, 1947, the degree of D.Sc. was conferred on J. Walker.

UNIVERSITY OF CAMBRIDGE

The following medical degrees were conferred on Jan. 30:

M.B., B.CHIR.—*R. W. Brown, *P. H. A. Sneath, *M. S. Adams, *N. H. Harris, *B. M. Watney, *P. S. Andrews, *P. H. Bright, *O. E. F. Hodgson, *J. E. MacIver, *J. Prestt, *J. D. Scott, I. S. Longmuir, D. S. Paine, *J. M. Frew, J. G. Bennette, B. E. Shairp, *E. H. Eason, *C. P. Atkin, *M. H. Clement, *D. Cooper, *W. N. Ingham, *R. V. Knight, *L. C. Robson, *M. H. Russell, *D. H. H. Walford, *J. H. Cule, R. G. Gibbs, G. G. Walker, *R. K. Mason, *M. D. M. Bowen, *K. C. G. Taylor, *M. B. Thompson, *W. Lewis, D. A. P. Hunt, *J. D. Cox, *G. W. C. Johnson, *F. R. Lambert, D. Whitfield, *H. C. H. Bird.

* By proxy.

Titles of degrees were conferred by diploma during January on B. Jones, M.B., B.Chir. (Girton College), and A. E. Perkins, M.B., B.Chir. (Newnham College).

UNIVERSITY OF EDINBURGH

Robert McWhirter, F.R.C.S.Ed., D.M.R.E., F.F.R., has been appointed to the recently instituted Forbes Chair of Medical Radiology in the University.

UNIVERSITY OF DUBLIN

The degree of M.D. has been conferred on Air Commodore E. A. Lumley, *M.C.*, R.A.F.

No. 4

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Jan. 24.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	47	5	21	2	—	94	13	30	2	—
Deaths		1	—				3	—		
Diphtheria	199	25	60	14	8	247	14	70	22	7
Deaths	2	—	—	—	—	4	—	2	1	—
Dysentery	131	7	43	1	—	97	4	32	1	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	—	—	1	—	—	3	—	—	—	—
Deaths		—					—			
Erysipelas			55	15	6			58	7	5
Deaths		—					—			
Infective enteritis or diarrhoea under 2 years				24					26	
Deaths	46	5	5	2	—	83	4	12	9	1
Measles*	3,457	284	1023	121	14	11,671	418	284	24	912
Deaths†			3	1	—	7	—	1	—	2
Ophthalmia neonatorum Deaths	64	5	17	1	—	87	5	11	—	—
Paratyphoid fever	7	2	—	—	—	1	1	—	—	—
Deaths	—	—	—	—	—	1	—	—	—	—
Pneumonia, influenzal	780	69	7	4	4	1,270	79	25	11	11
Deaths (from influenza)‡	18	5	2	—	—	92	17	10	1	1
Pneumonia, primary			278	31				367	57	
Deaths	454	47		12	10		73			14
Polio-encephalitis, acute	3	—				1	—			
Deaths							—			
Poliomyelitis, acute	35	4	3	—	—	5	2	1	9	—
Deaths§	3	—					1			
Puerperal fever		1	7		1		2	9		—
Deaths										
Puerperal pyrexia‖	110	12	10	2	2	133	7	21	2	—
Deaths		—					—			
Relapsing fever	—	—			—	—	—			—
Deaths										
Scarlet fever	1,847	127	350	39	45	1,286	81	254	19	42
Deaths†			—	—	—	—	—	1	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	6	1	1	4	1	6	—	1	3	—
Deaths	—	—	—	—	—	—	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	2,547	158	39	42	4	2,151	196	406	108	42
Deaths	8	1	—	2	1	8	—	3	2	1
Deaths (0–1 year)	385	60	53	23	10	535	64	85	41	19
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	5,222	788	685	215	156	6,200	1019	820	263	155
Annual death rate (per 1,000 persons living)			13·8	13·5				17·0		
Live births	8,421	1319	1030	372	264	10,110	1575	1233	356	284
Annual rate per 1,000 persons living			20·8	23·3				24·8		
Stillbirths	231	24	21			277	29	43		
Rate per 1,000 total births (including stillborn)			20					34		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Poliomyelitis

Notifications of poliomyelitis 49 (35) and of polio-encephalitis 4 (3) for the week ended Jan. 31 showed an increase. Figures for the previous week are given in parentheses. The principal increases of poliomyelitis and polio-encephalitis together were in London 6 (4), Chester 4 (2), Devon 3 (1), Warwick 7 (2), Wiltshire 2 (0), and Yorkshire West Riding 4 (2). In Warwickshire 4 cases of poliomyelitis were notified in Birmingham C.B., one in Solihull U.D., and one each in Alcester and Stratford R.D.

In 1947 primary notifications of infantile paralysis in England and Wales numbered 9,199. Corrections are expected to reduce this figure to about 7,350. The previous highest figure since 1912, when notification became compulsory, was 1,585 in 1938

Discussion of Table

In *England and Wales* infectious diseases were more prevalent during the week. There were increases in the incidence of whooping-cough 204, measles 153, scarlet fever 93, and dysentery 35.

A small increase in the incidence of scarlet fever was recorded in most areas of the country; the only notable exception was a decrease of 48 in Yorkshire West Riding. The incidence of whooping-cough in London remained stationary; elsewhere a small rise occurred, but the only large increase was 61 in Lincolnshire.

An increase in the number of notifications of measles was recorded in all areas except the North, where a slight decrease occurred; the largest variations in the returns were an increase of 44 in London and a decrease of 39 in Lancashire. The only fluctuation of any size in the returns for diphtheria was an increase of 11 in Lancashire.

One case of typhoid and two of paratyphoid fever were notified in Northumberland, Rothbury R.D. The rise in the incidence of dysentery was due to an increase of 31 in Lancashire and 13 in Yorkshire West Riding. In Lancashire the outbreak in Oldham rose from 4 to 20 and a fresh outbreak involving 25 persons was reported from Lancaster M.B.

The notifications of acute poliomyelitis declined by 12, and the largest returns were Lancashire 5, London 4, Middlesex 4. Liverpool C.B. with two cases of poliomyelitis was the only administrative area with more than one case.

In *Scotland* increases occurred in the notifications of measles 124 and acute primary pneumonia 25, while a decrease was recorded for scarlet fever 27. In the western area a rise of 9 occurred in the notifications of cerebrospinal fever and diphtheria. Half of the cases of dysentery were notified in the north-eastern area.

In *Eire* the incidence of measles decreased by 16 and that of scarlet fever rose by 15.

In *Northern Ireland* little change occurred in the trends of infectious diseases.

Infectious Diseases during January, 1948

The incidence of the notifiable diseases during January in England and Wales presents some interesting contrasts when compared with the levels of preceding years. The chief feature of the returns is the absence of an influenza epidemic—the deaths from influenza are only about one-quarter of the preceding lowest totals. Scarlet fever and whooping-cough were exceptionally prevalent. The notifications of measles were about five times the inter-epidemic level. Acute pneumonia has been at a low level. The notifications during the first four weeks of the past five years were:

	1944	1945	1946	1947	1948
Scarlet fever	7,603	5,866	5,356	4,731	7,052
Whooping-cough	8,150	6,626	4,818	8,301	9,672
Diphtheria	2,826	1,866	1,900	977	818
Measles	2,744	47,921	3,181	43,804	14,740
Acute pneumonia	5,129	5,437	5,360	6,021	3,392
Cerebrospinal fever	286	270	277	269	202
Dysentery	664	1,178	1,358	321	549
Enteric (typhoid and paratyphoid)	23	37	18	33	36
Influenza deaths in the Great Towns	699	270	736	287	78

Diphtheria in 1947

Provisional returns for 1947 show that in the 126 great towns a new low record for diphtheria was established. There were 6,775 cases and 128 deaths, totals which are 4,492 and 111 fewer than in the previous year. For the country as a whole there were on the average 58,000 cases and 2,800 deaths in the pre-war period. In 1946, the last year for which complete figures

are available, there were 18,284 cases and 472 deaths. Since 1941, when the immunization campaign started, until the end of June, 1947, nearly seven million children have been immunized under local authority schemes in England and Wales.

Week Ending January 31

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,926, whooping-cough 2,725, diphtheria 200, measles 4,233, acute pneumonia 850, cerebrospinal fever 48, acute poliomyelitis 49, dysentery 208, paratyphoid 4, and typhoid 2.

Medical News

Diamond Jubilee at Axbridge

On Jan. 18 Dr. Arthur Victor Leche celebrated his diamond jubilee as a resident of Axbridge, Somerset, where he first began medical practice on Jan. 18, 1888. Dr. Leche qualified M.R.C.S. in 1887 and took the L.R.C.P.Ed. in the following year. He was the first M.O.H. for the Axbridge Rural District.

Experimental Psychology: New Journal

In view of the increasing interest in experimental psychology in recent years, the Experimental Psychology Group has decided to found a new journal to be known as the *Quarterly Journal of Experimental Psychology*. Editorial inquiries should be addressed to Mr. R. C. Oldfield, M.A., Institute of Experimental Psychology, 34, Banbury Road, Oxford, and the journal may be ordered (30s. per year or 8s. 6d. per part) from W. Heffer and Sons, Petty Cury, Cambridge.

Journal of the C.S.P.

Physiotherapy, the journal of the Chartered Society of Physiotherapy and successor to the *Journal* of that society, is now produced in a brighter and more easily readable format. The current number (January, 1948) includes original articles on physiotherapy in disseminated sclerosis, on congenital round shoulders, and on the theory and practice of radiotherapy.

Food Standards Committee

A Food Standards Committee has been appointed with power to review the composition of foods other than liquid milk. It will replace the Inter-Departmental Committee on Food Standards set up in September, 1942. The Committee will advise the Ministers of Food and Health and the Secretary of State for Scotland on regulations which can be made under the Defence (Sale of Food) Regulations, 1943, and the Food and Drugs Act concerning the composition of foods other than liquid milk, and it will recommend food standards designed to protect the consumer against the sale of inferior products. The following have been appointed to the Committee: Mr. Norman C. Wright, Ph.D., Chief Scientific Adviser to the Ministry of Food (chairman); Mr. G. G. Barnes (vice-chairman); Mr. C. A. Adams, B.Sc.; Mr. P. N. R. Butcher; Prof. S. G. Cowell; Sir Jack C. Drummond, F.R.S.; Mr. A. Glover, M.Sc.; Sir Harry Hague; Sir Harry Jephcott, M.Sc.; Mr. J. M. Johnston; Mr. G. W. Monier-Williams, Ph.D.; Mr. J. R. Nichols, D.Sc.; Mr. R. W. Sutton, B.Sc.; Mr. G. Taylor. Mr. K. R. Allen has been appointed secretary, and communications intended for the Committee should be addressed to him at the offices of the Ministry of Food, Food Standards Division, Devonshire House, Mayfair Place, Piccadilly, London, W.1.

British Service Families in Germany

Dr. W. E. Chiesman, Medical Adviser to the Treasury, leads a team investigating medical facilities for the families of British Servicemen in Germany and Austria.

Working Party on Nursing

The Council of the Royal College of Nursing has issued a draft memorandum on the Report of the Working Party on the Recruitment and Training of Nurses. The Council begins by pointing out that it has for some time been advocating many of the recommendations made by the Working Party. It thinks that the Working Party made insufficient allowance for the handicaps that beset the nursing profession during the war, and it emphasizes that the key to staffing is the provision of adequate domestic help. On the question of human relationships, which the Working Party stressed as a cause of serious wastage of student nurses, the Council recommends a closer study of methods of developing satisfactory staff relationships, and further experimentation in connexion with the unbroken spans of duty required of nurses. The Council considers that the basic training should last three years, not two as suggested by the Working Party.

Thoughts for a Quiet Week-end

February is ever a month of funerals. . . .—*Observer*, Feb. 9.

Asked to send a message to the opening day of a training school for nurses, Bernard Shaw replied: "What nurses really need to be told is that they are at present trained to kill their patients by untimely washings and unwholesome diets."—*Sunday Express*, Feb. 9.

Wills

Dr. Charles Paget Lapage, of Didsbury, Manchester, left £20,588. Dr. John Skardon Prowse, formerly of Moss Side, Manchester, left £16,430. Surgeon Rear-Admiral Sir George Welch, who died on Oct. 26, 1947, left £5,951. Dr. Angus MacGillivray of MacGillivray, twenty-eighth Chief of the Clan MacGillivray, left £20,496.

COMING EVENTS

Association of Army Psychiatrists

The fourth reunion of Army Psychiatrists will take place at Slater's Restaurant, 50, Cannon Street, London, E.C., on Saturday, Feb. 21, from 7.30 to 10.30 p.m. Details may be obtained from the honorary secretary, Lieut.-Col. J. C. Penton, R.A.M.C., The Old Farm House, 1, Gatehill Road, Northwood, Middlesex.

Edinburgh Refresher Course

A fortnight's refresher course at Edinburgh University begins on Monday, May 3, at 9 a.m. It is intended primarily for demobilized medical officers (Class II) and for insurance practitioners. Fee for graduates not claiming expenses from Government sources, 10 gns.

Royal Medico-Psychological Association

The next quarterly meeting of the Royal Medico-Psychological Association will be held at the Royal Society of Medicine (1, Wimpole Street, London, W.) on Friday, Feb. 20, when, at 2.30 p.m., the subject for discussion will be "The Place of the Psychiatrist in a Children's Hospital." Papers will be read by Prof. R. W. B. Ellis and Dr. Eleanor Creak. Members of the British Paediatric Association and Fellows of the Paediatrics Section of the Royal Society of Medicine are invited to attend this session of the meeting.

Industrial Medicine in New York

The Long Island College of Medicine will hold its fifth postgraduate course on industrial medicine on April 5–16. The fee for the course is 75 dollars. Inquiries should be addressed to: Dr. Thomas D. Dublin, Department of Preventive Medicine and Community Health, 248, Baltic Street, Brooklyn 2, New York.

SOCIETIES AND LECTURES

Monday

EUGENICS SOCIETY.—At 26, Portland Place, London, W., Feb. 16, 5 p.m. "*Some Reflections on Genius.*" Galton Lecture by Dr. W. Russell Brain.

MEDICAL SOCIETY OF LONDON, 11, Chandos Street, Cavendish Square, W.—Feb. 16, 9 p.m. "*Clinical Pathology in Relation to Medical Practice.*" First Lettsomian Lecture by Dr. C. E. Dukes.

Tuesday

CHADWICK TRUST.—At 26, Portland Place, London, W., Feb. 17, 2.30 p.m. "*How Medicine became Social,*" by Dr. René Sand.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.— Feb. 17, 5 p.m. "*Pathological demonstrations,*" by Dr. I. Muende.

INSTITUTE OF LARYNGOLOGY AND OTOLOGY, 330, Gray's Inn Road, London, W.C.—Feb. 17, 9.30 a.m. "*Non-operative Treatment of Maxillary Sinusitis,*" by Mr. Myles L. Formby.

SOCIETY OF CHEMICAL INDUSTRY.—Joint meeting with Manchester Section of the Society of Chemical Industry and Manchester and District Section of Royal Institute of Chemistry at Gas Showrooms, Town Hall Annexe, Manchester, Feb. 17, 10.30 a.m. "*New Developments in German Dairy Industry,*" by Mr. F. C. White; "*Wartime Production of Food Yeast in Germany,*" by Mr. H. J. Bunker. 2.30 p.m. "*German Albumen Substitutes,*" by Mr. J. F. Hearne; "*German Soapless Detergents,*" by Mr. R. Perdue.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHARMACOLOGY, Gower Street, W.C.—Feb. 17, 5.15 p.m. "*The Pharmacological Chemistry of Enzymes (ii),*" by Mr. F. Bergel.

Wednesday

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—Feb. 18, 5 p.m. "*X-ray Technique,*" by Dr. C. W. McKenny.

ROYAL MICROSCOPICAL SOCIETY.—At B.M.A. House, Tavistock Square, London, W.C., Feb. 18, 5 for 5.30 p.m. "*Scope and Applications of Direct Microscopy to the Investigation of Starch and Cellulose Breakdown in the Digestive Tract,*" by Mr. Frank Baker.

Thursday

BRITISH INSTITUTE OF RADIOLOGY, 32, Welbeck Street, London, W.—Feb. 19, 8 p.m. *"Radiotherapy in Dermatological Conditions,"* by Dr. R. T. Brain.

EDINBURGH CLINICAL CLUB.—At B.M.A. Scottish House, 7, Drumsheugh Gardens, Edinburgh, Feb. 19, 8 p.m. *"Domiciliary Midwifery,"* by Dr. W. I. C. Morris.

ROYAL SOCIETY OF TROPICAL MEDICINE AND HYGIENE.—At 26, Portland Place, London, W., Feb. 19, 7.30 p.m. *"The Pathological Processes in Malaria,"* paper by Prof. B. G. Maegraith; *"Liver Lesions in Malaria,"* by Dr. W. H. H. Andrews. Discussion.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, London, S.W.—Feb. 19, 4.30 p.m. *Neurological Lecture-demonstration*, by Dr. A. Feiling.

STAINCLIFFE COUNTY HOSPITAL, Dewsbury, Yorkshire.—Feb. 19, 9.15 p.m. *"Post-Menopausal Haemorrhage,"* by Prof. A. M. Claye.

Friday

BRITISH INSTITUTE OF RADIOLOGY, 32, Welbeck Street, London, W.—Feb. 20, 8 p.m. *"Advances in the Design of X-ray Diagnostic Equipment,"* by Dr. A. Nemet.

FACULTY OF RADIOLOGISTS.—At Royal College of Surgeons, Lincoln's Inn Fields, London, W.C., Feb. 20, 2.15 p.m. Radiotherapy Section Meeting. Discussion: *"Carcinoma of the Bladder."* Openers: Messrs. Arthur Jacobs, E. W. Riches, and John Millen.

LONDON CHEST HOSPITAL, Victoria Park, E.—Feb. 20, 5 p.m. *"General Anaesthesia for Surgery of the Heart,"* by Dr. Parry Brown.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—Feb. 20, 8 p.m. *"Bronchial Carcinoma."* Dissertation by Mr. I. F. McLaren.

TUBERCULOSIS ASSOCIATION.—At Royal Society of Tropical Medicine and Hygiene, 26, Portland Place, London, W., Feb. 20, 3 p.m. *"Preliminary Reports on Results of Streptomycin Trials in Britain,"* Short papers by Dr. Geoffrey Marshall, Prof. N. B. Capon, Dr. Honor Smith, Dr. Douglas Smith, Dr. Richard Brent, Dr. J. W. Crofton, Dr. Robert Cruickshank, Dr. I. A. B. Cathie, and Dr. Marc Daniels. Dr. Jacques Bourdin (Laennec Hospital, Paris) will also speak.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—Feb. 20, 5 p.m. *"The Physician, His Drugs and His Instruments,"* by Dr. E. A. Underwood.

APPOINTMENTS

Air Marshal Sir Harold Whittingham, K.C.B., K.B.E., F.R.C.P., has been appointed Director of Medical Services, British Overseas Airways Corporation, in succession to Air Vice-Marshal Sir William Tyrrell, K.B.E., D.S.O., *M.C.*, M.B., B.Ch., who has retired.

AYLESBURY: ROYAL BUCKINGHAMSHIRE HOSPITAL.—*Surgeon to Ear, Nose, and Throat Department:* Brian Reeves, F.R.C.S.Ed. *Dental Surgeon:* A. G. Beaton, M.R.C.S., L.R.C.P., B.D.S. *Clinical Assistant to Dermatological Department:* G. H. V. Clarke, M.R.C.S., L.R.C.P.

BROWN, FELIX W., D.M., M.R.C.P., Honorary Psychiatrist, Hampstead General and North-West London Hospital.

PRINGLE, P., LL.B., M.R.C.S., L.R.C.P., D.I.H., Chief Medical Officer, British Electricity Authority.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Fletcher.—On Jan. 31, 1948, to Muriel (*née* Frew, M.B., Ch.B.), wife of Dr. Albert F. Fletcher, of Fitz Park House, Keswick, a brother for Andrew.

Ross.—On Feb. 3, 1948, at the London Hospital, to Margaret (*née* Green), wife of Dr. Michael Ross, a son.

MARRIAGE

McCabe—Milne.—On Jan. 24, 1948, at Changi, Singapore, John K. McCabe, M.B., to Elizabeth M. I. Milne, M.B.

DEATHS

Barrow.—On Jan. 31, 1948, Frederick Barrow, M.R.C.S., of Ogle House, Rothbury, Northumberland, aged 95.

Brown.—On Feb. 2, 1948, at Worthing, Herbert Henry Brown, O.B.E., M.D., F.R.C.S., aged 85.

Clarke.—On Jan. 10, 1948, at Napier, New Zealand, Edward Clarke, M.D.

Fasson.—On Jan. 25, 1948, at Hertford Hospital, Robert Robertson Fasson, M.D.Ed., Surgeon Commander, R.N., retired, of Sunnylawn, Broxbourne.

Ferguson.—On Jan. 22, 1948, at "Wychwood," Dunedin, New Zealand, Sir Henry Lindo Ferguson, Kt., C.M.G., M.D., F.R.C.S.I., F.R.A.C.S., aged 89.

Freer.—On Jan. 30, 1948, at Noble's Hospital, Isle of Man, Robert Mylcraine Freer, M.D.Ed., aged 78.

Geoghegan.—On Feb. 4, 1948, at the Middlesex Hospital, London, W., Joseph Geoghegan, M.D., F.R.C.S.Ed., of 22, Wimpole Street, London, W.

Hayburn.—On Jan. 19, 1948, at 6, Victor Road, Manningham, Bradford, Yorks, William Ernest Hayburn, M.B., B.Ch., aged 74.

Rees.—On Jan. 26, 1948, William Hywel Rees, M.B., Ch.B.Ed.

Rubidge.—At Graaff-Reinet, Cape Province, South Africa, John Liesching Rubidge, M.B., C.M.Ed., aged 80.

Webb.—Recently, Dr. Gerald Webb, late of Guy's Hospital, London Bridge, S.E.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Renal Glycosuria in a Boy

Q.—*A boy aged 10 was found to have glycosuria with S.G. 1032. He had had a recent infection of the nail beds. Apart from failure to gain weight he is quite well. According to hospital reports, glucose tolerance is within normal limits. The child's grandfather was a diabetic. Is it an approved practice to administer small doses of, say, 5 units of insulin daily to such a case in order to stimulate carbohydrate metabolism? Or is one bound to face the fact that weight increase will be permanently retarded by occasional renal glycosuria?*

A.—Since the sugar-tolerance curve was within normal limits the diagnosis of renal glycosuria seems justified. The total amount of sugar excreted in the urine in this condition is usually 10–15 g. a day, though it may be as much as 30 g. In view of the history that the grandfather had diabetes it is possible that the child may develop the disease, since the presence of a low threshold for sugar does not prevent its onset. It is advisable to estimate the total amount of sugar passed in the 24 hours. If this amounts to 10–20 g. only, the child has not developed diabetes, but if more than 20 g. is excreted the sugar-tolerance test should be repeated. If this is normal, although say 30 g. of sugar is excreted, an occasional estimation of the total sugar excreted should be made, but it is unnecessary to repeat the sugar-tolerance test unless the amount of sugar excreted increases. The giving of 5 units of insulin is unnecessary, as the patient makes as much insulin as he needs, and the extra amount would be valueless. The loss of even as much as 30 g. of sugar a day means that an extra 120 calories will be needed daily, but this in normal times is readily supplied, though it may be a little difficult so long as both potatoes and bread are rationed. The giving of an amount of glucose equal to that excreted in the urine may, under present conditions, be necessary if more than 10 g. is excreted in the 24 hours.

Pregnancy in an Epileptic

Q.—*A woman aged 24 started having very severe epileptic attacks at the age of 15; menstruation began at 12 years. She is now controlled and free from attacks, but only by the rather staggering dosage of "epanutin" 1½ gr. (0.1 g.) and phenobarbitone 2 gr. (0.13 g.) twice daily. (Other combinations and dosages have been tried in profusion, but she always relapses into major attacks.) There is no history of epilepsy on either side of her family, and her husband's family is also clear. She is anxious for advice about having a child. It is said that the chances of the child being epileptic are increased tenfold if either parent has the disease. What effect may the huge doses of drugs she is taking have upon pregnancy, labour, and the child; and should she be allowed to contemplate the idea? If the answer is against pregnancy, is her condition such as to warrant therapeutic abortion in the event of an accidental conception?*

A.—This statement of the risks of inheritance is apparently based on Russell Brain's 1934 estimate that the expected incidence of epilepsy among the children of an epileptic is 1 in 10, but it is not quite an accurate interpretation in that it does not allow for the fact that the children of apparently healthy parents are by no means immune. Moreover, several recent observers have found that only 2 to 3% of offspring are affected when only one parent has epilepsy. It is possible that an occult predisposition to epilepsy in one or other parent is important where inheritance is concerned, and it is suggested (W. G. Lennox and others, *Arch. Neurol. Psychiat.*, Chicago, 1940. **44**, 1155) that the outlook for the children can be better assessed if electro-encephalography is carried out on the apparently healthy partner of the epileptic wife or husband. The duty of the medical attendant is to tell the couple what is known of the risks of inheritance, and the ultimate decision regarding pregnancy should then rest with them. If, however,

a pregnancy occurs unintentionally there would not be any justification for terminating it unless some complication such as status epilepticus (which is comparatively rare) should arise.

It is impossible to foretell the effect of pregnancy on epilepsy. The fits might be reduced in number and the dose of sedatives could then be decreased. If need be, however, the drugs could be continued as at present without significant ill-effect on the course of pregnancy and labour, and without harm to the foetus provided they are not administered within four to six hours before delivery. The whole subject of epilepsy in relation to pregnancy, including some mention of the problem of inheritance of the disease, has been reviewed by C. W. F. Burnett (*J. Obstet. Gynaec. Brit. Emp.*, 1946, **53**, 539).

Lower Cervical Spondylarthrosis

Q.—*What is the treatment for a case of well-marked lower cervical spondylarthrosis with narrowing of the intervertebral disk spaces; and what is the pathology of this disease?*

A.—Lower cervical spondylarthrosis, more commonly known as osteoarthritis of the cervical spine, is characterized by degenerative changes in the intervertebral joints, often those between C 5 and 6 or between C 6 and 7. There is narrowing of the disk space and of the facet articulations, with osteophytic lipping of the margins of the vertebral bodies. These changes are often secondary to previous lesions of the cervical spine, usually either a prolapsed intervertebral disk or an infective condition. Treatment is in most cases conservative rather than operative. Some degree of relief may result from physiotherapy in the form of short-wave diathermy, exercises, and massage; in selected cases the exercises may be preceded by gentle manipulation under general anaesthesia. If satisfactory relief is not obtained from physiotherapy the cervical spine should be supported by a collar made from plaster or moulded felt. The partial immobilization and rest thus provided often succeed largely in eliminating the painful symptoms: after some months it may be possible to discard the support without significant return of the pain.

Operative treatment is advisable only occasionally—either for the relief of pressure phenomena resulting from persistent displacement of nuclear material, or in order to fuse the affected area of the spine when the arthritic symptoms are of extreme severity and have failed to respond to the more simple forms of treatment.

Tapeworm

Q.—*What is the latest treatment for tapeworm?*

A.—Oleoresin of aspidium *U.S.P.* (ext. filicis *B.P.*) is still the drug of choice, although it is probable that neither this nor any other drug used for the treatment of intestinal cestode infections is capable of killing the parasite *in situ*. Such drugs appear to act by temporarily anaesthetizing, paralysing, or irritating the worms, thus causing them to relax their hold on the gut wall. This failure to kill the parasite explains the importance of purgation following administration of the drug, and the need for searching the patient's faeces subsequently for the head of the tapeworm in order to establish the success or failure of the treatment.

Acetylsalicylic Acid and Menstruation

Q.—*Can acetylsalicylic acid affect menstruation? A woman aged 40, with a child of 12, has noticed during the last ten years that if she takes acetylsalicylic acid at any time during her menstrual period the bleeding stops within about two hours and does not start again until her next period. This has happened not only once but every time she takes the drug. She is now afraid to take it, although it causes no unpleasant effects. Is this an unusual phenomenon, and what is the explanation?*

A.—It is certainly an unusual phenomenon, and although many women regularly take acetylsalicylic acid during menstruation the writer has never previously heard of such a reaction. Any attempt to explain it would be guesswork. The action of acetylsalicylic acid is mainly on the central nervous system, and this raises the possibility of its having some effect, in a susceptible individual, on a "uterine centre" which is believed to exist in the midbrain. Another possibility is that an alteration in the peripheral blood supply which results from the action of acetylsalicylic acid on the heat-regulating centre might interfere with the menstrual flow, which is itself precipitated by alteration in the calibre and tortuosity of endometrial arterioles. It is also tempting to consider the possibility of a coincidence between the taking of the drug and the suppression of menstruation on the first one or two occasions—a coincidence, however, which produced such a profound impression on the patient that she now expects menstruation to cease whenever she takes acetylsalicylic acid. Such a conviction might be enough to ensure that the phenomenon recurs constantly. The woman can certainly be reassured that suppression of menstruation, should it occur, is harmless.

Post-herpetic Muscular Palsy

Q.—*What are the pathology and the ultimate prognosis of a residual intercostal muscular palsy at the site of the eruption after herpes zoster?*

A.—Residual segmental muscular palsy is a well-recognized but uncommon sequel of herpes zoster. It is usually held to indicate that the inflammatory process, instead of remaining limited to the posterior root ganglion, has spread to involve some of the anterior horn cells of the same segment. There may be some improvement in the weakness but complete recovery seldom occurs.

Treatment of Chilblains

Q.—*Is there any efficient treatment for chilblains in a healthy young adult?*

A.—It must be confessed that the treatment of chilblains is unsatisfactory. The best results are probably obtained by the prophylactic measure of keeping the feet and hands warm with thick woollen socks, gloves or mittens. There have been frequent reports of the benefits of calcium, vitamin D, and parathormone, but in the experience of most they are seldom efficacious. Recently good results have been claimed with vitamin K or its analogues given by intramuscular injection. An article on the treatment of 8 cases of chilblains with synthetic vitamin K appeared in the *Journal* of Nov. 1, 1947 (p. 689). The perniotic tendency usually disappears with increasing age, and thus the patient's youth permits the condition to be viewed with optimism.

Test of Virginity

Q.—*There is a custom among the natives of the Belgian Congo of testing the virginity of a bride by placing a white cloth on the bridal bed and observing the appearance of blood. Is this test 100% accurate? Is there any explanation of bleeding which in some cases appears to be more than would be caused by a hymeneal laceration?*

A.—The test is certainly not 100% reliable. Sometimes the hymen has a comparatively wide opening and is easily stretched, so that no tearing takes place on coitus. Again, absence of bleeding might be due to failure to penetrate the hymen on the marriage night—a not uncommon occurrence. On the other hand, if the bridal couch is stained a wrong judgment is less likely but might still occur. It is surely not beyond the ability of a girl who is aware of the test which will be applied to think out some means of ensuring that a few blood-stains shall be found next morning.

The bleeding which follows coitus is usually from the hymen, although a small tear of the fourchette is probably not rare. Injuries to other parts of the vulva and vagina can also result from brutal and forceful attempts to penetrate. The extreme variation in the amount of loss is mostly explained by differences in the thickness, vascularity, and width of the hymen, and the position of the tear in relation to blood vessels. The amount of bleeding from a tear of the hymen alone may be so great as to require medical attention, and when not treated promptly has been known to necessitate blood transfusion.

Laurel Berries

Q.—*Recently I found many laurel bushes heavily laden with ripe fruit. Are these berries poisonous to man? Have they ever been used as an article of food?*

A.—The shrub common in Britain which is known as laurel is not true laurel but *Prunus laurocerasus*, or perhaps *Prunus*

lusitanicus, another kind commonly found. The leaves of *P. laurocerasus*, according to Gilbert-Carter (*British Trees and Shrubs*, Oxford Clarendon Press, 1936), yield hydrocyanic acid, but the fruit is wholesome and good to eat. The fruit of *P. lusitanicus* is extremely unpalatable. It does not, however, seem to be poisonous. The true laurel is the bay-tree, and is not common in Britain.

Restrictive Covenants

Q.—*(a) In an agreement with an assistant is 10 years' restriction from practising in a very limited area too long to be successful in a legal action after a long period of assistantship? (b) If notice has been given to the assistant "to terminate the agreement" is the restrictive clause of the agreement still enforceable?*

A.—Covenants "in restraint of trade" are generally obnoxious in law, but may be justified by special circumstances. In particular, the law recognizes "goodwill" in a medical practice, and will uphold an agreement by which an assistant in a medical practice is restrained from taking an unfair advantage of his principal by using his knowledge of the patients so as to attract any part of the practice to himself after the termination of his engagement as assistant. Such an agreement will, however, be enforced only if it is reasonable and does not impose a degree of restriction which, in all the circumstances of the case, would not be justified. In the case of *Routh* v. *Jones* (1947, 1 All E.R. 179), reported in the *Journal* of May 17, 1947 (p. 700), Mr. Justice Evershed decided that a restrictive covenant was unreasonable which prohibited an assistant from practising, or assisting any other person to practise, in "any department of medicine, surgery, or midwifery" or from accepting any medical appointment whether paid or honorary within a radius of ten miles from the principal's address during a period of five years after the assistantship ended. This contract was drawn up in a form which had been in use by the British Medical Bureau, and there were many other agreements between doctors which had been similarly worded.

The Court held that such a covenant would have prohibited the assistant from doing many things which were clearly not likely to harm the principal; for instance, the covenant would not allow him to advance money to a lady to enable her to open a nursing-home, or to practise as a veterinary surgeon or dentist, or to accept an appointment as honorary lecturer in first-aid to an ambulance association. The learned judge expressed the view that the ten-mile radius and the five-year limit were both reasonable, but that in other respects as stated above the contract was unreasonable and would not be upheld by the Court. The assistant then gave an undertaking that for a period of eighteen months he would not accept as a patient any person who had been a patient of the principal at the time of termination of the assistantship. This undertaking was embodied in the order of the Court dismissing the motion for an injunction, with costs.

It should be noted that where a man makes a bad bargain the Court will not as a rule intervene to save him from the consequences of his imprudence, neither will the Court substitute a better agreement for one which has been found to be unenforceable, so that it may well happen that an agreement which is good in most of its particulars may turn out to be of no effect if some of its clauses are unreasonable. The only safe rule for a practitioner who contemplates entering into an agreement as partner or assistant is to have his contract drawn up by someone who has special experience of the drafting of medical contracts and who is thoroughly familiar with the legal pitfalls which surround these agreements.

Loss of Nails

Q.—*A girl aged 19 began to lose her nails at the age of 5. At 10 she had lost all her finger- and thumb-nails, and those of her big toes. A very thin rubbery skin has grown over the nail-bed. Occasionally a piece of nail grows on two fingers but quickly disappears. Can anything be done? Would painting habitually with nail varnish be harmful? Could artificial nails be attached somehow?*

A.—This is apparently a congenital abnormality and there is no treatment. It would be interesting to know if any relatives were similarly affected. Painting with nail varnish would be harmless; artificial nails would not be a practical proposition (see *Inherited Abnormalities of the Skin*, by E. A. Cockayne, Oxford Medical Publications, 1933).

Infective Recurrent Erysipelas

Q.—*What is the treatment for recurrent attacks of an erysipeloid nature affecting only the foreskin in a married man of 53? These attacks last a week and have occurred every six weeks or so for the last 15 years. The skin over the distal two-thirds of the penis is involved, and there is a rise in temperature and sometimes a rigor. The inguinal glands are enlarged, and the skin of the penis is very oedematous, red, hot, and tender. The attack is generally modified by one of the sulphonamides administered orally. Penicillin, tried once, considerably modified the attack but did not prevent a recurrence after the usual interval.*

A.—It is important to exclude a contact dermatitis as from a contraceptive, but the history suggests an infective recurrent erysipelas. Careful search should be made for any disease or fissuring of the skin of the prepuce or penis, of the perineum, the anus, or the adjacent areas. Infection in the rectum or adjacent tissues and in the urinary tract should be excluded. In the absence of any positive finding the use of penicillin, sulphonamides, or non-specific shock-therapy should be tried, but success is uncertain. The possibility of penicillin- and sulphonamide-sensitivity may cause difficulties. The writer has found that the intramuscular injection of penicillin, 32,000 units three-hourly to a total of 2,000,000 units, exercises effective control in 50% of cases. Sensitization reactions, if they occur, might be sufficiently controlled by giving "benadryl" at the same time. Milk protein or bacterial protein preparations injected intramuscularly, at weekly intervals, for six to twelve weeks may help.

Prolonged Fever of Unknown Origin

Q.—*For six months a boy aged 13 has had a fever which responds to sulphapyridine, but not to any other sulphonamide or pyridine derivative yet tried. If sulphapyridine is stopped or given in doses smaller than 1.5 g. daily, his temperature rises to 102° F. (38.9° C.), and conjunctivitis and a rash appear. Enlargement of cervical, axillary, and inguinal glands was reported at the onset of the illness, but none is palpable now. There has been no splenic enlargement or other abnormal physical sign. The white blood cells ranged from 8,000 to 12,000. Agglutinations against enteric and Brucella organisms were negative. The Weil–Felix reaction and the Paul–Bunnell test were negative; blood culture was sterile; Wassermann reaction and Kahn test were negative in blood; the urine was sterile; stools were free from pathogens. Biopsy of lymph gland and sternal marrow gave normal findings. Radiographs of the chest were persistently normal. What is the diagnosis?*

A.—Patients with prolonged fever fall into two groups: in one the diagnosis is obvious, or is rapidly made with the help of the laboratory; in the other all attempts to find the cause are fruitless, and the course of the disease provides the only clues to its nature. In the second group the fever may finally subside to leave the patient well and the physician still diagnostically destitute.

The patient described above can unhesitatingly be placed in this second category: he presents no physical signs apart from fever and a transitory skin eruption the appearance and distribution of which are not vouchsafed. The commoner infections have been excluded, and the only noteworthy feature is the subsidence of fever when sulphapyridine is given. It seems probable that this is a non-specific antipyretic effect which is often more prominent with this drug than with others of the sulphonamide group. Rarer causes of prolonged fever obviously require consideration, and malignant disease, polyarteritis nodosa, and disseminated lupus erythematosus account for a proportion of such cases. In the present instance the first seems improbable, and there is little to suggest the second, although a muscle biopsy might be worth while. There are two features which make the third a possibility—the initial lymphadenopathy and the skin eruption. Estimation of the plasma proteins might be of help, as the globulin fraction is increased in this disorder; repeated examinations of the ocular fundi should be made. Appearances often noted are yellow-white spots suggestive of

choroidal tubercles, haemorrhages, and slight papilloedema. A dermatologist's opinion on the rash might provide a clue. To close on a more mundane note, it is surprising how often prolonged and inexplicable fever is eventually found to be due to tuberculosis.

Sycosis Barbae

Q.—*In cases of sycosis barbae failing to respond to local applications and removal of infected hairs, what is the prognosis following depilation by x rays? For a definite cure, is it necessary to secure permanent depilation? What is the accepted modern treatment?*

A.—Temporary epilation by x rays is rarely employed in the treatment of sycosis, for there is risk of a patchy atrophy of the skin where treatments overlap. Recurrence of the sycosis is common. Permanent epilation should not be attempted, for it leaves disfiguring atrophy, with the risk of ulceration or worse complications. In local treatment fractional doses of x rays are useful combined often with "ung. quinolor co." at night and a zinc and copper sulphate lotion after shaving in the morning. Sulphonamides by mouth may help, but penicillin is disappointing. An important aspect of treatment is that of the underlying cause—the sycosis reflecting some general disturbance, and particularly psychological and nutritional disturbances and toxaemia from sepsis about the nose or throat or mouth.

Oral Administration of Penicillin to Infants

Q.—*I would be obliged for any information about the oral administration of penicillin to infants. References to published papers on the subject would be welcomed.*

A.—A. I. Suchett-Kaye and R. B. Latter described the use of oral penicillin in young children in a paper published in the *Journal* of Dec. 13, 1947 (p. 953). They treated 25 children aged from 6 months to 2 years and concluded that oral penicillin appeared to be effective against most varieties of acute pneumonia in childhood. Comment on this paper appeared in a leading article in the same issue (p. 962). The paper by J. L. Henderson and I. W. J. McAdam (*Lancet*, 1946, I, 922) should also be consulted. These authors added penicillin solutions to feeds, and found that adequate blood levels persisted for six hours or more after doses of 5,000–10,000 units in very small infants and of 100,000 units in those up to a year old.

Recurrent Attacks of Boils

Q.—*What steps can be taken to prevent recurrent attacks of boils every six to nine months? The boils have occurred in crops on the face, neck, and limbs. They are usually of the painless indolent type with a good deal of pus formation. The patient, a woman of 40, is stout, otherwise in good health, and has no glycosuria.*

A.—If no predisposing condition or cause for these attacks can be found it is to be assumed that the immunity mechanism is at fault, and a course of injections of an autogenous vaccine is indicated. The case described is of the type that responds best to this treatment, which should preferably be begun during an interval. If the staphylococcus is normally sensitive to penicillin a few intramuscular injections of the drug may be given to control any boils which develop during immunization, as commonly happens during its first stage.

Fibrous Cavernositis

Q.—*A man aged 48 has chordee. It started a year ago and is getting worse. A specialist says it is due to scar formation in the corpora cavernosa either from a haemorrhage (he tends to bleed easily) or from plastic induration of the penis. Blood count and other tests are normal. Can you suggest a line of treatment, as the risk of operative treatment failing seems high?*

A.—Fibrous cavernositis is a well-known condition, but the cause of it is often uncertain. After becoming progressively worse for a time, the amount of curvature of the penis becomes stationary. It never causes any urinary difficulties, and treatment is necessary only if it renders coitus impossible or very difficult. The only treatment that may give a satisfactory result, apart from operation, is exposure of the fibrous plaques to small doses of radium. It is true that surgical removal of these plaques may be followed by further fibrosis, but of recent years genito-urinary surgeons have had more satisfactory results

NOTES AND COMMENTS

Estimating Faecal Fats.—Drs. L. P. R. FOURMAN and G. H. SPRAY (Oxford) write: Our attention has been drawn to the fact that a reference to the method for estimating faecal fats was omitted from our paper on "Absorption of Vitamin D in Steatorrhoea" in the *Journal* of Jan. 24 (p. 142). The reference is: Fowweather and Anderson (1946), *Biochem. J.*, 40, 350.

Tallqvist Method of Haemoglobin Estimation.—Dr. P. K. MUSPRATT (Pleasington, near Blackburn, Lancs) writes: Under "Any Questions?" (Jan. 3, p. 33) a correspondent asks whether his low figures are due to ratiohing. I would suggest that his low figures are in part at least due to the coarse quality of the present-day blotting paper supplied. If he could manage to obtain one of the pre-war books he would, I think, find his figures higher. I have used this system for many years and found it most useful, but it requires a little experience to get useful results. I cannot agree that it is grossly inaccurate if properly used. I found pre-war that my colleagues in referee work used to get much the same figures as myself on the same cases. But of course the normal figures are far below 100%: 70% for females and 80% for males should be considered normal. A lower figure would probably be found in industrial cities of large size. The needs of the haematologist and the general practitioner are not identical; the former may have little use for the method, but I think the latter should find it distinctly useful.

Intractable Tinnitus.—Dr. J. R. writes: I was interested in the question and answer on the treatment of intractable tinnitus (Jan. 3, p. 34). I recently had a very unpleasant tinnitus immediately following an acute middle-ear infection with abscess formation. Under intensive treatment in a nursing-home, and penicillin for 5 days, the ear dried up quickly. When I came home I found the tinnitus most distressing (at night especially). As your correspondent states, bromides and phenobarbitone are unsatisfactory, and I found that so. The only drug which gave me peace was valerian taken in dragées, each one equivalent to 25 min. (1.5 ml.) official *B.P.C.* tincture. Even *one* taken at night was often sufficient to give me a good night's sleep free from tinnitus. As the drug is absolutely harmless, well tolerated, and with no carry-over the next day, I think it would be well worth your correspondent giving it a trial.

Treatment of Warts.—Dr. MICHAEL J. FENTON (London, W.) writes: With reference to the reply given for treatment of warts on the fingers ("Any Questions?" Jan. 17, p. 133) I have found occlusion with "elastoplast" a most efficacious method. This causes a maceration and on removal of the plaster the warts usually come away with it; in some obstinate cases renewed application of elastoplast may be necessary. The base of the wart is then touched with some simple cauterizing agent. This method of removal is of great use in cases of multiple warts in the knee area, so often seen in children.

Relaxation of Bronchial Spasm.—Dr. D. A. WILLIAMS (Cardiff) writes: Your questioner on this subject (Jan. 24, p. 183) might be interested to know that the use of equal parts of ether and olive oil, dose 4 to 6 oz. (114–170 ml.), depending on the weight of the patient, given per rectum without a preliminary cleansing enema, was a frequent form of therapy in adult cases of status asthmaticus after adrenaline had failed. It was usually necessary in severe cases of the infective type. The patient became relaxed and often somewhat drowsy, but was not completely anaesthetized, while the sputum became loosened and the wheezing, presumably due to bronchial spasm, became much less. If this failed to ease the attack it was often found that the patient would now respond to adrenaline. It may be repeated at intervals of four to six hours, but in smaller doses. Its use is now rarely indicated, as intravenous aminophylline, after adrenaline has failed, is usually effective.

Correction.—Dr. G. L. Brown, who is going to lecture in Sweden, will leave Britain on March 6, not on Feb. 6 as notified in our issue of Jan. 31 (p. 233).

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated.

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B.M.A. Scottish Office: 7, Drumsheugh Gardens, Edinburgh.

SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY FEBRUARY 14 1948

HEARD AT HEADQUARTERS

The Loudspeaker

The Great Hall of the Association's House has at last been equipped with a permanent loudspeaker arrangement. A good deal of acoustic experiment has been carried out in recent years, and those who have attended Representative Meetings and Panel Conferences and other gatherings in the Great Hall have been the subjects. Now, at a cost of nearly £600, microphones and amplifiers have been installed in such a fashion that everybody will hear in comfort, and there will be no danger of that embarrassing break in the proceedings whereby the roar of the lion suddenly drops to the whisper of the mouse. The microphone has come to be regarded as a necessity in all large assemblies and many small ones, though our fathers, whose laryngeal apparatus cannot have been very different from our own, somehow managed to make themselves heard without it. The most desirable equipment would be in the speaker himself, who should learn to keep a reasonable distance away from the microphone, and should not use it, as some do, as if it were a telephone receiver, or, as some others do, twiddle it about in his hands. One shudders to think of the eloquence of representatives which has gone unheard and unrecorded because of the misuse of the very instrument which was intended to assist it.

A Big Consolidation

Six pages of the agenda of the last meeting of the London County Council were closely covered with proposals for the consolidation of the remuneration of the medical staff. The L.C.C. was asked to implement the recommendations arrived at in conference with the B.M.A. for further increases in remuneration of the grades of medical staff covered by the Askwith agreement. Only certain of the Council's grades are specifically covered by that agreement, but in view of these increases it was considered necessary to recommend consolidation for certain other grades at a higher level than would have been appropriate under a previous decision of the Council. The salary scales of whole-time medical officers in the hospital and mental health services and at the central offices were due for consolidation in any case, and in view of the Askwith increases opportunity has been taken to bring them into line. Increases are proposed for certain medical superintendents in order to maintain a proper relationship with the scales for other grades, and for certain specialist positions in view of the increase of the sessional rates for part-time consultants and specialists. To take one example of the proposed consolidation: whole-time radiologists, whose basic salary has been £1,100 rising by increments of £50 to £1,300 (or £100 less in the case of radiotherapists), and whose total remuneration has been from £1,220 to £1,420, will have their salary consolidated as from April 1, 1947, at £1,350, rising by increments of £50 to £1,400, and by increments of £75 to £1,550. The newly consolidated scales and rates of pay extend through the whole-time medical staff of hospital and social welfare services, visiting medical officers, and certain part-time consultants employed at a yearly salary. District medical officers have their pay rounded off to the nearest £5 above their present remuneration. The financial effect of the consolidation proposals will mean an additional expenditure during the present year of £24,552.

PAYMENT OF "AWARDS" TO PUBLIC VACCINATORS

On several occasions during the past two years the Association has represented to the Ministry of Health that steps be taken to resume the inspection of public vaccinators' records with a view to the payment of outstanding "awards"—i.e., payments in respect of successful infant vaccinations at present authorized by the Local Government Act, 1929. These "awards" are calculated on the basis of 1s. for each such vaccination. In some parts of the country no payments have been made for many years. In April, 1947, the Ministry sought the Association's views on its proposals for dealing with the matter. The proposals, however, were restricted to public vaccinators currently under contract, and the Association, after consulting the Association of Public Vaccinators, informed the Ministry of the view that practitioners who formerly were public vaccinators, and to whom "awards" might be due, should not be excluded from the scheme. The Ministry accepted this and has now issued to local authorities a circular dated Jan. 7, 1948, outlining the procedure to be followed.

Vaccination authorities are asked to submit to the Ministry details of public vaccinators under contract at Dec. 31, 1947, whose records have remained uninspected, and a certificate by the medical officer of health, if he is able to give it, to the effect that so far as he knows the vaccination work of the public vaccinators concerned has been satisfactory and has been carried out in accordance with the terms of their contracts and with due observance of the rules that apply under the present vaccination system. The Ministry, having regard to the details supplied, will then determine the amount due in each case and certify it for payment by the vaccination authority.

The circular contains the following paragraph in respect of former public vaccinators:

> The Minister feels that it would be difficult to exclude from consideration in this matter, without exception, any former public vaccinator who, though no longer under contract as such with an authority, may put forward an application to be considered for a retrospective award. If, therefore, the department receives such an application direct from a former public vaccinator, who may be prompted to submit it in the knowledge of the action now being taken regarding public vaccinators currently under contract, the department will consider it, if received before July 5, 1948, on its merits, having regard to the time which has elapsed since the applicant ceased to be a public vaccinator and the reasonable possibility of now obtaining the necessary information about his vaccination work from the local authority. Where the department considers that, from these points of view, the application is one which can be reasonably entertained, it will communicate with the appropriate authority about the individual case, with a view to action being taken in line with the procedure relating to public vaccinators currently under contract.

Public vaccinators who were not under contract at Dec. 31, 1947, and who wish to claim payment are accordingly advised to write to the Ministry of Health, Whitehall, London, S.W.1.

At a recent very full meeting of the Colwyn Bay Medical Society the following resolution was passed: "That the members of the Colwyn Bay Medical Society unanimously agree that they find themselves unable to work the National Health Act as it now stands."

I.M.S. COMPENSATION AND N.H.S. ACT, 1946

At the meeting of the deputation of the Armed Forces Committee of the Association with representatives of the Commonwealth Relations Office in October, 1947 (see *Supplement*, Dec. 27, 1947, p. 167), the deputation asked whether an officer who accepted an appointment under any National Health Service would be liable to forfeit his compensation and receive only the resettlement grant of £500 on the ground that he had accepted a permanent, pensionable post under the Crown.

As the C.R.O. was unable to give an assurance that such an eventuality would not occur, the question was referred by the Committee to the Ministry of Health. A reply has now been received from the Ministry which states that appointments with regional hospital boards, executive councils, and local health authorities are not regarded as permanent, pensionable employment under the Crown, and in consequence ex-I.M.S. officers taking up such appointments would not be required to refund any compensation paid to them.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization :

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

Association Notices

DIVISIONS IN NORTHERN IRELAND BRANCH

Notice is hereby given to all concerned of the following proposals made by the Council of the Northern Ireland Branch:

1. That a new West Down Division of the Northern Ireland Branch be formed with the following area:

That part of County Down lying to the west of, but including, Magheralin, Dromore, Castlewellan; that part of County Armagh south of, but including, Newtownhamilton and Bessbrook.

2. That the Portadown and West Down Division be renamed the County Armagh Division, comprising the area of County Armagh north of, but excluding, Newtownhamilton and Bessbrook.

3. That the area of the Belfast Division be redefined as follows:

The City of Belfast; that part of County Antrim south of, but excluding, Toomebridge, Ballymena, Carnlough; that part of County Down lying east of, but excluding, Magheralin, Dromore, Castlewellan.

MEDICAL ASSOCIATION OF EIRE OPPOSED TO STATE SERVICE

A special meeting of the Central Council of the Association was held recently to discuss the White Paper on the Eire Health Act, 1947, and to consider the question of formulating a public policy in connexion with the matter. The meeting passed the following unanimous resolutions :

(1) That we, the Central Council of the Medical Association of Eire, consider that many of the provisions in the Health Act, 1947, as outlined in the White Paper, are unworkable.

(2) That the Central Council of the Medical Association of Eire is opposed to the taking over or directing of all medical services by the State and is opposed to the degree of State control and direction visualized in the White Paper.

Copies of these resolutions were forwarded to the Minister for Health, who has replied stating that he will be glad to consider such views as the Association is prepared to submit in amplification of these resolutions.

SCHOLARSHIPS IN AID OF SCIENTIFIC RESEARCH

The Council of the British Medical Association is prepared to receive applications for Research Scholarships as follows: An Ernest Hart Memorial Scholarship of the value of £200 per annum, a Walter Dixon Scholarship of the value of £200 per annum, and four Research Scholarships each of the value of £150 per annum. These scholarships are given to candidates whom the Science Committee of the Association recommends as qualified to undertake research in any subject (including State medicine) relating to the causation, prevention, or treatment of disease. Preference will be given, other things being equal, to members of the medical profession.

Each scholarship is tenable for one year, starting on Oct. 1, 1948. The scholar may be reappointed for not more than two additional terms. A scholar is not necessarily required to devote the whole of his or her time to the work of research but may hold an appointment at a university, medical school, or hospital, provided the duties of such an appointment do not interfere with his or her work as a scholar.

In addition, applications are invited for the first award of the Insole Scholarship of the value of £250 for research into the causes and cure of venereal disease.

Conditions of Award : Applications

Applications for scholarships must be made not later than Friday, April 30, 1948, on the prescribed form, a copy of which will be supplied on application to the Secretary of the Association, B.M.A. House, Tavistock Square, London, W.C.1. Applicants will be required to furnish the names of three referees who are competent to speak of their capacity for the research contemplated.

PRIZES FOR NURSES

The Council of the British Medical Association is prepared to consider the first award in 1948 of three prizes each of the value of 20 guineas for the best essay and three prizes each of the value of 10 guineas for the second best essay submitted in open competition by each of the following categories of nurses: (i) Pupil nurses; (ii) State registered nurses working in a hospital; (iii) State registered nurses not working in a hospital—i.e., district nurses, private nurses, etc.

The subjects of the essays for 1948 shall be: Category (i), "Suggested Improvements in the Methods of Training Nurses"; Category (ii), "Nursing the Patient, not the Disease: the Nurse-Patient Relationship"; Category (iii), "Difficulties of Nursing in the Patient's own Home and their Solution."

The purpose of these prizes is the promotion of systematic observation among nurses. In awarding the prizes *due regard will be given to evidence of personal observation.* No essay that has previously appeared in the medical press or elsewhere will be considered eligible for a prize. Nurses who are undergoing a course of training at a hospital are eligible to compete under category (i); nurses registered by the General Nursing Council are eligible to compete under categories (ii) and (iii). If any question arises in reference to the eligibility of a candidate or the admissibility of his or her essay, the decision of the Council of the British Medical Assocation shall be final. Should the Council decide that no essay entered is of sufficient merit, no award shall be made. Each essay must be typewritten or legibly written, must be unsigned, and have attached to it a sealed envelope containing the name and address of the candidate and the category into which he or she falls. Essays must be forwarded so as to reach the Secretary of the British Medical Association not later than May 31, 1948. Inquiries about the prizes should be addressed to the Secretary, British Medical Association, B.M.A. House, Tavistock Square, London, W.C.1

CHARLES HILL,
Secretary

Diary of Central Meetings

FEBRUARY

18 Wed. **Council,** 10 a.m.
26 Thurs. Publishing Subcommittee, 11 a.m.

Branch and Division Meetings to be Held

DORSET DIVISION.—At King's Arms Hotel, Dorchester, Tuesday, Feb. 17, 8.30 p.m. B.M.A. Lecture by Dr. Geoffrey Evans: Some Aspects of Diseases of the Kidney. All medical practitioners in the area of the Division are invited.

GREENWICH AND DEPTFORD DIVISION.—At Miller Hospital, Greenwich Road, S.E., Wednesday, Feb. 18, 9 p.m. Dr. R. L. Mansi: Interpretation of *X* Rays.

HYDE DIVISION.—At Bayley Hall, Hyde Park, Hyde, Wednesday, Feb. 18, 8 p.m. Film show of medical and allied subjects by Central Office of Information.

SUNDERLAND DIVISION.—At Sunderland General Hospital, Friday, Feb. 20, 7.45 p.m. Clinical demonstration by the staff of the hospital; Address by Prof. R. E. Tunbridge: Infantile Paralysis.

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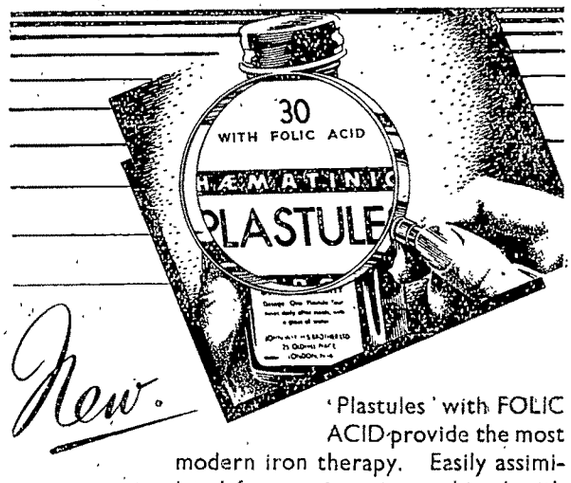

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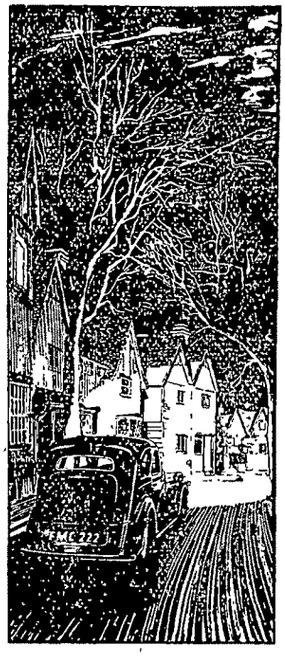

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To aid the Physician in choosing a laxative for children, we give the chief characteristics of Andrews. The dosage is easily adjusted according to age. Andrews is pleasant-tasting, and children accept it readily. Its laxative action is mild, and is due to the presence of magnesium sulphate and other salts in balanced proportion which increase the fluid content of the bowel by osmotic action and so lead to easy non-griping evacuation. Andrews has a soothing effect on the stomach, stimulates the bile-flow and generally aids digestive processes. It is also useful as a gastric sedative in bilious attacks. Andrews has no costive reaction when discontinued.

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Magnesium Sulphate ...	19.00%

A Medical Sample is again available free on request.

DOSAGE FOR CHILDREN: *For two years of age, it is safe to start with ¼ teaspoonful and to increase the dose as necessary for older children.*

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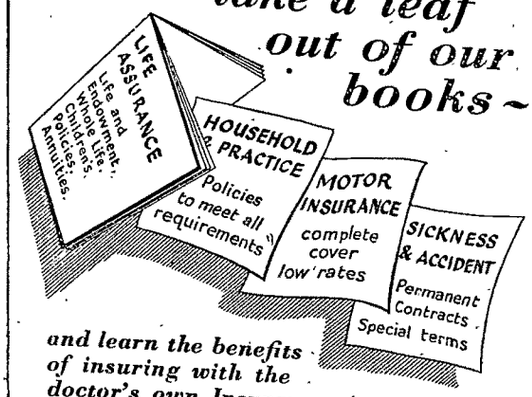

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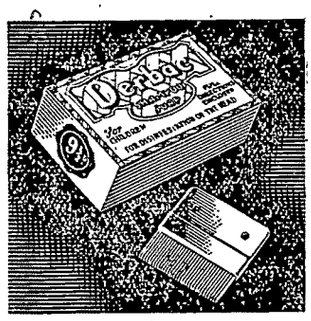

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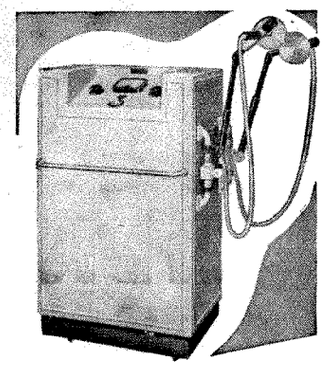

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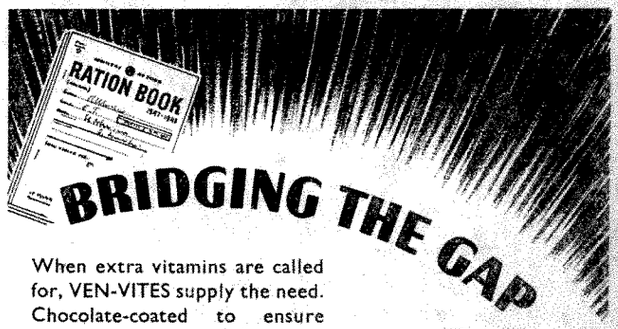

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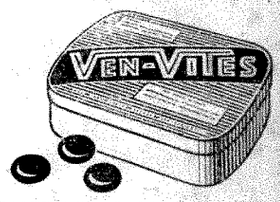

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RESTORATIVE, ANTI-INFECTIVE AND NUTRITIONAL SUPPLEMENT FOR CHILDREN AND ADULTS

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From all chemists 4/6 25 days' adults supply (50 for children)

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Use *For the treatment of*

MENOPAUSE
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As this preparation is highly active in small doses, the desired effects can be obtained without toxic reactions. "Oxoid" Stilboestrol and "Oxoid" Hexoestrol are also available.

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Each AMBER capsule contains:
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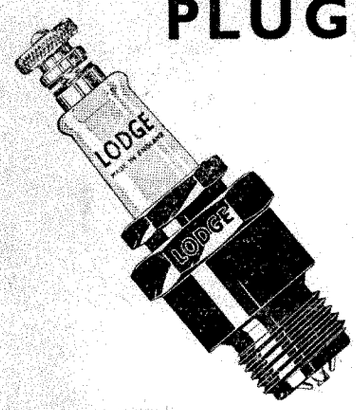

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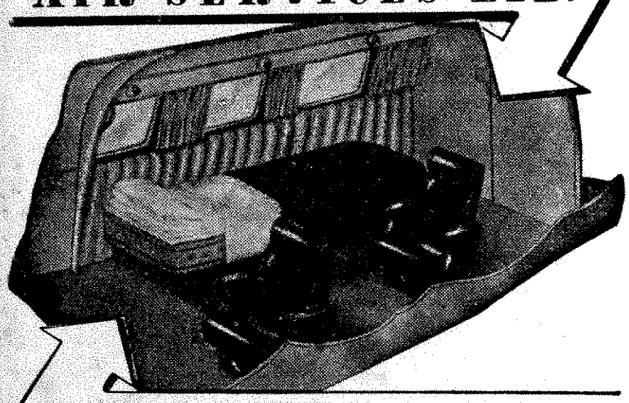

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The MA3 Aerolyser has been specially designed in consultation with leading specialists for the administration of penicillin and other therapeutic substances in aerosol form. The Aerolyser is complete as shewn—no oxygen cylinder is needed. It is easily portable, weighing only 15 lbs., and only needs plugging-in to the nearest suitable electric point.

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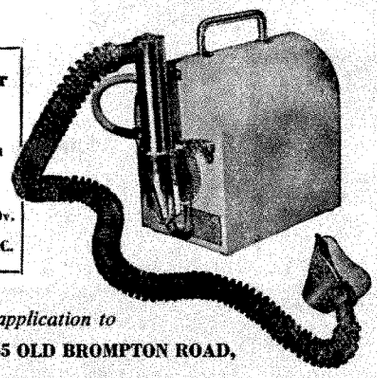
£25 · 10 · 0
Face mask extra
£1 · 12 · 6
Available for 210-240v. A.C. or 110-220v. D.C.



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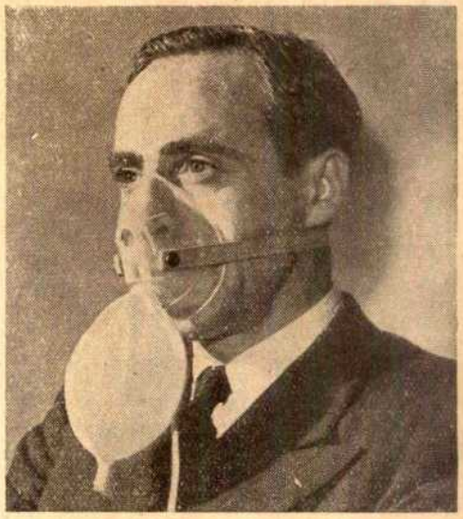
LIGHT WEIGHT PLASTIC OXYGEN MASK



The mask combines maximum comfort to the patient with lightness in weight and low resistance to breathing. The translucence of the material from which it is made enables the doctor or nurse to observe through the mask itself whether the patient is breathing through the nose or mouth, the colour of the lips, and any squeezing or pinching of soft tissues, etc. The mask is so designed that it is impossible for the neck of the reservoir bag to become closed even when the patient is in a reclining position.

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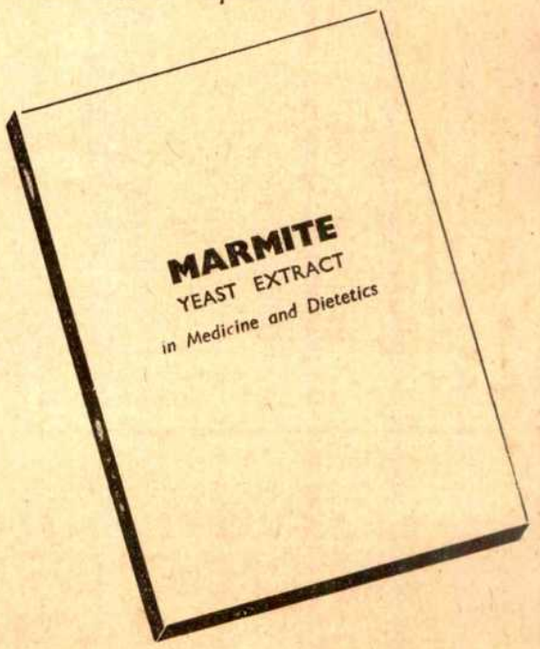

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Dimol (Dimethylo-methoxyphenol)	1.625
Syrup B.P.	150
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Ext. Glycyr. liq.	40
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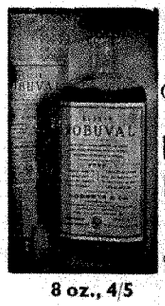

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Stront. Brom. gr. 12, Ext. Valer. m. 24 per oz.
8 oz., 4/5 40 oz., 14/3 net. 80 oz., 27/8 net.
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Applicants should, except where otherwise specified, state name, address, age, nationality, qualifications, and enclose copies of 3 recent testimonials★ with short statement of experience and appointments held. Unless closing date is stated applications should be sent at once.

★ *SERVICE MEMBERS may have difficulty in supplying recent testimonials, but this should not deter them from applying*

A—Whole-time resident house appointments open to practitioners without previous experience.
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APPOINTMENTS

HIS MAJESTY'S COLONIAL SERVICE
COLONIAL MEDICAL SERVICE

The Colonial Medical Service offers an interesting career and provides unique opportunities for applying medical science in territories which are undergoing rapid development. There are immediate openings in many parts of the Colonial Empire and applications are invited from both men and women doctors who are British subjects and possess qualifications registrable in the United Kingdom. Medical Officers are usually appointed in the first instance for general duties. This implies all-round ability with a balanced outlook upon both preventive and curative medicine. Officers are also required for public health duties, in which case the D.P.H. or some experience of health work is necessary. Ample opportunities exist for field investigation, while officers with special aptitude are encouraged to obtain such higher qualifications as will enhance their value to the Service. Officers are from time to time seconded or appointed to medical laboratories in the larger territories. In the West African territories improved salary scales and conditions of service have recently been introduced. In most of the other territories the terms of service are being actively reviewed, and meanwhile temporary cost-of-living allowances are being paid over and above the existing salaries. At present initial *basic* salaries, i.e. irrespective of any cost-of-living allowance and of any credit that may be allowable for war service or professional experience, vary between £600 and £925 according to locality. There are, in addition, numbers of super-scale posts in the administrative and specialist grades which are normally filled by promotion within the Service. Free passages for an officer and wife are generally provided both on first appointment and when travelling on leave of absence. Where Government quarters are provided a small rent is usually payable. Good leave conditions and an adequate pension scheme are in force. The Colonial Medical Service is a unified service and members are eligible for transfer from one territory to another, either with or without promotion. Selected candidates may be required to take a course in tropical medicine either before proceeding overseas (in which case they would receive an allowance) or on first leave. Candidates for permanent service must have been born on or after January 1, 1907. Contract appointments are also available in certain territories for doctors born before this date. Further particulars may be obtained from, and applications should be addressed to, the Director of Recruitment (Colonial Service), Colonial Office, 15, Victoria Street, London, S.W.1.

KINGSTON GENERAL HOSPITAL
Kingston, Ontario, Canada
INTERNESHIPS

Applications are invited for Internships from recent graduates. Kingston General Hospital is the teaching hospital of 500 beds, attached to Queen's University Medical School. Internes are ordinarily drawn from this source, but as a result of the adjustment of courses following the war, there will be no graduates from Queen's University this year. Eight posts are vacant (male or female) from July 1, 1948, to July 1, 1949. Maintenance, board and laundry are provided and an honorarium of $25.00 per month. There is a special travel expense provision for internes coming from a distance. Applications should be sent to the Superintendent, Kingston General Hospital, Kingston, Ontario, Canada.

MINISTRY OF HEALTH
INDUSTRIAL MEDICAL OFFICER

Applications are invited from medical practitioners with experience in industrial medicine for appointment to a Medical Interviewing Committee which is being established in Preston to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable for session of 1¼ to 2¼ hours £2 12s. 6d. plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Senior Medical Officer, Ministry of Health, Regional Offices, Sunlight House, Quay Street, Manchester, 3.

DEPARTMENT OF HEALTH FOR SCOTLAND
HAIRMYRES HOSPITAL
East Kilbride, Lanarkshire
ASSISTANT SURGEON

Applications are invited for appointment as Assistant Surgeon at Hairmyres Hospital, East Kilbride, Lanarkshire, salary £750 per annum non-resident or £650 living-in. The appointment is subject to one month's notice by either party. Forms of application from the Department of Health for Scotland (Room 103), St. Andrew's House, Edinburgh, 1.

DOWN COUNTY HEALTH COMMITTEE
SIX DIVISIONAL MEDICAL OFFICERS

Applications are invited for the above-mentioned whole-time appointments from registered medical practitioners, who must also be registered in the medical register as holding a Diploma in Sanitary Science, Public Health or State Medicine. Applicants must have had not less than two years' experience in general Public Health duties in a whole-time capacity as a Medical Officer of Health, Deputy Medical Officer of Health or Assistant Medical Officer of Health under a Local Authority in accordance with the Health Authorities (Qualifications and Duties of Medical Officers) Regulations (Northern Ireland), 1948, and/or must be otherwise qualified in accordance with the above Order. The salaries for the positions will be £960 per annum, rising by annual increments of £40 (first increment payable as from April 1, 1949) to £1,160, inclusive of cost-of-living bonus, plus travelling expenses on the County Council scale of 5d. per mile, and the posts are superannuable on a non-contributory basis in accordance with the Superannuation Acts relating to Local Government in Northern Ireland. The precise Boundaries of the Divisional Areas (which will have a population of 30,000 to 40,000) have not yet been finally determined, but these will be formally approved prior to the attendance of applicants for interview, and the opportunity will then be afforded to applicants to state their preference (if any) for individual areas. The positions have arisen in consequence of the re-organization of the Public Health Services in Northern Ireland, and the successful applicants will be required (*inter alia*):—(a) to reside in the Division to which they are appointed: (b) to act under the direction of the County Medical Officer of Health as Assistant County Medical Officer within the Division; and (c) to act as Medical Officer of Health to the various Borough, Urban, and Rural Districts within the Division. Details of the conditions of appointment and particulars of the Qualifications Order above referred to may be obtained from Dr. J. B. McKinney, County Medical Officer of Health, at the under-mentioned address. Other things being equal, preference will be given to ex-Service candidates possessing the required qualifications. Applications to be lodged with the undersigned not later than Monday, February 23, 1948.—J. C. Pantridge, Secretary, 17, Ocean Buildings, Donegall Square East, Belfast.

NORTHERN IRELAND COUNCIL FOR ORTHOPAEDIC DEVELOPMENT (INC.)
ORTHOPAEDIC SURGEON

The Northern Ireland Council for Orthopaedic Development (Inc.) invites applications for the post of Orthopaedic Surgeon. The applicant, after appointment, will be required to undergo a course of training at an approved Orthopaedic Centre. Applicant must hold the Fellowship of one of the Royal Colleges of Surgeons and furnish evidence of general surgery experience. Salary offered, £650 to £900 per annum, depending on qualifications After training, applicant will be required to take up work under the direction of the Northern Ireland Council for Orthopaedic Development (Inc.) and to confine his practice to that of Orthopaedic surgery. Applications should be submitted before March 15, 1948, to the Organizing Secretary, Northern Ireland Council for Orthopaedic Development (Inc.), 18, May Street, Belfast.

ARAB LEGION TRANSJORDAN
SURGEON TO THE ARAB LEGION

Applications are invited from registered medical practitioners (male) for the post of Surgeon to the Arab Legion. Successful candidates will be required to undertake full surgical responsibility, and preference will be given to candidates with the F.R.C.S. Three months leave (with passage paid) is granted every two years to the United Kingdom and passage is paid to Transjordan on first joining Salary varies from £848 per annum, single and unaccommodated, to £1,460 married and unaccommodated. Salary is liable to local income tax only (at present 4½%). Applications, accompanied by recent testimonials, should be sent to Senior Medical Officer, Arab Legion, Transjordan, from whom further particulars may be obtained.

UNIVERSITY OF BRISTOL
RADIODIAGNOSTIC REGISTRARS

The University of Bristol in conjunction with the Bristol Royal Hospital invites applications for two non-resident posts of Radiodiagnostic Registrars. The appointments are for one year and renewable. The salary will be on a scale from £500 to £750 per annum, according to qualifications and experience. Applications, giving full names, age, qualifications, details of education and experience, together with the names of not more than three referees, and copies of not more than three recent testimonials, should reach the undersigned, on or before March 1, 1948.—Winifred Shapland, Secretary and Registrar, The University of Bristol, Bristol, 8.

UNIVERSITY OF SYDNEY
CHAIR OF PHARMACOLOGY

The Senate will shortly proceed to the appointment to the newly established Chair of Pharmacology. The duty of the Chair includes tuition in Pharmacology to senior medical students and the direction of tuition in Materia Medica and allied pharmaceutical subjects to Pharmacy and Science students. The Senate will be glad to hear, before June 30, 1948, from anyone who would like to be considered for the appointment. The salary will be at the rate of £1,500 (Australian) per annum. To this salary the University adds a yearly sum equal to 10% by way of contribution to the Sydney University Professorial Superannuation System under which there is a retirement provision on the lines of F.S.S.U.; the Professor's own contribution to the system will be at the rate of 5% of his salary. In addition, the Professor will be entitled to receive a pension of £400 per annum upon retirement after attaining the age of 60 years. In order to encourage research and to maintain the standards of teaching in his Department, one year's sabbatical leave may be granted on full pay every seven years or thereabouts. Travelling expenses will be paid as arranged at time of appointment; generally speaking they will cover first class steamer fare in the case of a successful applicant coming from abroad.—G. Dale, Registrar.

UNIVERSITY OF BRISTOL
DIAGNOSTIC RADIOLOGIST

The University of Bristol, in conjunction with the Bristol Royal Hospital, invites applications for the post of Diagnostic Radiologist. The Royal Hospital is a teaching hospital, associated with the Bristol University Medical School, and is also a School for Radiographers. A salary at the rate of £1,250 per annum will be payable and the candidate appointed will be permitted to engage in limited private practice in the Royal Hospital, for which he will be remunerated on the B.M.A. Scale. Candidates who should possess a higher qualification in Radiology should submit applications, stating age, nationality, full details of education and experience, and copies of three recent testimonials, together with the names of three referees, to the undersigned not later than March 1, 1948.—Winifred Shapland, Secretary and Registrar, The University of Bristol, Bristol, 8.

BOROUGH OF WILLESDEN
WHOLE-TIME ASSISTANT MEDICAL OFFICER OF HEALTH

The Council invite applications for the appointment of a whole-time Assistant Medical Officer of Health in the Health Department. The duties include Maternity and Child Welfare work, School Medical work, control of infectious diseases, the supervision of the work of health visitors and such other duties as the Council or the Medical Officer of Health may require to be undertaken. The appointment is terminable by three months' notice on either side, is subject to the provisions of the Local Government Superannuation Act, 1937, to the regulations governing officers of the Council and to satisfactory medical examination. The salary is £750 per annum, rising by annual increments of £30 to £900 per annum, plus cost-of-living bonus. Application forms may be obtained from the Medical Officer of Health, Health Department, 54, Winchester Avenue, Kilburn, N.W.6, and should be returned not later than Saturday, February 28, 1948. All communications must be marked "Assistant Medical Officer of Health" on the outside of the envelope. —R. S. Forster, Town Clerk, Town Hall, Dyne Road, Kilburn, N.W.6.

BOROUGH OF WILLESDEN
RESIDENT MEDICAL OFFICER (B1)

The Council invite applications for the post of Resident Medical Officer (B1) at the Willesden Maternity Hospital, Honeypot Lane Kingsbury, N.W.9 (56 beds). Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The salary will be at the rate of £455 per annum rising by annual increments of £25 to £555 per annum plus current cost-of-living bonus with in addition accommodation, board, laundry and attendance. The appointment is for a period of twelve months, is subject to the staff regulations of the Council and to one month's notice on either side. Application forms may be obtained from the Medical Officer of Health, Health Department, 54, Winchester Avenue, Kilburn, N.W.6, to whom they should be returned not later than Saturday, February 28, 1948, envelopes being marked "Resident Medical Officer." —R. S. Forster, Town Clerk, Town Hall, Dyne Road, Kilburn, N.W.6.

Have you read the notice at top of page 13 ?

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT THORACIC HOUSE PHYSICIAN (A) or (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Thoracic House Physician ("A" or "B2"), now vacant, for work in the Thoracic Centre (70 beds) of the above hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months; otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months; otherwise it will be for a period of one year. The salary payable will be, in the case of an A appointment, £120 per annum and for a B2 appointment at £200 per annum, together with full residential emoluments. The Hospital, in addition to the Thoracic Unit, accommodates acute medical and surgical Service and Civilian patients and has an Orthopaedic Centre (300 beds). Total beds 1,000. Applications, with full particulars, should be forwarded to the Medical Superintendent, Pinderfields Emergency Hospital, Wakefield, forthwith.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT HOUSE SURGEON (A) or (B2)
for the Orthopaedic Department and Casualty Dept.

Applications are invited from registered medical practitioners for the above appointment, now vacant, at the Pinderfields Hospital, Wakefield. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months; otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months; otherwise it will be for a period of one year. The salary payable will be, in the case of an A appointment, £120 per annum and for a B2 appointment at £200 per annum, together with full residential emoluments. The Hospital, in addition to the Orthopaedic Centre (300 beds approx.), accommodates acute medical and surgical Service and Civilian patients and has a special Thoracic Surgery Unit (70 beds). Total beds 1,000. Applications with full particulars should be forwarded forthwith to the Medical Superintendent, Pinderfields Hospital, Wakefield.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT HOUSE SURGEON (A) or (B2)
for Fracture and Casualty Departments

Applications are invited from registered medical practitioners (male or female for the appointment of Resident House Surgeon (A) or (B2) now vacant, for work in the Fracture and Casualty Departments of the above Hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months; otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months; otherwise it will be for a period of one year. The salary payable will be in the case of an A appointment £120 per annum, and for a B2 appointment at £200 per annum, together with full residential emoluments. The hospital, in addition to the Fracture and Casualty Department, accommodates acute medical and surgical Service and Civilian patients and has a Thoracic Surgery Centre (70 beds). Total beds 1,000. Applications with full particulars should be forwarded to the Medical Superintendent, Pinderfields Emergency Hospital, Wakefield.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

ROMFORD JOINT HOSPITAL BOARD
RUSH GREEN HOSPITAL, Romford (240 beds)
HOUSE SURGEON (B2)

Applications are invited for the post of House Surgeon (B2) at the above hospital, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of one year. The salary is at the rate of £250 per annum plus bonus (at present £24 18s.) and emoluments. Applications, with copies of two testimonials or names for reference to be sent to the Medical Superintendent, Rush Green Hospital, Romford, as soon as possible.—Ernest E. Taylor, Clerk of the Board, Clerk's Office, Rush Green Hospital, Romford.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS EMERGENCY HOSPITAL
Wakefield
RESIDENT HOUSE SURGEON (A) or (B2)
General Surgical Duties

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) or (B2), now vacant, for General Surgical duties at the above hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be for a period of one year. The salary payable will be, in the case of an A appointment, £120 per annum and for a B2 appointment, £200 per annum, together with full residential emoluments. The Hospital accommodates acute medical and surgical Service and Civilian patients and, in addition to an Orthopaedic Centre, has a special Thoracic Surgery Unit (70 beds). Applications with full particulars should be forwarded to the Medical Superintendent, Pinderfields Emergency Hospital, Wakefield, forthwith.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

ADMINISTRATIVE COUNTY OF ESSEX
TEMPORARY ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The County Council invite applications for the above-mentioned temporary appointment from registered medical practitioners, with experience in maternity and child welfare and school health work. The appointment will be for a limited period but so far as can be ascertained will be continued for at least one year. Salary will be at the rate of not exceeding £950 a year according to experience, plus bonus and travelling expenses. Applications, on forms obtainable from me and accompanied by copies of not more than three recent testimonials, which will not be returned, should be addressed to me and delivered at the County Hall, Chelmsford, as soon as practicable. Full information should also be given as to the applicant's position in relation to military service. Canvassing directly or indirectly will disqualify.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL (1,050 beds)
CHIEF ASSISTANT RADIOLOGIST

Applications are invited for the appointment of Chief Assistant Radiologist at Dudley Road Hospital. The X-ray Department comprises Diagnostic and Therapeutic sections and has a Deep X-ray Therapy Unit. Candidates should be suitably qualified and hold the D.M.R. (combined Diploma or Diagnostic Diploma only). The scale of salary will be at the rate of £1,000 by £50 to £1,200, this is a total inclusive salary. The appointment will be renewable annually for three years in the first instance, but will be subject to one month's notice on either side. The officer appointed will be required to pay to the Council all extraneous fees and allowances received. The appointment will be subject to a medical examination and to the provisions of the Local Government Superannuation Act, 1937, and to the Widows and Orphans Pension Scheme (if applicable). Applications should be sent to the Medical Officer of Health, Public Health Department, Birmingham, 3, to reach him not later than February 27, 1948.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL
(Municipal General Hospital with 1,050 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female) for appointment as House Surgeon (A), at the above hospital. The vacancy will occur in the middle of March. The salary is at the rate of £250 per annum plus residential emoluments. This is approved as a resident post required for the final F.R.C.S.(Eng.). Practitioners within three months of qualification and liable under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Applications should be sent to the Medical Superintendent, Dudley Road Hospital, Birmingham, 18, as soon as possible.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL
(Municipal General Hospital with 1,050 beds)
HOUSE SURGEON (A)
Gynaecological and Obstetrical Department

Applications are invited from registered medical practitioners (male or female) for appointment as House Surgeon (A) in the Gynaecological and Obstetrical Department at the above hospital. The vacancy will occur in the middle of March. The salary is at the rate of £250 per annum, plus residential emoluments. This is approved as a resident post required for the D.R.C.O.G. Practitioners within three months of qualification and liable under the National Service Acts, may apply. If such a practitioner is appointed the appointment will be limited to six months. Applications should be sent to the Medical Superintendent, Dudley Road Hospital, Birmingham, 18, as soon as possible.

CITY OF BIRMINGHAM
YARDLEY GREEN ROAD SANATORIUM
(415 beds)
ASSISTANT TUBERCULOSIS OFFICER AND RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from male medical practitioners for the above resident whole-time appointment. In addition to duties at the Sanatorium, the successful candidate will be required to undertake duties as an Assistant Tuberculosis Officer at the Anti-Tuberculosis Centre. Candidates should have held a resident hospital appointment and have had experience of sanatorium and dispensary work. Salary £675 by £25 to £875, including residential emoluments, plus cost-of-living bonus. The appointment will be subject to the passing of a medical examination, to the Local Government Superannuation Act, 1937, to the Widows and Orphans Pension Scheme (if applicable) and to one month's notice on either side. Applications should be addressed to the Medical Officer of Health, Public Health Department, The Council House, Birmingham, 3, not later than February 27, 1948.

CITY OF BIRMINGHAM
ROMSLEY HILL SANATORIUM (120 beds)
RESIDENT ASSISTANT MEDICAL OFFICER
(Male or Female)
(Married Quarters are not available)

Applications are invited for the position of Resident Assistant Medical Officer at the above Sanatorium. Candidates should have held a hospital appointment and have had previous experience in the treatment and diagnosis of tuberculosis. Opportunities will be made available for occasional work at the central City Dispensary. Salary £675 per annum rising by £25 to £875 (including emoluments valued at £150 per annum), plus cost-of-living bonus. The appointment will be subject to the passing of a medical examination, to the Local Government Superannuation Act, 1947, to the Widows and Orphans Pension Scheme (if applicable) and to one month's notice on either side. Applications should be addressed to the Medical Officer of Health, Public Health Department, The Council House, Birmingham, 3, not later than February 27, 1948.

CITY OF BIRMINGHAM
ASSISTANT THORACIC SURGEON
to the Birmingham Tuberculosis Service

Applications are invited for the above full-time appointment. Candidates should hold higher surgical qualifications and have considerable experience in their speciality and in general tuberculosis work. The appointment is non-resident but the officer appointed would require to live within reasonable distance from the Yardley Green Road Sanatorium. Duties will relate mainly to work in the surgical unit of the service, but the officer will also have certain general clinical responsibilities at the Yardley Green Road Sanatorium. Salary £1,000 by £50 to £1,200 per annum inclusive. The appointment will be subject to the passing of a medical examination, to the Local Government Superannuation Act, 1947, to the Widows and Orphans Pension Scheme (if applicable) and to one month's notice on either side. Applications should be addressed to the Medical Officer of Health, Public Health Department, The Council House, Birmingham, 3, not later than February 27, 1948.

CITY OF PLYMOUTH
CITY GENERAL HOSPITAL
RESIDENT OBSTETRICAL AND GYNAECOLOGICAL OFFICER (B1)

Applications are invited from duly qualified and registered medical practitioners (male and female) for the above appointment. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Previous experience in a Maternity Department of a General Hospital is essential. The officer appointed will be responsible for the Maternity Department (normal and abnormal) at the Hospital, an associated Maternity Home outside the City, the Hospital Ante-Natal Clinics, and the Gynaecological ward of the hospital. The appointment is recognised for the requirements of the Membership of the Royal College of Obstetricians and Gynaecologists, and for the Diploma in Obstetrics. Salary will be at the rate of £450 per annum, plus full residential emoluments and war bonus. The appointment will be limited to twelve months, and terminable by two months' notice on either side at any time. Further details of the post are obtainable from the Medical Superintendent, City Hospital, Plymouth. Applications should be sent to the undersigned as soon as possible.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF BRADFORD
MUNICIPAL GENERAL HOSPITAL (St. Luke's)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the following appointment: Resident Anaesthetist (B1). Salary £350 per annum, plus full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also holding B1 and ineligible for H.M. Forces may apply. Candidates must have special experience in anaesthesia, and if not in possession of the D.A. should be studying for such Diploma. The hospital is recognized for the D.A. This appointment is limited to one year.—W. H. Leathem, Town Clerk, Town Hall, Bradford.

CITY OF LIVERPOOL
ASSISTANT MEDICAL OFFICER
in the Maternity and Child Welfare Department

Applications are invited from duly qualified women practitioners for the post of Assistant Medical Officer in the Maternity and Child Welfare Department. The City Council have adopted the interim revision of the Askwith scale and the salary will be within the range of £650 rising by annual increments of £25 to £850 per annum, plus bonus (£48 4s. 7d. per annum at present). The appointment will be held subject to three months' notice on either side, and to Standing Orders of the City Council. The officer appointed must devote the whole of her time to the duties of the office and must not engage in private practice. She must be prepared to perform maternity and child welfare and such other duties as may be required by the Medical Officer of Health. Applicants should have held a previous appointment as Medical Officer of maternity and child welfare clinics or have had at least three years' experience of practical midwifery and ante-natal work and in the care of young children. The holding of a Diploma in Public Health or a Diploma in Child Health and experience in the treatment of venereal diseases will be deemed additional qualifications for the post. The officer appointed will be required to pass a medical examination, and to reside within the city boundry. Canvassing, directly or indirectly, will disqualify. Applications should be made upon forms obtainable from the Medical Officer of Health, Gordon House, Belmont Grove, Liverpool, 6. These forms should be returned to the undersigned, together with copies of three testimonials not later than February 28, and endorsed "Assistant Medical Officer."—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool, 2.

CITY OF LIVERPOOL
Bacteriological Department
ASSISTANT BACTERIOLOGIST

Applications are invited for the appointment of Assistant Bacteriologist. Salary A.P.T.VIII (£625 by £25 to £700). Applicants, who should be non-medical, should possess an Honours B.Sc. in Chemistry. Bacteriological experience would be desirable, though not essential. War bonus, at present £59 19s. 3d. per annum in the case of men, and £48 4s. 7d. in the case of women, is payable in addition to the above-mentioned salaries. The engagements are subject to the Standing Orders of the Council and to the provisions of the Local Government Superannuation Act, 1937. Successful candidates will be required to pass a medical examination. Applications should be addressed to the City Bacteriologist, Bacteriological Department, 126, Mount Pleasant, Liverpool, 3, to arrive not later than February 28, 1948. Canvassing of Members of the City Council either directly or indirectly will be a disqualification. —Thomas Alker, Town Clerk, Municipal Buildings, Liverpool, 2.

CITY OF STOKE-ON-TRENT
CITY GENERAL HOSPITAL (1,200 beds)
APPOINTMENTS TO MEDICAL STAFF

Applications are invited from registered British medical practitioners, including R practitioners now holding A posts, for the following appointments at the above-named hospital, viz:—

HOUSE SURGEON (B2) (General)
HOUSE SURGEON (B2)
(Ear, Nose and Throat and General)
HOUSE SURGEON (B2)
(Gynaecology and Maternity)

In the event of R practitioners being appointed, the appointments will be limited to six months. Salary at the rate of £355 per annum plus full residential emoluments and bonus. Further particulars may be obtained from the Medical Superintendent (Dr. C. Gordon Lewis). Applications to be forwarded to the undersigned, as soon as possible, in envelopes endorsed "City General Hospital—Medical Staff."—Harry Taylor, Town Clerk.

COUNTY BOROUGH OF SOUTHPORT
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from male or female registered medical practitioners for the whole time appointment of Assistant Medical Officer of Health. The duties involved will be in the main the care of patients at the Sanatorium (36 beds) and the conduct of the Tuberculosis Dispensary and Contact Clinics. As and when required the successful candidate will also be expected to act as Medical Officer to the Infectious Diseases Hospital and to take part in the other activities of the Health Department. Candidates should be under 45 years of age and experience in an infectious diseases hospital and sanatorium is essential. The salary grade for the position is £650 rising by annual increments of £25 to a maximum of £850 per annum and the commencing salary will be fixed within this grade according to the qualifications and experience of the successful candidate. A cost-of-living award is payable and also a motor car allowance of £75 per annum. Accommodation for an unmarried doctor is available at New Hall Hospital for which a deduction of £100 will be made from the salary. Forms of application can be obtained from the Medical Officer of Health, 2, Church Street, Southport. Completed application forms endorsed "Assistant Medical Officer of Health," together with three copies of recent testimonials, to be sent to the undersigned so as to reach him not later than the first post on March 19, 1948. Canvassing directly or indirectly will be a disqualification.—R. Edgar Perrins, Town Clerk, Town Hall, Southport.

CITY OF LEEDS
DEPUTY MEDICAL OFFICER OF HEALTH
DEPUTY SCHOOL MEDICAL OFFICER

Applications are invited for the above post from registered medical practitioners possessing the D.P.H. Salary £1,200 per annum plus cost-of-living bonus (at present £59 16s. per annum). The post is subject to the Superannuation Act, 1937, and is terminable by three months' notice on either side. The candidate will be required to pass a medical examination. Applicants should have had administrative and clinical experience in the public health and school health services. The successful candidate will work under the direction of the Medical Officer of Health and will be required to perform such duties as are allotted to him. The person appointed will be eligible for appointment as part-time lecturer in Public Health in the University of Leeds. Applications endorsed "Deputy Medical Officer of Health and Deputy School Medical Officer," with full details of the applicant's age, qualification and experience, together with the names of three persons for reference, should be sent to the Medical Officer of Health and School Medical Officer, Health Department, 12, Market Buildings, Vicar Lane, Leeds, 1, by 10 a.m. on Saturday, February 21, 1948. Canvassing in any form, either directly or indirectly, will be a disqualification.—I. G. Davies, Medical Officer of Health, 12, Market Buildings, Vicar Lane, Leeds, 1.

CITY OF LEEDS
Public Health Department
ST. MARY'S HOSPITAL
204 beds (104 Maternity, 100 Chronic)
LOCUM MEDICAL OFFICER

Locum Medical Officer required for six to eight weeks from March 1 next. Previous experience of maternity work essential. Remuneration £10 10s. per week. Applications to the undersigned as soon as possible.—I. G. Davies, Medical Officer of Health, Public Health Department, (Hospitals Administration Section), 12, Market Buildings, Vicars Lane, Leeds, 1.

CITY AND COUNTY BOROUGH OF CARLISLE
CITY MATERNITY HOSPITAL
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Senior Resident Medical Officer (B1) at the above hospital. The hospital is recognised for the training of medical students, and is approved as a Part 1 Training School for Midwives. Applicants should have at least six months' experience as a Resident in a Maternity Hospital as well as experience as House Surgeon or House Physician in a General or Children's Hospital. Applications from R practitioners holding B1 appointments cannot be considered unless they have been rejected by H.M. Forces. Facilities are available for the person appointed proceeding to higher Diplomas or Degrees. The salary offered is £350 plus residential emoluments, and the appointment will be held for one year. Further particulars may be obtained from the Medical Officer of Health, Public Health Department, 22, Fisher Street, Carlisle, with whom all applications, stating age, nationality, medical school, qualifications, appointments and experience, together with copies of not more than three testimonials, should be lodged not later than February 25, 1948.—H. D. A. Robertson, Town Clerk, Town Clerk's Office, 15, Fisher Street, Carlisle.

CITY OF CARDIFF
LLANDOUGH HOSPITAL, Penarth, Glam.
(The Cardiff Municipal General Hospital
RESIDENT SPECIALIST ANAESTHETIST

Applications are invited for the appointment of Resident Specialist Anaesthetist at Llandough Hospital (345 beds). Applicants must have had extensive experience in the administration of anaesthetics, and must possess the Diploma in Anaesthetics. The salary for the post will be £800 per annum, rising by annual increments of £25, to £1,000 per annum, plus full residential emoluments valued at £140 per annum. The successful candidate (who will be required to pass a medical examination and to contribute to the Local Government Superannuation Act Fund) will work under the direction of the Medical Superintendent of the Hospital. Applications, on forms obtainable from the Medical Officer of Health, City Hall, Cardiff, to be returned to him not later than March 1, 1948. Canvassing will disqualify.—S. Tapper Jones, Town Clerk, City Hall, Cardiff.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
NEWCASTLE GENERAL HOSPITAL
HOUSE SURGEON (A)
to Accident and Admissions Department

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A) to the Accident and Admissions Department, vacant on March 1, 1948. The appointment will be for a period of six months. Salary at the rate of £150 per annum, with residential emoluments and cost-of-living bonus. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications should be forwarded to the Medical Officer of Health, Town Hall, Newcastle-upon-Tyne, 1.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

COUNTY BOROUGH OF DARLINGTON
RESIDENT MEDICAL OFFICER (B1)
at the Maternity Hospital, Darlington

Applications are invited for the post of an additional Resident Medical Officer (B1) at the Maternity Hospital (36 beds to be increased to 50 beds); R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Salary according to Askwith Memorandum (as revised) plus emoluments valued at £150 for board, residence, etc. Candidates should have had experience as a House Surgeon and experience in obstetrics will be a recommendation. The selected candidate will be required to act under the direction of the Medical Officer of Health. Application forms with particulars of appointment may be obtained from the Medical Officer of Health, Greenbank, Darlington, to whom they should be returned accompanied by copies of three testimonials, in an envelope endorsed "Assistant Medical Officer of Health."—W. E. Orchard, Medical Officer of Health.

COUNTY BOROUGH OF GREAT YARMOUTH
MEDICAL OFFICER OF HEALTH AND
SCHOOL MEDICAL OFFICER

Applications are invited from qualified medical practitioners holding a Degree in or Diploma of Public Health for the appointment of Medical Officer of Health and School Medical Officer, at a salary of £1,170 per annum, rising by two annual increments of £50 and one increment of £30 to a maximum of £1,300 per annum, inclusive of all fees and emoluments, plus a car allowance at the Council's scale, and cost-of-living bonus. Applicants must be fully qualified to carry out all the duties of Medical Officer of Health, School Medical Officer, Chief Tuberculosis Officer, Superintendent of the Borough Isolation Hospital, Port Medical Officer and such other duties as may from time to time be prescribed by the Council. Forms of application and further particulars may be obtained from me. Applications must reach me not later than noon on March 5, 1948.—Farra Conway, Town Clerk, Town Hall, Great Yarmouth.

COUNTY BOROUGH OF STOCKPORT
STEPPING HILL HOSPITAL
Resident ASSISTANT OBSTETRIC OFFICER (B1)

Applications are invited for the appointment of Resident Assistant Obstetric Officer (B1) at Stepping Hill Hospital. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The salary will be £455 per annum, rising by annual increments of £25 to £555 per annum, plus emoluments valued at £120 per annum. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate appointed will be required to pass a medical examination. Applications should be sent in forthwith to the Medical Officer of Health, Town Hall, Stockport.

COUNTY BOROUGH OF IPSWICH
BOROUGH GENERAL HOSPITAL (312 beds)

Applications are invited from registered medical practitioners (male or female) for the following posts, including practitioners within three months of qualification and liable under the National Service Acts for the A post, and R practitioners holding A posts for the B2 post:—

HOUSE SURGEON (A)
HOUSE SURGEON (B2)

Salary in the case of the A post will be £250 per annum and the B2 post £350 per annum, with full residential emoluments. The appointments will be for six months in the first instance and will be limited to six months in the event of practitioners being appointed who are liable for military service. Applications should be sent to the Acting Medical Officer of Health, Public Health Department, Elm Street, Ipswich.

COUNTY BOROUGH OF SOUTHEND-ON-SEA
PART-TIME PSYCHIATRIST

Applications are invited for appointment as part-time Psychiatrist and Director of the Child Guidance Clinic. Salary £500 per annum, rising by annual increments of £20 to a maximum of £620, will be payable. If the person appointed resides in London, 1st class return fare will be payable. Applications should be sent to the Medical Officer of Health, Municipal Health Centre, Warrior Square, Southend-on-Sea, not later than Saturday, February 28, 1948. —Archibald Glen, Town Clerk, Town Clerk's Office, Southend-on-Sea.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth, Cornwall
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant immediately. Salary at the rate of £200 per annum, with the usual residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications to be addressed to J. C. Field, Secretary-Superintendent.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

COUNTY BOROUGH OF WOLVERHAMPTON
NEW CROSS HOSPITAL
OBSTETRIC REGISTRAR (B1)

Applications are invited from male registered medical practitioners for the post of Obstetric Registrar at the above hospital, the maternity department of which contains 42 beds, exclusive of ante-natal beds, and in which there are over one thousand confinements annually. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H M. Forces. Previous obstetric experience is essential, and preference will be given to candidates possessing a higher qualification in obstetrics. The appointment will be for a period of twelve months. Salary is at the rate of £580 per annum (inclusive of bonus at the present rate), plus full residential emoluments. There are no married quarters available. Applications together with copies of three testimonials and/or names of three referees, should be forwarded to the Medical Superintendent.—J. Brock Allon, Town Clerk, Town Hall, Wolverhampton.

COUNTY COUNCIL OF THE WEST RIDING OF YORKSHIRE
Health Department
COUNTY GENERAL HOSPITAL, Wakefield
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male and female) for the above appointment, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, otherwise to a period not exceeding one year, and will commence immediately. This appointment will cover general duties under the direction of the Medical Superintendent and will afford good opportunities for experience in various branches of medicine, surgery and anaesthetics. The salary is at the rate of £200 per annum with full residential emoluments plus war bonus. Applications should be submitted to the County Medical Officer, "Hospitals" Section, County Hall, Wakefield.

GLAMORGAN COUNTY COUNCIL

Applications are invited from registered medical practitioners for the undermentioned appointments at the County Council Hospitals :—

(a) EAST GLAMORGAN COUNTY HOSPITAL, Church Village, near Pontypridd
TEMPORARY HOUSE SURGEON (A)
(b) MID-GLAMORGAN COUNTY HOSPITAL Bridgend
TEMPORARY RESIDENT ASSISTANT MEDICAL OFFICER (B2)
(Duties mainly surgical)
TWO TEMPORARY HOUSE SURGEONS (A)

Unless they are (a) already in the employ of a Local Authority and considered to be specially suitable for the appointment, or (b) ex-Servicemen, in which case the age limit will be raised by the number of years served in H.M. Forces during the late war, applicants must be under 45 years of age. Practitioners within three months of qualification and liable under the National Service Acts may apply for the A posts, and R practitioners at present holding A appointments may apply for the B2 post, in which cases the appointments will be limited to six months. The scales of salary for the appointments are as follows :—

(a) Temporary Resident Assistant Medical Officer (B2) £292 10s., rising by annual increments of £25 to £392 10s. per annum, plus prevailing cost-of-living bonus and full residential emoluments.

(b) Temporary House Surgeon (A) £260 per annum, plus prevailing cost-of-living bonus and full residential emoluments.

All fees whatsoever received by the successful candidates must be handed over to the County Council. The appointments which are subject to the Regulations of the County Council will be terminable by one month's notice on either side. Applications should be submitted to the County Medical Officer, Glamorgan County Hall, Cardiff, within 14 days of the publication of this advertisement.—D. J. Parry, Clerk of the County Council, Glamorgan County Hall, Cardiff.

CHESHIRE COUNTY COUNCIL
THE COUNTY BOROUGH OF CHESTER AND THE CHESTER ROYAL INFIRMARY
JOINT APPOINTMENT OF PAEDIATRICIAN

Applications are invited for the above appointment for duties in West Cheshire, including the City of Chester and the Chester Royal Infirmary. Whole time appointment. Commencing salary £1,500 per annum with cost-of-living allowances at present £48 per annum, and travelling expenses, on the Cheshire County Council Scale. Superannuable under the Local Government Act, 1937. Candidates must hold a higher qualification in Medicine and have experience in paediatrics. Further particulars and forms of application for the appointment may be obtained from the undersigned, to whom applications should be sent to arrive no later than February 24, 1948.—P. R. J. Arnold Honorary Secretary to the Joint Committee, The Royal Infirmary, St. Martin's Fields, Chester.

CHESHIRE COUNTY COUNCIL
CLATTERBRIDGE (COUNTY) GENERAL HOSPITAL, Bebington, Wirral
Assistant RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the post of Assistant Resident Medical Officer (B2). The duties will be mainly medical. Salary £200 per annum (plus bonus and residential emoluments). R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications (on special form) to be sent as soon as possible to the undersigned.—Arnold Brown, County Medical Officer, 24, Nicholas Street, Chester.

CUMBERLAND COUNTY COUNCIL
BLENCATHRA SANATORIUM
ASSISTANT MEDICAL SUPERINTENDENT

The Cumberland County Council invite applications for the above appointment. Applicants must be registered medical practitioners not over 45 years of age (male or female). The post is resident, and the salary will be £550 by £25 to £650, together with a small furnished house, food, fuel, light, and attendance. The person appointed will be required to contribute to the appropriate Superannuation Scheme, and to pass a medical examination. Forms of application with the terms of the appointment may be obtained from the County Medical Officer, County Health Department, 11, Portland Square, Carlisle, and completed applications must be received by him not later than March 17, 1948. Canvassing directly or indirectly, will disqualify.—G. N. C. Swift, Clerk of the County Council.

HAMPSHIRE COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified medical men for the joint whole-time appointment of Assistant County Medical Officer, Hampshire County Council, and Medical Officer of Health, Havant and Waterloo Urban District Council. The salary will be a minimum of £960 per annum plus cost-of-living allowance, at present £59 16s. per annum. Previous experience will be taken into consideration in fixing the commencing salary. If a nationally agreed scale comes into operation, this will be applied. The Diploma in Child Health is desirable, the Diploma in Public Health essential. The appointment will be subject to the provisions of the Local Government Superannuation Act 1937, and in relation to the appointment as Medical Officer of Health to Havant and Waterloo Urban District Council will be subject to the approval of the Ministry of Health. Forms of application, which can be obtained from The County Medical Officer, The Castle, Winchester, should be returned to him not later than February 28, 1948.—G. Andrew Wheatley, Clerk of the County Council, The Castle, Winchester.

HERTFORDSHIRE COUNTY COUNCIL
LISTER EMERGENCY HOSPITAL
Hitchin (350 beds)

Applications are invited from registered practitioners, including R practitioners holding A posts, for the following appointment:—

HOUSE SURGEON (B2), now vacant. Salary £240 per annum, with full residential emoluments. The appointment will be for a period of six months. Applications should be sent immediately to Mr. A. G. Young, F.R.C.S., Medical Superintendent.

HERTS COUNTY COUNCIL
HILL END HOSPITAL AND CLINIC
(Herts County Dental Hospital), St. Albans
LOCUM TENENS MEDICAL OFFICER

Locum Tenens Medical Officer required for about two months. Salary £10 10s. per week with full residential emoluments. Applications to the Medical Director.

KENT COUNTY COUNCIL.
COUNTY HOSPITAL, Farnborough, Nr. Bromley (935 beds)
RESIDENT ASSISTANT MEDICAL OFFICER (A)
(E.N.T. Duties)

Applications are invited from registered medical practitioners (male and female) for appointment at the above hospital for E.N.T. duties. Salary £200 a year, plus cost-of-living allowance and full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply for this post, when the appointment will be for a period of six months. Medical examination necessary and superannuation can be arranged. Applications and the names and addresses of two responsible persons to whom reference may be made as to professional ability and character, should be addressed to the Medical Superintendent at the Hospital, as soon as possible.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

KENT COUNTY COUNCIL
WILLESBOROUGH HOSPITAL, near Ashford
Resident ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the above appointment, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Otherwise, it will not exceed one year. Duties will be of a general medical and surgical nature. The salary is £200 a year, full residential emoluments plus a cost-of-living bonus. Applications should state age, qualifications, experience and the names and addresses of two responsible persons to whom reference may be made as to professional ability and should be addressed to the Medical Superintendent, so as to reach him by February 24, 1948.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

KENT COUNTY COUNCIL
SENIOR Assistant COUNTY MEDICAL OFFICER
for Mental Health Services
(Second Advertisement)

Applications are invited from suitably qualified and experienced practitioners, including those in H.M. Forces, for the above appointment on the central staff of the Public Health Department. The successful candidate will be responsible to the County Medical Officer for the general conduct of the Mental Health Services of the Health Committee as prescribed in the National Health Service Act, 1946, and will be required to undertake clinical duties, particularly in connection with mental defectives The salary scale is £1,100 a year rising by biennial increments of £50 to £1,210, and the commencing point will be fixed according to qualifications and experience. A cost-of-living allowance will also be paid. The appointment is superannuable and the successful candidate will be required to pass a medical examination and to provide a motor car, for which a travelling allowance will be paid on the County Council's scale. Applications, stating age, qualifications and experience, accompanied by the names and addresses of two persons to whom reference may be made as to professional ability and character, should be addressed to the County Medical Officer, Public Health Department, County Hall, Maidstone, not later than March 2, 1948. No forms of application are being issued.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

AMENDED ADVERTISEMENT
KENT COUNTY COUNCIL
COUNTY HOSPITAL
Chatham, Dartford, Willesborough and Sheppey
ASSISTANT RADIOLOGIST

Applications are invited from practitioners with appropriate experience for the appointment of Assistant Radiologist at the above Hospitals. The salary scale is £744 a year, rising by annual increment of £50 to £894 a year, together with a cash living-out allowance of £120 a year, plus a cost-of-living allowance. The commencing point in the scale will be fixed according to qualifications and experience. A motor car is essential and travelling expenses in accordance with the Council's scale will be paid. Suitably qualified R practitioners holding B2 appointments and those who have returned from the Forces are invited to apply. R practitioners now holding B1 appointments and ineligible for H M. Forces may also apply. The post is subject to the provisions of the Local Government Superannuation Act 1937, and the successful candidate will be required to pass a medical examination. Applications, stating age, qualifications, experience, nationality and the names and addresses of two persons to whom reference may be made as to professional ability and character, should be sent to the County Medical Officer, County Hall, Maidstone, by February 24, 1948.—W. L. Platts. Clerk of the County Council, County Hall, Maidstone.

KINGSTON UPON HULL CORPORATION
Health Department
CHIEF LABORATORY TECHNICIAN (Grade A)

Applications are invited from qualified and experienced technicians for this appointment at the newly-created laboratories at the Beverley Road and Anlaby Road Hospitals. The person appointed will be responsible, under the immediate direction of the Pathologist, for assisting in the development of the two laboratories and the teaching of Student Technicians. The salary rises from £470 to £600 per annum, being based upon the recommendations of the Joint Committee on salaries and wages (Hospital Staffs), the commencing point being dependent upon the experience of the successful candidate. The person appointed will be subject to the Local Government Superannuation Act, 1937, on passing a medical examination. Forms of application, which should be returned as soon as possible, may be obtained from the Medical Officer of Health, Guildhall, Hull.

LONDON COUNTY COUNCIL

Medical practitioners required for the Thoracic Surgery Unit (in conjunction with Brompton Hospital for Consumption) at

ST. CHARLES' HOSPITAL
St. Charles' Square, Ladbroke Grove, W.10

ONE ASSISTANT MEDICAL OFFICER Class I (B1). Salary £530 a year, rising by £25 to £630 a year.

TWO ASSISTANT MEDICAL OFFICERS, Class II (B2). Salary £400 a year.

In each case with board, lodging, washing, or an allowance in lieu in certain instances.

Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply for the B1 position, and R practitioners holding A posts may apply for B2 appointments, which will be limited to six months. Application forms, obtainable from Medical Officer of Health (S.D.2), London County Council, County Hall, S.E.1 (stamped foolscap envelope necessary), must be returned by March 1, 1948, to the House Governor, Brompton Hospital for Consumption, Fulham Road, S.W.3. (337).

LONDON COUNTY COUNCIL

Medical practitioners required for the undermentioned positions:—

(1) **Senior Resident Surgeon (B1)**—St. Nicholas' Hospital, 79, Tewson Road, Plumstead, S.E.18.
Senior Resident Anaesthetist (B1)—Lewisham Hospital, Lewisham, S.E.13.
(Salary in each case £700 a year rising by annual increments of £30 to a maximum of £820 a year.)

(2) **Assistant Medical Officers Class I (B1)**—Salary £530 a year, rising by £25 to £630 a year. The appointment will not exceed four years unless the officer's name is placed on promotion list.

Hospital	*Duties*
Lambeth Hospital, Brook Drive, Kennington, S.E.11	Obstetrics and gynaecology
Mile End Hospital, Bancroft Road, Mile End, E.1	Surgical
St. Mary Islington Hospital, Highgate Hill, N.19	Fracture and emergency surgery.
South-Western Hospital, Landor Road, Stockwell, S.W.9	Chronic sick, infectious ward and tuberculosis
St. John's Hospital, St. John's Hill, S.W.11	Chronic sick, some psychiatry

(3) **Assistant Medical Officers Class II (B2)**—Salary £400 a year. Appointment for one year only in first instance, renewable for second year under certain conditions.

Hospital	*Duties*
Mile End Hospital, Bancroft Road, Mile End, E.1	Obstetrics
Paddington Hospital, Harrow Road, W.9	Obstetrics and gynaecology
St. James' Hospital, Ouseley Road, Balham, S.W.12	Obstetrics and gynaecology
St. Giles' Hospital, St. Giles' Road, Camberwell, S.E.5	Obstetrics and gynaecology
New End Hospital, Hampstead, N.W.3	General medical
Highgate Hospital, Dartmouth Park Hill, N.19	General medical
St. Alfege's Hospital, 48, Vanbrugh Hill, Greenwich, S.E.10	Junior resident anaesthetist with care of medical ward
St. Francis' Hospital, East Dulwich, S.E.22	Mainly chronic sick

Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply for the B1 positions, and R practitioners holding A posts may apply for B2 appointments, which, if an R practitioner is appointed, will be limited to six months.

(4) **House Surgeons (A)**—Salary £200 a year. Including R practitioners within three months of qualification. If held by an R practitioner appointment will be for a period of six months. Otherwise, it will be for six-monthly periods, to a maximum of two years.

All the above positions are with board, lodging and washing.

Married quarters are not available, but in certain instances non-residence (excepting house surgeons) with the appropriate allowance is permitted.

Application forms, obtainable from Medical Officer of Health, S.D.2, County Hall, S.E.1 (stamped foolscap envelope necessary), must be returned by March 1, 1948.

Canvassing disqualifies. (356)

LONDON COUNTY COUNCIL
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for appointments of Assistant Medical Officer (B1) (man or woman) for the mental health services. Age limit 40 years. Candidates (*i*) must be registered to practise both in medicine and surgery in England; (*ii*) must be of at least one year's professional standing; (*iii*) must have held residential post in a general hospital for six months or comparable general experience. Salary £700 rising by annual increments of £25 to £800 a year. Additional allowance of £50 to holders of D.P.M. No emoluments. Charges for board, lodging, etc. (at present £2 9s. a week) if required to be resident. Pensionable. Applications from registered practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. For application forms returnable by February 24, 1948, send stamped addressed foolscap envelope to Medical Officer of Health (MHS/B), Public Health Department (Mental Health Services), County Hall, Westminster Bridge, S.E.1. (308).

LONDON COUNTY COUNCIL
Public Health Department
Consultant and Specialist Service
CONSULTANT DERMATOLOGIST
at St. Nicholas Hospital, Plumstead

Applications are invited for appointment as Consultant Dermatologist for duty at St. Nicholas Hospital, Plumstead, for one short session a fortnight. Remuneration, £2 12s. 6d. a session (duration one hour or less), plus mileage allowance of 1s. a mile. Application forms, giving further particulars and conditions of appointment and service, obtainable from the Medical Officer of Health (S.D.6), County Hall, S.E.1. (Stamped addressed foolscap envelope necessary). Returnable by March 1, 1948. Canvassing disqualifies. (260).

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL
Enfield, Middlesex (Approx. 800 beds)
CHIEF ASSISTANT
in Obstetrics and Gynaecology Department

Chief Assistant in Obstetrics and Gynaecology Dept. Higher degree or diploma in obstetrics and gynaecology and considerable experience in this work required. General scope of duties arranged by Medical Director and Senior Obstetrician may include teaching. Inclusive salary £750 by £50 to £950 per annum, plus any temporary bonus (now £60 per annum). First increment payable from April 1 following completion of six months' service. Appointment renewable annually up to three years, with possible extension; subject to medical examination. Whole-time, non-resident posts, but resident when on duty. Applications (no forms) with copies of up to two recent testimonials and two referees to the undersigned by March 1, 1948 (Quoting D.545, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
NAPSBURY MENTAL HOSPITAL
near St. Albans, Herts

CLINICAL ASSISTANT (B1). Salary £300 per annum, plus any temporary bonus (now £30 per annum cash) plus full residential emoluments (bachelor quarters). Previous experience not essential. Excellent travelling facilities. Six to twelve months appointment. Applications from R practioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications to Medical Superintendent at once, with recent testimonials or referees. (Quoting D592, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
RESIDENT MEDICAL SUPERINTENDENT
at Middlesex Colony, Shenley, nr. St. Albans

Resident Medical Superintendent (qualified medical practitioner) required at Middlesex Colony, Shenley, Nr. St. Albans (Certified Institution). Salary scale £1,100 by £50 to £1,200 per annum, plus any temporary bonus (now £60 per annum). Unfurnished house provided rent free (general and water rates paid by Council), valued at £130 per annum; no other emoluments. Established post, subject to Asylums' Officers Superannuation Acts, medical examination, and to the Council's General Conditions, etc. The candidate appointed must devote whole time to the Council's service and pay over any fees received. Experience in Mental Deficiency work essential; D.P.M. an advantage. Candidates not on the Council's established staff must be under 46 years of age on April 1, 1947. Canvassing disqualifies. Applications with copies of three testimonials to the undersigned by March 6. (Quoting D.593, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL
Edgware, Middlesex
Radiology Department
CHIEF ASSISTANT with D.M.R.E.

Chief Assistant with D.M.R.E. Full time Radiologist in charge. Facilities granted for postgraduate study. General scope of duties, may include teaching, arranged by Medical Director. Whole-time appointment, one to three years; subject to medical examination. Inclusive salary £750 by £50 to £850 per annum, plus any temporary bonus (now £60 per annum; non-resident, but required to live near hospital. Applications (no forms) with copies of up to two recent testimonials and two referees to the undersigned by March 1, 1948 (Quoting D.545, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

SURREY COUNTY COUNCIL
BROOKWOOD HOSPITAL, Knaphill, near Woking
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A appointments, for the post of House Physician (B2) at the above Mental Hospital. The appointment, which provides facilities for gaining experience in Psychiatry and the modern methods of treatment, is tenable for six months in the first instance and may be renewed for a further period of six months, unless held by an R practitioner. The salary is at the rate of £350, £400 or £450 per annum, according to previous experience, with full residential emoluments. Applications to be sent to the Physician Superintendent, Brookwood Hospital, Knaphill, Woking, Surrey, as soon as possible.

SURREY COUNTY COUNCIL
FARNHAM COUNTY HOSPITAL
Hale Road, Farnham
ASSISTANT SURGICAL OFFICER (B2)

Appointment for six months (renewable for further six months if candidate appointed not liable for service with H.M. Forces). R practitioners holding A posts may apply. Candidates must have had experience in a house appointment. Salary £250 per annum, plus bonus, and full residential emoluments valued at £150 per annum. Applications with one to three recent testimonials (copies) to the Medical Superintendent of the Hospital by February 28, 1948.

STAFFORDSHIRE COUNTY COUNCIL
TAMWORTH BOROUGH COUNCIL
LICHFIELD CITY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

Applications are invited for the combined whole-time appointment of an Assistant County Medical Officer for the Administrative County of Stafford and Medical Officer of Health of the Tamworth Borough and Lichfield City (estimated populations, 12,300 and 10,500 respectively), at a salary at the rate of £960 per annum, plus cost-of-living bonus. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. The selected candidate will be required to provide a motor car, the allowances for which will be in accordance with the County Council scale. Applicants must be fully qualified medical men with experience in public health duties, and must hold the Diploma of Public Health. The candidate appointed will, as regards his duties as Assistant County Medical Officer, act under the direction of the County Medical Officer of Health and will be required to perform such duties as may from time to time be prescribed. As regards his duties as District Medical Officer of Health, he will be subject to the sole control and direction of the local Sanitary Authorities. The appointment is subject to the approval of the Ministers of Health and Education, and also, as far as the offices of District Medical Officer are concerned, to the provisions of the Sanitary Officers' (Outside London) Regulations, 1935. The combined appointment will be subject to three calendar months' notice in writing on either side, which as far as the offices of District Medical Officer of Health are concerned, will also be subject to the consent of the Minister of Health. The successful candidate will be required to pass a medical examination and produce his birth certificate. Forms of application may be obtained from the Clerk of the County Council, County Buildings, Stafford, and should be returned to him by first post on February 23, 1948, together with copies of not more than three recent testimonials.—T. H. Evans, Clerk of the County Council; H. Wood, Town Clerk, Tamworth; A. N. Ballard, Town Clerk, Lichfield, County Buildings, Stafford.

SURREY COUNTY COUNCIL
BOTLEYS PARK, Chertsey
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners interested in the treatment of Mental Deficiency for the post of Assistant Medical Officer (B1) at the above-named Colony for Mental Defectives. Applications from R practitioners now holding B1 posts cannot be considered unless they are ineligible for H.M. Forces. The Colony is a modern one of 1,200 to 1,500 beds, with a fully equipped Hospital Block including operating theatre, laboratory and X-ray departments. There are also adult and juvenile occupation centres with departments dealing with remedial exercises, and all facilities for the care, treatment and study of mental defectives of both sexes, all ages and grades. The Colony is recognised by the London University for the D.P.M. (Mental Deficiency), and by the A.O.T. and G.N.C. as a school for the training of Occupational Therapists (Psychological section) and Mental Deficiency Nurses respectively. The successful candidate may be required to assist in giving lectures to Occupational Therapy and Nursing Students. Salary at the rate of £514 16s. by £25 to £614 16s. per annum inclusive, plus £50 per annum if in possession of the D.P.M., and emoluments valued at £150 per annum or cash in lieu if permitted to live out. Applications to the Physician Superintendent.

SURREY COUNTY COUNCIL
EPSOM COUNTY HOSPITAL
Dorking Road, Epsom, (450 beds)
Resident Assistant OBSTETRICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the above appointment. The duties will be mainly in the Obstetric and Gynaecological Unit (total beds approx. 100) but will also include duty in the general wards of the hospital as required by the Medical Superintendent. The hospital is recognized by the Royal College of Obstetricians and Gynaecologists for Obstetrics part of the M.R.C.O.G. qualification. Candidates must have had previous experience in a House appointment. Commencing salary £350, £400, or £450 per annum, according to qualifications and experience, plus bonus and full residential emoluments. Appointment is for six months, renewable for a second period of six months. Suitably qualified R practitioners now holding B2 posts may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have completed a period of service with H.M. Forces or have been rejected for such service. Enquiries relating to the appointment should be made to the Medical Superintendent of the hospital, to whom applications by letter should be sent by February 21, 1948.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

SURREY COUNTY COUNCIL
Mental Hospitals Department
BOTLEYS PARK CERTIFIED INSTITUTION
Chertsey, Surrey
PHYSICIAN

Applications are invited (including applications from Officers serving in H.M. Forces) for the post of Physician at the Botleys Park Certified Institution commencing at a point, according to qualifications and experience, on a salary scale of £1,200 by £50 to £1,500 a year inclusive. The appointment, which is non-resident, will be on the permanent staff of the Council; will be subject, for the present, to the Asylums and Certified Institutions (Officers' Pensions) Act, 1918, and to the staffing regulations of the Council. The Physician appointed will be expected to live within a reasonable distance of the hospital. The successful candidate will be required to pass a medical examination and the appointment will be terminable by three months' notice on either side. The Colony is a modern Institution of 1,200 to 1,500 beds, carries out all forms of modern treatment, and has facilities for all types of research work amongst a population of mental defectives of both sexes and all ages and grades. Candidates must hold a degree or Diploma in psychological medicine, and have a wide psychiatric experience including mental deficiency experience. Preference will be given to those with a higher medical qualification. Further information may be obtained from the Physician Superintendent of the Institution at the above address. Canvassing is strictly forbidden and will disqualify. Applications by letter stating age, qualifications and experience with a copy of three recent testimonials and/or the names of three referees should be sent to the County Medical Officer, County Hall, Kingston-upon-Thames, by February 28, 1948.—Dudley Aukland, Clerk of the Council.

SURREY COUNTY COUNCIL
Mental Hospitals Department
BROOKWOOD HOSPITAL, Knaphill, nr. Woking
PATHOLOGIST

Applications are invited for the post of Pathologist at the Brookwood Hospital, at a salary of £1,200 inclusive, rising by annual increments of £50 to a maximum of £1,500 a year inclusive. The appointment, which is non-resident, will be on the Council's permanent staff, will be subject to the Asylums Officers' Superannuation Act, 1909, and to the staffing regulations of the Council. The doctor appointed will be expected to live within a reasonable distance of the hospital. The successful candidate will be required to pass a medical examination and the appointment will be terminable by three months' notice on either side. Applications will normally be entertained only from persons with wide experience and who possess a higher medical qualification. The medical establishment of the hospital has recently been revised and further information can be obtained from the Physician Superintendent of the hospital. Applications, accompanied by three recent testimonials or the names of three referees, should be sent by February 28, 1948, to the County Medical Officer, County Hall, Kingston-on-Thames, Surrey. Canvassing is strictly forbidden and will disqualify.

SOMERSET COUNTY COUNCIL
TWO ASSISTANT COUNTY MEDICAL OFFICERS OF HEALTH

The Somerset County Council invite applications (men or women) for two appointments as Assistant County Medical Officer of Health at a salary of £650 per annum, rising by £25 per annum to £850 per annum, plus bonus. Applicants must be registered medical practitioners. Possession of the D.P.H. or D.C.H. would be an advantage. The duties will be mainly concerned with the services of School Medical Inspection and Maternity and Child Welfare. Possession of a motor car is essential. Travelling allowance will be paid in accordance with the County scale. The appointment will be subject to Local Government Superannuation Act, 1937, and to a satisfactory medical examination. Applications, on forms to be obtained from the undersigned, giving particulars of age, qualifications and experience, together with two copies of recent testimonials, should be received not later than February 21, 1948.—J. F. Davidson, County Medical Officer of Health, County Hall, Taunton.

STIRLINGSHIRE, CLACKMANNANSHIRE AND WEST PERTHSHIRE
DIVISIONAL COUNCIL FOR HOSPITAL SERVICES
CONSULTANT IN ORTHOPAEDICS

Applications are invited for the appointment of an Orthopaedic Surgeon of Consultant status. The appointment is a new one and is made jointly by the Voluntary Hospitals and the Local Authorities of Stirlingshire, Clackmannanshire and West Perthshire. The salary is £1,800 per annum with car allowance and superannuation rights. Private practice will not be allowed, and the successful applicant will require to live within the area in reasonable proximity to the hospitals. Applications, with copies of three testimonials and three references, should be sent to Mr. M. D. Kennedy, Hon. Secretary, Divisional Council for Hospital Services, 14, Princes Street, Falkirk, not later than February 28, 1948.

URBAN DISTRICT OF NORTON
RURAL DISTRICT OF NORTON
RURAL DISTRICT OF POCKLINGTON
EAST RIDING COUNTY COUNCIL
Combined appointment of
Whole-time MEDICAL OFFICER OF HEALTH and ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners possessing a Diploma in Public Health, or similar qualifications, for the following offices to be held as a whole-time joint appointment:—

(1) Medical Officer of Health for the Urban District of Norton and the Rural Districts of Norton and Pocklington (combined population 24,846; combined area 198,490 acres).

(2) Assistant Medical Officer of Health and Assistant School Medical Officer for the East Riding County Council within the combined area.

The total commencing salary for the combined appointment will be £1,040 per annum, plus cost-of-living bonus at the rate for the time being in force (now £59 16s. per annum), and a travelling allowance. Office accommodation, telephone facilities and necessary clerical assistance will be provided. The appointment will be subject to the provisions of Section 110 of the local Government Act, 1933, and the Sanitary Officers' (Outside London) Regulations, 1935. Further particulars as to the duties and conditions of appointment may be obtained on application to the undersigned. Applications to be made on forms to be obtained from the undermentioned address and must be forwarded, together with copies of not more than three recent testimonials, so as to reach the undersigned not later than February 25, 1948.—T. Stephenson, Clerk of the County Council, County Hall, Beverley.

ALTRINCHAM GENERAL HOSPITAL
PATHOLOGIST

Applications are invited for the post of Pathologist. The appointment is intended to be full-time, but daily attendance amounting to not less than six half-day sessions weekly would be considered. Applicants must be exclusively engaged in the practice of pathology, and experience in all branches of pathology is desirable. The post is non-resident with a salary of £750 to £1,000 per annum. The successful candidate will be encouraged to engage in private practice, for which there is considerable scope, and this will not be limited to patients in the private wards. He will be expected to undertake such work in the hospital laboratory, a proportion of the private fees being retained by the hospital. Duties to begin on or soon after April 1, 1948. Applications giving full particulars and the names of two referees should be sent by February 28, 1948, to the General Superintendent and Secretary

ASHFORD HOSPITAL, Ashford, Kent
TWO RESIDENT HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners (male) for appointment of two Resident House Surgeons (A), which become vacant immediately, including R practitioners within three months of qualification. The appointments will be for a period of six months each. Salary at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the Secretary, Ashford Hospital, Kent, as soon as possible.

BURY INFIRMARY, Lancashire (161 beds)
(With post-operative unit to be opened during the next few months—190 approx.)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from suitably qualified male practitioners for the above post which becomes vacant at the end of February. Possession of the Fellowship of one of the Royal Colleges will be an advantage, but applications from others (including those studying for this qualification) will be considered. The post is particularly suitable for those who are intending to take the F.R.C.S. examinations in due course, and its tenure is for one year in the beginning with the possibility of an extension for a further year. Applicants should have held a house appointment and R practitioners holding B2 posts are invited to apply. Applications from practitioners holding B1 posts can only be considered where the applicant is ineligible for H.M. Forces. Salary will not be less than £400 per annum to commence, and with full residential emoluments. Applications, stating whether married or single, to the undersigned immediately.—H. Wilkinson, Superintendent.

BOOTHAM PARK (REGISTERED MENTAL) HOSPITAL, York
JUNIOR ASSISTANT PHYSICIAN (B1)

Applications are invited for the post of Junior Assistant Physician (B1). Salary £455 per annum, with full residential emoluments, board, apartments and laundry, with annual increments of £25 to a maximum of £555, plus cost-of-living bonus of £59 16s. per annum. Should the successful candidate be married and living out an additional allowance of £200 per annum will be paid. An additional sum of £50 per annum will be paid to a candidate holding the D.P.M. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications, stating age, nationality, with copies of three recent testimonials or the names of two referees, should be sent to the Medical Superintendent, Bootham Park, York, and should reach him not later than February 28, 1948.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)

There are vacancies for the following posts:—

For duty mainly at the General Hospital.

TWO WHOLE-TIME MEDICAL REGISTRARS (Non-Resident) (B1). Candidates must be Members of the Royal College of Physicians and have held a resident appointment in a Teaching Hospital. Salary £500 per annum.

ONE RESIDENT SURGICAL REGISTRAR (B1). Candidates must be registered medical practitioners and have held a resident appointment in an approved hospital. Salary £150, rising by £50 to £250.

Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications should be sent to the undersigned not later than Monday, February 23, 1948, from whom all further information can be obtained.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
ASSISTANT RADIOTHERAPIST

Applications are invited for the post of whole-time Assistant Radiotherapist. Candidates must be registered medical practitioners and should possess either a Diploma in Radiology or Radiotherapy or be Fellows of the Royal College of Surgeons who propose to take a Diploma in Radiotherapy. Salary £1,000 per annum, rising by annual increments of £100 to £1,500 per annum. Applications should be sent to the undersigned from whom all further information may be obtained, not later than February 28.—G. Hurford, Sec., Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BERKSHIRE MENTAL HOSPITAL, Wallingford
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Medical Officer (B1). Commencing salary £550, rising by annual increments of £25 to £650 per annum, together with board, furnished apartments, and laundry valued at £130 per annum. Additional amount of £50 per annum is payable if in possession of the D.P.M. There is no married accommodation available, but, if non-resident, emoluments will be adjusted accordingly. Applications from R practitioners now holding B1 posts cannot be considered unless they are ineligible for H.M. Forces. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Applications, in writing, should reach the Medical Superintendent as soon as possible.

BIRKENHEAD GENERAL HOSPITAL

Applications are invited from resident medical practitioners, male or female, including R practitioners holding A posts, for the following resident appointment, vacant on April 1, 1948.

CASUALTY OFFICER (B2). Salary £200 per annum.

The appointment is with full residential emoluments, and, in the first instance, for a period of six months terminating on September 30, 1948, but this may be extended by mutual arrangement. If an R practitioner is appointed the period will be limited to six months. Membership of a Medical Defence Society is a condition of appointment. Applications should be sent to the undersigned, as soon as possible.—H. Hewitt Cooke, Secretary-Superintendent.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male) for the post of Resident Surgical Officer (B1), vacant immediately (including R practitioners who now hold B2 posts). Applications from R practitioners who hold B1 posts cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £300 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

CUMBERLAND INFIRMARY, Carlisle (289 beds)

Applications are invited from registered medical practitioners for the post of:—

CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2)

including R practitioners who hold A posts. Salary at the rate of £240 per annum, with full residential emoluments.

And for the following A or B2 posts:

HOUSE PHYSICIAN

THREE HOUSE SURGEONS (one combining General Surgery with Ear, Nose and Throat duties, one with Ophthalmic duties and one with Gynaecological duties)

including R practitioners within three months of qualification who are liable under the National Service Acts and R practitioners who hold A posts. Salary in each case at the rate of £175 per annum, with full residential emoluments. The appointments are for a period of six months from April 1, 1948. Applications must be made on forms obtainable from the undersigned, and must be received by February 28, 1948.—K. C. Booker, Secretary-Superintendent.

CUMBERLAND AND WESTMORLAND MENTAL HOSPITAL, Garlands, Carlisle
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the above appointment. Candidates must be registered medical practitioners and should have previous experience in mental hospital work. The commencing salary will be at the rate of £600 per annum, rising by two annual increments of £50 to £700 per annum, plus cost-of-living bonus. In addition the holder of a Diploma of Psychological Medicine will receive £50 per annum. Emoluments to the value of £150 are allowed. Married quarters are available. There would be an adjustment in the emoluments in the event of a married man being appointed. The post is subject to the provisions of the Asylum Officers' Superannuation Act, 1909. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications, accompanied by two testimonials, and the name of one referee, to be addressed to the Medical Superintendent, Garlands, Carlisle.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth
REGISTRAR
in the Department of Obstetrics and Gynaecology

Applications are invited from registered medical practitioners with considerable experience in Obstetrics for the full-time appointment of Registrar in the Department of Obstetrics and Gynaecology. Salary £800 per annum, with emoluments. The hospital has a Maternity Unit of 60 beds and is the main centre for the treatment of abnormal midwifery in the county. It is also the main centre for Radiotherapy in Cornwall under the South-West Joint Cancer Organization. The duties may include attendance at the Consulting Antenatal Centres already established under the Cornwall County Council as deputy for the County Obstetrician. Applications should be addressed, by February 27, 1948, to the undersigned, from whom further details may be obtained.—J. C. Field, Secretary-Superintendent.

CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE, Manchester, 20
RESIDENT RADIOLOGICAL OFFICER (B1)
ASSISTANT RESIDENT RADIOLOGICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for appointments as Resident Radiological Officer (B1) and Assistant Resident Radiological Officer (B2) to the Radiotherapy Department. The appointments are for six months commencing April 1. Salary in each case is at the rate of £200 per annum with full residential emoluments. The positions will enable the holders of the appointments to gain useful introductory experience in the practice of deep X-ray Therapy and Radium treatment. Applications from R practitioners now holding B1 posts cannot be considered for the B1 appointment unless they are ineligible for H.M. Forces. R practitioners holding A posts may apply for the B2 appointment. Applications with the names of three persons to whom reference may be made should be sent before February 28, 1948, to A. H. Keates, Superintendent.

CITY MENTAL HOSPITAL
Winson Green, Birmingham, 18
SENIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Senior Assistant Medical Officer (B1). Candidates should possess the Diploma in Psychological Medicine and have practical experience of modern methods of treatment. Commencing salary £617 10s., rising to £667 10s., together with cost-of-living bonus at present £59 19s. and residential emoluments valued at £150. Holders of the D.P.M. will be paid £50 in addition. There will be a house available. Bonus, in cash, will be payable at reduced rates in accordance with the type of emoluments provided, the balance being added to the value of emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces may apply. Applications, accompanied by two testimonials, to be addressed to the Medical Superintendent not later than March 8, 1948.

CHILDREN'S HOSPITAL, Sheffield (Inc.)
(201 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), vacant now. Salary at the rate of £100 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent to the undersigned immediately. The successful applicant must be a member of a Medical Defence Society.—T. H. G. Gartland, Superintendent and Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL
RESIDENT FRACTURE AND ORTHOPAEDIC REGISTRAR (B1)

Applications are invited from medical practitioners (male) for the post of Resident Orthopaedic and Fracture Registrar (B1). Salary at the rate of £500 per annum, with full residential emoluments. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications should be addressed to the House Governor and Secretary, Coventry and Warwickshire Hospital, Coventry.

COVENTRY AND WARWICKSHIRE HOSPITAL
FULL-TIME REGISTRAR (B1) (non-resident)
to the Ear, Nose and Throat Department

Applications are invited from medical practitioners (male or female) suitably qualified and experienced for the post of non-resident Registrar (B1) to the Ear, Nose and Throat Department. The work of this Department is exceptionally heavy both in regard to out-patient consultative and treatment services and in-patient operative services and the post offers considerable scope to one intending to specialise in Otorhinolaryngology. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months in the first instance; salary at the rate of £800 per annum. Applications stating full details as to age, married or single, nationality, medical training, qualifications and experience and accompanied by copies of testimonials, should be addressed to the House Governor, Coventry and Warwickshire Hospital, Coventry.

CITY HOSPITAL, Nottingham (1,020 beds)
RESIDENT OBSTETRIC AND GYNAECOLOGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Obstetric and Gynaecological Officer (B1). Applicants should have held previous house appointments and have had considerable experience in obstetrics and gynaecology. The post is approved for the M.R.C.O.G. Applications are invited from practitioners holding B2 posts or from those holding B1 posts who are ineligible for service with H.M. Forces. Salary £555 to £650 per annum, plus cost-of-living bonus, with full residential emoluments. The appointment is for twelve months in the first instance. Applications to be sent immediately to the Medical Superintendent, City Hospital, Hucknall Road, Nottingham.—J. E. Richards, Town Clerk, The Guildhall, Nottingham

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital, 200 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of House Surgeon (A). Resident—6 months. Salary £150 per annum. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital—200 beds)
RESIDENT ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic Officer (B2), including R practitioners who hold A posts. Salary £250 per annum with full residential emoluments. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

CHESTER ROYAL INFIRMARY (225 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female), including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of House Surgeon (A), to take up duty as soon as possible. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £200 per annum with full residential emoluments. Applications should be sent to the General Superintendent and Secretary.

CHELSEA HOSPITAL FOR WOMEN
London, S.W.3
HOUSE SURGEON (B2)

Applications are invited for the post of House Surgeon (B2) for six months from April 1, 1948. Salary £200 per annum together with board, residence and laundry. R practitioners holding A posts may apply when appointment will be limited to six months. Applications to reach the undersigned not later than February 20, 1948.—Geo. W. Cooling, Secretary.

DONCASTER ROYAL INFIRMARY (330 beds)
(Recognized under the Regulations for the D.O.)
EYE AND EAR, NOSE AND THROAT HOUSE SURGEON (A) (male)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification and liable under the National Service Acts, for an Eye and Ear, Nose and Throat House Surgeon (A) (male). The appointment will be limited to six months. Salary £225 per annum, with full residential emoluments. This large industrial area offers excellent opportunities for gaining experience. Applications should be sent immediately to A. Jones, Secretary-Superintendent.

DONCASTER ROYAL INFIRMARY (330 beds)
HOUSE SURGEON (A) (male)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) (male), including R practitioners within three months of qualification. If held by an R practitioner, appointment will be for a period of six months. Salary is at the rate of £225 per annum, with full residential emoluments. Applications should be sent immediately, addressed to the Secretary-Superintendent.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited from medical practitioners (male and female) for the post of Senior Resident Medical Officer (B1) for a period of six months in the first instance, from May 1, 1948. Salary £350 per annum with full emoluments. Candidates must have experience in paediatrics and higher qualifications are desirable. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces, may apply. Applications to be sent by March 8, 1948, to Louise Gillespie, Secretary.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from medical practitioners (male and female), including practitioners within three months of qualification and liable under the National Service Acts, for the post of Junior Resident Medical Officer (A) for six months from April 16, 1948. Salary £150 per annum with full emoluments. Applications to be sent by March 8, 1948, to Louise Gillespie, Secretary.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19
HONORARY ASSISTANT PHYSICIAN

Applications are invited for the post of Honorary Assistant Physician with beds and to do Out-patient sessions. Applications to be sent by March 1, 1948, to Louise Gillespie, Secretary.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
ANAESTHETIST

Applications are invited for the post of Anaesthetist for Tonsil and Adenoid Sessions on Tuesday mornings and Thursday afternoons and occasional emergencies. D.A. desirable. Payment is at the rate of £4 4s. per session of over 1½ hours. Applications to be sent by February 23, 1948, to Louise Gillespie, Secretary.

DISTRICT INFIRMARY, Ashton-under-Lyne
(Normal capacity, 200 beds)

Applications are invited for the following positions, including R practitioners who hold A posts, viz.:

RESIDENT ANAESTHETIST (B2). Salary £250, plus certain fees. The hospital is recognized by the Royal College of Surgeons for the Diploma in Anaesthetics. If held by an R practitioner the appointment will be limited to six months.

CASUALTY OFFICER (B2). Salary £200. Six months' appointment.

Full residential emoluments in each case.

Apply at once to Frank Oliver, General Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DURHAM COUNTY HOSPITAL
North Road, Durham City (12 beds)
RESIDENT HOUSE SURGEON (B2) (Male)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the appointment of a Resident House Surgeon (B2) (male). The appointment is for six months, duties to commence on or about April 20, 1948. Salary at the rate of £250 per annum with full residential emoluments. Applications to be sent immediately to the Secretary-Superintendent.

DERBYSHIRE HOSPITAL FOR SICK CHILDREN, North Street, Derby
HOUSE PHYSICIAN (B2)

Applications are invited from women medical practitioners for the post of House Physician (B2) at the above Children's Hospital of 84 beds. Vacant, April 1, 1948. Salary £200 per annum with full residential emoluments. Appointment is for six months. The hospital is recognized by the Conjoint Board for the purpose of the Diploma in Child Health. Applications to be forwarded to the Superintendent and Secretary.

GENERAL HOSPITAL, Nottingham (589 beds)
JUNIOR CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification who are liable to service under the National Service Acts, for the appointment of Junior Casualty Officer (A) for the above hospital. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned. Duties to commence about February 24.—Henry M. Stanley, House Governor and Secretary.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

ECCLES AND PATRICROFT HOSPITAL
Eccles, Manchester (88 beds)
HOUSE SURGEON (B2)

House Surgeon (B2) required, six months' appointment. R practitioners holding A posts may apply. Salary at the rate of £300 per annum plus full residential emoluments. Surgical, Medical and Obstetric Units. Apply Secretary as above.

FINCHLEY MEMORIAL HOSPITAL
Granville Road, London, N.12 (84 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Medical Officer (B2), vacant March 1 next, including R practitioners who now hold A posts. Appointments will be for a period of six months at the rate of £200 per annum, with full residential emoluments. Applications should be sent immediately to the undersigned.—T. E. Jarvis, House Governor and Secretary.

GUY'S HOSPITAL MEDICAL SCHOOL, S.E.1
SURGICAL REGISTRAR or ASSISTANT
Department of Thoracic Surgery

Applications are invited for the post of Surgical Registrar or Assistant in the Department of Thoracic Surgery at Guy's Hospital. Previous experience in thoracic surgery is desirable. Salary on the scale £600 to £750 per annum or, in the case of a candidate with exceptional qualifications, £750 to £1,000 per annum. Forms of application, obtainable from the Dean, Guy's Hospital Medical School, should be lodged, together with the names of three references, not later than February 19 1948.

GUEST HOSPITAL, Dudley (153 beds)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the following resident appointments Full residential emoluments apply to all posts, which are tenable for six months:

TWO HOUSE SURGEONS (B2). £200 per annum. Vacant immediately.

ONE RESIDENT ANAESTHETIST (B2). £200 per annum. Now vacant. (Successful candidate may be called up to undertake other Medical duties) — H. Raymond Hurst, House Governor and Secretary

GREAT YARMOUTH AND GORLESTON HOSPITALS
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) (male), now vacant, including practitioners within three months of qualification, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £250 per annum, with full residential emoluments Applications should be sent to John S. Egerton, Secretary-Superintendent immediately

GERMAN HOSPITAL, Dalston, London, E.8
HONORARY PAEDIATRICIAN

The Committee of Management invite applications for the post of Honorary Paediatrician to the Out-patients Department. Candidates holding the D.C.H should make written application to the undersigned, stating full particulars of experience, age, etc. with testimonials.—C. W. Kratz, Secretary.

GERMAN HOSPITAL, Dalston, London, E.8
HONORARY ANAESTHETIST

The Committee of Management invite applications for the post of Honorary Anaesthetist. Candidates should make written application to the undersigned, stating full particulars of experience, age, etc. with testimonials. The Anaesthetist who has held the post temporarily, will be a candidate.—C. W Kratz, Secretary.

GERMAN HOSPITAL, Dalston, London, E.8
(British Voluntary Hospital)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of House Surgeon (B2), vacant March 1, 1948. Salary £200 per annum to start with, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications to be sent to the Secretary.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts :—

(a) **RESIDENT SURGICAL OFFICER (B1).** Previous surgical experience essential. R practitioners holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary £250 per annum.

(b) **RESIDENT JUNIOR HOUSE SURGEON (A).** In charge of Casualty, Ear, Nose and Throat, and Fracture Department. Salary £200 per annum.

(c) **HOUSE PHYSICIAN (A).** Salary £200 per annum.

Practitioners within three months of qualification and liable to service under the National Service Acts are invited to apply.

The appointments are for (a) twelve months and (b) and (c) six months respectively. Applications should be sent to T. W. Upton, Secretary.

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE SURGEON (A)

Applications are invited, for the appointment of House Surgeon (A) vacant now, including practitioners within three months of qualification who are liable for service under the National Service Acts. Salary £200 per annum with full residential emoluments. If held by an R practitioner, appointment will be limited to six months. Applications to the undersigned immediately.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE SURGEON (A)
(E.N.T., Gynaecological, etc.)

Applications are invited for the post of House Surgeon (A) for duty with special departments, i.e. E.N.T., Gynaecological, etc., vacant now. Salary £200 per annum with full residential emoluments. The appointment will be for six months in the first instance but will be terminable by one month's notice on either side. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL
ACCIDENT SERVICE AND ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Accident Service and Orthopaedic Officer (B2), including R practitioners who hold A posts. If held by an R practitioner this post will be limited to six months. Salary is at the rate of £300 per annum with full residential emoluments. Post vacant on March 16, 1948. Applications should be sent to the undersigned.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE PHYSICIAN (A)

Applications are invited for the post of House Physician (A), vacant February 16. Salary £200 per annum with full residential emoluments. The appointment will be for six months in the first instance but will be terminable by one month's notice on either side. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to H. B. Coates, Secretary-Superintendent.

HARROGATE ROYAL BATH HOSPITAL AND RAWSON CONVALESCENT HOME (146 beds)
National Hospital for the Treatment of Rheumatic and Allied Diseases
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B2), vacant now, including R practitioners who hold A posts. This hospital is recognized as having an authorized Physical Medicine Department, time spent in the above post, which affords good experience in physical medicine and orthopaedics would count towards the qualifying twelve months for the Diploma in Physical Medicine. Salary will be at the rate of £250 per annum. The appointment will be for a period of six months. Applications should be sent to the Secretary, Royal Bath Hospital, Cornwall Road, Harrogate, immediately.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
Assistant RESIDENT MEDICAL OFFICER (B1) at the Country Branch Hospital, Tadworth, Surrey

There is a vacancy for an Assistant Resident Medical Officer (B1) at the Country Branch Hospital Tadworth, Surrey, 101 beds; duties to commence on April 15, 1948. Salary £200 per annum, with full residential emoluments. R practitioners now holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Further particulars, and form of application, which must be returned not later than Monday, March 8, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1

There will be vacancies on April 15, 1948, for the following :—

TWO HOUSE PHYSICIANS (B2)
ONE HOUSE SURGEON (B2)
ONE HOUSE SURGEON (B2)
to the Ear, Nose and Throat Department

All appointments are tenable for six months at a salary of £100 per annum with full residential emoluments. R practitioners now holding A posts and practitioners of either sex, ineligible for military service or rejected by the R.A.M.C., may apply. Further particulars and form of application, which must be returned not later than March 8, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL OF ST. CROSS, Rugby (195 beds)
RADIOLOGIST

The Board of Management invite applications from duly qualified medical men for the post of Radiologist. Salary £1,000 per annum with private practice. Applications to the House Governor.

HORTON GENERAL HOSPITAL, Banbury, Oxon (220 beds)
(Oxford Hospital Board Area)

Applications are invited from registered medical practitioners (male or female) for the appointment of **JUNIOR RESIDENT HOUSE SURGEON (A).** Salary at the rate of £200 per annum with full residential emoluments. Appointment, which is for six months, is now vacant. Practitioners within three months of qualification and liable for National Service may apply.

TEMPORARY RESIDENT HOUSE SURGEON (B1). Post vacant for three months commencing on March 1. Salary at the rate of £350 with full residential emoluments. Applications with testimonials should be sent at an early date to Richard H. Prescott, House Governor.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)

Applications are invited from registered medical practitioners for the following posts :

RESIDENT MEDICAL OFFICER (B2) vacant March 1, 1948. This appointment is for six months at a salary of £225 per annum with full residential emoluments. R practitioners holding A posts may apply.

HOUSE SURGEON (A) vacant March 1, 1948. Salary £175 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications to E. Barber, Secretary.

HALIFAX GENERAL HOSPITAL
RESIDENT OBSTETRICAL OFFICER

Applications are invited from registered medical practitioners, men and women, for the post of Resident Obstetrical Officer at the above hospital. The post is recognized for the M.R.C.O.G. and is for six months. There are 100 maternity beds and 35 gynaecological beds : over 2,000 deliveries are dealt with per annum. The salary is £485 per annum, together with full residential emoluments. Previous obstetric experience is essential. The successful candidate will be expected to take up duties during March, 1948. Applications should be sent as soon as possible to the Medical Superintendent, General Hospital, Halifax, Yorks.

HARLOW WOOD ORTHOPAEDIC HOSPITAL
Nr. Mansfield, Notts (355 beds)
E.M.S. and Civilian (Regional Orthopaedic Centre)
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2), including R practitioners who now hold A posts. Appointment will be for a period of six months. Salary, with full residential emoluments, at the rate of £200 per annum. The hospital is recognised under the Government's Scheme for the Postgraduate Education of Medical Officers released from the Forces and falling within Classes I and III, where applicable. Applications to be sent to the undersigned.—D. Roberts, Secretary-Superintendent.

HOSPITAL OF ST. JOHN AND ST. ELIZABETH
60, Grove End Road, N.W.8
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) to become vacant on Monday, March 15, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. Appointment will be for a period of six months. Salary is at the rate of £150 per annum with full residential emoluments. Applications should reach the undersigned on or before Thursday, February 26, 1948.—F. Dudley Hobbs, M.A., Secretary.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HULL ROYAL INFIRMARY
FIRST HOUSE SURGEON (B2)

Applications are invited for the post of First House Surgeon (B2), vacant now. Suitably qualified R practitioners who now hold A posts may apply. Salary £200 per annum with full residenual emoluments. The appointment will be for six months in the first instance, but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

INGHAM INFIRMARY, South Shields
HOUSE SURGEON (A)
CASUALTY OFFICER AND "SPECIALS" HOUSE SURGEON (A)

Applications are invited from medical practitioners, including those within three months of qualification and liable under the National Service Acts, for the posts of (1) House Surgeon (A), and (2) Casualty Officer and "Specials" House Surgeon (A), now vacant. The appointments are for a period of six months. Salary at the rate of £175 per annum, with full residential emoluments Applications to be sent to the undersigned.—R. Hood Coulthard, Jr., House Governor and Secretary.

JOINT COUNTIES MENTAL HOSPITAL
Carmarthen
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) from candidates with previous experience of Mental Hospital work. Salary £555 by £25 to £655 per annum, with full residential emoluments valued at £156 per annum, plus £50 per annum for D.P.M. An unfurnished flat is available for a married man, in which case the salary and the value of emoluments will be adjusted accordingly. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment is subject to the Asylums Officers' Superannuation Act, 1909. Applications, giving full particulars as to age, experience, and accompanied by names and addresses for reference purposes, to be sent to the Medical Superintendent.

KING EDWARD MEMORIAL HOSPITAL, Ealing
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B2), to become vacant on March 11, 1948, including R practitioners who now hold A posts If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Appointment recognized for Diploma in Anaesthetics. Applications, together with copies of two recent testimonials, should be sent to the undersigned by February 20, 1948.—R. A. Mickelwright, House Governor.

KING EDWARD MEMORIAL HOSPITAL, Ealing
HOUSE SURGEON (A)
to the Orthopaedic and Fracture Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts for the appointment of House Surgeon (A) to the Orthopaedic and Fracture Department, vacant now. Six months' appointment. Salary at the rate of £175 per annum, with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned immediately.—R. A. Mickelwright, House Governor.

KING EDWARD VII HOSPITAL
Windsor (200 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, including R practitioners who hold A posts, for the appointment of Resident Medical Officer (B2), to become vacant on March 1, 1948. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the Secretary as soon as possible.

KING GEORGE HOSPITAL, Ilford
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A), to become vacant on March 22, including R practitioners within three months of qualification. Appointment will be for a period of six months. Salary is at the rate of £180 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—G. Austin Hepworth, Secretary and Superintendent.

LONDON CHEST HOSPITAL
Victoria Park, E.2
RESIDENT SURGICAL OFFICER (B1)

Resident Surgical Officer (B1), male, required for Country Branch, April 1, 1948. High qualifications desirable, previous Thoracic experience essential. Appointment is for one year with salary at £350 per annum, with full residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should be sent by February 21, 1948, to the Secretary.

LEICESTER ROYAL INFIRMARY
(650 Beds, 18 Residents)

Invites candidates for the following vacancies on April 1, 1948.

	Salary p.a.
3 RESIDENT HOUSE SURGEONS (A)	£150
1 ORTHOPAEDIC HOUSE SURGEON (B2)	£200
1 EAR, NOSE AND THROAT HOUSE SURGEON (A)	£150
1 GYNAECOLOGICAL HOUSE SURGEON (A)	£150
1 OBSTETRIC HOUSE SURGEON (A) (Maternity Hospital, Causeway Lane Leicester)	£150
1 RESIDENT HOUSE PHYSICIAN (A)	£175
1 JUNIOR CASUALTY OFFICER (A)	£150
1 RESIDENT ANAESTHETIST (B2)	£200

Six months' appointments, all with full residential emoluments. For the A appointments practitioners within three months of qualification and liable under the National Service Acts may apply. For the B2 appointments R practitioners holding A posts may apply. Applications should be forwarded to the House Governor and Secretary on or before March 1.

LIVERPOOL MATERNITY HOSPITAL
Oxford Street, Liverpool, 7
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of a House Surgeon (B2) to become vacant on April 1 next, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it may be extended. Salary at the rate of £90 per annum, with full residential emoluments. Membership of a Medical Defence Society is a condition of appointment. Applications, stating present post, should be addressed to the Honorary Secretary of the Medical Board at the Hospital as above, not later than Friday, February 20.

LEWIS HOSPITAL, Stornoway
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1) due to fall vacant March 9, 1948. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Diploma of F.R.C.S. essential. Salary at the rate of £550 per annum, with full residential emoluments. Preference will be given to an ex-Serviceman. Applications should be sent to the undersigned.—Miss H. Bain, Secretary.

LEWIS HOSPITAL, Stornoway
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable under the National Service Acts, for appointment as House Physician (A) (male or female) due to fall vacant April 1, 1948. The appointment is for a period of six months, salary £175 per annum. Applications to be lodged with the undersigned.—Miss H. Bain, Secretary.

LIVERPOOL HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST
Mount Pleasant, Liverpool, 3
HONORARY ASSISTANT PHYSICIANS

Applications are invited for the following positions on the Honorary Medical Staff: Two Honorary Assistant Physicians. The present temporary Hon. Assistant Physicians are applying for the posts. Applications with names of three referees to be sent not later than February 21, 1948, to the Secretary, Mount Pleasant, Liverpool, 3.

LLANDUDNO AND DISTRICT HOSPITAL
Llandudno (70 beds)
HOUSE SURGEON (A) (Male or Female)

House Surgeon (A) (male or female), now vacant, Salary £200 per annum, full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. To R practitioners appointment for six months. Applications to Secretary.

LONDON CHEST HOSPITAL, E.2
ASSISTANT PATHOLOGIST

The Board of Management invite applications for the post of Assistant Pathologist. The salary range will be from £750 to £1,000 per annum, according to age and experience. Applications should be sent to the undersigned (from whom further particulars may be obtained) to arrive by February 23.—Thomas Brown, Secretary.

LEICESTER ROYAL INFIRMARY
(650 beds; 18 residents)
RESIDENT RADIOLOGIST

There will be a vacancy for a Resident Radiologist on March 1. Preference given to candidate with D.M.R. Consideration given to applicants who have passed Examination Part I. Salary £500 per annum. Appointment seven months in first instance. Applications to House Governor and Secretary on or before February 23.

MANSFIELD AND DISTRICT GENERAL HOSPITAL (245 beds)

Applications are invited from registered medical practitioners for the following appointments:—

HOUSE SURGEON (A) (male)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) (male), now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £220 per annum, with full residential emoluments.

HOUSE PHYSICIAN (A) (male)

Vacant end of February 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £220 per annum, with full residential emoluments. Applications should reach the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required to commence duties end of February. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

MILLER GENERAL HOSPITAL
Greenwich High Road, S.E.10
1st and 2nd HOUSE SURGEONS (B2)

Applications are invited from registered medical practitioners (male) for the appointments of 1st and 2nd House Surgeons (B2) to become vacant on April 1, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Form of application can be obtained from the Secretary. Applications to be submitted not later than February 28, 1948.

MILLER GENERAL HOSPITAL
Greenwich High Road, S.E.10
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (male) for the appointment of House Physician (B2) to become vacant on April 1, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Form of application can be obtained from the Secretary. Applications to be submitted not later than February 28, 1948.

NATIONAL HOSPITAL FOR NERVOUS DISEASES, Queen Square, London, W.C.1
RESIDENT MEDICAL OFFICER (B1)

The Board of Management invites applications from registered medical practitioners for the appointment of Resident Medical Officer (B1). The appointment will be for a period of six months in the first instance. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Demobilized members of H.M. Forces are invited to apply. Salary is at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned not later than February 28, 1948.—H. Ewart Mitchell, Secretary.

NATIONAL HOSPITAL FOR NERVOUS DISEASES, Queen Square, London, W.C.1
HOUSE PHYSICIAN (B1)

Applications are invited from registered medical practitioners for the appointment of House Physician (B1). The appointment will be for six months in the first instance. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Demobilized members of H.M. Forces are invited to apply. Salary is at the rate of £200 per annum with full residential emoluments. Applications to be sent to the undersigned not later than February 28, 1948.—H. Ewart Mitchell, Secretary.

NATIONAL HOSPITAL FOR NERVOUS DISEASES, Queen Square, London, W.C.1
HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B1). The appointment will be for six months in the first instance. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Demobilized members of H.M. Forces are invited to apply, particularly those having experience as graded surgeons or experienced in neurosurgery. Salary is at the rate of £200 per annum with full residential emoluments. Applications to be sent to the undersigned not later than February 28, 1948.—H. Ewart Mitchell, Secretary.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of full-time Pathologist at the above hospital. Applicants should be exclusively engaged in the practice of Pathology, with wide training in Clinical Pathology and Morbid Anatomy. The post will be non-resident, with a commencing salary of £1,100, the successful candidate being permitted to engage in private practice, restricted to the private wing of the hospital, at present 23 beds. Applications should reach the Secretary not later than February 28, 1948.

NORTH ORMESBY HOSPITAL
Middlesbrough (196 beds)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable under the National Service Acts, for the following appointments:—

RESIDENT HOUSE SURGEONS (A)
RESIDENT HOUSE PHYSICIAN (A)

Salary at the rate of £200 per annum, with full residential emoluments. The appointments are for a period of six months. Applications to the Secretary-Superintendent. This is a General Hospital with a busy Out-patient Department with four established Resident House posts.

Have you read the notice at top of page 13?

Have you read the notice at top of page 13 ?

NORTHAMPTON GENERAL HOSPITAL
(410 beds)

Applications are invited from registered medical practitioners for the following posts which are vacant on April 1, 1948:—

TWO HOUSE SURGEONS (A)
HOUSE SURGEON (A)
to the Orthopaedic and Fracture Department

Salary at the rate of £200 per annum with full residential emoluments. Appointments will run until September 30, 1948, and may be renewed. Any further employment at the hospital beyond that date will be at the rate of £225 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, in which case the appointment will be limited to a period of six months. Applications should be received at the Hospital by March 4, 1948.—S. G. Hill, Superintendent.

MOUNT VERNON HOSPITAL AND THE RADIUM INSTITUTE, Northwood, Middlesex
HOUSE SURGEON (A) (General Surgery)

The post of House Surgeon (A) (General Surgery), under the E.M.S. at the above hospital is now vacant. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Salary at the rate of £120 per annum, plus full residential emoluments. The appointment is for six months. Applications to the Secretary as early as possible.

NUNEATON GENERAL HOSPITAL
(130 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon to the Casualty, E.N.T. and Ophthalmic Departments, vacant on March 1, 1948. The appointment is for six months at a salary of £250 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.—H. W. Williams, House Governor and Secretary.

NUNEATON GENERAL HOSPITAL, (130 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited immediately for the post of Resident Surgical Officer (B1). Candidates should have held house appointments and have had surgical experience. Suitably qualified R practitioners holding B2 or A appointments or medical practitioners recently discharged from H.M. Forces may apply. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for one year at a salary of £450, with full residential emoluments. Applications to H. W. Williams, House Governor and Secretary.

NOBLE'S ISLE OF MAN HOSPITAL
Douglas, Isle of Man (137 beds)
SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for appointment of Second House Surgeon (A). Salary £250 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months, otherwise twelve months. Applications, with copies of two recent testimonials, to be sent to C. H. Spence, Secretary-Superintendent, by February 21, 1948.

NEW SUSSEX HOSPITAL FOR WOMEN
Windlesham Road, Brighton (72 beds)
(Officered by Women Doctors)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (female) for the appointment of a House Physician (B2), to become vacant at the beginning of April. The appointment is for a period of six months. Salary at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the undersigned by March 8.—Percy F. Spooner, Secretary.

NEW SUSSEX HOSPITAL FOR WOMEN
Windlesham Road, Brighton (72 beds)
(Officered by Women Doctors)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (female) for the appointment of a House Surgeon (B2), to become vacant immediately. The appointment is for a period of six months. Salary at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the undersigned.—Percy F. Spooner, Secretary.

PONTYPOOL AND DISTRICT HOSPITAL
Pontypool, Mon.
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Resident Medical Officer (A) medical and surgical beds. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be limited to six months. Salary £200 per annum and full residential emoluments. Apply to Secretary-Superintendent.

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)
to the Gynaecologist and the Aural Surgeon

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply and the appointment will be for six months. The person appointed will act as House Surgeon to the Gynaecologist and the Aural Surgeon, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)
to the Ophthalmic Surgeon and Orthopaedic Dept.

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Ophthalmic Surgeon and Orthopaedic Department, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRINCESS ALICE MEMORIAL HOSPITAL
Eastbourne
HOUSE SURGEON (A)

Applications are invited from male registered medical practitioners for appointment as House Surgeon (A), vacant February 18, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary at the rate of £250 per annum for the first three months and £275 per annum for second three months, with full residential emoluments. Applications to the Secretary as soon as possible.

PRINCE OF WALES'S HOSPITAL, Plymouth
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male and female, preferably with the D.A., for the appointment of Resident Anaesthetist (B2), including R practitioners who now hold A posts, vacant April 13. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications to reach the undersigned by February 28.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL, Plymouth
CASUALTY OFFICER (A)
(Ear, Nose and Throat)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (A), with Ear, Nose and Throat, vacant March 17, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL, Plymouth
HOUSE OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of House Officer (A) post, Surgery with casualty, for duty at the Devonport Section, vacant immediately, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
HOUSE SURGEON (A)
to the Urological Department

Applications are invited from registered medical practitioners for the post of House Surgeon (A) to the Urological Department. Practitioners within three months of qualification and liable under the National Service Acts may also apply. Six months appointment. Salary at the rate of £175 per annum with the usual residential allowances. Application should be made as soon as possible to the Superintendent, Royal Infirmary, Preston.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, London, E.15
DIRECTOR OF PATHOLOGY

Applications are invited for the whole time appointment of Director of Pathology at a salary of £1,400 per annum, rising by annual increments of £100 to a maximum of £1,800 per annum. Candidates should submit their applications to the undersigned not later than March 5, 1948.—M. J. Huntley, House Governor and Secretary.

QUEEN CHARLOTTE'S MATERNITY HOSPITAL
Goldhawk Road, Hammersmith, London, W.6

Applications are invited from registered medical practitioners for the following appointments, vacant April 1, 1948:—

ASSISTANT RESIDENT OBSTETRIC OFFICER (B1) for three months. Applicants should have held house appointments and had obstetric experience. Salary is at the rate of £80 per annum with full residential emoluments. On completion of the three months, the selected applicant will be expected to apply for the post of Senior Resident Obstetric Officer (B1), also for three months. Salary £100 per annum. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

JUNIOR RESIDENT MEDICAL OFFICER (B2) for six months. Salary is at the rate of £90 per annum, with full residential emoluments. R practitioners holding A posts may apply. Applications should be sent by February 28 to Seymour Leslie, Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (323 beds)
HOUSE SURGEON (A)
to the Gynaecological Department

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) to the Gynaecological Department, including practitioners within three months of qualification who are liable under the National Service Acts. Appointment in the first instance for six months at a salary of £175 per annum with full residential emoluments. Application is being made to the Royal College of Obstetricians and Gynaecologists for this appointment to be recognized by the Examining Board for the M.R.C.O.G. This is an additional appointment to the existing resident medical staff; the post is therefore vacant and applications should be sent immediately to R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary.

ROYAL FREE HOSPITAL
Gray's Inn Road, London, W.C.1
EAR, NOSE AND THROAT REGISTRAR (B1)

Applications are invited from registered medical practitioners of not more than ten years since qualification for the whole-time appointment of Ear, Nose and Throat Registrar (B1) (Non-resident) for one year in the first place to become vacant April 1, 1948. Preference will be given to candidates with the Fellowship of England, Edinburgh or the D.L.O., qualifications. Suitably qualified practitioners now holding B2 appointments are invited to apply. R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications and a photograph should be sent to the undersigned on or before February 20, 1948.—R. G. Heppell, A.C.A., House Governor.

ROYAL GWENT HOSPITAL, Newport, Mon.
(255 beds)

Applications are invited from registered medical practitioners (male or female) for the following appointments:—

HOUSE SURGEON (A) for the Fracture and Orthopaedic Department, vacant now. Practitioners within three months of qualification and liable under the National Service Acts may apply. Salary at the rate of £175 per annum, with residential emoluments.

CASUALTY OFFICER (A) or (B2), vacant on March 8, 1948, for a period of six months. R practitioners who now hold A posts may apply. Salary at the rate of £175 (A) or £210 (B2) per annum, with residential emoluments. Applications should be sent to the undersigned.—T. A. Jones, Secretary-Superintendent.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL INFIRMARY, Sheffield
HOUSE SURGEON (A) to the Neurosurgical Dept.

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A) to the Neurosurgical Department now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner under these Acts, appointment will be for a period of six months. Salary is at the rate of £120 per annum, with full residential emoluments. Applications should be sent forthwith to Joseph Griffith, General Superintendent, The Royal Infirmary, Sheffield, 6.

ROYAL WATERLOO HOSPITAL FOR CHILDREN AND WOMEN
Waterloo Road, S.E.1

Applications are invited from medical practitioners within three months of qualification who are liable under the National Service Acts, for the following appointments vacant March 1, 1948:

HOUSE PHYSICIAN (A)
HOUSE SURGEON (A)

Appointments are for six months. Salary at the rate of £175 per annum with full residential emoluments. Applications should be sent to the Secretary.

ROYAL BERKSHIRE HOSPITAL, Reading
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A) as from March 6, 1948. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
Applications are invited from registered medical practitioners, male, for the following posts :—
TWO CASUALTY OFFICERS (A). Salary is at the rate of £150 per annum, with full residential emoluments. Duties will involve alternating with each other in the Casualty Department, Fracture Clinic and Accident Wards, and assisting in the treatment of all cases of traumatic origin. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ANAESTHETIST (B2)
Applications are invited from registered medical practitioners, male, for the appointment of Resident Anaesthetist (B2), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. R practitioners who now hold A posts may apply, when the appointment will be limited to six months. Applications, stating present post, should be sent immediately to H. E. Ryan, House Governor.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch 310 beds
RESIDENT SURGICAL OFFICER (B1)
Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1) to become vacant March 1. The appointment will be for six months, eligible for re-election. Applicants should have held house appointments and had major surgical experience. Preference will be given to candidates holding Diploma of F.R.C.S. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £350 per annum or according to qualifications.—W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter) (500 beds)
General Hospital Branch 310 beds
Applications are invited from registered medical practitioners for the following appointments :—
SENIOR PATHOLOGIST at a salary of £1,100 to £1,400 per annum according to experience, resident or non-resident ; £100 in lieu of subsistence if non-resident.
JUNIOR ASSISTANT PATHOLOGIST. Resident at a commencing salary of £650 to £1,000 per annum according to experience.
The Laboratory is recognized for the purpose of the D.C.P. of the University of London. Applications, accompanied by copies of two recent testimonials, must be received on or before March 6, and should be sent to W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton (500 beds)
(Women's branch, 64 beds)
RESIDENT OBSTETRIC AND GYNAECOLOGICAL REGISTRAR (B1)
Applications are invited for the post of Resident Obstetric and Gynaecological Registrar (B1) at the Women's Branch of the Royal Hospital, vacant April 16. The appointment will be for six months, eligible for re-election. Salary £350 per annum, with full residential emoluments. Candidates should have special experience and preference will be given to those holding the special Diploma or working for the M.R.C.O.G. Demobilized Officers of H.M. Forces and suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, are invited to apply. Applications should be sent to W. Cockburn, House Governor.

ST. GEORGE'S HOSPITAL, S.W.1
(in association with The Victoria Hospital for Children, Tite Street, Chelsea)
Applications are invited for the following appointments to the Victoria Hospital for Children, where all the paediatric work of St. George's Hospital is now carried on :
ONE GENERAL SURGEON
ONE OPHTHALMIC SURGEON
(A member of the staff of St. George's Hospital is a candidate for this post)
ONE DENTAL SURGEON
(Specialist in Orthodontics)
(The present Assistant is a candidate for this post)
ONE PSYCHIATRIST
Applications, with the names of three referees, should be sent to the undersigned, from whom further information can be obtained, not later than February 23, 1948.—P. H. Constable, House Governor.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM
(Whole-time Temporary Assistant Medical Officer of Health (male).)

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
February 10, 1948. Secretary.

ROYAL INFIRMARY, Sunderland (312 beds)
Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable to serve under the National Service Acts, for the following resident appointments, which are tenable for a period of six months :—
TWO HOUSE SURGEONS (A), vacant immediately. This hospital is recognized by the Royal College of Surgeons for the Fellowship. Salary £175 per annum, with full residential emoluments.
Applications to be forwarded to F. Dagnall, House Governor and Secretary, Royal Infirmary, Sunderland.

ROYAL NORTHERN HOSPITAL, Holloway, N.7
OBSTETRIC HOUSE SURGEON (B1)
Applications are invited from registered medical practitioners for the post of Obstetric House Surgeon (B1) to become vacant March 17, 1948, for a period of six months. Applicants should have held house appointments. Salary £150 per annum, plus fees, with board, residence and laundry. Suitably qualified R practitioners now holding B2 and those now holding B1 appointments and rejected by the R.A.M.C. may apply. Applications should be sent to the undersigned not later than February 20, 1948.—Gilbert G. Panter, Secretary.

ROYAL NORTHERN HOSPITAL, Holloway, N.7
SENIOR CASUALTY OFFICER (B1)
Applications are invited from registered medical practitioners for the appointment of Senior Casualty Officer (B1) to become vacant on March 15, 1948, for a period of six months. Applicants should have held house appointments. Salary and emoluments £300 per annum, with board residence and laundry. Suitably qualified R practitioners now holding B2 and those now holding B1 appointments and rejected by the R.A.M.C. may apply. Applications should be sent to the undersigned not later than February 20, 1948.—Gilbert G. Panter, Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester
RADIOLOGIST
Applications are invited for the full-time salaried post of Radiologist at the Royal Hampshire County Hospital, Winchester. Salary £1,800 per annum, plus two-thirds of fees paid by or for hospital patients seen by the Radiologist. For further particulars apply to the undersigned with whom applications, giving three names for reference, should be lodged.—R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary, Royal Hampshire County Hospital, Winchester.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (323 beds)
HOUSE SURGEON (A)
Applications are invited from registered medical practitioners (men or women) for the appointment of House Surgeon (A), vacant March 29. Salary at the rate of £175 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be for a period of six months. Applications should be sent to R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary.

ROTHERHAM HOSPITAL
Doncaster Gate, Rotherham
General Voluntary Hospital (150 beds)
SECOND CASUALTY OFFICER (A)
Salary £225 per annum, with full residential emoluments. Applications are invited from registered medical practitioners, male or female, for the above appointment which will become vacant about March 1, 1948. Practitioners within three months of qualification and liable to service under the National Service Acts may also apply, when the appointment will be for six months. Applications should be sent at once to the Secretary-Superintendent.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)
Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), now vacant. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months ; otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A Stanley Brunt, General Superintendent and Secretary.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
Myrtle Street, Liverpool, 7
HOUSE SURGEON (A)
HOUSE SURGEON (A) E.N.T. and Orthopaedic
Applications are invited from registered medical practitioners for the above appointments for a period of six months. Salary £120 to £180 per annum, according to experience, with full residential emoluments. R practitioners within three months of qualification who are liable to serve under the National Service Acts may apply. Applications should be sent to the Secretary immediately.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
Myrtle Street, Liverpool, 7
ASSISTANT OUT-PATIENT OFFICER (A)
Applications are invited from registered medical practitioners for the above appointment, vacant April 1, 1948, for a period of six months. Salary £200 per annum, with full residential emoluments (8-hour day). R practitioners within three months of qualification who are liable to serve under the National Service Acts may apply. Applications should be sent to the Secretary immediately

ROYAL SURREY COUNTY HOSPITAL
Guildford (228 beds)
HOUSE SURGEON (A) (GYNAECOLOGY)
Applications are invited from registered medical practitioners, including those within three months of qualification who are liable to service under the National Service Acts, for the House Surgeon (A) (Gynaecology) appointment, to become vacant on March 1, 1948. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications should reach the Secretary-Superintendent as soon as possible.

(Continued on page 28)

Have you read the notice at top of page 13 ?

THE Medical Defence Union

Established 1885 — *MUSeum 1537*

Annual Subscription £1 — **MEMBERSHIP EXCEEDS 31,500** — *Assets exceed £170,000*

Protection is essential for every practitioner engaged in any form of practice

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Square, London, W.C.1.

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

DO PLEASE WRITE ADVERTISEMENTS CLEARLY. NAME AND ADDRESS SHOULD BE IN BLOCK LETTERS.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To **all other** advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s., 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d.; or 30 words 22s.; and 3s. 6d. for each six words *or less* thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO is used the charges are: 18 words, 25s. (minimum); or 24 words, 31s.; or 30 words, 37s.; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To **ALL** advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.
Telephone: Euston 2111.
Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 13.

PERSONAL

WANTED FOR CRIPPLED AND DIABETIC LADY (not bed-ridden), Resident Physician. Congenial surroundings, all found. Terms by arrangement. Would suit partially disabled ex-Serviceman (single).—Box 8158, B.M.J.

OVER EASTER IN DEVON. REALLY GOOD HOTEL at Torquay, entirely reserved for C.T.U. Party March 24 to 31. **PARTIES TO SWITZERLAND:** May 6 to 19, Lugano and Lucerne; June 16 to 30, Thun and Kiental; June 30 to July 14, Zermatt; Aug. 12 to 26 and Aug. 18 to 31, Off the Beaten Track; Sept. 1 to 15, Thun and Wengen. Write C.T.U., est. 1913, (Dr. C. F. Fothergill), "Hensol," Chorley Wood, Herts. Phone Chorley Wood 24.

ONE THOUSAND POUNDS for a Short Story. Full details in the Sunday Dispatch.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

EX-I.M.S. OFFICERS, CANADIAN.—Retired Canadian officers of the Indian Medical Service, in or passing through the U.K., are advised to contact the Senior Canadian Air Force Liaison Officer, 11, Hill Street, London, W.1, regarding employment in Canada with the Royal Canadian Air Force.

NATIONAL HEALTH SERVICE. Parliamentary Reports—giving extracts from "Hansard" on the above subject—available from Industrial Advisory Bureau. Ten Reports supplied for one guinea (specimen Report 1s.). Other Reports issued on Housing, Agriculture, Transport, Economics, etc. Full particulars from Industrial Advisory Bureau, 12, Buckingham Street, W.C.2.

PERCALL. THE PERSONAL 24-HOUR TELEPHONE service exclusive to doctors, growing with your support, £5 5s. p.a., G.P.O. licensed.—BAL 3331. 387, London Road, Mitcham.

THE PROPRIETOR OF ANDERSON'S PATENT No. 538643 for "Clavicle Splint" is desirous of entering into negotiations with a Firm or Firms for the grant of licence under this patent or to treat for the sale of the patent outright. Full particulars may be obtained from Withers & Spooner, Chartered Patent Agents, 148/150, Holborn, London, E.C.1.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

DIABETIC ASSOCIATION. Lund Research Fellowships.—Applications are invited for 1948 for part or whole-time Fellowships in Research on Diabetes Mellitus. Value according to qualifications and experience. Details of the proposed research and names of two referees should be sent to The Diabetic Association (Research), 152, Harley Street, W.1.

EXAMINING SURGEONS: FACTORIES ACT, 1937. The following appointments as Examining Surgeons under the Factories Act, 1937, are vacant: Cullen, in the County of Banff; Exmouth in the County of Devon. Applications, which should be received not later than February 28, 1948, should be sent to the Chief Inspector of Factories, 8, St. James's Square, London, S.W.1.

LIBRARIAN, knowledge of continental languages an advantage. **REQUIRED** to develop and maintain pharmaceutical medical library in London. Applications will be treated in confidence and should be submitted with details of qualifications and experience to Medical Executive, British Schering, Ltd., 167-169, Great Portland Street, London, W.1.

UNIVERSITY OF SHEFFIELD.—Applications are invited for the post of **RESEARCH ASSISTANT in the Department of Child Health,** to carry out original investigations under the Professor, which will be mainly in the clinical field. Experience in laboratory work would be an advantage. Salary in the range £500 to £700 per annum, according to qualifications and experience, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. Candidates must possess a medical qualification, and have had clinical experience. The successful candidate will be expected to begin duties as soon as possible. Applications (three copies), with the names and addresses of referees and, if desired, copies of testimonials, should reach the undersigned (from whom further particulars may be obtained) by February 24, 1948.—A. W. Chapman, Registrar.

UNIVERSITY OF LONDON. INSTITUTE OF CHILD HEALTH. ASSISTANT TO THE NUFFIELD PROFESSOR.—The Committee of Management is prepared to receive applications from duly registered medical practitioners for a whole-time non-resident Assistantship. Salary £750 to £950 per annum, according to experience. The Assistant appointed will work under the Professor of Child Health, mainly at the British Postgraduate Medical School, Ducane Road, Hammersmith. The appointment will, in the first instance, be tenable for six months, but renewable up to a maximum of three years. The candidate will be required to take up his or her duties early in May, 1948. Forms of application and further particulars are obtainable from the undersigned at the Institute of Child Health, The Hospital for Sick Children, Great Ormond Street, London, W.C.1. Applications, supported by three testimonials given specially for the purpose, must be received not later than March 8, next.—W. G. Wyllie, Dean.

UNIVERSITY OF LONDON. BRITISH POSTGRADUATE MEDICAL FEDERATION, INSTITUTE OF ORTHOPAEDICS (In association with the Royal National Orthopaedic Hospital), 234, Great Portland Street, London, W.1.—Applications are invited for the appointment of **PART-TIME DIRECTOR OF STUDIES** of the Institute. The successful candidate will also be appointed a member of the Staff of the Hospital and Clinical Director, and will be permitted private practice, for which consulting facilities will be provided in the Hospital. The salary will be £2,250 per annum, of which £1,500 is paid by the Institute and £750 by the Hospital. Applications (nine copies) giving full particulars and the names of three referees should be sent to the Dean of the Institute at 234, Great Portland Street, W.1, by April 15, 1948, from whom further particulars can be obtained. The Committee reserve the right to appoint by invitation.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN PHYSIOLOGY.—Applications are invited for a Lecturer in the Department of Physiology. Candidates must hold medical or scientific qualifications. Salary £600 to £750 or £750 to £900, according to qualifications and experience. In addition a children's allowance is payable. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than February 21, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN PATHOLOGY.—Applications are invited for a **LECTURER IN PATHOLOGY.** Salary £750 to £900 according to qualifications and experience. In addition a Children's Allowance is payable. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than February 29, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

UNIVERSITY OF LONDON.—The Senate invite applications for the **READERSHIP IN CLINICAL PATHOLOGY** tenable at Guy's Hospital Medical School (salary not less than £900). Applicants must have a special interest in Clinical Chemistry. Applications must be received not later than April 1, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY COLLEGE HOSPITAL, Gower Street, W.C.1.—**MEDICAL REFRACTIONIST** required for Friday afternoons, £2 17s. 6d. per session. Appointment for six months in the first instance.—Apply to the Secretary not later than February 21, 1948.

UNIVERSITY OF ABERDEEN. ASSISTANTSHIP IN PATHOLOGY.—Applications are invited for an Assistant in the Department of Pathology. Salary £450.—H. J. Butchart, Secretary, The University, Aberdeen.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment, 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

UNIVERSITY OF LONDON
BRITISH POSTGRADUATE MEDICAL FEDERATION
INSTITUTE OF ORTHOPAEDICS, ROYAL NATIONAL ORTHOPAEDIC HOSPITAL
234, GREAT PORTLAND STREET, LONDON, W.1

Course in Advanced Clinical Orthopaedics to be held from April 5–10, and repeated April 19–24, 1948.

MONDAY—GREAT PORTLAND STREET—		
10 a.m.	Club Foot	MR. A. ROCYN JONES
11.15 „	Volkmann's Contracture and Torticollis	MR. R. C. BAIRD
12.30 p.m.	Lunch	
1.30 „	Ward Cases	MR. R. C. BAIRD
4.15 „	Tea	
4.30 „	Shoulder and Brachial Plexus	MR. P. H. NEWMAN
TUESDAY—GREAT PORTLAND STREET—		
10 a.m.	Orthopaedic Principles in Arthritis	MR. D. TREVOR
11.15 „	Scoliosis	MR. A. T. FRIPP
12.30 „	Lunch	
1.30 p.m.	Ward Cases	MR. P. H. NEWMAN
4.15 „	Tea	
4.30 „	Some Bone Dystrophies	MR. H. J. BURROWS
WEDNESDAY—COUNTRY BRANCH, STANMORE—		
10 a.m.	Clinical Demonstration	MR. K. I. NISSEN
12 noon	Surgery of Infantile Paralysis	MR. K. I. NISSEN
1 p.m.	Lunch	
2.30 „	Clinical Demonstration	MR. V. H. ELLIS
4.15 „	Tea	
4.50 „	Bone Tumours	MR. V. H. ELLIS
THURSDAY—GREAT PORTLAND STREET—		
10 a.m.	Congenital Dislocation of the Hip	MR. A. ROCYN JONES
11.15 „	Tendons	MR. R. C. BAIRD
12.30 p.m.	Lunch	
1.30 „	Ward Cases	MR. A. T. FRIPP
4.15 „	Tea	
4.30 „	The Foot (not Club Foot)	MR. R. Y. PATON
FRIDAY—COUNTRY BRANCH, STANMORE—		
10 a.m.	Clinical Demonstration	MR. E. P. BROCKMAN
11.15 „	Kyphosis	MR. E. P. BROCKMAN
12.30 „	Lunch	
1.30 p.m.	Clinical Demonstration	MR. J. A. CHOLMELEY
4.15 „	Tea	
4.30 „	Principles in Treatment of Tuberculosis	MR. J. A. CHOLMELEY
SATURDAY—GREAT PORTLAND STREET—		
10 a.m.	Coxa Vara and Coxa Plana	MR. D. TREVOR
11 „	Intervertebral Disks	MR. H. J. BURROWS
12 noon	General Discussion	CLASS AND STAFF

The fee for the course is six guineas.

Early application, stating the date preferred, should be made to the Dean at the above address.

UNIVERSITY OF LONDON
BRITISH POSTGRADUATE MEDICAL FEDERATION
REFRESHER COURSES FOR GENERAL PRACTITIONERS, FEBRUARY–JUNE, 1948

Date	*No. of Weeks*	*Subject*	*Hospital*
February 23–March 5	2	General	Royal Northern Hospital, Holloway Road, N.7.
April 1–June 18	Extended 12 afternoons	General	Hampstead General Hospital, Haverstock Hill, N.W.3.
April 19–24	1	General	Royal Sussex County Hospital, Brighton
April 26–30	1	Medicine	Metropolitan Hospital, Kingsland Road, E.8
May 3–7	1	Obstetrics and Gynaecology	Paddington L.C.C. Hospital
June 7–11	1	Obstetrics and Gynaecology	North Middlesex County Hospital, Silver Street, Edmonton, N.
June 14–18	1	Medicine	West Middlesex County Hospital, Isleworth

Fees: 10 guineas for 2 weeks' course; 5 guineas for 1 week and extended courses. Schemes of financial assistance are available, subject to certain conditions, for (a) demobilized general practitioners, (b) N.H.I. practitioners.

Applications for places, and further particulars, should be made to the Secretary, British Postgraduate Medical Federation, 2, Gordon Square, W.C.1. They should state if the practitioner is applying under (a) or (b) above, or not.

EXAMINING BOARD IN ENGLAND
by the
ROYAL COLLEGE OF PHYSICIANS OF LONDON
and the
ROYAL COLLEGE OF SURGEONS OF ENGLAND

Notice is hereby given that the following Examinations will commence on the dates stated below :—

DIPLOMA IN TROPICAL MEDICINE AND HYGIENE
Thursday, March 11
DIPLOMA IN CHILD HEALTH
Friday, March 12

Candidates who have fulfilled the necessary conditions, and who desire to present themselves for examination, must give notice in writing to the Secretary, Examination Hall, 8-11, Queen Square, London, W.C.1, at least 21 days before the date of the Examination, transmitting at the same time such certificates as may be required by the regulations of the Board, together with the amount of the fee due. —F. M. Stent, Secretary.

POSTAL COACHING for all Medical Examinations. Examination Successes, 1901-47 ; M.D.Lond., 454 ; M.B., B.S.Lond., Final, 436 ; F.R.C.S.Eng., Primary, 411 ; F.R.C.S.Eng., Final, 308 ; M.R.C.P. Lond., 427 ; M.R.C.S., L.R.C.P., Final, 891 ; D.A. (1936-47), 143 ; F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone : HOLborn 6313

GUY'S HOSPITAL DENTAL SCHOOL.—Guy's Hospital Dental School is prepared to accept applications from a limited number of women for a **SIX-MONTH COURSE OF TRAINING AS DENTAL SURGERY ASSISTANTS.** Prior to entry it is necessary to obtain certificates of proficiency in "first aid and home nursing" and in secretarial work. Tuition fee is 20 guineas. Full particulars can be obtained from the Dean, Guy's Hospital Dental School, London, S.E.1.

MEDICAL CORRESPONDENCE COLLEGE, 19, Welbeck Street, London, W.1, provides COACHING for all Medical Examinations, D.A., D.P.M., D.O.M.S., D.L.O., D.C.H., D.M.R.D. and D.M.R.T., M.R.C.P., F.R.C.S., M.D. thesis, and all qualifying exams. by a staff of highly qualified Tutors, Honoursmen, and Gold Medallists. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested.

UNIVERSITY OF MANCHESTER. FACULTY OF MEDICINE. DIPLOMA IN DIAGNOSTIC RADIOLOGY (R.C.P.&S. Eng.)—A course of instruction for the above Diploma will commence in mid-April 1948 and extend over eighteen months. The course is full-time, non-resident. Inclusive fee 50 guineas. Applications are invited from registered medical practitioners who fulfil the requirements as to previous medical experience laid down by the Examining Board in England (D.M.R.D. Regulations, December 1945, obtainable from the London Conjoint Board, 8-11, Queen Square, W.C.1). Further information may be obtained from the Dean of Postgraduate Medical Studies, University of Manchester, to whom all applications must be sent before February 28, 1948.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. COURT OF EXAMINERS.—Notice is hereby given that the Council on March 11, 1948, will elect two Members of the Court of Examiners. The Examiners retiring in rotation are Mr. M. F. Nicholls and Mr. Harold Edwards, C.B.E., who are applying for re-election. Fellows of the College desirous of becoming candidates for the Office must make applications, in writing, to the Assistant Secretary on or before March 1, 1948.—W. F. Davis, Assistant Secretary, Lincoln's Inn Fields, London, W.C.2.

TANCRED'S STUDENTSHIPS
DIVINITY : MEDICINE : LAW. £100 p.a. each.

About Whitsuntide next the Governors propose to elect ONE STUDENT IN DIVINITY at Christ's College, Cambridge, ONE STUDENT IN PHYSIC at Gonville and Caius College, Cambridge, and ONE MALE STUDENT IN LAW at Lincoln's Inn. Candidates must have been born in England, Scotland or Wales, and be members of the Church of England and unmarried. An examination will be held at Caius College on Thursday, April 15, for Divinity and Physic candidates, who must be within the ages of 17 and 20 years. The Law candidates, who must be within the ages of 20 and 23 years, must have passed an approved examination ; exception will be made at the discretion of the Governors in favour of older candidates who have been prevented by war service from previous application. The last day for sending in Petitions is March 9. Apply stating kind of Studentship and mentioning this Journal to the Clerk, Mr. Howard, 28, Lincoln's Inn Fields, London, W.C.2.

TUTOR WANTED AT ONCE IN ANATOMY for Student taking 2nd M.B. in July, practical work required.—Box 8102, B.M.J.

UNIVERSITY OF LONDON. ACADEMIC DIPLOMA IN MEDICAL RADIOLOGY.—The **NEXT COURSE** for the D.M.R. (London) will commence in October, 1948. The course is suitable for candidates for the D.M.R.D. or the D.M.R.T. of the Conjoint Board. The fee will be 75 guineas for the D.M.R. course and 60 guineas for the D.M.R.D. or D.M.R.T. course. The number of vacancies is limited, and early application is advised. The closing date for applications from candidates who are not members of a Medical School of London University is May 1, 1948. Prospective candidates are informed that the regulations for the D.M.R. are now being revised and new regulations may come into force in October 1948. Further information and application forms may be obtained from the British Postgraduate Medical Federation, Central Office, 2, Gordon Square, W.C.1, to whom should be sent all communications about this course.

UNIVERSITY OF MANCHESTER. Nuffield Department of Occupational Health. A three weeks' full time postgraduate course in occupational health will be held during the period April 26 to May 14, 1948, for practising industrial medical officers. The course has been specially arranged for those who are qualified to take the Diploma in Industrial Health of the Conjoint Board. Admissions to this course are limited to 24. The syllabus and application forms may be obtained from the Dean of the Medical School, The University, Manchester, 13. All applications should be accompanied by a registration fee of 2 guineas and should be received not later than April 1. The fee for the course (including registration fee) will be £7 7s.

LECTURES

ANAESTHETICS : March 1 to 13. Dept. Anaesthetics, Radcliffe Infirmary, Oxford. Course of lectures. Limited. Apply, Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

PRIMARY F.R.C.S. COURSE OF LECTURE-DEMONSTRATIONS in Anatomy, Physiology, Pathology and Bacteriology, on Monday and Thursday evenings 7.30 to 10 p.m. until June 3. Lecture room, Royal Cancer Hospital. Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

UNIVERSITY OF LONDON.—A course of **TWO LECTURES** on "The Social and Environmental Conditions in Belgium in the War Period" will be given by Professor René Sand (University of Brussels) at the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C.1, on February 18 and 19, at 5.15 p.m. Admission free, without ticket.—James Henderson, Academic Registrar.

UNIVERSITY OF LONDON.—A **LECTURE** on "Some Scientific Aspects of the Rhesus Factor" will be given by Professor D. F. Cappell (University of Glasgow) at the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C.1, on Tuesday, February 24, at 5.30 p.m. Admission free, without ticket.—James Henderson, Academic Registrar.

UNIVERSITY OF LONDON.—A **LECTURE** on "Histamine" will be given by Professor J. H. Gaddum (University of Edinburgh) at the Middlesex Hospital Medical School (Clinical Lecture Theatre), Mortimer Street, W.1, on Friday, February 20, at 5.30 p.m. Admission free, without ticket.—James Henderson, Academic Registrar.

EMPIRE RHEUMATISM COUNCIL

The Spring Week-end Course will be held at THE APOTHECARIES' HALL, BLACKFRIARS LANE, QUEEN VICTORIA STREET, E.C.4 (Blackfriars Tube Station), on Friday, Saturday, and Sunday, March 12, 13, and 14, 1948.

LECTURES

FRIDAY, MARCH 12		
4.30–5.30 p.m.	Introductory Lecture	PROFESSOR L. S. P. DAVIDSON, F.R.C.P., F.R.S.E.
5.30–6.30 p.m.	Gout	G. D. KERSLEY, ESQ., F.R.C.P.
SATURDAY, MARCH 13		
10–11 a.m.	Osteoarthritis	ERNEST FLETCHER, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Spondylitis	W. S. TEGNER, ESQ., M.R.C.P.
2–3 p.m.	Juvenile Rheumatism and Still's Disease	R. E. BONHAM-CARTER, ESQ., M.R.C.P.
3–4 p.m.	Non-Articular Rheumatism and Sciatica	W. S. C. COPEMAN, ESQ., O.B.E., F.R.C.P.
4 p.m.	Tea	
4.30–5.30 p.m.	Rheumatoid Arthritis	OSWALD SAVAGE, ESQ., O.B.E., M.R.C.P.
SUNDAY, MARCH 14		
10–11 a.m.	Physical Treatment in the Rheumatic Diseases	H. A. BURT, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Orthopaedic Aspects of the Rheumatic Diseases	W. D. COLTART, ESQ., F.R.C.S.

The fee for the course will be One Guinea, limited to 100 entries, to be received with remittance, at least one week before, by the General Secretary, Empire Rheumatism Council, Tavistock House (N), Tavistock Square, W.C.1.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES IN SURGERY. MARCH–APRIL, 1948

The following Lectures in Surgery will be delivered at the College in Lincoln's Inn Fields, London, W.C.2, at 5 p.m. on each day:

Tues. 16	MR. A. J. GARDHAM	Surgery of Malignant Disease of the Pharynx
Wed. 17	PROFESSOR LAMBERT ROGERS	Surgery of the Spinal Cord
Thurs. 18	MR. RODNEY MAINGOT	Surgery of Peptic Ulcer
Fri. 19	MR. A. DICKSON WRIGHT	Varicose Veins and Ulcers
Mon. 22	SIR REGINALD WATSON-JONES	Fractures of the Spine
Tues. 23	MR. M. F. NICHOLLS	Surgery of the Urethra and Bladder
Wed. 24	MR. A. HEDLEY WHYTE	Surgery of the Rectum
Thurs. 25	MR. T. TWISTINGTON HIGGINS	Urinary Obstruction in Childhood
Tues. 30	MR. R. M. HANDFIELD-JONES	Some less usual examples of acute Intestinal Obstruction
Wed. 31	PROFESSOR G. GREY TURNER	Surgery of the Spleen
Thurs. 1	SIR HENEAGE OGILVIE	Scrotal Swellings
Fri. 2	MR. R. SCOTT MASON	Surgery of the Duodenum

The fee for the whole Course is £5 5s., or 10s. for one Lecture.

Fellows and Members, and Fellows and Licentiates in Dental Surgery, of the College will be admitted to the whole course on payment of a fee of £3 3s., or to one Lecture on the payment of 7s. 6d.

Applications, accompanied by a cheque for £5 5s. or £3 3s., should be sent to the Secretary, Postgraduate Education Committee, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

Closing date not later than Friday, March 12, 1948.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

ASSISTANTSHIPS

VACANT

Wanted immediately, Part-time or Full-time Outdoor Assistant, single and with own car, in South Coast resort. Work very light. Practically no midwifery or night work. Ample time for study. Salary by arrangement.—Box 8123, B.M.J.

Wanted, Assistant, British, small Midlands industrial town, small free unfurnished house, car provided. Salary £700, allowance if own car. Possible View.—Box 8179, B.M.J.

Wanted, Outdoor Assistant for mixed practice, St. John's Wood. Car owner preferred.—Box 8160, B.M.J.

Wanted, Assistant with View to Half Share Partnership for mixed general practice in Newcastle-upon-Tyne. No accommodation available. Must own car.—Apply Dr. Mark, 42, Heaton Road, Newcastle-upon-Tyne.

Wanted, male Assistant, R.C., single, live in, car provided, country practice, work light. Southern County.—Box 8103, B.M.J.

Wanted, Assistant in better class non-dispensing practice in E. Riding of Yorkshire, residential area. Car essential. Salary by arrangement.—Apply Box 8134, B.M.J.

Wanted, March 1, English Male Outdoor Assistant, East Anglian country practice. Car essential. Salary and car allowance by arrangement.—Box 7565, B.M.J.

Wanted, Indoor Assistant, mixed practice. About £700 all found, prospects of succession this year.—Box 8143, B.M.J.

Wanted, Assistant, male, immediately, large mixed practice Birmingham. Able to drive. Allowance if own car. Salary by arrangement.—Box 8133, B.M.J.

Wanted, Assistant, S.E. London suburb, from early April, for few months at least, work light.—Box 8125, B.M.J.

Wanted, married Male Assistant to woman doctor. Indoor at first but View to Partnership, and house later. Midlands.—Box 8122, B.M.J.

Wanted, Assistant, single, good class general practice, Grimsby. Live in. Car provided. References. State experience. Salary by arrangement. Work congenial. Usual bond.—Box 8121, B.M.J.

Wanted, Young Assistant for old-established Essex East Coast Practice. Hospital and various appointments, good salary and definite Partnership prospects for energetic and suitable man. Car essential. Full details, experience, etc., immediately to Box 7831, B.M.J.

Wanted, married Assistant, with or without View, Yorkshire town. Unfurnished house provided. Good salary and car allowance.—Box 7806, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Wanted, Assistant, North London. Accommodation available. Car available.—Box 8135, B.M.J.

Assistant, preferably with View to Partnership, in industrial practice near Birmingham. Unfurnished flat or complete house for sale to partner. Prospects excellent.—Box 8168, B.M.J.

Assistant with early View Partnership, rapidly increasing practice, Essex, 10 miles London. Must be young, keen and British.—Box 8149, B.M.J.

Devon. Part-time Assistant wanted early March, rural area. Little night work. Suit semi-retired practitioner. Excellent board-residence facilities. Shooting, fishing. Small car essential.—Dr. Storrar, Uffculme, Devon.

Permanent Assistant wanted. Good position for right man.—Box 8161, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

WANTED

Wanted by woman M.B. Assistantship in country town or country. Experienced in General Practice and Midwifery. Good testimonials.—Box 8107, B.M.J.

Wanted by postgraduate student (Hospital and G.P. experience), Part-time Work, London area, with or without accommodation. Surgeries by arrangement.—Box 8163, B.M.J.

Wanted, Assistantship View Partnership, or succession by young married experienced Scot. Northern England/Scotland preferred but not essential.—Box 8110, B.M.J.

Wanted, Assistantship with early View by Scots M.B., Ch.B., aged 33, experienced hospital (including midwifery) and G.P. Ex-R.A.M.C., married, own car and furniture. Scotland preferred, but not essential.—Box 8109, B.M.J.

Wanted, Assistantship with unfurnished house by Englishman, aged 35, married, two children. Hospital. G.P., Anaesthetic experience.—Box 8104, B.M.J.

Wanted, Assistantship, preferably with early View by M.B., B.S. Durham, age 32, married, family. Good G.P. experience, car owner. Unfurnished accommodation essential. Free at month's notice.—Box 8106, B.M.J.

Assistantship wanted, London or suburbs, by experienced ex-R.A.M.C., 34, married, no children. Own car, furniture. Accommodation essential.—Box 8150, B.M.J.

Assistantship with View wanted by M.B., Ch.B., ex-R.N.V.R., aged 27, married. Hospital and G.P. experience. Own car.—Box 8166, B.M.J.

Doctor with special practice London can undertake Part-Time Duties. Surgeries permanently or occasional.—Box 8101, B.M.J.

Keen G.P., aged 28, married, one child, urgently requires Part-time Work with accommodation, London area, while studying.—Box 8124, B.M.J.

Assistantship wanted, view permanency, by woman doctor, young, keen, experienced, interested midwifery. Preferably Darlington area, but other places considered.—Box 8169, B.M.J.

Assistantship with definite View, Southern England or Wales, single graduate, H.P. H.S., ex-Major R.A.M.C. Two years G.P.—Box 7811, B.M.J.

Doctor, 27, doing postgraduate study, desires Part-time Assistantship or Evening Surgeries in London. Free early March.—Box 8165, B.M.J.

Experienced woman doctor desires Assistantship, Permanent or with View to Partnership, N.E. England preferred, but not essential. Small house or flat appreciated. Car owner. Capital.—Box 7802, B.M.J.

Medical woman requires morning, afternoon or evening surgeries, London or near London.—Box 8105, B.M.J.

Part-time Assistantship or Evening Surgeries wanted in West London area. Car available. Knowledge of French and German.—Box 8162, B.M.J.

Recently qualified Practitioner available for evening surgeries or other part-time or occasional work, preferably in S.W. London.—Box 8108, B.M.J.

Woman (M.B., B.S. 1938), D.P.H., experienced hospital and G.P. desires Part-time Work, Manchester area.—Box 8164, B.M.J.

LOCUMS

VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars.—British Medical Bureau, 33, Cross Street, Manchester, 2.

Locums for three to four weeks commencing March 8. £12 12s. per week, with extra for car expenses.—Dr. Mukerji, Craghead, Co. Durham.

AVAILABLE

Experienced G.P. requires Locum Engagements. Excellent testimonials. London hospital. Ch. of England. Abstainer, preferably S.E. England. Own car.—Box 8151, B.M.J.

Experienced G.P. available for Locums or Part-Time Surgeries. Excellent testimonials, abstainer. London area.—Box 8180, B.M.J.

Experienced G.P., woman, 40, on Locums exclusively for past 12 months, accustomed to "taking over." Free April 4 for locums.—Box 8181, B.M.J.

Experienced retired doctor, M.D., requires short Locums or occasional Surgeries. No midwifery or night work.—Box 8171, B.M.J.

Keen young doctor available for short Locum, Hospital or G.P. anywhere next six weeks. Own car. Good testimonials.—Box 8170, B.M.J.

Lady Doctor, 29, M.B., Ch.B., 1941, civilian, Army hospitals and some G.P. experience, seeks Locums or temporary Assistantship.—Box 8112, B.M.J.

Orthopaedic Specialist available for Locums in London, May to September. Family accommodation required.—Dr. F. G. Day, Nordegg, Alberta, Canada.

PARTNERSHIPS

OFFERED

Wanted in the Midlands a Partner, half-share with full share in reasonable time. Trial Assistantship if required. Private and panel practice (Industrial). House available with vacant possession.—Box P8113, B.M.J.

Wanted, almost immediately, Partner for three-partner town and country practice, North Midlands. Net income for available 1/4 share approximately £2,500 (audited figures). Price two years' net. Scot. married, and Protestant preferred. House to rent. Capital required. Senior partner retiring ill health.—Box P8139, B.M.J.

Additional Partner required to take over quarter share old established West Riding town and country practice. Panel 2,500. Annual receipts £7,000.—Box P8182, B.M.J.

Additional Partner required 1/3 share, good class practice. Cardiff. Short preliminary Assistantship. Single man or woman preferred.—Box P8183, B.M.J.

Ophthalmic Partnership. 1/2 share with View £1,000 per annum. Good district. London, S.W. Good house, six rooms and basement. Low rental.—Dr. Mac. 198, Cranmer Court, Chelsea, S.W.3.

Partnership, Bristol. Half share, 1½ years purchase. Ex-Service and experience Industrial medicine an advantage. No panel.—Box P8114, B.M.J.

Partnership Share worth £1,000 per annum in North West Country Practice. 1½ years' purchase, house to rent.—Box P8138, B.M.J.

Scotland, easy reach of Edinburgh, main road and rail. Partnership (preliminary short assistantship) of 1/4 to 1/2 share of £3,000 at two years' purchase. Good panel, private, and appointments. House with surgery, garage and garden to rent. Commence April, early application essential.—Box P7835, B.M.J.

WANTED

Ophthalmic Partnership required by D.O.M.S., some operative experience, southern half England preferred, London area excepted. Country town suitable.—Box P8140, B.M.J.

Young married Scottish Graduate desires share or Practice (with or without preliminary Assistantship). Country or near sea preferred.—Box P8111, B.M.J.

Wanted by Cambridge M.D., introduction to Partnership or succession, in first-class West End practice. Full details Box P8136, B.M.J.

Wanted by Cambridge Graduate, aged 36, Partnership, with or without View to Succession, in first-class practice in country town in Southern Counties, preferably Surrey, Sussex, Hants, Wilts, or Berks. Commencing share £1,500 to £2,000. Full particulars Box P8137, B.M.J.

MEDICAL POSTS

VACANT

Hull Royal Infirmary. Laboratory Technician required. Grade B Certificate desirable, but not essential if previous experience satisfactory. Applications, together with copies of recent testimonials, should be sent to the undersigned as soon as possible.—R. J. Carless, House Governor.

Royal Edinburgh Hospital for Sick Children. Applications are invited for the appointment of **Biochemist** to take charge of laboratory in children's hospital of over 200 beds. Existing laboratory is to be greatly enlarged. Medical qualification preferable, though not essential. Commencing salary £650. Applications, giving full particulars of qualifications and experience, and names of three referees to reach Secretary, Royal Hospital for Sick Children, 9, Sciennes Road, Edinburgh, not later than February 28, 1948.

The Middlesex Hospital, W.1.—Applications are invited for the post of Medical Artist. The appointment will be whole-time with salary £450 to £550 according to experience. Ability to model in wax will be an advantage. Applications should be submitted to the Secretary-Superintendent as soon as possible.

WANTED

Wanted by woman doctor, Medical Post or Assistantship (outdoor) or Locums, well qualified, 10 years' experience. Free March.—Box 8172, B.M.J.

PRACTICES

FOR SALE

Death Vacancy. South Coast seaport town. Old established Practice, private panel and club. Receipts approx. £1,900. House available if required. Good scope for expansion.—Box P8173, B.M.J.

Excellent Mixed Practice, South West City, old-established. Certified accountant's figures 1946-7 £5,900. Panel 1,370. Great scope. Particularly suitable for two, but could be run by one energetic man. Very nice house and garden for sale freehold. Good schools. Premium 1½ years' purchase.—Box P7256, B.M.J.

For Sale. Practice, factory area, panel 4,000. Last year's income £6,500. Large house, good repair, six bedrooms. One year's purchase. House £2,500 or £150 yearly.—Box P8142, B.M.J.

For Immediate Sale.—Old-established Practice, Lancashire. Vendor retiring, ill health. Panel approximately 1,500. Audited returns average last three years over £2,000. Well built stone house and brick garage for three cars.—Box P8175, B.M.J.

For Sale owing to ill health, an old established unopposed Country Practice, Devon. Panel 630, average receipts for last 3 years £1,400. Premium 2 years purchase. House to rent.—Box P8115, B.M.J.

For Sale. Well established Practice in East Lanca-shire town. Receipts about £2,200, panel 1,491. Good house and surgery. Little opposition. Practice can be increased. Premium 1½ years' purchase. —Box P7874, B.M.J.

Good class Practice with Branch S.E. Coast. Income £1,600, good scope. Small panel. Excellent house, garden. £7,000 together.—Box P8127, B.M.J.

Nucleus with Flat combined. Separate entrances waiting and consulting. Council estate 15 minutes West End.—57, Union Grove, S.W.8. 'Phone: MACaulay 1331.

Old-established Private Practice for sale, Birm-ingham. Unfurnished leasehold house with garden available. Gross receipts £1,800. Good scope for panel. Sale necessitated by illness.—Box P7819, B.M.J.

Old established Practice near Birmingham. Panel nearly 4,000. Two professional establishments less than valuation. Premium by arrangement.—Box P8167, B.M.J.

Old-established panel, club Practice for sale N.E. Coast. Panel approx. 1,200, club £800 to £900 per annum. Income approx £2,000. Magnificent modern, detached, freehold, centrally heated house with large garden. Separate entrance surgery. Premium house, practice £7,500, for quick sale, vendor joining partnership.—Box P7870, B.M.J.

Old-established Private and Panel Practice for sale in Belfast Receipts (1947) £2,818 accountants figures. No midwifery. Excellent house in ideal professional site valued at £4,000. Price for practice, house, surgery contents, drugs, etc., £8,500.—Box P8126, B.M.J.

Old-established Practice in pleasant suburb, south London, close to Dulwich village, 8 minutes by train from Victoria. Large panel and good private, with much scope.—Box P7836, B.M.J.

Practices and Partnership Shares for sale in Midlands and Northern Counties. Full details free on request.—British Medical Bureau, 33, Cross Street, Manchester, 2.

West Midlands. Non-Panel Practice For Sale. Gross income £2,000 p.a., reasonable terms. Apply: "Midlands," c/o 144, Edmund Street, Birmingham.

Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool. Telephones: Royal 8116 and Royal 7480 Telegrams: "Organic," Liverpool

Small London Practice for Sale. Good class, no midwifery.—Box P8184, B.M.J.

South East England. Old-established Mixed Rural Practice. Income £2,530 audited. Appointments £525, panel 1,000. Charming detached freehold house and walled garden, valuation £7,000, for sale. Practice premium £4,000.—Box P8176, B.M.J.

West Riding, compact Industrial Practice £1,200 per annum. Panel 1,050 units, great scope, house to rent, surgery, waiting room, separate entrance, good schools, garden, garage.—Box P7800, B.M.J.

WANTED

Wanted by M.B., B.S. (London), Panel and Private Practice S.W. London, preferably within two mile radius Hammersmith. House not essential. Capital up to £4,000 available.—Box P7803, B.M.J.

Ex-principal, age 39, desires Practice or equal Partnership in non industrial area. Scot, Protestant, University graduate. Income over £2,000. Capital. Free now.—Box P8117, B.M.J.

Experienced Scots University graduate wishes Practice in pleasant town or district in North England or Scotland. Cash settlement.—Box P8116, B.M.J.

Indian doctor, Edinburgh qualification, experience in Radiology, electro-therapy and G.P. work, seeks Practice or Partnership. Would consider Assistantship, with accommodation. Wife British.—Box P8129, B.M.J.

Ophthalmic Practice within approximately 150 miles radius of London (excluding London area). Prospect of local hospital appointment desirable.—Box P8141, B.M.J.

Panel or Mixed Practice or Assistantship with View by experienced Scots graduate. Preferably rural or country town Southern Counties, with good house to rent.—Box P8144, B.M.J.

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Practice wanted, large or small, North London, preferably Stamford Hill, Finsbury Park, Golders Green areas. Other districts considered.—Box P8128, B.M.J.

Practices and Partnerships wanted anywhere, England, Scotland, Wales. Purchasers waiting. Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

DIETITIANS, DISPENSERS, NURSES

VACANT

Dispenser, Hall preferred, full time dispensing if desired. Hours 9 to 6. No extra duties. Half day Thursday. Modern pharmacy. Comfortable conditions. Four ladies staff. Permanency required. Liberal salary and bonus.—L. Matthews and Son (Chemists), Ltd., 25, High Street, Wanstead.

Dispenser required in busy mixed practice, market town, East Anglia. State age, experience. Salary by arrangement.—Box 8185, B.M.J.

Dispenser-Secretary required March 1. Small flat available. Apply, stating experience and salary required.—Drs. Hatfield and Lanchester, 151, High Street, Poole, Dorset.

Dispenser-Secretary required. Apply, stating ex-perience. Drs. Webster and Wilson, 29, Wellington Road, Bridlington, Yorkshire.

Dispenser-Bookkeeper required for practice few miles from Birmingham. Reply, giving full particulars, Dr. Blore, Hales Owen, Birmingham.

Experienced Lady Dispenser wanted for G.P. in Croydon Apply stating age, experience, and full particulars.—Drs. Hudson and Lane, 391, Lower Addiscombe Road, Croydon. Addiscombe 2100.

Lady Dispenser required immediately by large partnership. Three secretaries and two dispensers employed in modern surgery. Kindly state age and experience.—Dr. Eberlie and Partners, 163, Dunstable Road, Luton.

DIETITIANS, DISPENSERS, NURSES,

AVAILABLE

Dispenser Secretary, 21, requires Part or Full-time Post, hospital or specialist, London or Herts. Two years hospital and surgery experience.—Box 8178, B.M.J.

Hall qualified dispenser requires Part-time Post in London. Afternoons preferred, but other times considered.—Box 8152, B.M.J.

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

Temporary Secretary to Harley Street specialist required March 1 to April 23. Previous medical experience preferred.—Box 8191, B.M.J.

Required by Gynaecologist, Part-time Secretary with knowledge of medical terms and preferably some nursing. Monday to Friday, 1.30 to 5.30 p.m. —Phone: Langham 3796.

Firm of three doctors in the New Forest requires Full-Time Secretary-Bookkeeper. Apply Dr. Sears, Stydd House, Lyndhurst.

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

AVAILABLE

The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

An energetic and trustworthy ex-Hospital Matron, thoroughly experienced (Medical, Surgical, Theatre and Childrens) seeks post with Consultant Recent Secretarial Training.—Box 8187, B.M.J.

Australian trained Nurse wants Position with London doctor as Receptionist.—Box 8130, B.M.J.

All types Receptionists, Secretaries, Dispensers, Med. Aux., etc., again wanted and supplied. No fee to employer.—Medical Services Employment Bureau, 23, Mount Park Road, W.5. Tel.: Perivale 1976.

Ex-Hospital Nurse S.R.N. and S.C.M., 20 years' experience in all branches of Nursing including 7 years as Theatre Sister, seeks employment as Secretary or Receptionist to Consultant. Shorthand and Typing with Bookkeeping. Salary by arrangement but not important.—Box 8186, B.M.J.

Experienced Secretary to Psychiatric Specialist desires post in London.—Box 8119, B.M.J.

Lady, 40, with medical experience desires post Receptionist, light clerical work (no shorthand). Harrow district preferred.—Box 8118, B.M.J.

"How beautifully you type." It is pleasing to have this said of any one of my staff. I hope you, too, will think the same if ever you have occasion to write to the Professional Typewriting Service, 11, Caroline Place, Bayswater, London, W.2. Personal attention given to all work received, however small the job.

Speed and Accuracy in all varieties of Type-writing. Temporary staff supplied.—Rae Secretarial Services, 29, Monmouth Road, London, W.2. Tel.: Bayswater 7768.

Typewriting, Duplicating, Medical Manuscripts, testimonials, etc. Immediate service, ex-R.A.M.C. staff. Satisfaction guaranteed.—Specialist Typewriting Bureau, 30, City Road, E.C.1. Mon. 4881. Mai. 6344.

Typewriting Service, Testimonials, Theses, Notes, etc., accurately and speedily typed.—Phone HAMpstead 7949 after 1 p.m. daily.

Two educated ladies desire resident posts as Secretary-Shorthand-Typist and Lady Housekeeper to gentleman. Both qualified and experienced. Excellent references. Willing to travel.—Box 8153, B.M.J.

Young widow desires post as Receptionist to doctor London area willing to look after house and cooking if required.—Box 8154, B.M.J.

HOUSEKEEPERS

Man and wife, very capable, seek situation Joint Housekeeper-Caretaker in return for good accommodation London. Wife available preparation light meals, supervision of cleaners, shopping, etc., man (employed whole-time ambulance department of Order of St. John) capable and willing do small jobs evenings. Can produce highest credentials One daughter, at school all day.—Wood, 87, Lullington Garth, N.12.

MISCELLANEOUS

PRIVATE

Doctor's set, about 75 drug bottles with glass stoppers, 40 oz. to 4 oz.; some coloured glass, labelled gold leaf, little used. Also examination couch, beechwood, upholstered rexine, virtually as new. Seen London area. Offers?—Box 8190, B.M.J.

Doctor's Library, comprising translated foreign American and British works, approximately 250 volumes, £50 or would consider offer.—Box 8188, B.M.J.

Electrocardiograph, Cossor Robertson 1939 bat-tery model for sale. Unused throughout the war. Condition as new with all accessories. What offers? —Box 8131, B.M.J.

Ear, Nose, Throat Instruments—Ex-Service doctor urgently desires to purchase secondhand instruments including endoscopic.—Box 8120, B.M.J.

For Sale.—Schall stabilized single valve X-ray transformer unit. Metallix water-cooled tube, moveable switchboard, vertical screen, Potter-Bucky frame, rotary converter. Little used. In excellent condition Immediate possession. Offers.—Box 8147, B.M.J.

For Sale. Unused Examination Couch practically new, £10. Apply Advertiser, 115, Harley Street.

For Sale. Watson "Service" Microscope, excellent condition, in mahogany case. Klinostik Auroscope and Hamlin May Ophthalmoscope.—Offers to Dr. Long, 8, Drake Road, Westcliff-on-Sea.

For Sale.—Full Skeleton with Skull, also Foetal Skull, £17 or nearest offer.—Box 8146, B.M.J.

Half Skeleton and Skull for sale. £10 (Newcastle area).—Box 8155, B.M.J.

Microscope for sale, Bausch and Lomb, complete in case, plus Leitz oil condenser. Fixed stage. Condition excellent. £40. For inspection phone Monniview 6692

Naval Mess Suit, Surgeon Lt.-Commander, velour cloth chest 40, waist 41, height 6 ft as new, also Naval Overcoat, rank and measurements as above New Fleece lined fawn Trench Coat, measurements as above. Civilian Evening Dress Suit, absolutely new, with two coats (one tail). Two white silk Shark-skin Evening Jackets (as used in Tropics).—Box 8189, B M.J.

Polished Oak Globe Wernicke Filing Cabinet for 8 in. by 5 in. cards with 40 alphabetical cards.—Box 8156, B M.J.

Sale. Flat top Desk, mahogany, 4 ft. by 2 ft. 3 in., £45. Roll-top desk, light oak, 3 ft. by 2 ft. 3 in., £20. Examination couch, £4 10s. Dressing trolleys almost new, £4 10s. Seen North London.—Box 8159, B.M.J.

TRADE

A ready market for Microscopes. We pay the highest prices obtainable for fine modern apparatus —Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. Mayfair 7511.

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept B.M.J.), 3, Ralston Road, London, S.E.24.

Occupational Therapy Dept. Plastic Wire for making baskets, etc., as supplied to hospitals, institutions etc. Quotations on official application.—Matthias Rivlin, 79, Park Lane, Leeds, 1.

Parker-Knoll Easy Chairs can now be supplied to doctors for surgeries, waiting rooms, etc., by D. Matthews & Son, Ltd., 14/16, Manchester Street, Liverpool, 1.

APARTMENTS, BOARD, ETC.

AVAILABLE

Attractive Furnished Rooms for single professional men, breakfast and evening meal, with service, near Underground and buses.—Miss Maude, 14, Maresfield Gardens, N.W.3. Hamp. 5714.

London, N.W.2.—Three professional men taken in private house, partial board, from 3½ guineas.—Box 8132, B.M.J.

S.W.3, near Sloane Square, Furnished Service Rooms with Breakfast—3 guineas weekly and upwards.—Phone Kensington 4435, or write Box 7588, B.M.J.

WANTED

Woman medical student urgently requires Quiet Room, Hampstead or Central London district, with breakfast and evening meal provided.—Box 8157, B.M.J.

HOTELS

Aileen Paterson Hotels, Ltd. Osborne Hotel, Exeter Road, Bournemouth. Tel.: Bournemouth 3055. Close to pier and shopping centre. H. and C. and gas fires in all bedrooms. Centrally heated. Moderate charges. Resident director.

Near Shrewsbury, Longnor Hall. Easter and Spring. Carpets of daffodils. Lovely parkland. Find peace and comfort in this beautiful 17th century house. Perfect meals. Ideal service. Private bathrooms. Club licence. Trout fishing, etc. Tel.: Dorrington 58.

Old Red Lion Hotel, Stow-on-the-Wold, Glos. (Tel.: 66). Cotswolds, easily reached by train, well heated, good cooking, own poultry, garden, magnificent country, restful. Winter terms from 3½ gns. Summer 5 to 6½ gns.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild, allowing visitors to be out in the wonderful air. The Hotel is central heated, individual heating in bedrooms. H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

Skegness. Nurse Smithson, Westholme Guest House, 41, Drummond Road. 'Phone 567. Rest home for invalids, elderly people. Good food, attention, also good fires, one minute sea, beach hut.

3, Courtland Avenue, S.E.12. Well appointed Guest House, heated rooms, hot cold water, good food, easy access all parts London, from 3 guineas. Lee Green 3778

HOUSES, CONSULTING ROOMS

Brook Street, W.1. Consulting Rooms to let, first-class establishment. Day and night telephone service. Luncheon room. Further particulars apply, Allsop & Co., 21, Soho Square, W.1. Gerrard 5847.

Consulting area. Share offered on exceptional terms in very fine consulting suite. Plate. Reply Box 8177, B.M.J.

Consulting Room, furnished, to let half day per week, Queen Anne Street, W.1.—Box 8148, B.M.J.

For Sale. 26 roomed House in East Kent, prominent sea front position. In excellent condition. At present a Nursing Home. Admirably suited for hotel. Price, including freehold, equipment, and furniture, etc., £16,000. £10,000 can remain on mortgage. Ref. F/8160. Apply, Tellwright, 2, Potter Street, Bishop's Stortford. Phone 758.

Kensington, off High Street. Modern Furnished Room in nurses house. Entrance floor front. French windows. Newly decorated. Suit one or two professional men. Telephone: Western 8954.

Medical or Dental Consulting Suite available in professional house in the Drive, Hove. Unfurnished. 'Phone, Hove 2827.

AUCTION

14, Crescent Road, Crouch End, with vacant possession. Large Detached Residence, 12 rooms, kitchen, 2 bathrooms, w.c.'s., etc., large gardens. Bold position. Good lease. Ground rent £10 per annum. For sale by auction February 26 at London Auction Mart, 155, Queen Victoria Street, E.C.4. Particulars from Auctioneers, Ernest Owers and Williams 459, Finchley Road, N.W.3. (Telephone: Ham. 0074.)

BUSINESSES

FOR SALE

West End business, with good living accommodation, returning £2,000 p.a. net (Audited accounts), is offered for £6,000.—Commercial Development Company, 199, London Road, Sevenoaks, Kent.

MOTOR CARS

MILHALL MOTOR CO., LTD.

1934 Bentley 3½-litre sports saloon. Thrupp and Maberly. Serviced Bentleys

1939 Standard 12 saloon.

1940 Morris 10 h.p. saloon. Speedometer reading 25,000.

1938 Rover 20 sports saloon.

1933 Rolls Royce 20-25 sports saloon. Thrupp and Maberly.

1937 Packard Type 120 saloon.

Showrooms: 5, ST. JAMES'S STREET, S.W.1 (Whitehall 1952-4)

Service: 55-57, South Edwardes Square, W.8 (Western 2269)

Gentleman urgently requires 1946/7 car, earlier model considered if condition exceptional.—Cutmore, 34a, Burnt Ash Hill, London, S.E.12. (Imperial 3527).

Motourists (London), Ltd., of Great North Road, East Finchley Station, N.2, urgently require late model cars of all makes, any h.p. Representative will call by appointment. Tudor 2301-2.

OVERSEAS CARS LIMITED offer: 1946 16 Armstrong Siddeley D/H Coupe, 1939 8 and 10 Austins, 1947 10 Ford, 1939 Hillman Minx D/H Coupe, 1939 1½ litre Jaguar, 1937 2 litre M.G., 1939 and 1947 Morris 8, 1939 12 Rover, 1939 and 1946 8 Standard, 1939 10 Vauxhall and many others. Full particulars from 227, Brompton Road, S.W.3. Tel. KENsington 7475.

1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

NURSING HOMES

Nursing Home run like first-class private house. Resident medical man and wife Certificated nurses. Rest Cures, Neurasthenics and Convalescents (not certified, malignant nor tubercular). Guests also received. Lounge hall, large dining-room, lovely drawing-room. Own poultry kept. Private garden. Beautiful country. Shops four minutes London 40 minutes. Very comfortable, quiet. Good catering and cooking. Consultants and other medicals can visit their own patients.—C. F. Fothergill, M.B., B.Ch., Hensol, Chorley Wood, Herts. Phone: Chorley Wood 24.

Whistley House, Axtown Lane, Yelverton, South Devon (Tel. 149). L. B. Reeves, L.R.C.P.&S.Ed. Lovely modern residence run as first-class Nursing Home (registered) for convalescents and aged gentlefolk. Excellent cuisine. Resident doctor and wife Further particulars on request.

FOR SALE

Convalescent Sanatorium near Ventnor. Established 39 years. 30 patients taken. 5 staff. Beautiful property and attractive buildings in 2 acres of delightful grounds with sea views Well equipped wards and private quarters. £9,300 freehold property, contents, equipment and goodwill Folio No. 2586. Write Ashcroft & Taylor, Estate Agents, Ventnor, I.W

APPOINTMENTS

(Continued from page 23)

Have you read the notice at top of page 13 ?

CANADIAN RED CROSS MEMORIAL HOSPITAL, Taplow, Maidenhead, Berks
OBSTETRICAL HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of Obstetrical House Surgeon (B2) for Maternity Unit of new Hospital. Preference will be given to candidates who have had previous midwifery experience. Salary £200 per annum plus residential emoluments Appointment for six months. R practitioners holding A posts may apply. Applications with copies of two recent testimonials should be sent immediately to the undersigned.—John R. Griffith, House Governor.

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL, Southampton (291 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners (male) with previous experience in Anaesthetics for the post of Resident Anaesthetist (B2), including R practitioners who hold A posts. The appointment is recognized for the D.A. The salary will be at the rate of £200 per annum, with full residential emoluments. Applications should be sent immediately to Frank Jennings, House Governor and Secretary.

ROYAL HALIFAX INFIRMARY
(283 beds, Resident Medical Staff 6)
HOUSE PHYSICIAN (A) (Male)

Applications are invited for the post of House Physician (A) (male), including practitioners within three months of qualification who are liable for service under the National Service Acts, for a period of six months from February 27, 1948 Salary £200 per annum, with full residential emoluments. Applications should be sent to R. W. Ranson, Secretary.

ROCHDALE INFIRMARY
PATHOLOGIST

The Board of Management invites applications for the appointment of Pathologist. Salary is at the rate of £900 per annum, plus private fees, guaranteed up to £100 by the Committee. Applications for the appointment should be made immediately to the undersigned, from whom further information regarding the appointment may be obtained.—W. Wynn, Infirmary Office.

ST. PETER'S HOSPITAL FOR STONE
Henrietta Street, Covent Garden, W.C.2
HOUSE SURGEON (B1)

The office of House Surgeon (B1) will fall vacant on April 1, 1948 and applications are invited from male candidates on the British Register with previous experience in a similar office at a general hospital. The salary is at the rate of £150 per annum, with board, lodging and laundry. At the expiration of six months' term of office, and subject to the recommendation of the Medical Committee, the House Surgeon may be appointed Resident Surgical Officer (B1) for a further similar period. Candidates should therefore be prepared, if successful, to remain at the hospital for twelve months in all. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Twelve copies of application, accompanied by copies of three testimonials, should be forwarded to reach the Hospital Secretary not later than the first post on Monday, March 15, 1948.

ST. GEORGE'S HOSPITAL, S.W.1
(In association with The Victoria Hospital for Children, Tite Street, Chelsea)
FIRST ASSISTANT (Part-time)
(a) to the Ophthalmic Department
(b) to the E.N.T. Department

Applications are invited for the post of First Assistant (part-time) (a) to the Ophthalmic Department, (b) to the E.N.T. Department, at Victoria Hospital for Children where all the Paediatric work of St. George's Hospital is now carried on. Duties will involve attendance on three or four half-days a week; payment will be at the rate of £125 per annum for one weekly attendance. Applications with the names of three referees should be sent to the undersigned, from whom further information can be obtained, not later than February 29 1948.—P. H. Constable, House Governor.

ST. MARK'S HOSPITAL FOR CANCER, FISTULA AND OTHER DISEASES OF THE RECTUM, City Road, London, E.C.1
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1) for period of six months from April 1, 1948. Preference will be given to candidates holding a higher surgical qualification. Salary at the rate of £250 per annum, with full residential emoluments, and certain fees. R practitioners holding B2 appointments and those holding B1 appointments and rejected by the R.A.M.C. may apply Applications should be sent to the undersigned not later than February 27, 1948.—Raymond Bull, Secretary.

ST. GEORGE'S HOSPITAL, S.W.1
Honorary Assistant NEUROLOGICAL SURGEON
Applications are invited for the appointment of Honorary Assistant Neurological Surgeon. Applications with the names of three referees should be sent to the undersigned, from whom further information can be obtained, not later than Friday, March 12, 1948.—P. H. Constable, House Governor.

SWANSEA GENERAL AND EYE HOSPITAL
Applications are invited from registered medical practitioners (male or female) for the undermentioned appointments:—
HOUSE SURGEON (A), vacant March 11, 1948.
HOUSE PHYSICIAN (A), vacant March 14, 1948.
including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by practitioners who are liable under these Acts, the appointments will be for a period of six months. Salary for each appointment at the rate of £200 per annum with full residential emoluments. Applications should be forwarded to the undersigned.—O. C. Howells, Secretary-Superintendent.

SWANSEA GENERAL AND EYE HOSPITAL
HOUSE SURGEON (A)
Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (A), now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these acts, appointment will be for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications should be forwarded to the undersigned.—O. C. Howells, Secretary-Superintendent.

SALFORD ROYAL HOSPITAL (256 beds)
HOUSE SURGEON (B2) to Orthopaedic Department
HOUSE SURGEON (B2) to Special Departments (Ear, Nose and Throat, and Gynaecology)
Salary £175, plus full residential emoluments. Appointment for six months.
CASUALTY HOUSE SURGEON (A)
Salary £175 per annum, plus full residential emoluments. Limited to six months to R practitioners. Applications should be made at once on a special form obtainable from the undersigned, accompanied by copies of three testimonials.—H. B. Shelswell, General Superintendent and Secretary.

ST. THOMAS' HOSPITAL, S.E.1
CHIEF ASSISTANT
to the Radiotherapy Department
Applications are invited from registered medical practitioners, including those serving in H.M. Forces, for the post of Chief Assistant to the Radiotherapy Department, vacant on April 1. Maximum tenure four years, subject to annual reappointment. Salary for full-time duty £950 per annum, part-time duty on a pro rata basis. Twelve copies of applications are required and should state age, qualifications with dates, and be sent by February 28 to the Clerk of the Governors.

ST. JOHN'S HOSPITAL, Lewisham, S.E.13
HOUSE SURGEON (A)
There is a vacancy for a House Surgeon (A) as from March 1, 1948, for which applications are invited from registered practitioners, including those within three months of qualification, who are liable for service under the National Service Acts. The appointment is for six months at a salary of £150 per annum with full residential emoluments. Applications should be sent to the undermentioned.—J. C. Gilbert, Secretary-Superintendent.

ST. MARY'S HOSPITAL FOR WOMEN AND CHILDREN, Plaistow, E.13
(General Hospital, no Maternity)
Applications are invited from registered medical practitioners for the following appointment:—
RESIDENT PHYSICIAN (B2), vacant March 1, 1948. Salary £250 per annum with full residential emoluments. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications to be sent to the Secretary.

SEVERALLS MENTAL HOSPITAL, Colchester
HOUSE PHYSICIAN (B2)
Salary at the rate of £300 per annum during first six months, and if renewed for second six months at rate of £350 per annum, with full residential emoluments. If held by an R practitioner the appointment will not be renewed after six months. R practitioners now holding A posts may apply. Previous general hospital experience is desirable but not essential. Applications to the Medical Superintendent.

SCARBOROUGH HOSPITAL, Yorkshire
(140 beds)
HOUSE SURGEON (A)
Applications are invited from male or female registered medical practitioners for the post of House Surgeon (A). The appointment is for six months commencing March 3, 1948, and the salary is at the rate of £175 per annum, with board residence, laundry, etc. Practitioners within three months of qualification may also apply. Applications to sent immediately to the Secretary.

SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common, S.W.4
PART-TIME MEDICAL REGISTRAR
Applications are invited from medical women for appointment as part-time Medical Registrar to the Out-Patient Department. Salary according to experience and time available, but not less than £300 per annum for 3½ days per week. Applications should be sent to the Secretary by March 6, 1948.

SALISBURY GENERAL INFIRMARY (275 beds)
RESIDENT HOUSE PHYSICIAN (B2)
Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the appointment of Resident House Physician (B2). Salary at the rate of £200 per annum, with full residential emoluments. The appointment is for a period of six months, duties to commence April 1. Applications should be sent as soon as possible to the Superintendent and Secretary.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
HOUSE PHYSICIAN (A)
Applications are invited from registered medical practitioners for the post of House Physician (A), including practitioners within three months of qualification who are liable for service under the National Service Acts, which will become vacant on February 17, 1948. If held by an R practitioner, the appointment will be limited to six months. Salary £250 per annum, with usual emoluments. Applications should be submitted to the undersigned immediately.—A. E. Collins, Secretary.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
ANAESTHETIST
Applications are invited from persons who have served in His Majesty's Forces, for the position of Anaesthetist under the terms of Circular 202/46. The position will be whole-time, non-resident. Salary £1,000 per annum. Candidates must hold the recognised Diploma in Anaesthetics. Applications should be forwarded to the undersigned forthwith.—A. E. Collins, Secretary

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
CLINICAL PATHOLOGIST
Applications are invited for the post of Clinical Pathologist. The position will be whole-time and non-resident at a salary of £1,250 per annum. Applications should be forwarded to the undersigned as soon as possible.—A. E. Collins, Secretary.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (B2)
Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2), vacant immediately. Salary is at the rate of £300 per annum, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be for a period of six months. Applications, stating age, qualifications (with dates), nationality and accompanied by copies of three recent testimonials, should be sent to the Secretary, H. F. Donald, The Infirmary, Stamford.

STAMFORD, RUTLAND AND GENERAL INFIRMARY
HOUSE SURGEON (A)
Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (A) now vacant. Salary is at the rate of £200 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent immediately to the Secretary, H. F. Donald, The Infirmary, Stamford.

SUSSEX MATERNITY HOSPITAL
Buckingham Road, Brighton
TWO HONORARY ANTE-NATAL OFFICERS
The Committee of Management invite applications for the posts of two Medical Officers for the Ante-Natal Department. The appointments will be for a period of two years from March 1, 1948. Applications should be made in writing to the Secretary, 80, Buckingham Road, Brighton.—Percy F. Spooner, Secretary.

THE LAWN, Lincoln
(Registered Hospital for Mental and Nervous Diseases—100 beds)
ASSISTANT MEDICAL OFFICER (B1)
Applications are invited from registered medical practitioners for the appointment of Assistant Medical Officer (B1). Experience in mental work preferable but not essential. Salary £500 per annum, together with emoluments including board, flatlet, and laundry. R practitioners should not apply unless ineligible for H.M. Forces. Applications should be addressed to the Chairman of Governors, The Lawn, Lincoln.

VICTORIA HOSPITAL FOR SICK CHILDREN
Park Street, Hull
RADIOGRAPHER (female)
Applications are invited for the post of non-resident Radiographer (female). Vacant, May 31, 1948. M.S.R. essential. Salary according to J.N.C. scale. F.S.S. in force. Applications to be addressed to the Secretary as soon as possible.

WIMBLEDON HOSPITAL
Thurstan Road, Copse Hill, S.W.20
RESIDENT MEDICAL OFFICER (B2)
Applications are invited from registered medical practitioners for the appointment of Resident Medical Officer (B2), including R practitioners who now hold A posts. The appointment will be limited to six months. The salary is at the rate of £250 per annum, with full residential emoluments. Vacancy end of February. Applications to the Hon. Secretary.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
HOUSE OFFICER (A) to Special Departments (Children, E.N.T., Eyes and Skin)
Applications are invited for the above appointment from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for six months from March 1, 1948, and may be terminated by one month's notice on either side. Salary at the rate of £100 per annum, with the usual residential emoluments. Applications, with particulars of age, nationality, medical school, qualifications (with dates) and experience, accompanied by copies of three testimonials, should reach me not later than first post, Wednesday, February 18, 1948. Please state 'phone number (if any).—C. R. Lockhart, Secretary.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
HOUSE SURGEON (A)
General and Orthopaedic
Applications are invited for the above appointment (General and Orthopaedic) from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for six months from March 1, 1948, and may be terminated by one month's notice on either side. Salary at the rate of £100 per annum, with the usual residential emoluments. Applications, with particulars of age, nationality, medical school, qualifications (with dates) and experience, accompanied by copies of three testimonials, should reach me not later than first post, Wednesday, February 18, 1948. Please state 'phone number (if any).—C. R. Lockhart, Secretary.

WHITE LODGE HOSPITAL, E.M.S.
Newmarket (312 beds)
RESIDENT MEDICAL REGISTRAR (B1)
Applications are invited for the appointment of Resident Medical Registrar (B1) at the above hospital. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applicants should have had previous hospital experience in general medicine. Special experience in Chest Diseases (including pulmonary tuberculosis) would be an advantage. Salary payable by the Ministry of Health at the rate of £750 per annum on non-residential basis, less £100 for board and lodging. Applications should be sent to the Medical Superintendent before February 27, 1948.

WHITE LODGE HOSPITAL
Newmarket, Suffolk
HOUSE PHYSICIAN/ANAESTHETIST (A)
Applications are invited for the post of House Physician/Anaesthetist (A) at the above hospital. Salary at the rate of £150 per annum. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months. Applications should be sent to the Medical Superintendent.

WHITE LODGE HOSPITAL, Newmarket, Suffolk
ORTHOPAEDIC HOUSE SURGEON (A)
Applications are invited for the post of Orthopaedic House Surgeon (A) at the above hospital. Salary at the rate of £150 per annum. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months. Applications should be sent to the Medical Superintendent.

WILSON HOSPITAL
Cranmer Road, Mitcham, Surrey
(72 beds—Resident Medical Staff 2)
RESIDENT SURGICAL OFFICER (A)
Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (A), to become vacant from March 6, 1948. Salary at the rate of £150 per annum, with full residential emoluments. Practitioners within three months of qualification, who are liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications to be forwarded immediately to the Chairman, Medical Committee, Wilson Hospital, Mitcham.

WESTON-SUPER-MARE GENERAL HOSPITAL
(100 beds)
HOUSE SURGEON (A) and
HOUSE PHYSICIAN (A)
Applications are invited from medical practitioners for the appointments of House Surgeon (A) and House Physician (A). Duties to commence as follows: House Surgeon, immediately, and House Physician from March 1, 1948. Salary for both posts at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

WATERLOO AND DISTRICT GENERAL HOSPITAL, Liverpool, 22
HOUSE SURGEON (A or B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (A or B2) for a period of six months as from April 1, 1948. The appointment is open to practitioners within three months of qualification who are liable for service under the National Service Acts and A practitioners. Salary is at the rate of £250 per annum with full residential emoluments. Applications should be lodged with the undersigned as soon as possible.—G. Lawson McGregor, Secretary-Superintendent.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
CHILD PSYCHIATRIST (Male or female)

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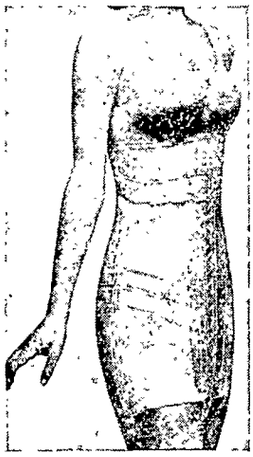

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY FEBRUARY 21 1948

SOCIAL MEDICINE IN THE CURRICULUM*

BY

JOHN B. GRANT, C.B.E., M.D., F.A.P.H.A.

(From the International Health Division, the Rockefeller Foundation)

Sir Wilson Jameson[1] has said that the term "social medicine" in Great Britain is really a synonym of public health. An abbreviated American definition of public health is organized community efforts for (*a*) the hygiene of the environment; (*b*) the control of communicable disease; (*c*) the organization of services for the early diagnosis and preventive treatment of disease in the individual; (*d*) the education of the individual in principles of health; and (*e*) the development of the social machinery which will ensure to every individual in the community a standard of living adequate for the maintenance of physical and mental health. As such, public health becomes a field of social service. The General Medical Council in its evidence in the Goodenough Report[2] makes the aim of social therapy to be "to seek and to promote measures, other than those usually employed in the practice of remedial medicine, for the protection of the individual and of the community against such forces as interfere with the full development and maintenance of man's mental and physical capacity." This paper attempts to answer two questions; first, Specifically what do we want to train the general practitioner for in social medicine? and, secondly, How do we train him?

Medical education is still concerned primarily with teaching clinical pathological diagnosis and treatment, and even in this field of medicine it is as yet backward in its training of the general practitioner in geriatrics, in psychosomatic medicine, and in rehabilitation. In addition to removing these lags, social medicine requires extension of medical education to fulfil the aim of the General Medical Council, quoted above. The general practitioner must be fully aware of the effect on health of all socio-environmental factors which may lead to personal maladjustment and cause social deficiencies resulting in disability of the individual.

The promotive services are chiefly non-medical, but the physician should be aware of their relation to health and disease. Their availability in the community should be based upon a positive population policy to improve the quality of the country's human capital, on which are based the Government's policies on housing and nutrition. Two other important promotive health services are health education and community centres to provide mental, social, and physical recreation. The promotive services require buttressing by social security to assure adequate standards of living. The general practitioner must also be more adequately trained in the preventive services.

Organization a Prime Essential

Having outlined what social medicine wants to train for, I now turn to the chief purpose of this discussion, that is, to decide how training in social medicine can be undertaken adequately by medical schools. For this it is necessary to discuss the *organization* required for satisfactory teaching as well as the *content* of such teaching. The latter has already been the subject of numerous authoritative pronouncements, but the question of organization has received much less attention. It must also be noted that as yet we do not have scientific disciplines covering either the content or the practice of social medicine. The first step should be specific provision in teaching institutions for social physiology, social pathology, and social therapy.

It is now acknowledged without question that the pathologist cannot teach pathology adequately without a laboratory in which each student has his own place and his own microscope; it is similarly accepted that the clinician cannot provide adequate instruction without a minimum of controlled hospital beds per student. What is the corresponding essential for the adequate teaching of social medicine? A community in which the student can go through the routines and apply the techniques of social diagnosis and therapy as he does in clinical diagnosis and therapy, and thereby develop habits of practice useful in his future professional work. It is in such a community, furthermore, that the professors of social medicine can best carry on investigations under controlled conditions.

Until such controlled facilities are provided social medicine cannot hope for full development into a university discipline. Little imagination is required to see that both social physiology and social pathology would develop much more rapidly as scientific disciplines if studied "from the womb to the tomb" in a medical-school-controlled community of 100,000 to 250,000 rather than, as is the case at present, through *ad hoc* facilities. In the absence of a controlled community the techniques of social therapy remain undeveloped; nor can the general practitioner practise social medicine until he has had opportunity as a clerk or intern to habituate himself to proved methods and techniques of social therapy. Only such a controlled community will make it possible to put into effect the important recommendation that the medical schools should take their place as real partners in the National Health Service and discharge their responsibility in the experimentation and demonstration of progress in new forms of medical service.

Health centres in the teaching of social health correspond to hospitals in the teaching of clinical medicine. The Health Act, in recognition of the requirements to train physicians in diagnosis and clinical pathology, has left the control of teaching hospitals in the hands of the university authorities. If physicians are to be trained in the techniques of social medicine university authorities should also control the teaching health centres.

*Delivered at the International Conference of the Royal College of Physicians of London, Sept. 8-13, 1947.

Concept of the Health Centre

The Health Act provides for the establishment of health centres and gives an implication of the services they will undertake. The nature and scope of the health centre was first described as the general practitioner centre in the Interim Report of the Consultative Council on Medical and Allied Services as far back as 1920[3]; but, despite much lip-service all over the world, there has been practically no move to implement the concept. The draft Interim Report of the British Medical Association's Medical Planning Commission describes a "model health centre." The health centres provided by the Act are discussed both by Scott[4] and by Stark Murray and McNae.[5] The *Lancet* carried a series of articles in 1947 on "Health Centres of To-morrow." However, these reports gave inadequate attention to the promotive and rehabilitative services which constitute the major social emphasis of health centres.

A good discussion of the health centre in relation to social medicine comes from South Africa in recent papers presented by Kark and Kark[6] and by Gale,[7] who stress, as has the British Medical Association in its *Charter for Health*,[8] that the family should be the unit of health care rather than the individual. This cannot be overemphasized if "positive health" is under consideration, because "the biological approach to physical and, more particularly, mental health is through the family, which is the natural unit of society." The South African concept of health care through health centres is briefly as follows:

> Adequate health care is in effect a continuous programme of family welfare coupled with education regarding health. The health centre service places in the field for each 500 families a team consisting of a physician, a nurse, and two health assistants. An "album" is opened for each family to take stock not only of the physical conditions of each member but also of details of such social, economic, and environmental factors as may be related to health and disease. The team periodically reviews the health progress of each family, assisted by such other categories of medical personnel as circumstances may indicate. It is the responsibility of the team to bring about the utilization of the non-medical community resources indicated previously in the promotive service.

Here and there one notes fragmentary progress towards the extension of the teaching institution into the surrounding community. An example in London is the relationship established by the Institute of Child Care with the child-care activities in the borough of St. Pancras. Generally speaking, paediatrics has been most progressive in community work. Other examples are the Institutes of Child Care in Newcastle and Glasgow. While at present limited to public health, many schools of hygiene throughout the world have during the past two decades concluded agreements with local authorities whereby the school administers its own community. Examples are found as far apart as Toronto and Baltimore on the one hand and Warsaw and Manila on the other. As long ago as 1925 the Department of Public Health of the Peking Union Medical College in China secured administrative control of the health services in the ward of 150,000 population in which the college is situated.

There is therefore ample precedent for and no insuperable obstacle to the extension by medical schools of their controlled facilities to the health care of a designated community of preferably some 100,000 to 200,000 population. There are several ways to effect this. One which works satisfactorily and is implied in Section 10 (*a*) of the Ministry of Health's recent Circular 118/47 is as follows. The local authority agrees that the medical school may govern the qualifications and the selection of the senior administrative officer for the area to be appointed by the authority concurrently with an academic position. Any difference in the salary required to procure a competent officer above that paid ordinarily by the local authority would be a responsibility of the medical school. Similarly, the teaching institution would provide such funds which a teaching area might require over and above the average local authority expenditure for a similar population under its administration elsewhere. Thus the final administrative control vests in the local authority, but the medical school has an immediate jurisdiction over the technical aspects of such control. Experience has proved that it is essential for personnel in such a teaching area to be paid on a higher grade than corresponding personnel in non-teaching areas if the technical standards are to prove satisfactory.

Where there is either compulsory or voluntary prepayment the cost to the medical school of such controlled health care facilities is minimal. Here in London, health centres have passed beyond the discussion stage to a definite decision on the number required for the population of such a borough as Hackney. The local authorities and their communities would be the chief beneficiaries in making the medical school their agent for administering such centres, just as local authorities have benefited when they have made their hospitals available for clinical instruction.

The health centre would thus become the basic unit for providing health care in its community and for giving the student an opportunity to learn by self-participation the practice of social medicine along such lines as are outlined under Stage III in the Interim Report of the Royal College of Physicians of London. It is estimated that one physician provided with sufficient ancillary workers can give general practitioner services of health care to approximately 2,000 to 2,500 population and self-participative facilities to one medical student. This means that a health centre serving 20,000 to 25,000 population would provide the essential features of health-care practice necessary for clerkship and internship groups of 8 to 10 students. It is desirable to keep such groups small enough for each student to have ample opportunity for self-participation as well as frequent consultation and seminars with his supervising instructor.

The health centres would also constitute the workshops from which social pathology and physiology would largely carry out their community projects. The content of the former is now generally appreciated. The aim of research in social physiology (biology) would be to determine norms of population-quality, which eventually must constitute the base-line from which social welfare policies of Government would be derived. The material for study, as already is the concept of the Peckham and other groups, would be the family in social action and the effect of environment upon such families. The latter would include the determination of the interaction of socio-economic and other factors of modern society upon mental and physical health. Such studies would require medical personnel with qualifications in social anthropology, who, where necessary, would draw upon and supplement the routine personnel and equipment of the centres. Many studies would of necessity be long-term in nature.

The administration of the medical school health centres should rest with the Department of Social Medicine and Public Health through arrangement with the local authority in the manner described. The professional personnel of the health centres should also, as in the case of the hospital, be members of existing clinical, nursing, and almoner departments, etc. The Department of Social Medicine and Public Health would have two technical interests in the health centres: one corresponding to, and bearing the same relation to, the teaching community as preclinical disciplines do to the teaching clinical departments, and the

other the conventional public health interests, both in teaching and in research. Schools which, in addition to undergraduate, have graduate responsibilities in public health can also utilize the community in question, with functions differentiated into such recognized fields as epidemiology, nutrition, and biostatistics. The Interim Report rightly stresses the importance of medical and psychiatric social workers. The effectiveness of social medicine is as much dependent on these social workers as that of clinical medicine on nurses. It has been suggested in the United States that there should be one medical social worker for every 2,000 and one psychiatric social worker for every 500 out-patients annually. Several universities in the United States have extended the student health service to include the faculty as well as the employees which are under the administration of the Department of Preventive Medicine in association with Departments of Medicine. This provides a particularly interesting group for study and teaching in social medicine.

The fields and scope of social medicine have been so thoroughly discussed[2 9-12] that without additional experience little more can be said Curriculum and instruction are at the beginning of a trial-and-error period. This is confirmed by the recent recommendations of the General Medical Council[14] that for the time being schools "should be left with an ample measure of discretion to determine for themselves how far the instruction of students in the subject should be carried."

Trends in Instruction

Before discussing trends it may be well to summarize the emerging pattern of instruction in the whole field of social medicine and public health in North America. Clinical instruction usually begins in the latter part of the second of the four years of medical education, which do not include the fifth intern year. The pattern in several schools is already taking shape along the lines recommended by the Committee of the Association of American Medical Colleges. Thus at Johns Hopkins biostatistics is given in the first and epidemiology (the nature of disease) in the second year. The third year is given to the economic, social, and environmental factors in disease, while the fourth year is devoted to medical economics and the personal health services.

The more comprehensive trend is the permeation of the regular clinical curriculum with instruction on social and environmental factors. The less comprehensive concerns case-study projects. The latter is rapidly spreading and, as noted, is being undertaken in 39 schools. Its utilization in the following illustrations of clinical permeation makes it unnecessary to describe this trend separately. However, it should be pointed out that curative, preventive, and promotive medicine are brought together and integrated in "case work," and when used by the general practitioner bring him back to his true place in the forefront of the picture which of late years has been outshone by the specialist.

At Harvard special medical social case-teaching conferences are held monthly, attended by all clerks. Each student prepares a fully worked-up case during his clerkship He acts with the aid of a suggestive outline and in consultation with the social service. At Beth Israel Hospital weekly medical social ward rounds are designed primarily to achieve the best co-ordinated medical care for the patient. Any social component bearing on the patient comes up automatically in discussion of the case. Medical social conferences, held weekly, are attended by students clerking in this hospital. The purpose is to deal with obstructions to good medical care and to help the patient in his planning. Generally speaking, experience at Harvard has indicated that the students are too confused by curriculum requirements to grasp the import of social medicine until the clerkship year. There is a considerable literature on the Harvard methods of instruction. Attention is particularly called to the paper of Cohen and Derow.[15]

Washington University is another illustration of clinical integration. In the second year students are assigned in groups of four to single necropsies, with a separate student responsible respectively for clinical history, gross findings, microscopical findings, and social and environmental factors associated with the illness. The student responsible for the last-mentioned item determines at what point in the patient's life measures might have been introduced to prevent the illness or death, and also what either the patient himself or the community doctor could have done to maintain health. In the third year, along with clinical instruction co-ordinated to disease and organ system, there is included the social approach and reference to community facilities. In the fourth year groups of twelve students undertake a six-weeks clerkship in close co-operation with the clinical departments of medicine, psychiatry, and paediatrics. Students return to a more complete study of patients already examined by them in these departments to determine the social, economic, and environmental factors leading to the illness. These studies are discussed in seminars twice a week. This social point of view is assured by having members of the department participate in grand medical rounds, clinical pathological conferences, and ward visits. In addition the department conducts one of the four-a-month "Saturday noon medical clinics." The paediatric co-operation includes weekly two-and-a-half-hour conferences, with discussion of a case study by each clerk during the clerkship.

It is necessary to bear in mind that medical students are not interested in abstractions, because, as pointed out by Flexner, "medicine is learnt; it is not taught." Their interest is specific. Their education, to be effective, must be continuous and self-participative, and not sporadic and "canned." If the factors of social medicine are as important as claimed by its advocates they should be demonstrated in every case the student sees and not just once in a while in exercises.

Unfortunately this clinical integration trend in the United States, although a great step forward, is of a negative nature. The activities practised are limited chiefly to steps taken after disease occurs. Few relate to health promotion. The latter, generally speaking, cannot be undertaken until there is prepayment to provide comprehensive health care. In this respect there are two significant developments taking place in the United States whereby medical schools are organizing themselves to promote comprehensive health care on a prepayment basis to groups in the community and which will be available for teaching purposes. The inauguration of the Health Insurance Plan of Greater New York has led New York University to establish a group clinic to provide comprehensive medical care under this plan. The other schools in New York City may follow suit. Recently medical care of the indigent in Maryland was transferred from Welfare to the State Health Department and the Baltimore City Health Department. The two medical schools in Baltimore are organizing health centres within their premises to provide health care for the people within their own areas. These, together with the university health services, will provide a considerable population for whom comprehensive health care will be available, also for instructional purposes in health care, which must include all four services.

It is because the Health Act provides for a comprehensive medical service on a prepayment basis that England offers

such a unique opportunity to explore and demonstrate the positive aspects of health care, and it is because promotive health care services can best be administered from health centres that these constitute a central focus for the teaching of social medicine.

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THE PROBLEM OF CHILBLAINS

WITH A NOTE ON THEIR TREATMENT WITH NICOTINIC ACID

BY

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Chilblains are relatively common in Britain and on the Continent of Europe, but are rare in Canada and the United States of America. The usual sites of the lesions are the dorsal aspects of the proximal phalanges of the hand, on the plantar aspect of the toes, along the inner border and dorsum of the great toe, and in the region of the heel and Achilles tendon. Chilblains may also occur on the ears, but in this site they resemble frost-bite rather than a true perniosis; Dubreuilh and Petges (1911) have even reported a case in which a chilblain occurred on the prepuce.

The first sign that a chilblain is developing is a local redness and irritation which comes on in bed or on sitting in front of a fire. The redness becomes more intense and the irritation increases, and if the chilblain is situated on a toe the joint feels stiff and slightly painful. The redness is gradually replaced by a cyanotic tinge and the irritation by pain; desquamation may supervene or bulla formation and ulceration may develop. In mild chilblains very little thickening and infiltration can be felt, but in severe multiple chilblains, such as may occur in the region of the Achilles tendon, there is marked thickening and induration and the skin feels icy cold to the touch. In older people a chronic type of chilblain may develop on the backs of the fingers. It is associated with hyperkeratosis and painful fissuring of the skin. Pain is a more dominant symptom than irritation.

Hallam (1931), in 100 consecutive cases, found 54 in the 0–10 years age group, 29 in the 10–20 years age group, and thereafter only 17 cases; Haxthausen (1930) noticed the more frequent occurrence of chilblains in women; and Wigley (1946) claims that chilblains are frequent between the ages of 5 and 15 years, rare after 20 years, and exceptional after 30 years.

Aetiology

There can be little doubt that cold plays a part in the aetiology of chilblains, although Leduc (1927) suggested that chilblains were first-degree burns due to the incautious exposure of numbed limbs to heat. Becker and Obermayer (1940) believe that the degree of cold is not the sole cause, and attempt to prove this point by stating that natives of India while studying in England do not develop perniones. I questioned three Indian medical students and found that they were all suffering from chilblains. It is certainly correct, however, that there is another factor, as witness the fact that certain individuals may develop chilblains during a thaw when colder weather has left them unscathed.

Mackenna (1927) and Savill (1926) incriminate focal sepsis, such as infected teeth and tonsils, as a predisposing cause. Funk (1899) blames anaemia, but Jausion, Somia, and Meunier (1941) examined the blood in 17 of their 47 cases and found no abnormality apart from a moderate polymorphonuclear leucocytosis in five of them. Glandular dysfunction has its advocates: Embden (1922) and Juster (1927) claim good results with thyroid extracts, but Parkes Weber (1925) and Dore (1928) have not been able to confirm these results. Barber (1926) found the simultaneous administration of thyroid and large doses of iodine of great value; while, according to Hallam (1931), in a series of 1,275 patients 12 were suffering from myxoedema but were not subject to chilblains. On the other hand, 24 of these patients were under treatment for exophthalmic goitre; of these, three had suffered from chilblains only since the onset of the hyperthryoidism. More lately a woman doctor (1947) has suggested a hormonal basis in chilblains, as she has noticed that, although a chronic sufferer, she experiences relief during pregnancy. One of my patients noticed the same freedom from chilblains during her two pregnancies.

Wright (1897) advises calcium, but Percival and Stewart (1927) consider a hypocalcaemia improbable. Hallam (1931) found no benefit from the administration of vitamins A and D and calcium, and noticed no difference in the incidence of chilblains in 100 London school-children subjected to carbon-arc light through the winter as compared with control groups. Dr. J. T. Ingram, of Leeds, in a personal communication, said he had noticed that a certain number of patients who were being treated for lupus developed chilblains for the first time while taking calciferol.

Many writers believe that there is a tuberculous diathesis in chilblain sufferers, but Barber (1926) denies this. The past and present incidence of chilblains in 217 men suffering from tuberculosis and undergoing treatment in a sanatorium was found, on personal interview, to be 19.8%. In cases of pulmonary tuberculosis the incidence was 18.6% and in non-pulmonary 24.4%. Their ages ranged from 4 to 63 years. The slightly higher incidence in the non-pulmonary cases may be due to the fact that their average age was considerably less than the average age of the pulmonary cases and that their movements were more restricted. These figures do not, however, prove the relationship between tuberculosis and chilblains, for Winner and Cooper-Willis (1946) estimated that 50% of their sample of Service women (A.T.S.) will at one time or another have suffered from chilblains by the time they reach the age of 40.

It was not found possible to obtain any correlation between the observed peripheral circulation and the incidence of chilblains. Many patients with red congested hands and lowered bodily metabolism, as evidenced by undue intolerance to low temperatures, were found never to have suffered from chilblains. Neither was any relation discovered between patients who often suffered from "dead fingers"

and those who suffered from chilblains. A patient who had a severe degree of Raynaud's disease for two years before lumbar ganglionectomy had to be performed, and who complained of cold feet both summer and winter, never developed chilblains; and an old lady who refused insulin treatment for her diabetes and as a result developed gangrene of the toes of one foot remained free from chilblains.

Andrews (1946), on the other hand, claims that even moderate exposure may produce chilblains in people predisposed by poor peripheral circulation. Hallam (1931), however, found 14 patients with arteriosclerosis in his series of 1,275 cases, and none of them suffered from chilblains; he remarks that in Raynaud's disease chilblains are not commonly seen, and notes how seldom chilblains occur in the aged even when serious organic disease is present.

Pathology

The gross pathology of the chilblain lesion is a vasoconstriction of the subcutaneous arteries and larger arterioles associated with a vasodilatation of the superficial minute vessels.

Microscopically the lesion has been described by Hodara (1896), who found the skin vessels full of blood and dilated, with thickened walls. In the vessels there were hyaline masses of white blood cells without actual thrombosis; the cutis showed dense inflammatory infiltrations of round cells, in which plasma cells were absent, and oedema of the connective tissue. Kyrle (1915) confirmed these observations, and Gans (1925) found thrombi in late cases of chilblains with alteration of the endothelium; the stratum corneum was thickened and the stratum granulosum occasionally so. In the connective tissue there were proliferation of the connective tissue cells and a considerable perivascular infiltration of lymphocytes. Hallam (1931) claims that a histological examination in the early stages shows a rapid degeneration of the small vessels accompanied by perivascular infiltration: this is not a mere transudation of serum, as some writers state, but a sudden and severe damage affecting the vessels of the papillary layer of the cutis Diapedesis of red cells may also take place.

Pathogenesis

Many theories have been evolved to explain the pathology of the chilblain lesion. Harris, Lewis, and Vaughan (1929) think that cold urticaria is due to a dermolysin present in the blood which unites with the skin cells at low temperatures and lyses them on rewarming, setting free histamine; and Goldsmith (1936) suggests that this mechanism plays a part in the formation of chilblains. Unna (1896) maintains that there is a high degree of venous tone and a normal or very low arterial tone in perniosis; and Parrisius (1921) supposes that there is a spasm of the subcutaneous veins, as witness the slow return of blood to an anaemic spot caused by pressure on a perniotic area.

Lewis (1941) later elaborated his theory of the liberation of H-substance from the skin cells as a result of damage by cold; however, this theory does not seem to explain why severe degrees of cold may produce no lesion when moderate degrees cause chilblains in the same individual. It does not explain why persons who develop frost-bite do not at the same time develop chilblains, and it has been found impossible to produce chilblains experimentally by the injection of histamine or by the application of carbon dioxide snow. Simmons (1945) states that the spasm of the vessels in chilblains leads to suboxygenation of the tissues, which of itself gives rise to further vascular spasm; and Gellhorn (1943) points out that continued deficiency of oxygen supplies and blood stagnation increase capillary permeability and lead to dropsical exudations. Sequeira, Ingram, and Brain (1947) claim that erythema pernio is the outward sign of the inability of the skin, including its small blood vessels, to adapt itself to low temperature.

In an attempt to elucidate further the problem of the pathogenesis of chilblains I carried out certain experiments.

Present Investigation

It was noticed that considerable pressure with a glass slide on an established chilblain was necessary to cause blanching, and that on the release of pressure the colour was only slowly re-established. If the same experiment was carried out on the skin of a hand that had been immersed in water at 45° F. (7.2° C.) for three minutes it was found that blanching occurred readily, but that, as in the first experiment, the colour was only slowly re-established. Since in both cases the subcutaneous arteries were in spasm, as witness the coldness of the skin—for Krogh (1922) has shown that the skin temperature is dependent on the rate of blood flow—it follows that in the case of the chilblain there must have been interference with venous drainage. The veins draining the subpapillary venous plexus are thin-walled and pass through the corium in close relation to the collagen bundles, and it is not unreasonable to assume that oedema of the corium can cause pressure on and partial collapse of these veins. This mechanism may cause interference with the nutrition of the connective-tissue cells, with consequent cellular degeneration.

In another experiment the venous return from one hand was stopped by means of a tourniquet applied round the arm, and the hand was then immersed in cold water at 45° F. for six minutes: no cyanosis developed in the hand. With the tourniquet still in position the hand was then immersed in hot water at 115° F. (46.1° C.): cyanosis developed, and was well marked after four minutes. The hand was then returned to the cold water, with the tourniquet still in position, and it was noticed that the cyanosis started to disappear, and at the end of six minutes had been replaced by a bright-red colour. This experiment was repeated on three occasions with the same result. It was thus concluded that the cold had in some way caused a breakdown or dissociation of the carboxyhaemoglobin responsible for the cyanosis. This took place when the venous drainage from the part was occluded.

As has been shown, the venous drainage from a chilblain area is at least partially occluded and the skin temperature is initially very low; therefore it would seem that cold interferes with the formation or causes the breakdown of carboxyhaemoglobin and thus prevents the elimination of the waste products of cellular metabolism. It was felt that these waste products, if allowed to remain for any length of time in the tissue spaces or capillaries, would cause irritation and damage to the tissues resulting in the inflammatory reaction which has been shown to be the basis of the pathology of a chilblain. Several other experiments were done with this theory in mind, and further support was gained for it.

The nature of these waste products, or metabolites, is open to speculation, but they may well be the products of catabolism such as carbon dioxide and lactic acid, or they may be the products of incomplete anabolism such as oxaloacetic acid, fumaric acid, or succinic acid, because enzyme activity is either limited or arrested by cold and therefore the action of the dehydrogenases will be impaired.

One more experiment was performed: the arm and forearm were exsanguinated and a tourniquet applied to occlude both the arteries and the veins. The hand was then immersed in cold water at 45° F. for two minutes and the

tourniquet was then released. It was noticed that the colour returned to the fingers very much more slowly than in a control experiment with the hand in warm water. It was thus concluded that cold can cause spasm of the subcutaneous arteries without the intermediary of metabolites.

To sum up on the basis of this hypothesis it would appear that the pathogenesis of chilblains is the following:

Exposure to cold causes a vasoconstriction of the subcutaneous arteries and interference with cellular metabolism resulting in the formation of irritating metabolites. On warming the part, if the arterial spasm relaxes the metabolites are removed and no lesion supervenes. If, however, the arterial spasm does not relax within a reasonable time more metabolites are formed at the site because of the increase in cellular metabolism due to warming the part; this causes irritation, oedema of the corium, and thus interference with venous drainage, setting up a vicious circle and producing a chilblain. Thus a chilblain will result only when cold causes arterial spasm and there is an upset of the balance between vital cellular activity and venous drainage.

It is claimed that this theory explains the many and varied anomalies of chilblain production.

Treatment

The best treatment of chilblains is undoubtedly prevention, and to this end warm clothing should be worn, a certain amount of exercise taken, and a liberal diet provided.

The number of special measures advocated is legion, but in the main their object has been to improve the local circulation of the affected limbs. Jacquet and Debat (1914) advise raising the hands and actively flexing the fingers several times; McAll (1946), during his internment in China, came across a means of exercising the fingers by playing with two walnuts in the one hand. Bathing the affected parts in hot and cold water alternately has been recommended, and Whitfield (1921) suggests bathing the chilblains in a 5% salt solution at a temperature of 38° C. to relieve the irritation. Haxthausen (1930) has used carbon-arc light filtered through a water filter to exclude the non-luminous heat rays and has also applied carbon dioxide snow for short periods; Steimann (1926) used ethyl chloride locally; Grünbaum (1920) and Stein (1928) advise diathermy; and Henk (1926) recommends one-third of an erythema dose of *x* rays filtered through an aluminium filter. Price (1933) suggests massage, galvanic and faradic stimulation, and Spiethoff (1933) advises Grenz rays; Dore (1928), on the other hand, has tried arterial sympathectomy with unconvincing results. Stimulating ointments containing such substances as iodine, camphor, phenol, turpentine, and methyl salicylate have their advocates. Wigley (1946) advises dressing ulcerated chilblains with penicillin. Brack (1940) used dihydro-imidazole; Grossman (1926) advises the induction of artificial fever by means of "aolan" and "novoprotin." Dr. H. M. Walker, of Glaxo Laboratories, in a personal communication, claims that the value of vitamin D (5,000 units of calciferol and 5 mg. of calcium oleate per ml.) in the treatment of chilblains is not due to its calcium content but to the fact that it is a colloid suspension containing negatively charged colloids which have a specific stimulating action on the reticulo-endothelial system.

Herxheimer (1942) advocates a modification of Bier's method of passive congestion, and Simmons (1945) treated chilblain sufferers by means of a paravertebral sympathetic block using 20 ml. of a solution containing amethocaine 1/1,000 and adrenaline. Whitfield (1921) recommends nitroglycerin 1/200 gr. (0.32 mg.) and erythrol tetranitrate 1/50 gr. (1.3 mg.) thrice daily; Grove (1926) advises prophylactic injections of sodium cacodylate; Lefevre, Dubarry, and Halle (1942) treated 85 cases with intravenous fluorescein, and had to record failure in only 9.4%. Jausion, Somia, and Meunier (1941) used up to 600 mg. of nicotinamide daily in their treatment of chilblains; they administered it both orally and by injection, and by this method they claimed they could cure mild cases in one week, moderate cases in two weeks, and severe cases in three weeks. Watson (1941) injected each chilblain with 0.5 ml. of histamine; this caused an immediate and intense irritation locally, with subsequent alleviation.

Having observed the vasodilator action of nicotinic acid I decided to use it in the treatment of the cold congested hands and noses from which so many young children suffer in the winter; the results were dramatic. It was then decided in the winter of 1943–4 to attempt the treatment of chilblains, which has for so long been unsatisfactory in general practice, by the oral administration of nicotinic acid. The results were most gratifying, not one failure being recorded. In the following winter similar results were obtained, but it was felt that the weather had not been severe enough nor the chilblains bad enough to assess the real value of this treatment.

The winter of 1946–7 proved so severe and unremitting and the results so successful that it was decided to place this method of treatment on record. The basic dose of nicotinic acid administered was for an adult 50 mg. and for a child 25 mg. thrice daily immediately after meals; this tended to reduce the incidence of flushing, and no doubt caused a prolongation of the vasodilator action of the nicotinic acid. In severe cases the dose was increased, but in no case was it found necessary to give more than 300 mg. a day.

Relapse was common when the nicotinic acid was withdrawn, and advantage was taken of this fact to assess the value of the treatment. In eight patients who were asked to stop taking nicotinic acid as soon as their chilblains were cured or considerably improved, the chilblains returned but were promptly relieved by further treatment. Two patients who were cured by the administration of nicotinic acid were asked to stop treatment and to wait until the chilblains returned. They were then given nicotinamide in similar doses (the substitution was unknown to them), but no improvement resulted; they were then again treated with nicotinic acid with complete success.

It follows from this that it is of no prophylactic value to administer nicotinic acid for a long time before the advent of the chilblain season in an attempt to build up some sort of reserve. It also follows that nicotinic acid does not act primarily by virtue of its enzyme action, as the radical of coenzymes 1 and 2, otherwise nicotinamide, in similar doses should have effected as satisfactory a cure.

Presentation of Cases

The cases presented are unselected and consecutive, and were collected in the normal routine of general practice. Detailed notes were made of 27 cases so treated, of which 21 were female and 6 male. The incidence and distribution of chilblains in 15-year age groups for males and females is shown in Table I.

TABLE I.—*Incidence and Distribution of Chilblains*

Ages in Years	Female	Male	Hands	Feet	Hands and Feet
0–14	2	1	—	2	1
15–29	5	—	—	4	1
30–44	10	2	—	11	1
45–59	—	3	—	1	2
60–75	4	—	2	1	1

The results of treatment arranged in 15-year age groups is shown in Table II. Cases were considered to be improved if *all* subjective symptoms such as irritation and pain were

TABLE II.—*Results of Treatment*

Age in Years	Cured		Improved		No Difference	
	Female	Male	Female	Male	Female	Male
0–14	2	—	—	1	—	—
15–29	4	—	1	—	—	—
30–44	6	2	3	—	1	—
45–59	—	1	—	2	—	—
60–75	—	—	4	—	—	—
Total	12	3	8	3	1	—

abolished, but they were not counted as cures unless there was no evidence of chilblains on examination. Observations were made on results only during the severe weather.

Every patient was asked if this was the best treatment so far tried, and 26 responded in the affirmative; this gives a failure rate of only 3.7%. The one failure was a female telephonist aged 30, who suffered from very severe chilblains of the hands and feet. Her work may have militated against a cure. She was given only 150 mg. of nicotinic acid daily, and in the light of further experience it was felt that the dose should have been increased.

Four patients blamed a change in the weather, such as a thaw, for the onset of their chilblains; one blamed sitting still for a long time; two blamed sitting in front of a fire; sixteen blamed cold weather and frost; four blamed cold weather and damp. All but two said sitting in front of a fire made the chilblains worse. Fifteen were chronic sufferers and got chilblains practically every year; of these eight were cured and seven improved. Nine were sufferers for the first time: of these six were cured and three improved. The others were only occasional sufferers.

Two patients complained of occasional cracks at the corners of the mouth and one of a sore tongue, but it was difficult to relate these symptoms to a systemic deficiency of the vitamin B complex. Two patients noticed improvement after taking only 50 mg. of nicotinic acid; five noticed improvement after treatment for three days, ten after four days, six after seven days, and three were indefinite.

It is interesting to record that two patients found that they could tolerate the cold with much greater comfort during treatment; this may have been due to a "stoking up" of skin-cell metabolism resulting from the vasodilatation of the subcutaneous arteries.

Untoward effects noticed during treatment were of little significance and were only transitory: constipation was recorded in three cases, sleepiness in two, slight headache in two, and transient flushing and mild irritation of the skin in twelve.

Conclusions Regarding Treatment

On the basis of the action of nicotinic acid—namely, vasodilatation—it stands to reason that this treatment cannot be expected to benefit to any great extent chilblain sufferers who have pronounced arteriosclerosis or other condition of the peripheral circulation which interferes with the vasodilatation of the skin vessels. Nevertheless it is felt that nicotinic acid has a specific action on chilblains, and that the very vast majority of chilblain sufferers will benefit from this treatment.

Treatment should start as soon as the first sign of a chilblain makes its appearance and should be continued, possibly in reduced dosage, until the chilblain season has passed.

Summary

The problem of chilblains is discussed as regards their aetiology and pathogenesis. It is claimed that nicotinic acid, given orally, has a specific effect on chilblains. Twenty-seven cases are quoted to prove this, and it is suggested as the treatment of choice in general practice owing to its ease of administration and its freedom from serious untoward effects.

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HYPOTHALAMUS AND PITUITARY GLAND

WITH SPECIAL REFERENCE TO THE POSTERIOR PITUITARY AND LABOUR

BY

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Marañón (1947) reported the case of a woman who had diabetes insipidus with an associated uterine atony, and discussed the light that this and similar cases throw on the mechanism of labour. Two important facts emerge from a study of such cases: (1) that lesions of the hypothalamus or neurohypophysis which produce diabetes insipidus may also interfere with the mechanism of parturition, and (2) that similar lesions which produce interference with the secretion of the posterior lobe of the pituitary gland (as evidenced by the diabetes insipidus) do not necessarily interfere with the activity of the anterior lobe of the pituitary (as shown by normal menstrual cycles and pregnancy). It is felt that a summary of recent work dealing with these points may be of interest in view of Marañón's paper.

Anatomy of the Hypothalamico-hypophysial System

The Neurohypophysis (Posterior Pituitary Gland).—It is now generally recognized that the secretory tissue of the posterior pituitary exists in the median eminence of the tuber cinereum, in the infundibular stem, and in the infundibular process, all these parts being included by the term neurohypophysis (Fig. 1). The main anatomical connexion between the hypothalamus and neurohypophysis is a rich nervous pathway, of which the most important element is the supraoptico-hypophysial tract. There are also good grounds for belief in the existence of a tract from the paraventricular nucleus to the neurohypophysis. The origin and destination of the fibres in the tubero-hypophysial tract, situated in the posterior wall of the neural stalk, are unknown.

The Adenohypophysis (Anterior Pituitary Gland).—The adenohypophysis consists of the pars tuberalis, pars intermedia, and pars distalis (Fig. 1). These three structures

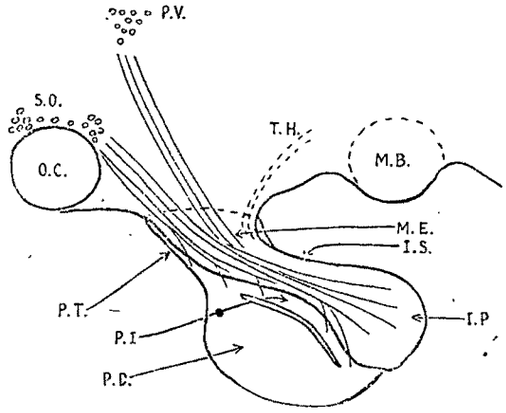

FIG. 1.—Diagram of a sagittal section through the pituitary and hypothalamus to illustrate the hypothalamic innervation of the pituitary gland. The neurohypophysis—which includes the median eminence (M.E.); infundibular stem (I.S.); and infundibular process (I.P.)—receives a rich innervation from the supraoptic nuclei (S.O.) and a supply from the paraventricular nuclei (P.V.). The tubero-hypophysial tract (T.H.) enters the dorsal or caudal wall of the tuber cinereum and infundibular stem. The three parts of the adenohypophysis are termed the pars distalis (P.D.), pars intermedia (P.I.), and pars tuberalis (P.T.). A few nerve fibres cross from the neurohypophysis to the adenohypophysis. O.C.=optic chiasma; M.B.=mammillary body.

receive only a meagre innervation, and there is no sound evidence that the few nerve fibres found in them are other than vasomotor to the hypophysial vessels.

Both the posterior and the anterior lobes of the pituitary possess a systemic blood supply from the internal carotid artery, the venous drainage being in both cases to the adjacent venous sinuses. The vascular fields of the infundibular process and the pars distalis are largely independent, the pars intermedia being relatively avascular. The pars distalis, however, has a rich vascular connexion with the median eminence in the form of a portal system of blood vessels (Fig. 2). These latter vessels were first described by Popa and Fielding (1930, 1933), and later by Wislocki and King (1936), and Green and Harris (1947). Small arterial twigs from the internal carotid arteries supply a rich vascular plexus between the pars tuberalis and median eminence. From this plexus "vascular tufts" or "sinusoidal loops" penetrate the median eminence over an area co-extensive with the pars tuberalis. These loops unite to form the wide trunks of the portal vessels which descend to the pars distalis and so drain into the typical sinusoids of this part of the gland. This vascular system has been found to exist in the rat, guinea-pig, rabbit, cat, dog, monkey, and man. Also, the porpoise, in which the infundibular process is separated from the pars distalis by a thick dural septum, possesses a typical hypophysial portal system (Harris, 1947b). Green (1947), in a careful study of the amphibian hypophysis, confirms the presence of hypophysial portal vessels in the frog and analogous vessels in

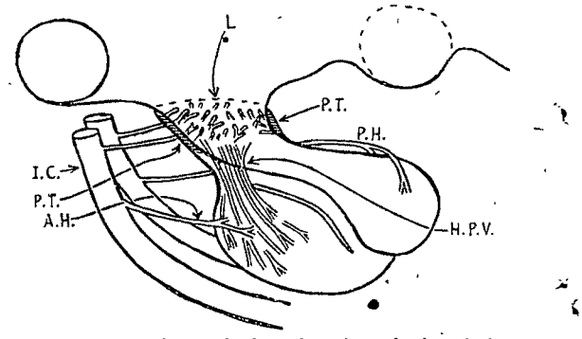

FIG. 2.—Diagram of a sagittal section through the pituitary and hypothalamus to illustrate the systemic arterial supply of the pituitary gland, and the hypophysial portal system. A.H. and P.H., the anterior and posterior hypophysial arteries; I.C., branches from the internal carotid arteries, supplying the pars distalis and infundibular process, respectively. Small twigs from the internal carotid arteries run to the pars tuberalis (P.T.) and supply a vascular plexus situated between this structure and the median eminence. From this plexus capillary sinusoids arise and penetrate the median eminence in the form of loops or tufts (L.). These capillaries unite into the large portal trunks (H.P.V.) and pass down into the pars distalis.

urodeles. Thus it may be said that these vessels are widely distributed amongst the vertebrates. All the evidence points to the direction of blood flow in these vessels being from the median eminence to the pars distalis. Since the pars tuberalis has no proved endocrine function, and since it bears a constant relationship to the upper set of capillaries of the portal vessels, it is suggested that the significance of this structure lies in the fact that it forms a bed for the vascular pathway from the median eminence to the pars distalis (Harris, 1947c).

Influence of the Nervous System over the Hypophysis

The hypothalamus undoubtedly influences the secretion of the posterior pituitary by means of the supraoptico-hypophysial tract, as first clearly shown by Fisher, Ingram, and Ranson (1938).

There is much evidence that nervous stimuli affect the activity of the anterior pituitary gland, and so indirectly, through the eutrophic hormones, other endocrine glands such as the gonads, thyroid, and adrenal cortex. In the experimental field Marshall (1942, 1947) has collected and summarized the evidence that external influences (exteroceptive factors) affect the reproductive rhythm of many birds and mammals by an action through the hypothalamus and anterior pituitary. Selye and McKeown (1934) uphold the view that suckling stimulates the anterior pituitary through reflex nervous pathways and so maintains milk secretion. Electrical stimulation of the hypothalamus has been shown to excite the anterior pituitary, as evidenced by the occurrence of ovulation in rabbits (Harris, 1937; Markee, Sawyer, and Hollinshead, 1946).

Clinically there are many observations that can be explained only by an action of the nervous system modifying anterior pituitary activity. Hypogonadism may be due to hypothalamic lesions. Hypertrophied genitalia (pubertas praecox) are also found associated with hypothalamic lesions, especially those situated caudal to the tuber cinereum. Weinberger and Grant (1941) suggest that this precocity is due to destruction of a posterior hypothalamic mechanism with release of an anterior hypothalamic innervation of the anterior pituitary. The effect of worry in causing menstrual irregularities, or diminution of milk flow in nursing women, is probably mediated by a nervous

influence over the anterior pituitary. The occurrence of psychic trauma in the history of patients showing endocrine disturbances is well known (Lichtwitz, 1942), and in this respect it is perhaps significant that hypothalamic lesions have been found in cases of thyroid dysfunction (Möschl, 1938) and diabetes mellitus (Vonderahe, 1937).

Since there is no sound evidence that secretomotor nerves to the testis, ovary, thyroid, adrenal cortex, or anterior pituitary gland exist, the most likely explanation of the above and other examples of neural influences over the endocrine glands is that the hypothalamus regulates the activity of the adenohypophysis by vascular transmission of stimuli through the hypophysial portal vessels, as suggested by Harris (1944) and by Green and Harris (1947). The activity of the other glands of internal secretion would then be brought indirectly under neural control through the intermediation of the pituitary. The upper set of capillaries of the portal vessels are situated deeply in the median eminence, some penetrating to the ependymal lining of the third ventricle. In this region the capillary sinusoids are intimately related to a multitude of nerve fibres from the hypothalamus, and the possibility certainly exists that the hypothalamus could excite or inhibit the activity of the anterior pituitary by liberating some chemotransmitter into the portal vessels and so into the sinusoids of the anterior pituitary. At the present time the evidence regarding this hypothesis is indirect but substantial. Further information with respect to the state of the hypophysial portal vessels in cases of pituitary dysfunction in man would be of much value. It may be mentioned that these vessels are particularly obvious in human material.

The Posterior Pituitary and Labour

Many workers have found that simple hypophysectomy (leaving the upper end of the neural stalk and median eminence *in situ*) does not necessarily lead to dystocia, and for this reason it was believed that the oxytocic extract obtainable from the posterior pituitary gland was of pharmacological interest only. Fisher, Magoun, and Ranson (1938) and Dey, Fisher, and Ranson (1941) found, however, that a large proportion of cats and guinea-pigs suffering from experimental diabetes insipidus had a prolonged labour or delivered their young dead. Similar results have been found by Smith (1946), working on monkeys. Previous work was criticized by Fisher, Magoun, and Ranson (1938) on the grounds that most workers had failed (*a*) to control the complete removal of the neurohypophysis, including the median eminence, (*b*) to control the presence of some normally secreting anterior-lobe tissue, and (*c*) to record the details of labour such as the type and duration of the different stages. Several cases are on record of prolonged labour in women suffering from diabetes insipidus (see Marañón, 1947). However, the evidence is not entirely clear-cut, for both in animals (Dey, Fisher, and Ranson, 1941) and in man (Dandy, 1940) normal labour has been reported in spite of a concurrent state of diabetes.

Haterius and Ferguson (1938) and Ferguson (1941) have shown that stimulation of the pituitary stalk in anaesthetized post-partum rabbits and cats produced an increase in uterine activity even though all the structures in the neck except the internal carotid arteries, jugular veins, and a flap of skin had been crushed. Ferguson (1941) also described a reflex secretion of oxytocic substance from the infundibular process following distension of various parts of the reproductive canal in rabbits, and suggested that such reflexes play a part in the normal labour. Harris (1944, 1947a) has shown that stimulation of the supraoptico-hypophysial tract in unanaesthetized rabbits produces a marked increase in uterine activity. Stimulation was performed by inducing the stimuli through the intact skin into a previously implanted coil, an insulated lead being taken from the coil to the site stimulated. The spread of stimulus was not more than 0.5 mm. The uterine reactions were recorded from a chronic vaginal fistula, and in many cases the sensitivity of the uterus was standardized by ovariectomy and the implantation of a tablet of stilboestrol di-*n*-butyrate. In these experiments the response of the oestrous, or oestrogenized, uterus could be graded at will by varying the intensity of the stimulus, though the response to similar stimuli applied to the oestrogenized rabbits was found to be very constant from day to day. The oxytocic reaction to stimulation could be closely duplicated by intravenous administration of 200-500 mU. of posterior-lobe extracts, especially extracts relatively low in pressor activity. Stimulation or injection of extracts had little effect on the activity of the anoestrous or pseudo-pregnant uterus, or on the organ under the influence of progesterone. From experiments using this (remote control) method of stimulation has accumulated much evidence that the substance secreted from the rabbit's pituitary is richer in oxytocic, relative to pressor, activity than various standard whole posterior pituitary extracts. For example, the uterine response to the injection of whole pituitary extract consists of a stage of increased activity followed by a variable stage of inhibition. This latter effect is probably the result of the pressor fraction causing constriction of the uterine blood vessels and ischaemia of the uterine musculature. The inhibitory pause in the uterine response to stimulation of the supraoptico-hypophysial tract is short-lived, and is lacking in the response to injection of the purified oxytocic fraction. Thus it would seem the secretion elicited by stimulation of the neurohypophysis possesses (relative to oxytocic content) less pressor activity than whole extracts and more than purified oxytocic extracts.

It may be concluded, then, that evidence is accumulating for the physiological role of the posterior pituitary in labour. It might be suggested, from the results of animal experimentation, that in replacement therapy during labour the purified oxytocic fraction be used instead of whole posterior-lobe extracts. However, more direct evidence on the reactions of the human uterus *in situ* to such extracts is desirable.

It is of interest that stimulation of the neural stalk in rabbits also produces inhibition of a water diuresis, increase in urinary chloride, and an increase in intestinal peristalsis, though no change is obtained in the level of the blood sugar and only slight rises in blood pressure (Harris, 1947a, 1947d).

Conclusions and Summary

The relationship between the hypothalamus and the pituitary gland is reviewed.

There is much evidence that the hypothalamus controls the secretion of both the anterior and the posterior lobes of the pituitary gland. The mechanism whereby control of the anterior lobe is exerted is probably by means of a humoral relay through the hypophysial portal vessels. Nervous regulation of the anterior pituitary brings the testis, ovary, thyroid, and adrenal cortex indirectly under nervous control via the mediation of the pituitary eutrophic hormones. This offers an explanation of various endocrine disturbances (pubertas praecox and others) associated with psychic trauma or lesions at the base of the brain. The activity of the posterior pituitary is regulated largely by the supraoptico-hypophysial tract. Evidence is accumulating that this mechanism plays a physiological part in labour, and attention is drawn to the reflexes described by Ferguson. Results obtained by stimulating the pituitary stalk in animals suggests that the secretion of the posterior lobe contains less pressor activity than whole posterior pituitary extracts. It is suggested that replacement therapy for cases

of uterine atony associated with diabetes insipidus can best be performed by use of the purified oxytocic fraction.

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DISORDERS OF THE NERVOUS SYSTEM DUE TO MALNUTRITION*

BY

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Considerable and new interest has been aroused in nutritional disorders of the nervous system as a result of their high incidence among prisoners of war in the Near and Far East. These disorders have of course been recognized for a long time by those familiar with deficiency diseases occurring among more primitive peoples. My own observations began nearly forty years ago.

Three Important Points

If series of these cases showing symptoms of nervous disorder be observed, it becomes apparent that there may be a disturbance in each and every *sensory* function of the body without the *motor* system being involved. This is the first point of importance. Thus it is possible to distinguish syndromes correlated with the functions of vision, hearing, taste, and smell, with joint, muscle, positional, and vibration sense, with temperature sense, and with tactile sensibility. This group of syndromes, like all symptom-complexes, may be more or less complete or incomplete in any individual. The factors which determine their several incidences are not known; it is not known why some individuals develop symptoms and others under the same conditions manifest none.

The second point of importance is the fact that if the symptoms, more especially the early symptoms, in each syndrome be studied they will be found to be of the same order; they are homologous, though naturally they differ according to the sensory function under consideration. These symptoms consist of disorders of perception, with what might be called distortion. Though they may be of short duration pointing to a lesion which is reversible, there is a tendency towards complete failure of function.

*A short communication read at a discussion in the Neurological Section of the International Conference of Physicians.

In each syndrome—whether the disturbance be of the visual, auditory, or tactile function, for example—there may be noted considerable variations in rate of onset and rate of progress, in intensity, in intermission and remission, and in the final stage reached.

The patient who later develops amblyopia with a persisting central scotoma may complain of loss of vision for short periods lasting from a few minutes to half an hour: objects may come into focus and then disappear again: some part of an object may seem to be missing; print appears blurred as if seen through a curtain; there is difficulty in recognizing persons and objects; complaint is made of shimmering and spots before the eyes, of flickering of images, and of rings and haloes about lights, reminiscent of migraine.

The otoneurological manifestations are of similar character though often dismissed by observers with a reference to loss of acuity of hearing. There may, however, be loss of tonal differentiation: the patient can no longer understand wireless music; he may fail to understand the human voice against a background of other sounds.

Tinnitus and vertigo are common; dizziness may come on in attacks lasting a few minutes to several days and may or may not be accompanied by nausea, vomiting, tinnitus, and headache. Vestibular hyperexcitability may be demonstrated in a large proportion of cases, as noted by De Raadt, the only observer to investigate the otoneurological syndrome fully. He points out that, though this and other symptoms may be of peripheral origin in initial stages, they are essentially central symptoms.

Thirdly, consider the disturbances of tactile and pain sensibility: the patient may complain of all manner of paraesthesiae or dysaesthesiae—pins-and-needles, tingling, pricking, formication, aching, burning or shooting pains, a sensation of wetness—there may be hyperaesthesia to touch and pin-prick, followed by numbness, hypoaesthesia, or anaesthesia, characteristically patchy in distribution, incomplete, and changeable. This intermittency and variability is equally characteristic of the ataxia, hypotonia, incoordination, and Rombergism at the onset, though of course there are no accompanying subjective symptoms. To this group of syndromes must also be added mental apathy, mild depression, loss of memory, loss of emotional control, and mental deterioration.

The character of the symptoms in this group of syndromes seems to suggest a widespread disturbance of function in the cortex, both cerebral and cerebellar, and probably in subcortical nuclei. The disturbance at the onset is variable and intermittent, therefore the cause must be reversible, a fact which, it is again suggested, could be explained only by some disorder of metabolism, a disorder of the vascular system, or both.

Dietary Deficiency

That this group of syndromes is associated with malnutrition there can be no doubt. So-called toxic agents can be ruled out, though the possible action of an antivitamin must not be lost sight of. Epidemiological studies show that the prevailing dietary deficiency in all cases is one of protein and the B group vitamins, with a relative excess of carbohydrate.

Without going into details it is possible to exclude vitamins A and C as the factors in causation. Similarly thiamin and nicotinic acid may be disregarded, for though these syndromes may be present in the subjects of beriberi and pellagra they are not due to deficiency of either of these vitamins. There remain the other members of the vitamin B_2 complex to be considered. The association of these syndromes with signs of riboflavin deficiency is very

close and, it is suggested, significant; pantothenic acid and pyridoxin, closely correlated with riboflavin, might also be implicated, but for the purposes of my argument I am going to assume for the moment that a riboflavin deficiency is the cause of the condition under consideration.

The brain derives its energy solely by the metabolism of glucose. It is suggested that the initial biochemical lesion consists in a partial failure of glucose breakdown at the link between the anaerobic dehydrogenase system and the aerobic cytochrome/cytochrome oxidase system which is formed by an enzyme into which riboflavin enters as co-enzyme. In other words, there is produced a condition of anoxia or hypoxia. This of course is generalized, but only those nervous elements with a high metabolic rate, and therefore the more vulnerable, suffer as a result of this partial oxygen deprivation.

If this assumption be correct it becomes at once apparent why only the sensory side of the central nervous system is affected, for it has been shown that the oxygen consumption of the sensory nuclei is far greater than that of the motor nuclei.

The researches of Gasser (1937), Dunning and Wolff (1937), and Craigie (1939) have demonstrated, in animals, that the oxygen consumption of the grey matter of the central nervous system is very much greater than that of the white matter, that the blood supply—i.e., the number of capillaries present ("capillarity")—is proportional, but that the oxygen consumption of the grey matter is not due to the richness in cellular elements but to the neuropile (Gasser uses the word "neurophil") or mass of fine protoplasmic strands contributed by dendrites, terminal axon arborizations, and other synaptic structures.

Those areas with a high degree of capillarity and high metabolic rate include the cochlear and vestibular nuclei, Deiters's nucleus, the granular layer of the cerebellar cortex, the second layer of the occipital cortex, followed in descending order by parietal, temporal, pre-central, and insular cortices.

Conclusion

Briefly these are the arguments put forward in support of a thesis which suggests that the group of syndromes under consideration are due to failure in the metabolism of glucose in the neuropile of those areas of the central nervous system which have a high metabolic rate, in turn caused by hypoxia induced by hyporiboflavinosis and/or a deficiency of other closely associated members of the vitamin B_2 complex.

There is also some evidence that a disorder of the capillary bed (capillary dysérgia) is caused by a deficiency of riboflavin coincident with the affection of the nervous tissue.

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The Minister of Health states that the following agreement has been reached between representatives of the British Medical Association, of the Associations of Local Authorities, and of the London County Council: "That for the period from July 1, 1947, until the appointed day for the purposes of the National Health Service Act, 1946, or, if new scales have not then been agreed, until the date of operation of any new scales, whichever be the later, there should be substituted for the percentages mentioned in paragraph 1 of the Interim Revision of the Askwith Memorandum agreed to at the conference held at the Ministry of Health on March 26, 1946—viz., 30, 20, and 10 respectively—the percentages of 35, 30, and 25 respectively, this substitution to include the substitution of 25% for 10% in the last line of subparagraph 1 (*a*)."

The Minister understands that this modification has been accepted by all parties to the Askwith agreement, and it is being circulated to local authorities by the Minister at their request.

AN IMPROVED DIRECT COAGULASE TEST FOR THE RAPID DETECTION OF STAPHYLOCOCCUS AUREUS

BY

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AND

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As a preliminary to penicillin therapy a method has been suggested for the rapid detection of *Staphylococcus aureus* (*pyogenes*) which consists in adding the material to be investigated (pus or fluid squeezed from a swab) direct to citrated or oxalated plasma (Lominski and Grossfeld, 1944). Coagulation of the plasma indicates the presence of the organism. Positive reactions develop at 37° C. within several hours (occasionally in 20 minutes), thus being available before the results of cultures; they may also be obtained where staphylococci are too scanty to be detected in smears of the material. The reliability of the test was controlled both by culture and by the coagulase test carried out with the isolated strain. However, in the course of extended routine observations doubt arose regarding the advisability of the use of citrated plasma for coagulase tests in general, since it was found that such plasma may be clotted under certain conditions by organisms other than staphylococci. The use of heparinated plasma, on the other hand, was found to exclude this fallacy. (A detailed account of the mechanism involved, which is entirely different from that of staphylococcal coagulase, will be published elsewhere by E. M. Harper and N. S. Conway.)

Accordingly, the original method has been modified as follows: to 1 volume of citrated plasma are added 3 volumes of saline, 1 volume of meat extract broth, and heparin in such amount that 1 ml. of the mixture contains 2 to 5 Toronto units. Heparin serves the purpose of assuring the specificity of the test, while the addition of broth provides better growth conditions for staphylococci. Excess of broth must be avoided, as it favours rapid liquefaction of the coagulum and thus makes the test difficult to read overnight.

The modified direct coagulase test here described has so far proved very sensitive and highly specific, and its diagnostic value equals that of the ordinary coagulase test carried out with pure strains of staphylococci. Thus, over the last three years the reliability of this modified test has been confirmed in several thousand cases controlled by culture and the ordinary coagulase reaction with the pure strain. Where *Staphylococcus aureus* was present the results were positive in almost 95% of cases; in no instance was a fallacious positive result obtained in the absence of the organism.

The presence of other organisms does not, as a rule, prevent a positive reaction, but early reading of the test is essential, since a coagulum which forms within several hours may liquefy later owing to the presence of proteolytic bacteria. It should be added that the final test with a pure strain of staphylococcus-like Gram-positive cocci ought also to be carried out in heparinated plasma.

We are indebted to the Rankin Medical Research Fund for a grant toward the expenses of the work.

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Medical Memoranda

An Unusual Case of Intestinal Obstruction

The following case is worth recording because of the unusual cause of the obstruction.

CASE HISTORY

A man aged 64 was admitted on the evening of Oct. 2, 1947, with colicky abdominal pains and vomiting of 24 hours' duration. On the morning of admission he had taken castor oil, with considerable aggravation of the pains, though these had become much easier by the time he was admitted. Bowels were opened normally on the day before admission. Urinary history was normal. Twelve days previously there had been attacks of colicky abdominal pain which had subsided spontaneously after 48 hours. There were no previous operations.

On admission his general condition was fair, with tongue moist but slightly furred. Heart and chest, clear. There was no distension of the abdomen or guarding, and no tumour was palpable. Rectal examination revealed soft faeces and a moderately enlarged prostate. An enema yielded a good result and he felt much relieved. There had been no vomiting since admission, and it was decided to leave the patient under observation for the night.

When I saw him the following morning he stated that he had spent a restless night owing to attacks of mild colicky pain, had passed no flatus, and had felt nauseated though he had not vomited. Examination revealed noticeable fetor and a dry coated tongue. The abdomen showed slight distension with shifting dullness in both flanks. No guarding or tumour was found. Auscultation revealed peristalsis to be present—not unduly increased, but louder and harsher than normal. Laparotomy was decided on.

Intravenous fluids were started, and under general anaesthesia the abdomen was opened through a right rectus-splitting incision. There was much clear free fluid in the peritoneum, and congested and dilated small gut presented. The caecum was found to be collapsed, and on further exploration a thick fibrous band was encountered running from the region of the transverse mesocolon to the posterior abdominal wall of the right iliac fossa. Kinked round this band was a huge Meckel's diverticulum the diameter of the dilated small gut and 3 in. (7.5 cm.) in length. Division of the band immediately relieved the obstruction, and it was found that this band had produced a well-marked constriction immediately distal to the diverticulum. Some of the contents of the dilated bowel were "milked" into the caecum and the abdomen was then closed.

The patient's general condition was so good that the intravenous therapy was stopped. He spent a fair night and there was a spontaneous bowel action early the following morning, but he collapsed later in the morning with circulatory failure. Intravenous fluids were restarted and 2 pints (1.14 litres) of plasma were given rapidly and then 1 pint (0.57 litre) more slowly. There was considerable improvement in the pulse and colour, and the air hunger was abolished. A blood pressure of below 60 was raised to a steady 84/64. This improvement was maintained throughout the day, but he collapsed again in the early hours of the following morning, Oct. 5, and died at 5.45 a.m. During the last 19 hours of life he had had over 12 pints (6.82 litres) of intravenous fluids, and at no time did the lungs show signs of oedema or congestion.

I wish to thank Mr. J. E. Piercey, medical superintendent, for advice and helpful criticism and for permission to publish.

M. J. LANGE, F.R.C.S.Ed.,
Supernumerary Surgeon,
New End Hospital, Hampstead.

Severe Oedema of the Vulva in Labour

This case illustrates the conservative treatment of severe oedema of the vulva in labour, in contradistinction to treatment by caesarean section, as advocated by Bush (*British Medical Journal*, 1946, **2**, 988).

CASE REPORT

Mrs. G., a primigravida aged 25, reported on July 26, 1946, as a new case at the West Middlesex County Hospital's antenatal clinic. She gave no history of disease. Her last menstrual period began on April 23, and her expected date of delivery was Jan. 30, 1947. She felt well, and had no complaints. A general medical examination revealed nothing abnormal. Her blood pressure was 120/70, her ankles were not oedematous, and there was no albuminuria.

She attended the antenatal clinic every month, and nothing abnormal was noted until Nov. 25 (31 weeks), when she complained of some oedema of the ankles and vulva. On examination her general condition was good. There was some oedema of the ankles and fingers, and a slight degree of oedema of the vulva. The height of the fundus was 32 weeks; the presentation was by the vertex, position R.O.L.; the head was floating, and the foetal heart was heard. The blood pressure was 156/100, and the urine contained nothing abnormal.

She was admitted to the antenatal ward. Treatment consisted of rest in bed, with a low-salt diet. Fluids were not restricted. The blood pressure was taken four-hourly, and her fluid intake and output were recorded. Next day the oedema of the ankles and fingers was less, but the oedema of the vulva had increased. The blood pressure averaged 140/88, and the urine contained no albumin. Renal-function tests carried out at this time revealed good concentration of urea, with a satisfactory output. The blood urea was 32 mg. per 100 ml.

Conservative treatment was continued during December. The blood pressure remained in the region of 135/90 and the urine clear, except on Dec. 24, 25, and 26, when a faint trace of albumin was found. This was measured as 0.25 g. in an Esbach tube. During December the patient felt well and the oedema of hands and feet disappeared. Oedema of the vulva increased during the first ten days in hospital, and then started to decrease, the right side of the vulva decreasing more rapidly than the left. By Dec. 23 the improvement in the oedema of vulva ceased, leaving a slight residual amount.

On Jan. 7, 1947 (37 weeks), oedema of the vulva began to increase again. The patient still felt well. The fundus of the uterus was equivalent to 37 weeks; the presentation was by the vertex, position R.O.L.; the head was engaged. The blood pressure was 140/90, and the urine contained albumin—0.25 g. in an Esbach tube.

FIG. 1.—Showing oedema of the vulva four days before delivery.

On Jan. 13 (38 weeks) oedema of the vulva reached the stage seen in Fig. 1. The blood pressure was 140/90; the urine contained albumin—1.5 g. in an Esbach tube.

Owing to the steady increase in the severity of the pre-eclamptic toxaemia and the rapid return of oedema of the vulva, surgical induction of labour was decided upon. At 6.30 p.m. on Jan. 13, with the patient under a general anaesthetic, the membranes were ruptured after they had been swept from the lower uterine segment. Labour began next day and progressed very slowly until the 17th, when, at 9.30 a.m., meconium-stained liquor was being passed from the vagina. The uterine contractions were infrequent and the foetal heart was irregular during contractions. An examination per vaginam revealed that the cervix was fully dilated and the head low in the pelvic cavity. A forceps delivery was decided upon because of foetal distress. The patient was anaesthetized.

By separating the labia majora with one hand it was easy to insert the examining fingers into the vagina. The head was found to be lying in the R.O.P. position, and attempts at manual rotation only turned the head to the R.O.L. position. Kjelland's forceps were applied and the head rotated. Traction was then made through the forceps, and as the head came on to the perineum the oedematous labia fell apart, revealing a normal perineal body. A lateral episiotomy was performed and the head delivered. The delivery of the child was then completed. The episiotomy was repaired with a continuous catgut suture into the vaginal epithelium and six deep silkworm-gut sutures. The third stage was normal. The infant weighed 7 lb. 6 oz. (3.35 kg.) at birth. It was limp after delivery, but soon recovered.

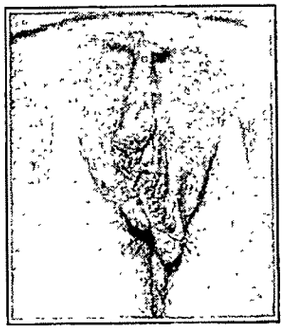


FIG. 2.—Showing the vulva 14 days after delivery.

During the puerperium oedema of the vulva gradually subsided, and by Jan. 30 it had disappeared, and the episiotomy incision had healed, as seen in Fig. 2. During this period the urine contained no albumin and the blood pressure fell to an average of 130/80. The patient was discharged from hospital on Feb. 9, the baby being fully breast-fed and weighing 6 lb. 12 oz. (3.06 kg.).

The patient has been seen twice at the postnatal clinic, and was very well. The blood pressure at the last visit was 160/80. The infant was satisfactory.

I wish to thank Mr. D. M. Stern for permission to publish this case.

S. L. TOWNSEND, F.R.C.S.Ed., M.R.C.O.G.

Reviews

CURARE

Curare. Its History, Nature, and Clinical Use. By A. R. McIntyre, Ph.D., M.D. (Pp. 240; illustrated. 27s. 6d.) Chicago: The University of Chicago Press. London: Cambridge University Press. 1947.

The clinical applications of curare have aroused widespread interest in recent years, and a monograph on this drug will therefore be welcomed. The author of this book, Prof. A. R. McIntyre, is Professor of Physiology and Pharmacology in the University of Nebraska and a recognized authority on curare, having been largely responsible for the introduction of standardized extracts into clinical practice. He begins the book with a fascinating account of the adventures in South America from the sixteenth century onwards of the first European explorers to see the effects of arrows poisoned with curare. He then discusses the botanical characters of the plants used to make the poison and the chemical properties of the active principles, of which tubocurarine is the best known. This alkaloid is easily made available in the pure state, and its exact chemical structure was established by the careful work of Dr. Harold King in 1935. Some samples of curare, however, contain more active substances, such as toxiferin, and may contain various other poisons with quite different actions. Confusion has arisen in the past because curare has been regarded as a single drug, and those who have used it have not realized that all specimens are not alike and have not taken care to state the exact nature of their material.

Prof. McIntyre describes the early pharmacological studies of curare which culminated in the beautifully simple experiments of Claude Bernard in 1857, which proved that curare inhibits the transmission of impulses from motor nerves to voluntary muscle. This is undoubtedly the chief action of the drug, and the most important fact known about it was established in 1930 by Dale, Feldberg, and Vogt, who showed that when a muscle is paralysed by curare the nerve continues to liberate acetylcholine, which is prevented from having its normal effect on the muscle. Prof. McIntyre reviews much other work devoted to the problem of how this happens but does not succeed in presenting a clear picture of the results. He emphasizes that curare has actions on other parts of the body, and particularly on the central nervous system, and he ends the book with a history of the clinical uses of the drug. Its use in medicine was first suggested in 1811, but actual trials were not made until 1858. During the second half of the nineteenth century curare was administered in the treatment of tetanus, epilepsy, chorea, and hydrophobia, but progress was impeded by the variability of samples. In modern times interest was stimulated by the enthusiasm of West in 1931–5. In 1938 A. E. Bennett, at the suggestion of Prof. McIntyre, used curare in conjunction with shock therapy, and in 1942 Griffith and Johnson used it to secure relaxation in anaesthesia. Prof. McIntyre reviews all this work in the monograph before us and includes a bibliography of over 1,300 items. It will be a standard work.

J. H. GADDUM.

SURGICAL TREATMENT

Textbook of Surgical Treatment, Including Operative Surgery. Third edition. Edited by C. F. W. Illingworth, M.D., Ch.M., F.R.C.S.Ed. Compiled by 21 contributors. (Pp. 644; illustrated. 32s. 6d.) Edinburgh: E. and S. Livingstone. 1947.

It might be interesting to listen to a round-table discussion by students on the relative merits of books by one and by several authors. There is little doubt that there would be considerable difference of opinion, for each case has its special merits and defects. In any case, this textbook by 21 contributors has already found favour, for this is the third edition to appear within four years. It undoubtedly provides what is difficult to obtain elsewhere—a conspectus of the main outlines of surgical treatment.

Several new sections have been added to this edition. There is a useful chapter on the indications for and the methods of using penicillin. Its author is wise in stating that "the findings to date . . . cannot be taken as final," for even since he wrote our knowledge has advanced in several particulars. Facio-maxillary injuries are competently discussed, but we think that a few words on the methods of grafting an ununited fracture of the mandible might with advantage be inserted. In a book where such a wide field of knowledge is covered there are sure to be some gaps. The index is not quite full enough. We could not find there any mention of acute dilatation of the stomach, the thymus, actinomycosis, or Meckel's diverticulum. The first two do not appear to be mentioned in the text. Actinomycosis is considered in the chapter on penicillin but is not mentioned in the section on the face and neck. In the section on sigmoid volvulus the surgeon is warned not to bring the distended colon outside the abdomen, "as without the support of the abdominal wall it may rupture"; the alternative method of making a large incision and quickly bringing the whole coil outside the abdomen might be mentioned, for it allows the volvulus to be untwisted without any need for puncture. Since this book is intended for senior students we think it would be helpful if after each section there were added a short list of references to the most authoritative writings on that subject.

V. ZACHARY COPE.

MEDICINE FOR PATIENTS

The Art is Long. By William Edwards, M.D. With foreword by the Rt. Hon. Lord Horder. (Pp. 160. 10s. 6d.) London: Andrew Melrose, Ltd. 1947.

The Doctor's Job. By Carl Binger, M.D. (Pp. 244. 12s. 6d.) London: George Allen and Unwin, Ltd.

The author of the first of these books sets out to describe for the layman the work of every type of doctor. The medical student, the hospital resident, the family doctor in varied practice, the public health officers, the Service doctors, the specialists, and many others will find that Dr. Edwards has adequately described their work. He has thereby done a useful public relations job for the medical profession. There is little here that will be new to medical readers, but many a patient, bemused by the complexity of modern medicine, will find the answer to his questions. The family doctor, when he has read these lively essays in portraiture, would find a useful place for this book on his waiting-room table.

While both these books are ostensibly written for the layman, Dr. Edwards's book exactly fits its purpose; Dr. Carl Binger, excellent though his book is, seeks two audiences and therefore fails to find either. His chapters on fees, on the choice of a doctor, and on the achievements of medicine are sound exposition for intelligent patients, but there are other chapters whose appeal should be directly to doctors and where, with the layman out of the room, the discussion could have proceeded with sober and scientific caution. For Dr. Binger writes like a man of judgment and he brings to his especial interest, which is the application of the Freudian code to the aetiological and therapeutic problems of internal medicine, unusual qualities. This book of his suggests that he could write an important book which would help to answer the urgent question, Granted that there are psychosomatic diseases, how much of each of them is related to a psychogenic factor and how much to a constitutional pattern? And what results may be expected from the application of a psycho-analytical technique to such diseases as duodenal ulcer, ulcerative colitis, and the allergic disorders?

Dr. Edwards describes the work of only sixteen specialists, but Dr. Binger tells us that the American Medical Association recognizes twenty-six specialties—and obviously the quiver is not yet full. In fact, Dr. Binger's first-rate book might well be interpreted as a demand for the recognition of one more specialty—psychosomatic medicine—in spite of his expressed denial of such an intention. Those who have followed the American literature on psychosomatic medicine written by himself and by Cobb, Alexander, French, Weiss, Wolff, Dunbar, and others are not likely to agree with Binger that it is possible for one man to practise both internal medicine and psychotherapy. The investigation of psychosomatic problems appears to lead directly towards the higher flights of psychiatry—to the uncovering of deeply unconscious mechanisms—as indeed might be expected when one considers that tensions which are

mediated along autonomic pathways to produce organic disease must result from profound affective inhibition associated with as yet unrecognized constitutional factors. This is surely work for the physician wholly devoted to such psychotherapeutic problems—a psychotherapist who should be neither alienist nor internist.

Carl Binger concludes with an interesting discussion on the prospects of socialized medicine in the U.S.A. He states that 80% of American families—i.e., with incomes of 3,000 dollars or under—cannot now afford to meet the full cost of medical care. Such facts impel him to the conclusion that some form of socialized medicine, such as contributory health schemes organized by individual States, is inevitable. He also writes: "The public is hardly yet aware that the general practitioner's day is passing and that he is being replaced not by the high-priced specialist but by the internist, who should be the primary counsellor in all illness." Some of us in Britain hope that the general practitioner will, given reasonable facilities, become the general physician (the internist) of the future.

D. V. HUBBLE.

UROLOGY IN WOMEN

L'Urologia nella Donna. By Luigi Caporale. Second edition. (Pp. 366. No price given.) Torino: Edizioni Minerva Medica S.A. (Via Martiri della Liberta, 15).

This is the second edition of a book on urology in women. The author gives a full account of the anatomy and the diseases and disorders of the female urinary tract from the kidney to the urethra, including an account also of the methods by which the functions of the various organs can be investigated. He stresses, as one would expect a professor of urology to do, the urological rather than the gynaecological aspects. In fact his discussion of the obstetrical and gynaecological disorders which have urinary complications is rather meagre. The description of the kidney in toxaemia of pregnancy which he describes as nephrosis of pregnancy, is far from up to date, and he does not mention the vascular lesions that are now regarded as of primary importance in the disease. He describes elaborately the technique of nephropexy, an operation that is at any rate temporarily out of favour in Britain. The section on pyelitis in pregnancy is adequate, though he seems to stress unduly treatment with diuretics and vaccines instead of the more modern chemotherapeutic methods. His account of the latter is by no means full enough, since he hardly considers the bacteriological aspect and omits to mention the choice and dosage of the various agents.

The best section is that on the bladder, where he discusses conditions such as cystitis and the tumours of the bladder. He describes various methods of operative treatment for urinary incontinence in women, but gives no account of the new fascial sling operations such as those devised by Aldridge and by Millin, which are now tending to replace muscle grafting and the older methods. The book is well produced and the illustrations are good. With the exception of omitting to mention certain very recent advances already referred to, the author presents a clear, well-written, and full account of the subject.

JOSEPHINE BARNES.

We again welcome that dermatological "best-seller" *Common Skin Diseases*, by A. C. Roxburgh (eighth edition, published by H. K. Lewis at 21s.). Eight editions in sixteen years—few medical books can show such a record. Where students and doctors have given so decisive a verdict there is no need for additional panegyric. In the present edition the author maintains all the characteristics of its predecessors, but with a few more pages, a few more illustrations, and a slight increase in price, which remains moderate by modern standards. Last year it was translated into French, and we wish the best of luck to that enterprise.

The fourth edition of Dr. Thorpe's well-known *Biochemistry for Medical Students* (18s., J. and A. Churchill) is of the same high quality as the previous edition. Although he has added a new chapter, "The Use of Isotopes in Biochemical Investigations," and has rewritten many of the sections, the size of the book has been increased by only 20 pages. This testifies to the soundness of the general plan of the work as well as to the author's determination to keep the text within reasonable limits—an achievement that medical students, for whom the book is primarily designed, will appreciate.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

The Nursing of Tuberculosis. By O. V. Buxton, S.R.N., and P. M. Macculloch Mackay, S.R.M.N. (Pp. 124. 7s. 6d.) Bristol: John Wright. 1947.

A manual intended for nurses and student nurses.

Penicillin in Syphilis. By J. E. Moore, M.D. (Pp. 319. 27s. 6d.) Oxford: Blackwell Scientific Publications. 1947.

After discussing the pharmacology of penicillin and some experimental investigations, the author describes its use in the treatment of syphilis.

Psychiatric Examination of the School Child. By Muriel Barton Hall, M.D. (Pp. 398. 15s.) London: Edward Arnold. 1947.

A general account of mental disorder in children aged 5 to 15, especially their classification and investigation.

Hamlet. By W. Shakespeare. (Pp 179. 8s. 6d.) London: Vision Press. 1947.

Dr. Ernest Jones contributes a psycho-analytical study as introduction to the play.

1947 Year Book of General Surgery. Edited by Evarts A. Graham, A.B., M.D. (Pp. 734. 21s.) Chicago: The Year Book Publishers. 1947.

Abstracts of recent papers on surgery.

Films—their Use and Misuse. Part I. By N. H. Rosenthal, B.A., B.Sc. (Pp. 36. 3s. 6d.) Melbourne: Robertson and Mullens. 1945.

A short account of the use of films in education.

The Teacher's Manual. Part II. By N. H. Rosenthal, B.A., B.Sc. (Pp. 67. 6s.) Melbourne: Robertson and Mullens. 1947.

An aid to teachers using instructional films.

Primer of Cardiology. By George E. Burch, M.D., F.A.C.P., and Paul Reaser, M.D. (Pp. 272. 22s. 6d.) London: Henry Kimpton. 1947.

An introduction to cardiology intended chiefly for medical students.

Studies on the Formation of Cellular Substances During Blood Cell Production. By Bo Thorell. (Pp. 120. 12s.) London: Henry Kimpton. 1947.

A monograph on the development of blood cells.

Therapeutic Uses of Infra-Red Rays. By W. Annandale Troup, M.C., M.D., Ch.B. 4th ed. (Pp. 149. 15s.) London: The Actinic Press. 1947.

A practical book on infra-red ray therapy for medical men.

Color Atlas of Hematology. By Roy R. Kracke, M.D. (Pp. 204. 30s.) London: J. B. Lippincott. 1947.

Coloured plates illustrating blood disorders, with explanatory notes.

Calcific Disease of the Aortic Valve. By Howard T. Karsner, M.D., and Simon Koletsky, M.D. (Pp. 111. 30s.) London: J. B. Lippincott. 1947.

A monograph on calcification of the aortic valve.

Practical Histology for Medical Students. By D. T. Harris, M.D., D.Sc., F.Inst.P. 4th ed. (Pp. 138. 12s. 6d.) London: H. K. Lewis. 1947.

Summarized description of laboratory techniques.

Progress in Clinical Medicine. Edited by Raymond Daley, M.A., M.D., M.R.C.P., and Henry G. Miller, M.D., M.R.C.P., D.P.M. (Pp. 356. 21s.) London: J. and A. Churchill. 1948.

Articles by various authorities on recent clinical medicine.

Materia Medica. By William Hale-White. Revised by A. H. Douthwaite, M.D., F.R.C.P. 27th ed. (Pp. 549. 15s.) London: J. and A. Churchill. 1947.

A textbook for the student and practitioner, with emphasis on clinical applications of pharmacology.

A Handbook of Hygiene and Health Education. By Cyril G. Eastwood, M.D., Ch.B., B.Sc., D.P.H. 2nd ed. (Pp. 368. 7s. 6d.) London: Edward Arnold. 1947.

An introduction to the subject for students.

BRITISH MEDICAL JOURNAL

LONDON

SATURDAY FEBRUARY 21 1948

38,534 DOCTORS DISAPPROVE

By a 9 to 1 majority in an 84% poll the medical profession has shown Mr. Bevan how completely he has misjudged the thoughts and feelings of the medical men and women of this country, and how ill-timed, inept, and untrue were his vicious remarks about raucous-voiced and politically poisoned people. His attempt to find a narrow target for his vituperation has failed completely. By their votes British doctors have shown what they think of his recent observations and the National Health Service Act in its present form. The medical profession and some of its leading personalities have during the last few weeks been subjected by certain newspapers to misrepresentation and personal abuse: 90% of all those voting have made the only fitting response to this. This is a truly remarkable result, and a confirmation, incidentally, that in these columns we have voiced what are the ideas and feelings of the great majority of doctors in this country. The policy and actions of the British Medical Association in relation to the present controversy have now been fully vindicated.

In the first few days of the plebiscite Mr. Bevan accused the B.M.A. of intimidation by means of the voting paper. The B.M.A. immediately invited a senior officer of the Minister to inspect the counting of the votes and the arrangements made for it, and expressed the hope that the Minister himself might come if he so wished. He had made the accusation, and he was given the opportunity of substantiating it. One of his officers replied that the Minister "cannot see his way to accept your proposal that he should associate himself or his officers with the Association's plebiscite."

The Council of the B.M.A. met on Wednesday to receive the results of the plebiscite and to discuss future action. The Representative Body at its meeting on March 17 will decide what this action is to be. A heavy responsibility now lies upon the British Medical Association—a responsibility not only to the medical profession but to the community generally, which has been given the most exaggerated idea of the medical benefits it has been led to expect when the National Health Service Act comes into operation on July 5. If it is made possible for the medical profession generally to join in that Service doctors will become heavily overworked, and there will be a dilution of the quality of treatment because of the excessive demands on a doctor's time that will inevitably be made by people who have been told that they will be free at any time to call upon a doctor's services of whatever nature. On July 5 there will be no increase in the number of doctors, nurses, or hospital beds, and there will be no health centres. The man or woman who now hesitates to call in a doctor for a trivial complaint will no longer hesitate to call in a medical man or woman employed by the State to give services free of charge. If it proves to be possible to start this Service on July 5 we foresee a state of affairs that will sadly disillusion a public that has been so misled by the Minister and his publicists about the medical benefits it will receive.

The results of the plebiscite are analysed at page 352 of this issue. Of the 51,042 medical men in Britain to whom voting papers were sent, 43,013 have returned valid papers—an 84% poll. The strictest supervision of these papers was maintained by the auditors, Messrs. Price, Waterhouse and Co., and 593 of the voting papers had to be declared invalid. Of the 43,013 voting, 38,534—or 90%—expressed disapproval of the Act in its present form. Of the general practitioners 17,626 expressed disapproval, and 17,037 voted against accepting service. The necessary majority and the necessary numbers of general practitioners more than fulfil the stated requirements for the B.M.A.'s decision to oppose the Act in its present form.

Of those directly concerned in service under the Act—consultants and specialists and general practitioners—who answered Question B, 22,106 have said they will not take service under the Act in its present form, as against 3,471 who have said they will take service. If nothing happens to change the views of these men between now and July 5 Mr. Bevan will have at his disposal 3,560 general practitioners (giving him the benefit of the non-voting G.P.s) and 971 consultants and specialists to operate the National Health Service Act designed for a population of 47,000,000. These figures and facts deserve the serious consideration of the Minister of Health, the Government, and Parliament. In particular they deserve the serious consideration of the general public, who are being misled by Mr. Bevan's promises and who have failed to understand what the position of the medical profession is.

The way different sections of the profession have voted is of considerable interest, and Mr. Bevan will, perhaps, share our surprise at some of the results. He might, of course, have expected that the small clique of "political conspirators" in the B.M.A. Council would influence the general practitioners, and perhaps even the consultants. But he can hardly have expected that the majority of those already in whole-time employment, and especially those in whole-time Government service, would disapprove of the Act in its present form. Yet that is what they have done. In 1943 the Society of Medical Officers of Health issued a report advocating a State Medical Service. But out of the 2,392 men and women working whole-time in the Public Health Service, 1,928 disapprove of the Act in its present form, and only 316 approve of it. *Of the 762 medical men and women working whole-time in Government service, 634 disapprove of the Act, and only 127 express their approval.* This result deserves to be italicized. Of the 548 whole-time teachers in Great Britain, 424 disapprove, and only 110 approve. Of the 530 whole-time research workers, 220 disapprove, and 104 approve. These are, indeed, instructive figures. One may assume that those in whole-time employment are not particularly interested in the question of buying and selling practices, or in the basic salary or in the tapering capitation fee, or, possibly, even in negative direction. Some of them, no doubt, in their disapproval are expressing their sense of solidarity with the

rest of the medical profession; some of them, too, feel affronted by the unmannerly and unfair treatment meted out by Mr. Bevan to practising doctors. Whatever may be the constitutional niceties of the right of appeal to the Courts against dismissal in the National Health Service, many, we believe, are gravely disquieted by the fact that in a State Medical Service available to the whole of the community a man's life and career may be ruined by the decision of a tribunal of three men, of whom only one has a legal training. The General Medical Council is the statutory body for dealing with cases of professional misconduct. In the future the Ministry of Health will be able to get rid of what it will regard as an unsatisfactory servant, and that servant will then have no alternative but to emigrate or try to gain a livelihood in another occupation for which he has not been trained. This power of the State over an individual highly and lengthily trained to do one kind of work is indeed alarming in its enormity. The more highly skilled a man is the less easily is he adaptable to alternative forms of work. That is the penalty of specialization. But in England to-day we find men of all political parties ready to give the State this unbelievable control over individual freedom. Mr. Bevan should take note that many medical men are already emigrating, or seeking to emigrate, from this country in order to escape the new servitude. There are probably other reasons why medical men in whole-time Government and local authority service disapprove of the Act in its present form. Behind this opposition we see apprehension at the increasing regimentation of all sections of the community, and a reaction against the dislike and envy of the educated classes shown by the rank-and-file of the present Labour Government, eager to disenfranchise the university voter. As Lecky observed over fifty years ago: "It is curious how often in modern England extreme enthusiasm for education is combined with an utter disregard for the opinions of the more educated classes."

Mr. Bevan's cries about a "political conspiracy" are falsified not only by the above results but by at least two of our correspondents who, while openly declaring themselves to be Socialists, state their opposition to the Act. Mr. Bevan has liked to claim that the young men are on his side. It has not been possible to break down the present plebiscite figures, but we know into what age groups the various sections of the profession fall on the basis of the analysis of the last plebiscite, the final figures of which were published in the *Journal* of Jan. 11, 1947. We may examine the votes of those working whole-time in voluntary hospitals. The great majority of these are working temporarily whole-time—namely, house-physicians, house-surgeons, resident medical and surgical officers, registrars, etc. The older men working whole-time would be the professors of medicine and surgery, professors of pathology, professors of bacteriology, and so forth. In 1947 3,736 whole-time voluntary hospital workers voted. Of these, 2,826 were qualified 7 years or less; 685 were qualified for 8 to 14 years; and only 80 had been qualified for over 15 years. It is safe to assume that the age distribution of whole-time workers in voluntary hospitals is unchanged. In fact, there is probably a greater proportion of the young men than last year. In this plebiscite 3,425 whole-time voluntary hospital workers disapprove of the Act, and only 467 give their approval. With minor variations the same proportion signified their intention not to take part in the Service in its present form. This is the response of the young men with whom the future of medicine lies, many of them wanting to go into general or consultant practice in the future, and all of them the least likely to be affected by B.M.A. "propaganda."

The plebiscite shows that the medical profession has firmly resisted all attempts made to play off one section against the other. By its vote it has shown that we are, indeed, one profession, in spite of the widely varying nature of the type of work and of the method of employment characteristic of various professional groups. This expression of solidarity is a real and valuable thing, and a confirming of faith in our common professional heritage. It is now up to the medical profession to make this unity still firmer and to use it in the coming months with the highest sense of responsibility. Parliament and the medical profession are pledged to provide a comprehensive medical service for the country. We may have grave doubts about the wisdom or possibility of putting a gigantic scheme of reform into operation in July of this year, but the expressed opposition of the Negotiating Committee is to certain features of the Act and certain proposals of the Minister. Mr. Bevan should now know that this opposition is not just the agitation of a political caucus or what *The Times* unkindly described as "the views of a score of elderly doctors." Parliament and public opinion will now realize that even if Mr. Bevan succeeds by financial pressure in coercing doctors into the Service on July 5 he will have in his service 38,534 unwilling and dissatisfied workers.

SAFEGUARDS FOR THE GENERAL PRACTITIONER

A sentence in the first leading article in the *Journal* of Feb. 7 seems to have given rise to some misunderstanding on the question of buying and selling practices. Having disposed of some of the stupid criticisms levelled against this custom, we observed that "if the financial burden of buying a practice is too heavy for the young man to bear in these days then there is a case for reasoned discussion on this point." To deny this in these days of economic stress would not appear to be reasonable. The fundamental case for the preservation of ownership of goodwill is to-day the preservation of the professional freedom of the general practitioner in a State medical service. If the medical profession enter such a State service then it is essential to see that within it the general practitioner retains professional freedom and what individual freedom may be possible in the uncomfortable new England taking shape under our eyes.

The medical profession has this week decided by an overwhelming vote against service under the Act in its present form. On the items of disagreement it would seem fair to state that for the general practitioner the principal objection is to a universal basic salary applied to all practitioners,

young, middle-aged, and old. We have the evidence of Government spokesmen that the idea of salary is related to control of certification, and, as the Labour Party is still committed by its published policy to a whole-time salaried service, the fears that the basic salary is a pointer in this direction are clearly well founded.

What real safeguards can be introduced? The assurance of any Minister of Health is valueless because it is not binding on his successor. We stated in the *Journal* of Feb. 7 that "at the moment it is difficult to see how the general practitioner can maintain his professional freedom without ownership." There are, of course, other considerable advantages to the purchaser of goodwill. These were discussed in a leading article in the *Journal* of Jan. '24. But even though all political parties have accepted the Government proposal to abolish ownership of goodwill in public practices the medical profession has the right to persist in its claim to continue the custom to which they have been used in the medical service under the National Health Insurance Acts. We do not accept Mr. Bevan's contention that the buying of goodwill is "an evil thing." His Ministry is a Ministry of Health—not a Ministry of Morals.

The essence of ownership is freedom and independence. In the *Journal* of Feb. 7 we suggested a possible alternative for safeguarding this freedom. There can be no question of change of policy, for this is decided by the Representative Body. We were concerned solely with possible methods of safeguarding professional freedom—which is the principle behind ownership. The Negotiating Committee, in its document laid before the Minister, suggested that the method of remuneration should be in the Act, thus: "It is the Committee's view that, except where special circumstances justify it, the remuneration of general practitioners should be by capitation payment in proportion to the number of persons on a doctor's list and that this principle, which it regards as fundamental, should be embodied in the Act." Summarizing this in the leading article of Feb. 7, we suggested that if this were done it "*might* offer an alternative safeguard" (our italics). It would certainly make it impossible for any Minister to introduce overnight a whole-time salaried service. An amendment to the present Act as suggested by the Negotiating Committee would make statutorily secure the Minister's assurance. If general practitioners were thus safeguarded against the arbitrary introduction of a whole-time salaried service it would be of value, as we indicated; but it is to be doubted whether practitioners would regard this as affording as strong a safeguard as personal ownership of goodwill.

THE FUTURE OF THE KING'S FUND

Like many other organizations connected with hospitals, King Edward's Hospital Fund for London is closing a chapter in its history and opening a new one. A recent meeting of the General Council, presided over by the Duke of Gloucester, was probably the last at which the annual distribution of grants will be made on traditional lines. A few months hence the financial responsibility for hospitals will be transferred to the State, and the activities of the Fund, so far as they have been directed to the maintenance of hospitals, will take a different pattern. "Henceforward," said the Duke of Gloucester, "the Fund will be able to help the hospitals in ways which lie outside the scope of routine expenditure. It is a great opportunity and a great responsibility."

For fifty years the Fund has maintained its ordinary distribution; it has assisted in the building of new hospitals, and has sustained several of the great teaching hospitals through periods of crisis. When the National Health Service Bill was considered in Standing Committee Mr. Bevan was questioned about the future of the Fund. He strongly denied any intention to seize the Fund and disburse its income, and when he was further asked whether each hospital receiving a grant from the Fund would be able to use it as a kind of pocket-money over and above the State provision, he said he would be loth to believe that those responsible for the Fund were going to use it in that way, and added, "There will be many other purposes for which the Fund can be used." At the meeting of the General Council Sir Edward Peacock, the treasurer, stated that it is already evident that the help which the Fund can give to the hospitals when they have passed under public control may be even more important than hitherto, that the Fund is feeling its way cautiously in this new territory, and that already several services were in being.

The Fund, of course, has never been a mere distributor of largesse. It has led the way in a number of important hospital matters such as the financing of training schemes for administrators, hospital caterers, and domestic supervisors, the assistance of group preliminary training schemes for nurses, and the augmentation of the efforts of individual hospitals in nursing recruitment. Various plans are now under consideration for helping Regional Boards over the transitional period by means of the Emergency Bed Service which the Fund sponsored. All these, as Sir Wilson Jameson said on the same occasion, are pointers to future possibilities. It is certainly a fortunate circumstance that in this time of change an organization independent of the Government and outside all the new administrative machinery which is being fashioned, a body, moreover, possessed of ample resources—the Fund's ordinary income to almost half its extent is derived from investments—and with an unrivalled experience of voluntary hospitals and their difficulties, should be available and ready with its help.

The grants distributed by the Fund to about 150 hospitals in the London regions in 1947 amount to £300,000, ranging from sums of over £10,000 to four large hospitals down to £25 or £50 to cottage hospitals or quite small institutions. About a quarter of a million of the distribution is for maintenance; some £26,000 is for schemes of capital expenditure, such as the provision or completion of a nurses' home or the purchase of *x*-ray apparatus or hospital furniture, and a further £20,000 is allocated to convalescent homes not attached to hospitals. A year ago a Convalescent Homes Committee was appointed under the chairmanship of Sir Henry Tidy to look into the position with regard to these homes, which it found to be very indefinite. No list of such homes existed, and information

was difficult to obtain. The first task of the committee was to prepare a directory, and details of 150 homes have been obtained. But much more has been done than a mere compilation of particulars. Arrangements were made for the visiting of all homes serving the London regions, most of them on the coast from Bournemouth to Felixstowe, and information was obtained as to their needs. Not only has financial help been given, but much useful advice also by experts on dietetics and on more general questions working under the Fund's auspices.

It was reported to the General Council that the income of the Fund is being well maintained. Subscriptions and donations are slightly down on the year, but the amount received from legacies has risen considerably; and as for the individual hospitals themselves, the income has been remarkably steady, notwithstanding the shadow of impending change. Evidently it takes more than a great State merger operation to repress the sentiment awakened by hospitals among the British people and the desire to express that sentiment by gifts. The new Act leaves the way open for the public to continue to subscribe to the hospitals, and the Fund appears to be confident that the flow of voluntary gifts will continue. It is understood that the method of applying a gift for the benefit of a hospital will be in the discretion of its management committee, but presumably it will not be included in its normal maintenance budget. Dealing with this point in his address to the General Council, the Duke of Gloucester said: "The value of this additional money will lie in the power it will give hospital committees to do many things that they would not otherwise be able to do within the limits of a strict budget; but much more than that, it will help to give the committees a sense of real responsibility."

NUTRITIVE VALUE OF MEAT EXTRACT

Meat extracts were first prepared by Liebig, more famous as the father of organic chemistry, about the middle of last century. When they were produced commercially their attractive taste and their property of stimulating appetite and digestion soon earned them a high place in public favour. These virtues have never been seriously questioned, and in recent years controlled experiments have been made to measure the ability of the extracts to increase gastric secretion and the tone of the gastric muscle.[1] The claim that meat extracts improve stamina and muscular performance was less generally accepted, except by military hygienists. Early dietitians, indeed, found that they were poor sources of proteins, carbohydrates, and fats, the only types of nutrients then recognized, and therefore proclaimed that they had little value as food. The discovery of vitamins at first did nothing to improve their reputation, since vitamins A, B_1, C, and D—the first to be recognized—are absent, or present only in negligible amounts.

According to Rees and Salway[2] modern research on the vitamin B complex has placed meat extracts in a more favourable position. Because all the vitamins in this complex are water soluble, and because one part of extract represents 25–30 parts of meat, it would be expected that the vitamins which are found in meat would be present in much greater concentration in the extract. This is not the case, however, in so far as vitamin B_1 is concerned, since the small amounts which are present in the meat disappear during the process of extraction. Nicotinic acid, on the other hand, is highly concentrated, beef extracts containing 1.0–1.2 mg. per g. as against 0.024–0.102 mg. in the original meat. Riboflavin is concentrated in about the same ratio. These values imply that 10 g. of meat extract daily, or about 2–3 breakfast-cups of beverage, would meet the needs of an adult for nicotinic acid. As much as 30–40 g. of extract, however, would be necessary to provide the required quantity of riboflavin.

It may be asked whether these considerable amounts of vitamins are wholly or in part responsible for the value of the extracts as stimulants. There is little doubt that their ability to increase appetite is due to their high content of "meat bases," such as carnosine, anserine, adenosine, creatine, etc. Frankau[3] has described experiments in which a diet rich in nicotinic acid was found to improve muscular performance and stamina and increase efficiency when severe tests involving both physical effort and co-ordination were undertaken. Such an important finding obviously requires confirmation and correct interpretation before receiving general acceptance, but it is at least possible that the views of the early military hygienists will at last be supported by some scientific justification.

1 Fisher, R. S., and Apperly, F. L., *J. Lab. clin. Med.*, 1941, **26**, 823.
2 *Chem. Ind.*, 1947, **22**, 302.
3 Frankau, I. M., *British Medical Journal*, 1943, **2**, 601.

AGENE-TREATED FLOUR

The discovery by Sir Edward Mellanby[1] that flour "improved" by the agene process, involving treatment with nitrogen trichloride, produced canine hysteria when given as food to dogs had important biochemical implications apart from its possible significance in relation to public health. The obvious questions were, first, Is the effect due to a toxic substance or to the impairment or inhibition of a vitamin? and, secondly, If a toxic substance is responsible, what is its nature? The first question was answered independently by Sir Edward Mellanby[2] and by Dr. T. Moran,[3] the most clear-cut evidence being provided by the latter's demonstration that flour treated with greater concentrations of nitrogen trichloride than in commercial practice can produce hysteria in dogs within twenty-four hours. This is clearly inconsistent with any explanation in terms of deficiency disease. Towards an answer to the second question little direct progress has yet been reported. Moran and his collaborators,[4] however, have described a possible mechanism by which the still unknown toxic substance is produced. Not only the gluten fraction of flour but also casein, the zein complex of maize, egg albumen, haemoglobin, "and probably many other proteins" are also capable, when similarly treated, of giving rise to canine hysteria with the same symptoms that Mellanby earlier described. By supposition therefore the same toxic substance can be formed from these proteins also. On the other hand, negative results were obtained with arachine, isolated from peanuts, and kerateine; while in the case of gelatin the effect was slight compared with that of the other proteins mentioned previously. This suggested a comparison of the compositions, in terms of amino-acids, of these two groups of proteins, and the result indicated that methionine plays a key part in the mechanism. Arachine, gelatin, and kerateine each contain only about 0.5% of this amino-acid, whereas those proteins which seem to be connected with the toxic substance contain at least 2%. This interpretation is further supported by the fact that from defatted and agene-treated peanut meal it is possible

1 *British Medical Journal*, 1946, **2**, 885.
2 Ibid., 1947, **2**, 288.
3 *Lancet*, 1947, **2**, 289.
4 Bentley, H. R., Booth, R. G., Greer, E. N., Heathcote, J. G., Hutchinson, J. B., and Moran, T., *Nature, Lond.*, 1948, **161**, 126.

to separate two fractions—the first arachine, which as already stated is non-active, and the second a water-soluble protein which has an appreciable methionine content and, when thus treated, causes hysteria in dogs.

Two different experiments, however, provide evidence that the reaction is not limited to nitrogen trichloride and methionine. The first showed that casein, when treated as a complete protein, produces the toxic substance; but if first broken down by hydrolysis into its constituent amino-acids and then treated with nitrogen trichloride it has no harmful effect. The second experiment was concerned with methionine when separated from other amino-acids. This substance, mixed with starch at 14% moisture as a "filler," was found to be unique in its capacity to react with nitrogen trichloride and in fact took up one-third of its own weight. However, if the reaction was allowed to proceed to saturation the resulting product caused no toxic symptoms in dogs, while the symptoms produced by the same mixture at half saturation were a temporary paralysis of the legs which passed off within a few hours and was clearly distinguishable from hysteria. Both these experiments suggest that more than one amino-acid is involved in the production of the toxic substance which causes canine hysteria, but the second tends to confirm the supposition that methionine is the most important.

On the practical side the assurance has been given that other chemical "improvers" of flour—such as chlorine, chlorine dioxide, potassium bromate, and ammonium persulphate—produce no abnormal symptoms in dogs even when used in amounts twelve times the usual and administration is continued over periods as long as twelve weeks. Since nitrogen trichloride has now been incriminated when used to "improve" flour it should also be regarded with suspicion if used in the manufacture of any food. There seem, indeed, to be few proteins on which it does not act to produce substances which are toxic to dogs, and in the present state of knowledge it would be unwise to assume that man would be unaffected by such substances.

THE AETIOLOGY OF ANKYLOSING SPONDYLITIS

Although rheumatoid arthritis and ankylosing spondylitis possess many features in common the striking difference in the sex distribution indicates that their aetiology and pathology are different. Because ankylosing spondylitis occurs usually in young males the possibility of a prostatic focus being the cause has been considered, but no definite support for this was found, and investigation of the phosphatases, both acid and alkaline, has yielded indefinite results. The probability that the sex glands have an influence in both diseases cannot, however, be ignored and demands further investigation. Sjövall[1] concluded that 21% of women under 40 with rheumatoid arthritis suffered from ovarian insufficiency. On the other hand the young robust males attacked by ankylosing spondylitis often provide evidence of considerable sexual activity.[2] The influence of the sex glands on bone metabolism has been frequently demonstrated, and the association of osteoporosis with redeposition of calcium in adjacent tissues is suggestive of the part these organs may play in the aetiology of spondylitis.

Davison, Koets, and Kuzell[3] have recently studied the excretion of the 17-ketosteroids in both rheumatoid arthritis and ankylosing spondylitis, and they report marked differences between the two diseases. The 17-ketosteroids are a group of compounds forming the metabolic end-products of steroids originating in the adrenal cortex of the female and in the adrenal cortex and the gonads of the male. The excretion of these substances in the urine was found to be increased in ankylosing spondylitis. In a series of 13 cases with characteristic *x*-ray changes in the spine but without any changes in the small joints of the extremities the amount excreted averaged 27.3 mg. in 24 hours compared with an average of 14 mg. in the normal healthy males. In 11 females with typical rheumatoid arthritis chiefly affecting the joints of the extremities it was found to average 12.8 mg. compared with an average of 10 mg. for normal females.

These findings support the view that the sex glands may be connected with the cause of ankylosing spondylitis and in addition provide confirmation that the disease is not simply a form of rheumatoid arthritis. The research is being continued, and it is to be hoped that other workers will repeat these investigations in order that the facts may be verified and further light shed on both diseases.

1 *Acta med. scand.*, 1944, **117**, 69.
2 Buckley, C. W., *Ann. rheum. Dis.*, 1945, **5**, 49.
3 *J. clin. Endocrinol.*, 1947, **7**, 201.

REGENERATION OF FASCIA LATA

Tissue regeneration after injury or operation is an interesting subject. The possibilities of bone reconstruction have been fully used by orthopaedic surgeons. The whole success of peripheral nerve surgery depends on nerve regeneration. Sometimes when regeneration of tissues is claimed the process is merely one of replacement by scar tissue, as is seen, for example, in the formation of disk-like structures after the removal of the menisci from the knee. There is obviously some practical importance in knowing what happens after the removal of fascia lata from the thigh in the process of carrying out surgical repair elsewhere, as is done by the methods of Gallie. Not only have many surgeons been concerned about muscle herniation but there is also the possibility that more fascia might be required from the same site at a later date. Does fascia lata regenerate sufficiently to close the gaps and is regeneration complete enough to permit the removal of further material later on?

Foshee[1] has endeavoured to answer these questions. His results are most interesting and are illustrated by excellent photomicrographs. In experiments with dogs, regenerated fascia lata was studied at different stages from the fourteenth to the ninety-seventh day after the original removal. Normal fascia is composed of three layers—inner and outer fibres with a middle longitudinal layer. The inner and outer transverse layers always regenerate satisfactorily, but no regeneration of the middle longitudinal fibres takes place. On the other hand, in the regenerated fascia the inner and outer layers hypertrophy to compensate for the lack of vertical fibre formation.

In another paper Foshee[2] reports his observations upon material removed from five patients, and it is apparent that human fascia lata behaves in precisely the same way. The transverse fibres do not always run at right angles to the longitudinal fibres, but the regeneration of the transverse inner and outer layers is so rapid and complete that it is never necessary to suture the gap in the fascia lata from which a transplant has been taken. Herniation does not occur. The more active the individual the thicker will be the regenerated fascia, and in six months to one year afterwards it will be sufficiently strong to be used successfully in certain surgical procedures in which ordinarily normal fascia lata is desired but lacking. In the human material it was clear that the regenerated fascial layers are direct extensions from normal fascial edges across the gap, but the noticeable density of the inner as compared with the outer layer suggested that the presence of the underlying muscle is of importance to the success of the regeneration.

1 *Surgery*, 1947, **21**, 800.
2 Ibid., 1947, **21**, 819.

PLEBISCITE ON THE NATIONAL HEALTH SERVICE ACT

Summary and analysis of replies received up to and including 16, February, 1948

TABLE I

(1) Reference to Plebiscite Form	(2) Classification of professional work	(3) Registered medical practitioners either resident in Great Britain or serving in H.M. Forces at home or overseas (55,842 plebiscite forms issued)						(4) Medical practitioners with foreign qualifications resident in Great Britain who are for the time being registered by the General Medical Council (1,233 plebiscite forms issued)		Classification No.
		England and Wales		Scotland		Total Great Britain				
		Approve	Dis-approve	Approve	Dis-approve	Approve	Dis-approve	Approve	Dis-approve	
A	1a. Consultant or specialist, not holding whole-time salaried post	228	3,655	41	432	269	4,087	4	12	1a
	1b. Consultant or specialist, holding whole-time salaried post	339	1,132	73	176	412	1,308	3	4	1b
"I APPROVE of the National Health Service Act, 1946, in its present form."	2. General practitioner, principal ..	1,207	13,614	206	1,689	1,413	15,303	4	5	2
	3. General practitioner, assistant ..	251	1,958	55	365	306	2,323	25	57	3
	4. Whole-time voluntary hospital ..	393	2,928	74	497	467	3,425	7	5	4
	5. Whole-time local authority general hospital	200	1,052	17	119	217	1,171	4	4	5
	6. Whole-time local authority special hospital	147	657	27	156	174	813	13	11	6
"I DISAPPROVE of the National Health Service Act, 1946, in its present form."	7. Whole-time public health service ..	277	1,683	39	245	316	1,928	9	5	7
	8. Whole-time Government service ..	101	519	26	115	127	634	2	3	8
	9. Whole-time teacher	95	313	15	111	110	424	1	2	9
	10. Whole-time research	92	182	12	38	104	220	2	7	10
	11. Other whole-time non-Government post	46	354	7	59	53	413	—	3	11
	12. Medically qualified dental surgeon	9	246	3	61	12	307	3	4	12
	13. Retired	148	3,355	28	524	176	3,879	1	—	13
	14. Unclassified	266	1,946	57	353	323	2,299	15	16	14
	15. Services, permanent commission ..					47	779	1	1	15
	16. Services, temporary commission, specialist					31	169	5	3	16
	17. Services, temporary commission, graded specialist					41	268	1	1	17
	18. Services, temporary commission, general duty officer					137	1,064	17	5	18
	Totals	3,799	33,594	680	4,940	4,735	40,814	117	148	

TABLE II

		In Favour	Not in Favour	In Favour	Not in Favour	In Favour	Not in Favour	In Favour	Not in Favour	
B										
"I AM IN FAVOUR of accepting service under the Act in its present form."	1a. Consultant or specialist, not holding whole-time salaried post	340	3,571	66	404	406	3,975	6	11	1a
	1b. Consultant or specialist, holding whole-time salaried post	473	946	92	148	565	1,094	3	3	1b
"I AM NOT IN FAVOUR of accepting service under the Act in its present form."	2. General practitioner, principal ..	1,784	13,204	301	1,610	2,085	14,814	2	4	2
	3. General practitioner, assistant ..	344	1,870	71	353	415	2,223	26	49	3
	4. Whole-time voluntary hospital ..	522	2,767	91	467	613	3,234	7	5	4
	Totals	3,463	22,358	621	2,982	4,084	25,340	44	72	

TABLE III

		Do Not Agree	Agree	Do Not Agree	Agree	Do Not Agree	Agree	Do Not Agree	Agree	
C										
"I AGREE to abide by the decision of the majority and undertake not to enter the service if the answers to part B reveal a majority against undertaking service as defined in para. 4 of preamble and if so advised by the British Medical Association."	1a. Consultant or specialist, not holding whole-time salaried post	406	3,406	67	387	473	3,793	3	12	1a
	1b. Consultant or specialist, holding whole-time salaried post	518	808	97	137	615	945	1	5	1b
	2. General practitioner, principal ..	1,887	12,671	351	1,506	2,238	14,177	1	7	2
	3. General practitioner, assistant ..	369	1,778	83	326	452	2,104	12	59	3
	4. Whole-time voluntary hospital ..	600	2,611	116	436	716	3,047	5	7	4
"I DO NOT AGREE to abide by the decision of the majority if it is against accepting service as defined in para. 4 of preamble."										
	Totals	3,780	21,274	714	2,792	4,494	24,066	22	90	

The work carried out by staff of the British Medical Association for the purpose of obtaining a plebiscite of the medical profession on the matters set out in column (1) of the above Tables was directed and supervised by our representatives continuously from its start on 27, January until 17, February, 1948. The completed plebiscite forms received during that period were examined only by our representatives and by staff of the Association working under our supervision and under pledge of secrecy and were retained under our control from the time of their receipt at B.M.A. House until their destruction in the presence of our representative on 17, February, 1948.

We satisfied ourselves by appropriate tests

(1) that all reasonable steps were taken to furnish a plebiscite form to every registered medical practitioner either resident in Great Britain (but not Northern Ireland) or serving in H.M. Forces at home or overseas and to every medical practitioner with foreign qualifications resident in Great Britain who was for the time being registered by the General Medical Council;

(2) that the figures set out in the foregoing Tables I, II, and III are a correct summary and analysis of the replies received at B.M.A. House up to and including the second post on Monday, 16, February, 1948.

3, Frederick's Place,
Old Jewry, London, E.C.2.
17, *February*, 1948.

PRICE, WATERHOUSE & CO.
Chartered Accountants.

PLEBISCITE RESULTS, FEBRUARY, 1948

SOME IMPORTANT PERCENTAGES

All percentages are calculated to the nearest whole number. 51,042 Plebiscite Forms were sent to practitioners other than those serving in H.M. Forces. The distribution of practitioners as between England and Wales and Scotland* is based on figures obtained from B.M.A. records.*

		Question	Total Voting	Percentage Approving the Act	Percentage Disapproving	Not Voting	Of those who Voted	
							Approving	Disapproving
All civilian categories	Great Britain	A	84%	9%	75%	16%	10%	90%
	England and Wales* ..	A	85%	9%	76%	15%	10%	90%
	Scotland*	A	79%	10%	69%	21%	12%	88%

	Question	Of those who Voted	
		(A) Approving (B) In Favour (C) Not Agreeing	(A) Disapproving (B) Not in Favour (C) Agreeing
Group 1 A. Consultant or specialist not holding whole-time salaried post	A	6%	94%
	B	9%	91%
	C	11%	89%
Group 1 B. Consultant or specialist holding whole-time salaried post	A	24%	76%
	B	34%	66%
	C	39%	61%
Group 2. General practitioner principal	A	8%	92%
	B	12%	88%
	C	14%	86%
Group 3. General practitioner assistant	A	12%	88%
	B	16%	84%
	C	18%	82%
Group 4. Whole-time voluntary hospital†	A	12%	88%
	B	16%	84%
	C	19%	81%

† Excluding those of specialist status (covered by Group 1 B) but including practitioners holding B1, B2, and A appointments and Class I and Class III appointments under the Government's postgraduate scheme for ex-Service practitioners.

BLOOD TRANSFUSION SERVICE FOR LONDON HOSPITALS

One of the important peacetime activities of the British Red Cross Society is the Greater London Blood Transfusion Service. An organization for the recruitment of voluntary blood donors for the service of patients in London hospitals was started as far back as 1921. It began with a telephone call from King's College Hospital to the Camberwell branch of the British Red Cross Society asking urgently for a donor. The secretary of the branch, the late Mr. P. L. Oliver, assembled his office staff and they all went to the hospital, where one of them was chosen for the immediate purpose. The transfusion was successful, and the patient's life was saved. Mr. Oliver then formed a company of men and women who agreed to have their blood tested and grouped and to stand by for a call from any hospital at any time. The service extended, and in 1926 was taken over by the B.R.C.S. as one of its own activities. By the outbreak of war in 1939 the service, with its experience of over 50,000 transfusions, proved of great help to the authorities in meeting the problem of expected war casualties.

After the war the management of the service was transferred from the Red Cross headquarters to a committee set up by the City and County of London branches of the Society, and a year later other county branches in the metropolitan area took a share in the management, so that now the Greater London Blood Transfusion Service covers London and five adjoining counties and serves fifty or more hospitals. The service is responsible for the supply of donors where it is essential that freshly drawn blood should be used. Every call is for a definite patient (there is no blood bank), and therefore the importance and urgency of the demand is brought home to the donor. The number of calls rose as the service became known; it was 1,095 in 1945, 1,863 in 1946, and 2,436 in 1947. In January, 1948, the number of calls was 273. The highest number received on any one day was 27.

All newly enrolled donors undergo a simple medical examination and their blood is tested and grouped by the medical officer to the Service, Dr. H. F. Brewer, at the Pathological Department, St. Bartholomew's Hospital. The Service is in a position not only to supply Rh-negative and Rh-positive donors of A, B, AB, and O groups, but also donors of any of the rare Rh sub-groups for both transfusion and research purposes. No maximum of donations is fixed for any one donor. More than half of those on the active panel have given blood over ten times, and more than a quarter have served over twenty times. One donor has served over one hundred times, and the seventieth birthday of another was celebrated by the seventieth transfusion, though it should be added that 65 is the usual age limit. The minimum period between donations is three months for men and four months for women, so that the maximum is four or three transfusions a year. In only two cases out of 60,000 has the service been made aware of a donor having suffered in health, even temporarily, from withdrawal of blood. All donors, however, are insured against ill-effects, and are examined after ten transfusions or multiples of ten.

It seemed interesting to inquire what is the bond which holds the thousand and more donors together. They are not paid for their service, only reimbursed for their expenses, and the calls must often be made at times which involve sacrifice. A high standard of discipline is exacted, and donors are expected to conform to Red Cross traditions. The secretary of the service, the Hon. Mrs. Kathleen Howie, stated that in her opinion the more important of the two factors which held the band of donors together was that each of them, after giving his or her blood, received a form describing the nature

of the disease or injury for which the transfusion was given (but not giving the patient's name), the amount of blood drawn, and the result of the transfusion so far as could be ascertained. The other factor is that donors receive a certificate with appropriate seals for the transfusions they have given. A considerable number have been awarded the silver bar for 50 transfusions. Another feature of the service is that a report is expected from the hospital or from the doctor giving the reason for and the result of the transfusion—the result not to be confined to such words as "satisfactory" or "good"—and in particular mentioning any untoward reaction which might possibly be attributable to the transfusion and of which the medical officer to the service should be informed. The headquarters of the service are at 10, Collingham Road, Earl's Court, S.W.5, and the telephone number, day and night, is Frobisher 6477–8.

NATIONAL INSURANCE

PAYMENTS AND BENEFITS

The Government has recently made Orders-in-Council making July 5 the appointed day for the National Health Service Act, 1946, and the Scotland Act, the National Insurance Act, 1946, and the National Insurance (Industrial Injuries) Act, 1946. Many medical men have wondered what the relation between these Acts is and what insurance contributions, if any, they must pay. We therefore outline below some points of interest to the medical man.

The present National Health Insurance scheme is contributory—that is, people pay weekly contributions in order to qualify for medical treatment from their panel practitioner. After July 5 it is proposed that the National Health Service shall be free to every man, woman, and child in the country without the necessity of paying insurance contributions. The National Health Service is, therefore, not a contributory scheme, but it is financed in small part from insurance contributions paid under the National Insurance Act. For each National Insurance contribution paid by a man over the age of 18, 10d. will be transferred to the fund required to finance the National Health Service; for each woman over 18 the sum is 8d., and for boys and girls under 18 it is 6d. It is estimated that these sums will provide about £32,000,000 towards the cost of running the National Health Service, which is £152,000,000 a year. This is a matter of Governmental book-keeping, and the Health Service remains available to all without payment, even, for example, to a person who has failed to pay his insurance contribution.

Contributors

For the purposes of the National Insurance Act the contributors are classified into three main categories: (1) employed persons (these are people gainfully employed under a contract of service); (2) self-employed persons (these are people who derive a living without being employed by some other person or body); (3) non-employed persons (that is, people who are neither employed nor self-employed). The people who come into these categories constitute rather less than half the population of Britain. Not included are wives, children under 16 or those who continue to receive full-time education after that age, and people with an income of less than £104 a year.

Contributions

Employees in Category 1 pay a weekly sum; their employers also pay a weekly sum. These are shown in the following Table.

Contributions Paid by Employees and Employers

	Employee	Employer
Men	4s. 7d.	3s. 10d.
Women	3s. 7d.	3s. 0d.
Boys under 18	2s. 8d	2s. 3d.
Girls under 18	2s. 2d.	1s. 9d.

It is presumed that medical men working in the National Health Service will be regarded as employees, the employer of general practitioners being the local executive council and that of the consultants and specialists being either the regional hospital board or the board of governors of a teaching hospital. If a general practitioner has a small practice in the National Health Service and a large private practice he will presumably still be regarded as an employed person. Medical men who employ a secretary or a maid will pay the employers' weekly contribution, and the secretary or maid will of course pay the employee's. People who come into the second category (self-employed), such as doctors in private practice, pay weekly contributions at the following rates: men, 6s. 2d.; women, 5s. 1d.; boys under 18 who are not receiving full-time education, 3s. 7d.; and girls, 3s. 1d. Non-employed people whose income exceeds £104 a year pay at the following rates: men, 4s. 8d.; women, 3s. 8d.; boys, 2s. 9d.; and girls, 2s. 3d. Contributions will not have to be paid during periods of sickness or unemployment.

Benefits

The benefits available to contributors include unemployment and sickness benefits, retirement pension, widows' benefits, maternity grants and allowances, and death grants. Only employed people (Category 1) are entitled to unemployment benefit; non-employed people (Category 3) are entitled neither to sickness nor to unemployment benefits. Self-employed people (Category 2) may receive sickness benefits but not unemployment benefits.

Insured people must have paid in a certain number of contributions (which vary for different benefits) if they are to receive the benefits. For unemployment and sickness benefits at least 26 contributions must have been paid since that person became insured, and 50 contributions must have been paid or credited during the preceding contribution year. The contribution year runs from the beginning of July to the end of June the following year; the benefit year runs from January to December. Contributions are said to be credited when the insured person is exempt from paying them—for example, during unemployment or sickness. To qualify for the retirement pension at least 156 contributions must have been paid, with a yearly average of paid or credited contributions of 50; but people insured for the first time under the Act must complete 10 years' insurance to qualify for a pension. For a death grant to be payable the contributor must have made at least 26 payments and have either had 45 paid (or credited) contributions during the previous contribution year, or had a yearly average of 45 paid (or credited) contributions.

The unemployment, sickness, and retirement benefits amount to 26s. a week for the insured person, with additional allowances of 16s. for a wife and 7s. 6d. for the first child. Unemployment benefit is payable for 180 days, though more payments may be made if the person's contribution record is good or on the recommendation of a local tribunal. The insured person may requalify for benefit by returning to work and paying contributions for 13 weeks or more. People who have paid the minimum number of contributions required for sickness benefit will be entitled to receive that benefit for a year, and they will requalify for the benefit by returning to work and paying 13 weeks' contributions. However, contributors who have made 156 payments will receive sickness benefit for as long as the sickness lasts, even if it exceeds a year.

The benefits for maternity, for which contributions must have been paid by either the mother or her husband, are of two kinds: a grant of £4 on the birth of a child, or of £8 for twins, or £12 for triplets, and either a maternity allowance or an attendance allowance. The maternity allowance is 36s. a week for 13 weeks, beginning 6 weeks before the week in which confinement is expected. The attendance allowance is £1 a week for four weeks after confinement and is payable only to women whose contributions (or those of her husband) are not sufficient to qualify for a maternity allowance. The death grants are intended to meet funeral expenses of the husband, wife, widower, widow, and children. They are as follows: for a person over 18, £20; for children aged 6 to 18, £15; for those aged 3 to 6, £10; and for those under 3, £6. The grant will be paid to the insured person or, on the death of the insured person, to the person responsible for the funeral expenses.

Since people insured for the first time under the new Act must complete 10 years' insurance in order to qualify for a retirement pension, they may, after reaching pensionable age before completing that qualification, elect to do one of two things: (1) continue contributions until a period of 10 years is completed, or (2) reclaim with interest part of the contributions allocated to retirement pension and waive further claim. People who do not qualify for a contributory pension can apply for a non-contributory pension when they reach the age of 70, subject to certain conditions including a means test.

The insurance officer will decide claims for benefit, and the claimant may appeal to a local appeal tribunal. In certain circumstances the appeal may be continued to the National Insurance Commissioner, whose decision is final.

Some of the conditions outlined above depend upon regulations yet to be laid before Parliament. We understand that the Ministry of National Insurance will issue a booklet to the public during May giving a full description of the National Insurance schemes.

THE DOCTOR IN THE MAGISTRATE'S COURT

Another of the series of lectures on medico-legal subjects arranged by the Metropolitan Counties Branch for the benefit of senior students and newly qualified practitioners was delivered in the Great Hall of the Association's House on Feb. 3 by Mr. Claud Mullins, former metropolitan magistrate at the South-Western Court. Dr. H. Guy Dain, Chairman of Council of the British Medical Association, presided.

Mr. Claud Mullins said that when he first became a magistrate he was as cocksure as any of his legal brethren, but it took him only a few weeks to realize how much he needed the help of the medical profession. It was the sexual offenders first of all who compelled him to seek the advice of doctors. He could not understand why they did what they did, nor did he know what action he could take to prevent them from doing it again. Sir William Clarke Hall referred him to the Tavistock Clinic (the Institute of Medical Psychology), whose medical director, Dr. J. R. Rees, undertook to see such cases as he thought could be helped in that way. Some years before the war an inquiry was undertaken by the Prison Commission concerning the possibility of treating offenders of this type in prison. The report was rather a depressing one, especially with regard to the exhibitionist group, and was contrary to his own experience, which was that if an offender would go to a psychiatrist for treatment, and would stick to the treatment, he would improve. The failures were among those who would not go or, having gone once or twice, would not continue.

In the Criminal Justice Bill as introduced into Parliament just before the war there was a clause under which courts, through their probation machinery, could pay for doctor's treatment, but this clause did not reappear in the present Bill. A heavy blow would be struck at the use of psychiatry in dealing with offenders if the necessary treatment was required to be taken at mental hospitals, places dreaded by the rather primitive people concerned. Part of the success attending the treatment of the sexual delinquent was attributable to the private nature of the treatment; it was a great advantage if it could take place in the doctor's consulting room.

As a police magistrate he had often found doctors very useful in marriage cases. In many cases the real trouble between husband and wife was a complete inability on the husband's part to understand sexual manners. The man had never learned the elementary fact that there were times when a woman might not want sexual intercourse, and the result was frustration on the one hand and an unnecessary frigidity on the other. Magistrates felt that they were not the right people to teach sexual manners and that the services of a doctor could with advantage be offered. He obtained through the British Social Hygiene Council the names of doctors willing to undertake this task, and he found that if a couple could be persuaded to go to such a doctor concerning their matrimonial difficulties it almost always resulted in a reconciliation. He was rather proud of the number of cases which he had turned over to a doctor and which had been successfully resolved.

Inadequacy of the Law

All those who sat in judgment on offenders against the law were either lawyers or lay magistrates; on their decisions the fate of a criminal depended. Mr. Mullins thought the time was coming when the public would realize that for a good deal of crime a fair trial and a sentence according to law was not enough. Lawyers and lay magistrates were not always the best people to decide on the course to be taken with an offender and it was by no means only in sexual cases that psychiatry might be needed. At all times there were in prison men, and women too, who could have been made into decent citizens if only when the case was heard someone had been present to point out to the judge, the recorder, or the magistrate what course was likely to be most successful in putting them right. He believed that at some future date crime might be divided into two classes, medical and non-medical. The law was inadequate to deal with some types of crime. Before sentence was passed in these cases there should be provision for social investigation by probation officers and for medical investigation by doctors. He wanted to see doctors take at least as important a place in court as the officers already there. He wanted them to come in, so to speak, in the province of the sentence.

In some discussion following the address the question of doctors called in by one side and giving partisan evidence was raised. Mr. Mullins said that it was certainly an undesirable position when the doctor was called in by one side or the other, exposing him to the criticism that he was weighting his evidence in favour of the side which had called him in. The more desirable arrangement would be a medical panel available to the court. Doctors from this panel would in certain cases give their opinion previous to the trial, and if they decided that the man was of unsound mind the trial would not proceed. It was perfect nonsense to submit evidence of insanity to a jury.

Asked whether there was likely to be any change in the McNaghten "rules," Mr. Mullins said that these "rules" had caused great controversy. Before the war a committee recommended that irresistible impulse should be regarded as an excuse within the McNaghten rules; he was against this because it could be pleaded by criminals to cover many crimes. What he wanted to see was an alteration of the procedural law; he wanted a classification of degrees in murder, proper medical investigation of cases beforehand, and, if there was a conviction, more cases to be sent for medical investigation and treatment.

L.C.C. PUBLIC HEALTH DEPARTMENT

Structure under National Health Service

The new structure of the Public Health Department of the London County Council, to enable it to fulfil its functions under the National Health Service Act, Sections 21–9 and 51, has now been determined. On the appointed day the council ceases to administer its hospital services and becomes responsible as local health authority for London for the personal health services defined in Part III of the Act. It has already submitted proposals to the Minister for the administration of the majority of these services—care of mothers and young children, health visiting, home nursing, prevention of illness, and care and after-care, vaccination and immunization, and duties under the Lunacy and Mental Treatment Acts and the Mental Deficiency Acts. The midwives' service scheme is already administered by the Council. Proposals have not yet been submitted for the health centre service. The Council will, of course, continue to administer through the public health department certain services, as, for example, the school medical service, which devolve upon it under other legislation.

New Medical Staff

Heavy responsibilities will fall on the medical officer of health for the county in providing the link between all sections of the National Health Service, and therefore it is proposed that the position of deputy medical officer of health,

which has been vacant for some years, should now be filled. The salary scale will be £2,000, rising by biennial increments of £250 to £2,500. In addition a principal medical officer of high administrative ability, with particular knowledge of maternity and child welfare, will be appointed at a salary of £1,800, rising by increments of £100 to £2,000, as well as two medical officers for inspectorial and advisory duties in the field of maternal and child health (£1,500–£100–£1,800), and a third senior medical officer whose principal responsibility will be the medical examination of staff. It is expected that the number of health visitors, school nurses, midwives, and home nurses, together with domestic helps, will exceed 3,000. A chief nursing officer will be appointed, with a status enabling her to represent adequately the medical officer of health in discussions and negotiations with senior officers in other branches of the National Health Service.

Divisional Organization

The County of London is being divided into nine areas, each with a population of approximately half a million, for the day-to-day local administration of the personal health services. In each of the nine divisions it will be necessary to employ a divisional medical officer to supervise and co-ordinate the personal health services. The salary scale suggested for these positions is £1,500–£100–£1,800. There will also be in each division a principal administrative officer and a principal nursing officer. The Council reserves the right to transfer divisional staff from one division to another, but as it is realized that the successful functioning of the new divisional organization will be dependent on local knowledge and experience it is not expected that such transfers will be made except in very unusual circumstances."

Reports of Societies

CARDIAC CATHETERIZATION

At a joint meeting of the Manchester Medical and Pathological Societies on Jan. 14 Prof. J. McMICHAEL gave an address on cardiac catheterization.

Prof. McMichael said that catheterization of the heart was introduced by Forssman in 1929 and subsequently used extensively in Portugal, France, and Latin America for injecting radio-opaque substances so as to define vessels at the root of the lung. Cournand in 1941 was the first to report its use for the measurement of pressure in the chambers of the heart, and by the application of the Fick principle he also measured the cardiac output. The method had been applied in 800 cases at the London Postgraduate Medical School without untoward incident, and its use was now spreading widely in research centres in both America and Europe. Blood never clotted on the surface of the catheter; but small pin-head thrombi occasionally formed at the tip, and some of them must have escaped into the lungs, where there was good reason to believe they were harmless. In the right ventricle the tip of the catheter might excite extrasystoles, and runs of extrasystoles might harm patients whose cardiac condition was already precarious. One death had been reported in Holland in a patient with gross disease of the coronary artery following right ventricular catheterization. This was the first known fatality in an estimated 3,000 cardiac catheterizations. With the catheter in the right auricle there were no significant risks if proper precautions were taken. The standard error of right auricular samples used for the determination of cardiac output was plus or minus 4%.

Patients with cardiac venous congestion and oedema fall into two groups. In the ordinary forms of heart failure resulting from hypertensive valvular and ischaemic heart disease the cardiac output was reduced to about half the normal level. In another group in which the congestive phenomena resulted from (1) anaemia, (2) emphysema, (3) conditions in which there was an increased mechanical burden on the circulation (e.g., arterio-venous aneurysm, generalized osteitis deformans), the cardiac output was raised above the normal. These high-output types of cardiac failure were recognizable not only aetiologically but also clinically: warm hands and full peripheral pulses contrasted with the cold extremities and feeble pulsation often present in the low-output group.

The immediate action of intravenous digoxin on the normal heart was to lower the output and the venous pressure. A similar reaction was the rule in high-output heart failure in which digitalis was unlikely to be of benefit. In low-output failure, however, digoxin raised the output of the heart. Venesection reproduced the action of digoxin on cardiac output. It was probable that digoxin had a primary venous pressure-reducing effect which relieved the overstrained failing heart. Digitalis acted quite as well whether auricular fibrillation was present or not. Theophylline had a similar action on the venous pressure but was also a direct cardiac stimulant. Theophylline-ethylene-diamine was of particular value in hypertensive cardiac failure, but its effect was less dramatic in mitral stenosis.

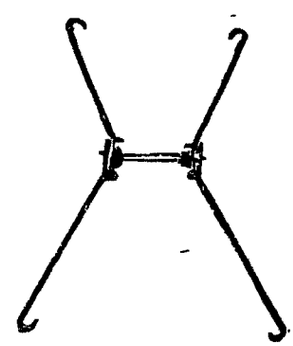
In congenital heart disease the simpler defects could often be clearly diagnosed by cardiac catheterization. An inter-auricular septal defect was recognized by the admixture of "arterialized" blood with venous blood in the right auricle. The cyanotic forms demanded great skill in analysis with fluoroscopic control and pressure measurements at every point. With right to left shunt the method had certain risks, as tiny emboli might be serious. The selection of cases for Blalock's operation was usually made on clinical grounds. Bing's test of falling oxygen-uptake per litre of ventilation on exercise was a valuable index of pulmonary stenosis.

Cardiac catheterization, Prof. McMichael concluded, had come to stay. Further research possibilities were indicated by Bing's recent success in sampling blood from the coronary sinus. When such sampling was combined with the nitrous-oxide method of Kety and Schmidt for measuring organ blood flow we should be able to measure the volume flow in the coronary arteries. The catheter had also been used to reach the hepatic and renal veins. New avenues of research were clearly being opened.

Preparations and Appliances

DEVICE FOR ADMINISTRATION OF ANAESTHETICS

Dr. G. C. PETHER, Barnet, Herts, writes: The device illustrated was made to my instructions before the war. It was effective in use and very economical. Two face-pieces of sheet metal are made to interlock in such a way that the outer end of one fits inside the outer end of the other. By the provision of a ridge as shown a detachable metal ring is held in position. This ring supports a thin sheet of asbestos gauze on to which the anaesthetic is poured. The asbestos is a substitute for cotton gauze. Of the two face-pieces the larger is for adults and the smaller for children. Each face-piece has a gutter round its periphery to trap any anaesthetic which may run down from the asbestos.



When in use the mask is applied over a piece of Gamgee tissue. If an adult is to be anaesthetized, the anaesthetic is poured into the opening of the child's face-piece; if a child, then into the other end. After use the whole apparatus is sterilized by flaming, gauze included. Ether and chloroform consumption is greatly reduced, and cotton gauze is not required at all.

A recent PEP broadsheet, *Family and Nation*, stresses the nation's interest in strengthening and improving family life. It proposes that greater financial aid should be given to parents as soon as the economic situation permits. This should be done by increases in family allowances and maternity grants, reform of tax rebates, and provision for low-interest marriage loans. The second half of the broadsheet discusses health examination before marriage, marriage guidance, birth control, abortion, sterilization, childlessness, and artificial insemination. It is proposed that a Family Welfare Service should be set up to deal with these problems.

Correspondence

The Plebiscite

SIR,—I have read and reread the Plebiscite Form. I am in a quandary. How do I reply to Question C? I shall answer Questions A and B in the negative. As I am not willing to sell my practice to the Minister of Health, nor to any other person who would not be personally interested in it—nor do I approve of the salary element—I cannot agree or disagree with "the majority."

My wife and I have discussed our probable financial position should the Act come into force, and as individualists we are prepared to stand on our own feet even though the profession sells itself to the State: and we are well aware that it may be equivalent to financial suicide. We are prepared to take the risk—and the risk to the higher education of our children—because we are both convinced that the fundamentals of the Act are morally wrong. It is another example of the State supporting the individual, whereas the individual should support the State. To us "social security" is the antithesis of incentive and reduces the speed of every hare to that of tortoises. A pension in lieu of full salary (in the doctors' case salary plus capitation fee *at present*) is not our idea of a sound moral training. Is the individual so weak-minded or improvident that he cannot be expected (or permitted) to save for himself? I am open to further arguments regarding the sale of my practice to the Minister of Health: but, until I am convinced that having sold to him he *cannot* force me into a salaried service, I shall retain my capital in my own hands and take the risk of it depreciating to *nil* should the vote be in favour of accepting service under the Act in its present form.

To my mind a National Health Service should and can be born, and soon. I want to take part in an N.H.S., but not to the detriment of my self-respect. I hope that every medical man, both those qualified and those preparing to qualify to practise, will read again and again the article by Colm Brogan (*B.M.J.*, Jan. 31, p. 209) and take it to heart. It will be cowardice that sells the soul of medicine to the State. What shall it profit a man if he gains the whole world and loses his own soul?

Am I, Sir, justified in answering Question C of the plebiscite in the affirmative, since I do not wish to be released from my undertaking in answering Question B in the negative?—I am, etc.,

London, N.19. C. H. JOHNSON.

Attack Now

SIR,—Like myself there must be a large number of doctors who, although whole-heartedly against Mr. Bevan's Act, are afraid that they will lose their life-savings, as represented by the compensation, if they fail to sign on the appointed day. Letters in the *B.M.J.* and conversations with other doctors show that this fear has not been entirely allayed by the assurance of the B.M.A. If we wait until July 5 before taking any action we have to fight: (1) without our N.H.I. cheques, because existing contracts will be cancelled on that date, and (2) without the fees of a large number of our present private patients, either because they will be quite genuinely unable to afford both private and public service—this latter being of course compulsory—or because they are unwilling to do so; and we run the risk of losing our compensation—in my case some thousands of pounds I hope. I would suggest, Sir, that if the plebiscite result justifies it, as it gives every indication of doing, we should attack *now* by resigning from the N.H.I. on April 1. The resulting confusion would soon force Mr. Bevan into a more reasonable frame of mind, as it did in the matter of the capitation fee, and (this is the main point of my suggestion) would give us the advantage of the three remaining months of our existing private practice before the date to sign or not to sign.

Common sense tells me that Mr. Bevan could not hold out against such a state of affairs for twelve weeks, and that by the appointed day we should have won the battle and there would be no fear of not being able to sign on July 5 and so risk losing our compensation. Finally, Sir, it is my opinion that the fear of loss of compensation is the strongest card in Mr. Bevan's hand and that it will become stronger as the date approaches. Parliament will, I am sure, endorse Mr. Bevan's policy this week, and, however big a majority of "Noes" the plebiscite may reveal, the position will remain the same. Therefore, I suggest, do not wait until July 5 but attack *now*.—I am, etc.,

Nantwich. K. KNOWLES.

Buying and Selling

SIR,—Is clarification of our ideas and emotions really helped forward by dismissing as "nonsense" views which do not secure your agreement? The comparison between dealing in practices in a nationalized health service and dealing in commissions in the Army is not wholly invalid inasmuch as in both cases one buys a right to an income from public funds. The newly qualified doctor who has secured a bare pass but whose wealthy father is able to buy for him a practice which an honours man after three or more years of postgraduate hospital work is quite unable to afford is not altogether different from the young gentleman whose father in days gone by could buy his commission.

Again, many of us find it difficult to defend our official position on this point when a layman declares that it is "nonsense" to claim the right to buy and sell practices in a public service. Anyone who offers a practice for sale is on difficult ground if he tries to probe into the professional aptitude, moral code, or social standing of a purchaser who is willing to buy and able to pay. It is really difficult to dismiss as "nonsense" the contention that a transaction of this kind is a buying and selling of patients, particularly as the vendor hands over the most intimate records of his patients without taking any steps to assure himself that they will employ the purchaser.

I hope and believe that there will be a vast majority of "Noes" in the plebiscite, but I submit that it is unwise to overlook the fact that they will be tendered for many different reasons.

It seems to me, as an unimportant and uninfluential member of the profession, that the time is more than ripe to change the whole incidence of our propaganda. The public is not interested in *our* grievances. We must bring it home that this or any similar Act will not make available one extra consultant, one extra general practitioner, one extra matron, sister, or nurse, one extra wardmaid or orderly; that it will not add a single bed in any available ward or reopen any single ward now closed for lack of staff; that it will do nothing to provide an extra service or building of any kind. The Act can do nothing to cause a levelling-up of skill or services but may do much to cause a levelling-down. The Act will cause those who have average or less than average sickness to pay a great deal more than they have hitherto done for medical attention.

At the risk of being accused of wanting to rock the boat at a critical time I would like to conclude by expressing my considerable uneasiness when I note that a large section of the press (nearly all of it if one excludes Lord Kemsley's excellent papers) is hostile and that the majority of the public are apathetic, perplexed, or openly hostile. If we have, as the vast majority of us believe we have, a very good case, why are these things?—I am, etc.,

Launceston. DONALD M. O'CONNOR.

Amendments to Act

SIR,—Resolutions expressing disapproval of the National Health Service Act are being carried by overwhelming majorities at professional meetings everywhere, but do these votes have very much significance? It is surely clear that almost any medical man can find something in the Act with which to disagree, and can therefore in all sincerity vote against it as it now stands. Since, however, the feature which offends one may appear highly desirable to another, who in turn objects to some quite different section, it does not inevitably follow that a mass vote against the Act is a mass vote against the whole or even against some specific part of the scheme. Therefore a large majority voting in disapproval of the Act does not necessarily imply an equally strong support for the full programme of amendments in the summary at the end of the statement of the Negotiating Committee's case which has been circulated by the Council of the B.M.A. Indeed, to judge by the correspondence in the *Journal*, it would seem that few of the

proposals command individually the support of an effective majority in the profession, and from the comments in the press it appears doubtful if any single one finds much sympathy among the general public.

The implication of *The Times*'s question, quoted in the leading article on "The Press and The Profession" in the *Journal* of Jan. 24 (p. 155), as to the nature of "the B.M.A. questionnaire" is emphasized and expanded in the letter from Dr. J. Shackleton Bailey (p. 167). I agree entirely with his view that the only amendments which can or should be secured are those which have the support of a very substantial majority of the profession, and that the Association should at once take steps to discover which of the proposals of the Negotiating Committee do in fact obtain such support. If this can be done it becomes possible, by selecting those points on which the profession can be virtually united, to create the essential factor for success in obtaining an amended Act and a reasonably satisfied and contented body of doctors to operate the Service. If, however, the B.M.A. continues to press for a whole series of amendments, many of which are opposed by considerable numbers among the profession, then it cannot fight whole-heartedly, nor is it likely to impress a Minister who is presumably well aware of the divergent opinions held by his opponents.

The letter from Dr. J. V. Dockray (p. 172) encourages me to believe that, unless the B.M.A. succeeds in crystallizing the issues more effectively, I shall not be alone in accepting service under an Act which I do not altogether like, but which appears preferable to the amorphous mass of amendments put forward by the Negotiating Committee.—I am, etc.,

Maryport, Cumberland. J. D. H. BIRD.

An Amending Act Needed

SIR,—If, as we all believe, the plebiscite shows an overwhelming majority against the Act, the Council might consider issuing a statement incorporating the following points. (1) The profession is *not* against a satisfactory health service. It is against the Act *in its present form*. (2) If amending legislation is passed incorporating the points of difference it would have the support of the whole profession. (The points of difference seen to be most adequately recorded in the resolutions of Jan. 5 of the Fellows of the Royal Faculty of Physicians and Surgeons of Glasgow.) Such an approach would put public opinion well on our side and give the Government and the people a final chance of preventing an unfortunate conflict.

If no response to this offer is made by the Government, then a trial of strength should be made by withholding certification. This would give us confidence in ourselves and our fellow practitioners before the appointed day, and perhaps force a solution.—I am, etc.,

London, N.W.11. HAROLD E. THOMAS.

Alternative Plan?

SIR,—I am strongly opposed to the State scheme. I have recently purchased a practice and a large house that goes with it and therefore have heavy financial obligations. I have signed the plebiscite that I will abide by the decision of the majority. But I know that as the "appointed day" approaches there will be increasing mental conflict between loyalty to the profession and that of my obligations—the latter affecting the well-being of my family. There must be many others in the same position as myself. This is just what Mr. Bevan wants!

We as a profession must realize that the plebiscite will not be enough and that doctors will not just stay out, risking thousands of pounds depending on the loyalty of others over whom they have no control. I therefore wish to emphasize the following points: (1) Mr. Bevan no doubt has his plans. We must not underestimate the strength of the "enemy." (2) In order for the doctors to remain adamant, they must have concrete plans of action. We have not yet been informed of any and do not know if they even exist. (3) We should preferably act as long as possible before the appointed day—i.e., while our compensation, etc., is not at stake. (4) Clear propaganda both for the Press and surgery waiting-room to let the public see that it is also their fight. (5) Those who are members of bodies which do not support the wishes of the majority should resign from those bodies.—I am, etc.,

London, S.E.20. L. A. LAVENTHALL.

Compromise Suggested

SIR,—I once heard a young lady say that, however much she rebelled against parental authority, she always ate all she ever could. That is a sound principle. Parliament has approved the National Health Service Act, 1946, and papa Bevan advises the B.M.A. to put on record the opinion that, while they may disagree with the Act in this or that particular, nevertheless they will loyally accept the decision of Parliament and go on agitating for such revision as they think proper. That seems sound advice. While we may agree with the leading article of the *Sunday Times* that Sir Stafford Cripps has been grossly unjust to the doctors, and while we may deprecate Mr. Bevan's haughtiness with the Negotiating Committee, there still seems no need for imposing on the rank and file of the profession the self-immolation of starvation on July 5. There can surely be some give and some take.

If we examine dispassionately the main points of obduracy on the part of the Negotiating Committee, and intransigence on the part of the Minister, they resolve into four: (1) ownership of goodwill; (2) appeal to the courts; (3) element of basic salary; and (4) negative direction.

The essence of practical policy, not to say sweet reasonableness, would seem to be compromise, for which the British have some reputation. Taking the points in order, I would observe upon the first that maintenance of the position that we prefer the succession of a medical practice to depend on the purse rather than on nomination, with its accompanying risk of some degree of nepotism, is somewhat a pious expression of choice between two evils. Neither way is perfect, neither is worth fighting for. I for one will not be led out on hunger-strike to maintain the first point.

As regards the second point, I do not object to adjudication of disputes by a reasonably constituted tribunal. It would probably be just as fair as the courts, and certainly less expensive. If the Negotiating Committee prefer the corresponding clause in the Health Act for Northern Ireland, by all means let them ask for it. Just as with the first point, I find nothing here to justify me in hunger-striking.

The third point is more important. While here, as on the first two points, I feel no great trepidation about the basic salary. I realize that the bulk of my professional brethren do. I think if the Minister met us on this point he could also reasonably concede the fourth—namely, conversion of negative direction into positive inducement by giving a basic salary in certain under-doctored areas.

I have therefore to propose that the B.M.A. Divisions authorize the Negotiating Committee to yield gracefully on the first two points and ask the Minister in turn to compromise on the other two. Surely that would secure our professional freedom and, just as important, freedom of movement. Should the Minister prove intransigent and refuse seriously to negotiate on a new approach, then the B.M.A. can declare a dispute and call a no certification strike before July 5. I for one will join it. If, on the other hand, the B.M.A. defer action until July 5, I shall not commit my family to a hunger-strike at their bidding, nor do I think will a great many doctors who would support them in a reasonable middle course.—I am, etc.,

South Molton, Devon. R. A. NASH.

Basic Salary Compromise

SIR,—I should like to suggest a possible compromise between the doctors and Mr. Bevan on the basic salary dispute. The doctors do not want to be paid for the work they do by salary. Mr. Bevan wants to help the young doctor starting in practice. Every doctor has certain basic expenses. He must maintain a car. He must provide a surgery, keep it clean, and equip it. He must pay somebody to take in messages from his patients. These items alone cost £300 a year.

Could not Mr. Bevan call his basic salary an "essential expenses allowance" and guarantee to the doctors by amending his Act that the "salary" will never exceed in amount the minimum expenses every doctor incurs? The work a doctor does for his patient can then be paid for by capitation fee. I should not object to this form of "salary." Would other doctors? I have sent this suggestion to my local M.P. for Epping.—I am, etc.,

London E.4. JOAN WAGSTAFF.

Where is the Staff?

SIR,—While in favour of the National Health Act, even as it stands, in my view the main issue in refusing to join this service is that in doing so we, as medical practitioners, are aiding the delusion of the public. What are they offered? (1) Free service at time of service.—Where are the doctors needed? (2) Free hospital treatment.—Where are the beds? (3) Home help and home nurses.—Where, oh where, are the nurses? Surely we are not going to help the general public to expect these, at the moment, Utopian ideas. By all means let us have a comprehensive service, but let us first have the man-power and woman-power to implement these ideals.—I am, etc.,

Bristol. REGINALD E. GIBSON.

Tell the Public

SIR,—I believe that if the National Health Scheme be accepted in the present form the public would be the first to bitterly regret the step before long. It would seem that the public ought to be educated as to why the medical profession is largely in opposition to the scheme, as the Government propaganda machine is trying to represent the medical profession as a mercenary body interested only in its vested interests.

I believe that doctors should explain to their patients in the course of conversation what a menace to the free action of doctor and patient is involved in this political scheme.—I am, etc.,

Prestatyn. T. H. HARGREAVES.

SIR,—In reviewing the campaign up to the present, there still seems to me to be much doubt in the minds of the public, and to a lesser degree in the minds of the doctors themselves, as to what it is all about. I am fully aware of the good work done by the B.M.A., and I hope the doctors have taken it to heart. But we must not forget the first importance of public opinion (after all, it is the public who stand to gain or lose by it). Many lay people of all types have discussed it with me, and it is clear that they have the most confused ideas about the whole thing. Many of them think that it is a purely political move. One friend of mine who has had very wide experience as a journalist said: "Why can't you medical people draw up a very short list, setting forth very simply what you stand for? It should not be more than 500 words. It should have the widest possible publication, so that everyone who reads any newspaper, all over the country, can see it and grasp its meaning easily."

Large numbers of letters, and very long tedious articles, have appeared in different papers already. People are only confused by such articles, and the letters generally each take up some particular point, and then reach only a limited circulation. I send you this suggestion for what it is worth, but personally I feel it might do much good to clear the air of a good deal of doubt and misunderstanding. The doctors have been told, but it is equally necessary to tell the public and to tell them in a manner which they can readily understand. They will then be able to form their own opinions—they have certainly not been able to do so up to now. It is no use to send a notice to any one particular paper, which only reaches a small section of the people. The notice *must* have the widest possible publicity; but I imagine this could be arranged with the Press.

If you think it a good plan to act on these lines, naturally the sooner something is done about it the better.—I am, etc.,

London, W.1. REGINALD C. JEWESBURY.

SIR,—At a meeting held in this small village recently a resolution was passed, by an overwhelming majority, supporting the doctors in their dispute with the Minister of Health, and urging that remuneration in a National Health Service should be by capitation fee only. The meeting was arranged by myself and was attended by my partner and by two other doctors practising in the district. About 150 of our patients crowded into the village hall in response to our invitation that they should come to ask questions. Many of them have since told me that before the meeting they were quite ignorant of the issues at stake, and they have urged me to ask you to bring our meeting to the notice of doctors throughout the country so that similar meetings can be held elsewhere. They were convinced, and I fully agree with them, that if patients could hear their own doctors' points of view we would have a much more powerful force of public opinion behind us than we have now.

I suggest to any of my colleagues who contemplates holding a similar meeting that: (1) The discussion should be kept as far away from party politics as is possible, and indiscriminate slanging of individuals or parties should be avoided. The experience of our meeting showed that Socialist supporters could be won to our point of view. (2) The issues involved should be kept as simple as possible, and the "capitation fee *versus* salary" controversy should be the main point for discussion. (3) The public should be told that we are fighting their battle even more than our own. One of my patients told me after the meeting that the layman seemed to find it difficult to realize that any group of people could in these times be indulging in political agitation with the object of benefiting humanity rather than of improving their own financial status.—I am, etc.,

Ash, Canterbury. J. D. OGILVIE.

SIR,—Perhaps the weakest link in the B.M.A.'s chain of opposition to Mr. Bevan is its failure so far to produce a coherent alternative plan. Let there be even a unanimous decision to reject the present "health service"; what is to take its place? There must be few doctors who are glad to acquiesce in a system in which some of their patients are deprived of investigations and treatment because they cannot afford them. Journeys by ambulance, *x* rays, flying-squads, etc., vary in their availability in different areas, and it is in the field of rationalization and standardization of equipment and provision of facilities that the medical profession has itself long advocated reform.

The B.M.A. would strengthen its case if it were to make clear its willingness to co-operate in the development and organization of technical services whose desirability is not disputed. If these were paid for out of public funds the Minister would naturally have a right to supervise them, and would also have a duty to answer for their proper use in Parliament. But even the most elaborate scheme for equipment, accessory services, and nursing facilities need not in any way curtail the freedom of the medical practitioner, who would simply be assured of their availability to all his patients whatever their income. He himself could be free to make an individual contract for service with each of his patients, either privately or through an insurance agency (whether the latter was Nationalized or Friendly need not concern him). If the Minister was anxious to transfer doctors from Bournemouth to Jarrow, on his own assumption that their god is their income, he would have only to subsidize the contracts offered by insurance agents in Jarrow for queues to form on platforms to the North.

Much of the opposition to the B.M.A. among patients is based upon the fear that the doctors are in some way against the provision of the "best possible medical treatment for all" so liberally promised by Mr. Bevan. This opposition could well become support if it could be made clear, by alternative proposals, that doctors do in fact want every facility and service to become available to their patients, together with the freedom to employ individual judgment in their use.—I am, etc.,

Oxford. E. M. VAUGHAN WILLIAMS.

Free Choice

SIR,—Freedom is necessary both for the consultant and the general practitioner. The profession has turned down negative direction as a negation of freedom. The Minister of Health called the sale of practices a blot on our medical system. The Conservative Party, during the debate, was in tacit agreement. It is the weakest part of the doctors' case, yet it is intimately connected with their professional freedom. It is a measure of the present impasse. Can a solution be found, and can the gap be bridged?

At present for the transfer of a panel practice patients on Dr. A's list are notified that he is relinquishing his practice, but that they will be transferred to Dr. B, his successor, unless they take their card to another doctor for signature within one month. I would suggest a change, and hope that a different formula might prove acceptable to both sides. On the transfer of a public practice all patients on Dr. A's list are notified that he is relinquishing his practice on a certain date, and that as

they will *not* be on the list of any doctor then, they must re-register with the doctor of their choice. Further, it might be stated that Dr. B. will be practising at the same address, where they can register, or with any doctor in the neighbourhood. A list of such doctors might be included if thought essential. Undoubtedly, doctors now in practice would lose materially, but they should gain a lot more. They would retain their professional freedom and that intangible asset, goodwill. It would be entirely ethical, and completely undermine our opponents' case, for there would be a completely free choice of doctor and no buying and selling of patients, however they would argue, and no bulk transfer of patients. It would enormously strengthen the B.M.A. case.

There would be no need for the Government to buy out the practices, nor for committees to deal with direction. A longer introduction would be necessary, and this would help to cushion out the changes, so materially helping the new scheme. It would prevent the scandal and abuse in the exploitation of the sale of practices, free the family doctor from any taint of commercialism, and give a better understanding with his patients. It would help the young doctor, for premiums would be less and he would not be overloaded with debt. The basic salary should be limited to the young doctor in his first practice for a maximum of, say, five years, and as an inducement in *proved* under-doctored areas.—I am, etc.,

Leamington Spa. I. H. GRACEY.

Choice of Consultants

SIR,—It would appear to be inevitable, under the regionalization which is consequent upon a State Medical Service, that the general practitioner will be directed as to where he should send cases for hospital or specialist treatment. The planners tell us that all branches of the specialties will be covered in the various regions of the National Health Service, but one anticipates that our present right to send cases where one likes will be taken away. At present if a specialist opinion is required, whether for a private or a hospital case, the general practitioner has been able to send the patient to the most expert opinion obtainable. In the London area a neurological case may be sent to the National Hospital, Queen's Square, a paediatric case to Great Ormond Street, or a proctological one to St. Mark's or the Gordon Hospital. Furthermore, many of those practising around London have their old teaching hospitals close at hand and have naturally referred cases to their old teachers and colleagues. It is quite obvious that the bureaucrats who administer the National Health Service will be most displeased if an old St. Thomas's man, practising at Enfield, refers a case to his teaching hospital, which is outside his present section. Similarly, a Bart's man in Surrey or a Guy's man in Middlesex may be prevented from using his old hospital.

In the Services one saw the evils of ultra-regionalization. If one wanted a psychiatric opinion the case had to be referred to the nearest psychiatrist, for whose reports one might have little regard. The same applied in other specialties at the static military hospitals in this country. One might be lucky and have a team of good specialists available, or, on the contrary, there might be a "dud" in some department who could not be circumvented. The fact that a specialist was recognized or "graded" by the authorities at the War Office was an excellent system in its way, but, as every practitioner knows, there are specialists and specialists. The G.P. has his own pets, whose opinions he values and whom he can recommend to his patients with the utmost confidence. It is his duty to find the best possible opinion available when it is needed, and not to trust a system which may plant a "dud" on him at some local hospital.

This problem of choosing consultants was recently brought home to me in a urological case which was twice misdiagnosed by one hospital and which was correctly diagnosed and cured by a specialist hospital. Other G.P.s must constantly meet such cases where, when one consultant misses the bus, they can intervene and send the case elsewhere with satisfactory results.

Lastly, many patients express a preference as to which hospital they wish to attend and which specialist they desire to consult. It is to be hoped that in framing the regulations of the "revised" Act this fundamental right of both patient and practitioner may be preserved.—I am, etc.,

Petersham, Surrey. JOHN M. JACKSON.

Individual Freedom

SIR,—The majority of the medical profession have at one time or another served in one of the Forces. There appears to be insufficient discussion as to the lessons we have learnt during that time. Furthermore, the public seem to have forgotten their condemnation of the "general-practitioner-types" of the Services. The condemning request made by serving soldiers to their R.M.O.s of "I want to see a specialist" sums up their attitude to a nicety and at the same time shows the ignominious position to which they have delegated the essential part of our profession, namely, the general practitioner. Few can fail to remember the deplorable lack of enthusiasm for learning that pervaded some of those doctors whose working hours were spent directing us rather than attending the sick. Are these specialist gentlemen to participate in the health scheme as organizers of the Service and are they with their office staffs to be allowed to pour forth the same dreary set of forms as we were accustomed to see in the Services?

One can view the inexorable descent of the prestige of the general practitioner. He will be considered the clerk to the so-called "true doctors"—the specialists! Surely a sad and dangerous retrogressive step. As in the Army, this type of work can be performed by the corporal, who is aware of the number of the "specialist form" and does not require the painstaking training of eight or more years which is the sturdy background of a qualified doctor to-day.

What was the reason for this sudden change of efficiency? I would suggest it was due to a man being deprived of the major part of his personal responsibility, his individual status, being plagued and frustrated by a superfluity of forms, and having his enthusiasm blanketed by the people who are engaged in controlling him. He is converted from an individualistic worker to an over-controlled unit in a large machine, realizing his progress and stability of position lay not in critical work and fighting for small improvements, but becoming a polite "yes-man" who would give those above him no trouble. Of course he became browbeaten, morose, and disinterested; his foundations have been knocked from under him. His self-respect and independence were slowly but steadily lost. He learnt that an outward show was more important and insisted upon than the courage to criticize and uphold the views in which he believed.

This state of affairs, although not true in every individual case, was sadly observable over the greater part of the system. I fear, as the bureaucratic machine after a few years really commences to get under way, a similar deplorable falling off of efficiency will be painfully manifest. What are the safeguards? The only ones possible are to allow as much individual freedom for the doctors as possible and also to confirm now their right to criticize their own organization and publish their scientific work exactly as they do to-day.

We all look forward to increased efficiency—let us not be blinded by the "nation-size" of the organization being the *sine qua non* of progress. The system to-day resulted from years of practical trial—it works well and harmoniously. Let us hope that the new method at least does not produce a retrogressive step. The Services have sounded the warning!—I am, etc.,

London, W.5. J. J. SHIPMAN.

National Health Service

SIR,—It is a pity that the antagonists of the B.M.A.'s policy produce letters which are inaccurate and misleading. Dr. S. Gilford's letter (Jan. 31, p. 222) concerning a meeting of doctors practising in "Fleet and the surrounding district" is a case in point. This was a private meeting of G.P.s practising in a rural area. Six of the eight signatories recently left the Services and none of them lives within six miles of Basingstoke, where Dr. Gilford states two practise. He also brings in Farnham and Camberley. Heaven alone knows why. These towns are in another county.

As regards the doctors in Basingstoke, Farnborough, Aldershot, and Fleet: a meeting open to all doctors in the Aldershot and Basingstoke Division of the B.M.A. was held on Jan. 18, 1948, where it was unanimously decided not to accept service under the Act in its present form. So much for the militant minority.

Dr. Gilford started in practice 44 years ago. He has seen and helped medicine to evolve slowly. Yet now he wants the whole doctor–patient relationship turned upside down overnight. His allegiance was to his patients: now it will be to the State. I am sure his patients will appreciate that. It is an extraordinary thing that a man of Dr. Gilford's obvious great talents should be so blind that he cannot see the ghastly danger ahead of doctors and patients alike. Call it what you will. It is dictatorship pure and unadulterated, with the loss of that precious freedom for which so many gallant young men and women fought and gave their lives all over the world. The B.M.A. and the Negotiating Committee have given us a lead. It is up to us all to support them.—I am, etc.,

Hook, Hants. R. H. SCOTT.

SIR,—Basic salary.—The doctor receiving a basic salary is a State-salaried employee and must carry out any duties assigned to him in the way indicated. The salaried servant is not a free man. The basic salary as an attraction to under-doctored areas would be unnecessary if a supplementary capitation bonus—an addition to the general capitation fee—was paid in such areas. (This method could also be used to help rural practitioners.) The basic salary for newly qualified general practitioners would be inessential if the buying and selling of practices was permitted, enabling them to earn a reasonable net income in their early days.

Goodwill of practice.—If the State owned the goodwill of the doctor's practice the State and not the doctor would say how that practice was to be run. The doctor would have lost his freedom. Direction would have been made easy.

Direction.—Negative direction when there are many under-doctored and few over-doctored areas becomes positive direction when there are few under-doctored and many over-doctored areas—and a great increase in the number of doctors is envisaged.—I am, etc.,

Newcastle-upon-Tyne. WM. HUNTER.

Distribution of Doctors

SIR,—If a statement is repeated sufficiently often it is apt to be regarded as a fact. Dr. Charles R. Palmer (Feb. 7, p. 271) has repeated the statement made in Parliament and in the Press when he writes: "It is obvious that one cannot receive money from public funds whether by capitation fee or salary for practising where there is not a public need. It is not just to expect it." As I understand it the G.P. neither wants nor expects to receive public money except for services rendered or definite risks undertaken. This is quite a different situation to that put up by supporters of the Act and so easily demolished, a very elementary form of debate.

Surely the statement should be: "Every general practitioner should have the right to sell his skill where he pleases and as a natural corollary be paid only for the work he undertakes to do (i.e., capitation fee)." If every G.P. elected to practise in Worthing the capitation fees per doctor would be very few and in many cases *nil*. This in itself would solve the problem of distribution.—I am, etc.,

Hove, Sussex. H. J. MCCURRICH.

Newly Qualified Doctor in N.H.S.

SIR,—There have recently been complaints from newly qualified doctors that under existing conditions their initial salaries are low. I should like to point out that under the proposed Health Act the initial salary for any doctor is £300 per annum. The capitation fee for any patient only commences after that patient has registered with a doctor, and there appears to be no certainty that a doctor's patient will be transferred to his successor automatically.

In the event of the death or retirement of a doctor practising under the Health Service, what method is there of conveying this fact to the patient? What inducement is there for the patient to register with his doctor's successor until he is actually ill and in need of medical assistance, which may be many years later?—I am, etc.,

St. Albans, Herts. PHYLLIS F. L. DAPLYN.

The Temporarily Registered Practitioner

SIR,—It has come to our knowledge that doctors on the temporary register should vote on a special coloured paper. We feel indignant that we should be earmarked as a special group, and especially as we are called blacklegs in the general and medical press. We should like to point out that we have all served this country during wartime in H.M. Forces or in civilian capacity. Most of us are already British subjects and feel strongly about being called displaced persons. The number of 3,000 temporary registered doctors is an exaggeration; most of this original number were in this country with the Allied Forces during the war only; others have emigrated or are too old to start practice again. According to the estimation of the Ministry of Health the number would be no more than 1,500 and of the B.M.A. perhaps about 1,000. To anticipate the result of the plebiscite by calling us blacklegs would only serve to impair our good relations with the rest of the profession. We are feeling indignant over the frivolous attack on us in the press, even in some medical meetings, and think this amounts to a kind of intimidation. In spite of this attempted intimidation we have advised the doctors of our association that each of them should exercise his right to vote as he thinks fit, guided only by his conscience and his conviction in the light of past experience.—I am, etc.,

M. BERGENTHAL,
Chairman, Association of Refugee Doctors from Germany in Great Britain.

London, N.W.11.

Questions in Parliament

SIR,—The *Spectator* (Feb. 6) draws attention to the Socialist Government's dictum through the Minister of Transport that after nationalization it is not legitimate for a Member of the House of Commons to put questions of detail to the Minister. Will the Negotiating Committee secure a definite clause in the Act ensuring for the medical profession that this democratic right of appeal is safeguarded before it finally commits itself to acceptance of service?—I am, etc.,

St. Mawes, Cornwall. J. N. WHEELER.

Intimidation

SIR,—Mr. Bevan complains of the possibility of intimidation by the B.M.A. with regard to the plebiscite. I think he is about the last person who should take up this attitude. His own Act contains as good an example of intimidation as can be imagined. I refer, of course, to the condition that there will be no compensation if one fails to join the scheme by the appointed day. This seems to be no less than an attempt at compulsion in spite of the contention that participation is entirely voluntary.

Doctors should be free to enter at any time *after* the appointed day without loss of compensation. If the scheme is attractive enough, a sufficient number will be forthcoming. I hope that when the Act comes to be amended we will see to it that it is made so attractive that doctors and patients alike will be anxious to join, and that intimidation in any form will be unnecessary.—I am, etc.,

Musselburgh, Midlothian. JAMES SHARP.

SIR,—The dispute is not altogether devoid of humour: for instance, the accusation that the B.M.A. might intimidate doctors in the plebiscite made by Mr. Bevan in the House of Commons. Isn't that the place where they have party whips to ensure that Members vote according to party doctrine? And wasn't he the Minister who introduced the vicious clause about no compensation for those who enter after the appointed day?—I am, etc.,

Penn, Bucks. JAMES SMIBERT.

Political Selection

SIR,—Recently I applied for an appointment with a certain nationalized industry, and was granted an interview. The selection board consisted of three men, one of whom was a doctor. The doctor asked me the usual questions and was perfectly helpful and understanding. But imagine my surprise and inward fury when one of the laymen asked me my views on nationalization! No doubt my evasive answer did not

influence their rejection of me for the appointment, but surely a political means test is an unwarrantable method of trying to assess a medical candidate for a purely medical post.—I am, etc.,

Stockport. W. E. BROUGHTON.

Mutual Confidence

SIR,—We read with interest the letter of Dr. N. J. P. Hewlings (Feb. 7, p. 269). We heartily agree with his views and feel sure that the big fear of all G.P.s *re* the future N.H.S. is that we cannot be sure how many of our colleagues will refuse to sign when the allotted day comes to join the Service. Dr. Hewlings's suggestions are very good, but we feel that they do not go far enough. We would like to suggest that when the time comes for signing the contract with Mr. Bevan—we presume there will be some form of contract—all medical men in all areas should meet, as we do for local B.M.A. meetings, and in the presence of each other join the Service or refuse to do so as they feel justified.

We—and I am sure many other doctors—having given a good number of years to the Forces, are just beginning to find our feet, and we feel that we dare not risk the possible loss of capital involved in the value of our practice or the compensation. Mr. Bevan's strongest weapon is the fact that we lose all claim to compensation if we do not sign on the appointed day, and the only way for us to fight this weapon is for us all to publicly refuse service. By this means we will all be sure that we have sufficient backing to fight for better conditions. Our neighbours will not join for fear we have and we will not be forced to for fear our neighbours have.—I am, etc.,

J. H. BEGG.
Wroughton, Wilts. A. S. CAMERON.

SIR,—We think that the main issues of the controversy between Mr. Bevan and the medical profession are now clarifying. To us it appears that it is no longer a battle of the rights and wrongs of the scheme : it is essentially a battle of morale, for it is obvious that the vast majority of the profession are against the scheme. As we see it, unless some radical change occurs, the profession will vote 90% against the plebiscite and equally will vote 90% for the scheme in July. What is the reason for this ? To put it in a nutshell, the individual practitioner would vote against the scheme if he thought his colleagues would do the same, but unless he has faith in the integrity of his colleagues he will in the last resort vote for it. We suggest that some more binding arrangement should be made. In each area a document should be drawn up in which the local doctors solemnly pledge themselves to vote against the scheme. This document should be witnessed by independent persons and should be regarded as an absolutely sacred undertaking. There might be an escape clause releasing the signatories of the document from their pledge if less than 85% of the profession agree to do likewise. This should do away with these apprehensive people who wish to sit on the fence and who will at the last prejudice the opposition to the scheme. A list of those who sign these documents should be publicly displayed in the areas concerned and a copy sent to the B.M.A.

We feel that nothing less than the most energetic measures will meet the situation. The moral fibre of the country is not good, and to this the medical profession is no exception, for unless immediate action is taken to unite the profession, irrespective of the results of the plebiscite, Mr. Bevan's intimidatory tactics of divide and conquer will inevitably succeed. If the profession fails to rekindle the spirit of its ancestors, we are lost.

It may appear patronizing for young men who are not yet in the difficult position of most doctors with families to write in this fashion, but unless we are prepared to take risks we shall be in Mr. Bevan's parlour, and another bastion of liberty will have been taken. We do not wish to imply that we think the present state of affairs is perfect, but, as we have been at pains to point out, this is not the question. To put it vulgarly, it is "guts" that is needed.—We are, etc.,

J. W. MACLEOD.
D. H. H. WALFORD.
London, W.2. JOHN S. PRATT.

The Moral Issue

SIR,—A medical man in his professional capacity has and can have only one loyalty, and that towards his patient. By the law of nature and the recognized code of medical ethics, Christian as well as pagan, the doctor is bound to seek the welfare of his patient by all the means within his power exclusive of every other consideration. From time immemorial the Hippocratic Oath (*Encyclopaedia Britannica*, 14th ed., vol. 15, p. 198b) makes every medical man promise : "The regimen I adopt shall be for the benefit of my patients, according to my ability and judgment, and not for their hurt, or any wrong. I will give no deadly drug to any, though it be asked of me, nor will I counsel such. . . . Whatever home I enter . . . I will keep silence thereon, counting such things as *sacred secrets*."

It is quite clear to the medical profession that Mr. Bevan in the N.H.S. Act, 1946, shows himself jealous of this relationship. The preliminary draft of the National Insurance (Unemployment and Sickness Benefit) Regulations, 1948, newly made under the N.I. Act, 1946, for unemployment and sickness benefits, requires the insured person to "answer any reasonable inquiries by the Minister or his officers as to the advice given him by the medical practitioner," under pain of forfeiture of his sickness benefit. The Ministry of National Insurance betray suspicion of both doctor and patient ; in effect it will amount to sowing distrust between patient and doctor.

Mr. Bevan by the N.H.S. Act wants to assume *absolute* power over every doctor and surgeon in the land, and *absolute* mastery over every hospital and nursing institution he may at any time wish to seize. The N.I. Act regulations prepare the way to coerce doctor and patient to reveal to them and the whole hierarchy of officials the "sacred secrets" which no doctor may tell and no human being may be compelled to reveal—except where there is a danger to the patient himself (e.g., in case of lunacy) or to the community (as in contagious disease). Apart from this, no man has or can be given any authority to know such "sacred secrets." Both the N.H.S. Act, 1946, and the draft regulation under the N.I. Act, 1946, as they stand are therefore immoral. To carry out his obligations towards his patients, the doctor must be free from all interference from "higher authority" (including the paymaster, who regulates even the qualities of the medicines to be used), and the patient must have the right and the real opportunity to choose his own doctor whom he can trust implicitly.—I am, etc.,

Liverpool THOMAS J. AGIUS, S.J

Manipulation in a State Service

SIR,—When the time comes for the State to assume financial responsibility for all medical care, official provision will have to be made for, among others, patients requiring manipulation—the only branch of therapy suitable for delegation to medical auxiliaries as yet unprovided for. The number of doctors practising this art is so small that they cannot themselves deal with more than a fraction of all such cases. Indeed, there are said to exist, outside the medical and physiotherapy professions, some 3,000 persons in this country earning their living by giving manipulative treatment of one sort or another. This provides some measure of the amount of work done ; for, though a good deal of it may be done unnecessarily, this does not apply to all of it, as results prove. Since patients will be paying the State to defray the cost of all medical treatment they obviously cannot be asked to pay all over again for manipulation performed by unqualified persons outside the Service.

Grave danger may arise of the State being compelled by public demand to enrol and recognize irregular practitioners unless an alternative body exists to whom this work can be properly delegated. By virtue of their ethical stand and wholehearted collaboration with the medical profession the State will naturally turn to chartered physiotherapists to meet this demand. And the physiotherapists must close this gap, otherwise others exist only too ready to rush in to fill it.

It is thus imperative, in my view, that no time should be lost in teaching manipulative technique to physiotherapy students. The subject is in fact included in the syllabus, but is dealt with very cursorily at present at most schools. Indeed, before the war almost the only systematic teaching was that of Dr. Mennell

at St. Thomas's Hospital. May I urge all surgeons working at hospitals with physiotherapy training schools, and all medical officers of physiotherapy departments, to institute as a matter of urgency wider teaching on this important subject?—I am, etc.,

London, W 1. J. H. CYRIAX.

Rationing and Tuberculosis

SIR,—I heartily agree with Dr. Keers's observations (Feb. 7, p. 245) that during the years of rationed foodstuff sanatorium patients have been regaining their lost body weight at a much slower rate than comparable groups of patients did before the war, and I find too that clinically this slowing is accompanied by a slowing in the healing process, as evidenced by less rapid improvement in their sedimentin indices. I disagree with him, however, that there is any evidence that curtailment of meat and cheese are especially to blame.

It is illuminating to compare the performances of the average patient at Mundesley with those of the average patient at Tor-na-Dee over the same years. Columns 2 and 3 in the table below are the average gains in pounds of body weight during each twelve months in question (calculated in the manner described in Dr. Keers's article):

	Average Gain lb. (kg.)	
	Mundesley	Tor-na-Dee
1937	16·0 (7·26)	average 8·12 (4·08)
1938	16·2 (7·35)	
1939	20·3 (9·2)	
1940	5·7 (2·58)	6 (2·72)
1941*	11·8 (5·35)	1 (0·45)
1942*	15·8 (7·17)	10·5 (4·76)†
1943*	13·3 (6·03)	2 (0·9)
1944*	11·0 (4·99)	5 (2·27)
1945*	7·4 (3·34)	−1 (0·45)
1946	1·3 (0·59)	−½ (0·22)
1947	11·2 (5·08)	?

* Years of extra sugar at Mundesley. † Year of extra fats at Tor-na-Dee.

It will be observed: (*a*) Since food rationing began, patients at neither sanatorium have shown their expected pre-war rate of body-weight regain. (*b*) In 1940 both institutions showed a significant drop in the rate immediately following the onset of rationing. In 1940 I found that newly admitted Mundesley patients on wartime diet were on an average only 2½ lb. (1.13 kg.) heavier at the end of their first six months. (*c*) At Mundesley from 1941 to 1945, thanks to the Medical Research Council, each patient was allowed an extra "experimental" 4 lb. (1.8 kg.) of sugar per week. This was taken by all patients in a fruit-flavoured drink between meals and supplied an additional 1,000 calories per diem over and above the ordinary diet. During this period I found that newly admitted patients on this regime regained their lost body weight at the same rate as pre-war new patients for the first two months (i.e., 1.6 lb. (0.73 kg.) per month), but fell off thereafter so that at the end of the first six months the "war diet plus sugar" patient was only 7 lb. (3.17 kg.) heavier whereas his "pre-war diet" counterpart had been 10½ lb. (4.76 kg.) heavier. (*d*) In 1942 arrangements were made for Tor-na-Dee Sanatorium to run a similar dietetic experiment with a special group of patients receiving an additional 1,000 calories per diem of *fats* instead of sugar. (*e*) In 1946 Mundesley was back on ordinary civilian diet (with of course the extra 2 pints (1.14 l.) of milk a day accorded to the tuberculous). Once again the drop in rate is significant.

I have three comments to make: (1) I agree with Dr. Keers that after each fresh "cut" in any commodity the rate of weight-increase fell badly for a month or two until patients accustomed themselves to make good with alternative foodstuffs.

(2) There is one inconstant factor, it must be emphasized, which tends to invalidate equally both Dr. Keers's results and mine—if viewed separately—and one which has hitherto deterred me from publishing my results until I could find a "control" series of figures which would be similarly influenced by this factor: and that factor—oddly enough—is the varying delay between diagnosis and admission to sanatoria. Since the beginning of the war this delay has grown from a matter of a very few weeks to peaks of five and six months before settling down to its present three to four months. While awaiting admission, usually in bed at home (where they are treated with all the family tit-bits), patients often regain a large proportion of their lost body weight. Consequently by the time they are admitted many are nearly back to their normal weight—a few are even over-weight—and they cannot be expected to put on weight anything like so rapidly as did their pre-war counterparts, who would have been admitted within a week or two of diagnosis when their body weight was lowest. The patient who is one stone below par regains his first half stone much quicker than he does his last seven pounds.

(3) Dr. Keers's figures have confirmed my belief expressed elsewhere (*Tubercle*, 1942, **23**, 10) that it is calories that count in combating tuberculosis and that the caloric value of the present civilian diet is inadequate for the tuberculous. I have gone so far as to hazard that the average daily requirement of the tuberculous patient is more than 2,500 calories. The best form in which additional calories should be administered is still an open question. Dr. Keers found that extra fats caused nausea (*Tubercle*, 1943, **24**, 8): few patients could go on taking them indefinitely. I found that sugar drinks could be imbibed without detriment to appetite or the capacity to enjoy full meals. Unfortunately at no time has there been a third experiment involving an extra 1,000 calories per diem in protein form; but there is still time so long as rationing remains with us.

It would be interesting to learn the experiences of any other sanatorium superintendents who hold the weighing machine in as high esteem as Dr. Keers and I do.—I am, etc.,

The Mundesley Sanatorium, Norfolk. GEORGE DAY.

Smallpox in Edinburgh, 1942

SIR,—Dr. C. Simpson Smith, in his paper on "Smallpox in Staffordshire, 1947" (Jan. 24, p. 139), states that "once again an outbreak of smallpox followed a confident diagnosis of chicken-pox by competent experts" and follows by mentioning four other outbreaks in which the same sequence of events occurred, including the Edinburgh outbreak of 1942. As far as Edinburgh is concerned he is completely in error, and the reference he gives (*B.M.J.*, 1944, **2**, 54) does not say so. The first patient coming to our notice was in cell isolation on admission to the City Hospital, and, though his rash had much in common with chicken-pox, there were certain elements which aroused our suspicions, and within two hours he was installed in the special smallpox isolation which had been earmarked for first cases in an outbreak. It is true that the above reference mentions that it was not till the rash of the patient was fully out that a confident diagnosis of smallpox could be made, but as he had been securely isolated from his arrival in hospital there never was the slightest suggestion that he infected others or initiated the outbreak. Furthermore, again quoting the reference given by Dr. Smith (a condensed version of a report I gave to the Fever Group of the M.O.H. Society), it is stated that the Edinburgh cases fell into two groups: (1) 23 institutional cases and (2) 13 city cases, of which five were direct contacts of other city cases. The source of infection of the institutional cases was never disclosed, nor was the association of these with the city cases, or of the primary city cases with each other.—I am, etc.,

City Hospital, Edinburgh. ALEXANDER JOE.

The Training of Specialists

SIR,—Sir Francis Fraser's masterly paper on the training of specialists (Jan. 24, p. 135) and the plan proposed are probably the fruit of years of careful thought and study, and it is only with great humility that one points out the dangers of the combination of rigid specialist training and the State-owned hospital. It is true that seven years of strict and orderly training will make the young specialist ready for responsible appointment sooner than the present haphazard system prevailing in this country, but, unfortunately all too often, there will be no job waiting for him when he finishes, and the period of waiting will creep on to ten, fifteen, or even twenty years, and an agreeable apprenticeship becomes an unhappy servitude.

The reason for this is not far to seek: the State-controlled hospital, unlike the E.M.S. hospital, *must* be economically run, and as regards medical staff this is done by reducing the chiefs

of departments (hereafter called professors) to the minimum and paying them only enough (£300 per annum) to make them manageable. In return they are given a monopoly of private practice, hundreds of beds, and numerous registrars (I have seen as many as 30) to do the work of the hospital beds. The whole-time registrars are promoted at various stages, but their maximum salary seldom exceeds £300 because they are in training and living on their hopes. It is wrong to say that this military type of organization is peculiar to Germany; it is a fault of the system and not the national temperament, and it has grown up in Scandinavian, Slav, and Latin countries and does not seem to depend upon the financial condition of the country.

Furthermore, I do not think Sir Francis Fraser can hope for our present whole-time professor system to be extended to provide more specialist appointments. These posts have been disappointing; their holders have been distracted from their work by the examining bodies, committee work, country homes, a five-day week, and finally a sabbatical year of absence in every seven. The Universities may put up with this, but the Treasury will never resist the temptation of paying their professors out of private practice.

It really comes back to simple mathematics—if there are few chiefs and lots of pupils, there will be no outlet for the pupils till their lives are well spent and their spirits broken. It would be better to continue our present system which allows early access to private practice while training is still going on. It is not a bad system, being very flexible; the man who neglects his training is soon found out, and the brilliant man like Arthur Hurst or Paul Rouquette is quickly recognized, rewarded, and given his head. Our present method never provides the sad spectacle of the "pupil" of 40 standing like a ramrod because the "Sehr geehrte Herr Professor" is in the room.—I am, etc.,

London, W.1. A. DICKSON WRIGHT.

Specialties of Postgraduate Teaching

SIR,—I have read the interesting article by Sir Francis Fraser (Jan. 24, p. 135), but I am still left in doubt and indecision as to what he regards as the complete field of the specialist. He has from time to time stated quite clearly that in his view he only regards proctology as a branch of surgery and proceeds to ignore it as a special subject. In connexion with that apparently simple operation for haemorrhoids, which can so easily go amiss in the wrong hands, might I inquire if and when the time comes that surgical aid may have to be called to deal with these small venous protrusions of the rectum would Sir Francis Fraser commit himself to the care of a fully competent and experienced surgeon in diseases of the rectum, or relegate the rest of his life passing rectal dilators keeping open the stenosed rectum left as a legacy from the carpentry of the inexperienced general surgeon? I have seen the latter occur time and again, even where the general surgeon was experienced and well known.

Further, how does Sir Francis Fraser reconcile the reasoning that he contends, as I believe he does, that because most, if not all, surgeons practising proctology also do general surgery, therefore diseases of the rectum should only be regarded as a branch of surgery? Could Sir Francis Fraser enumerate in Great Britain how many physicians are engaged in the specialty of diseases of the chest, and also devote their lives to the thorax only, or how many physicians engaged in child health, neurology, or cardiology have ceased to practise in other spheres of general medicine, but also how many practise both?

In my own sphere of radiology of the colon time and time again I have had to reconstruct the radiological diagnosis from one of malignancy to diverticulosis, *vice versa*, or other modification in some of these cases that have caused difficulty and serious thought for even those of established experience and skill in *x*-ray work; and these cases come from all over the world. Might I again quote that old and true axiom that one man doing one job all the time can usually do it better than he who undertakes all kinds of work, and I suggest Sir Francis Fraser might tarry a moment to ponder if he is doing the profession and mankind generally a service in trying to exclude proctology from the list of specialties, even under a State medical service.—I am, etc.,

London, W.1. NORMAN P. HENDERSON.

A Misleading Antithesis

SIR,—I would like to draw the attention of your readers, especially of those who write on or teach clinical pathology, to certain cliché-mongers. They are the inventors and the perpetuators of the misleading but specious antithesis—hyperglycaemic and hypoglycaemic coma. Hyperglycaemia cannot cause coma, except possibly by intravenous introduction of crude molasses. The term, however, perpetually misleads unfortunate students. If sugar is described as poisonous it may well be withheld in the insulin treatment of diabetic coma. This has by now probably killed more than one patient. Since this type of death cannot be brought home to the cliché-mongers aforesaid, the least they can do is to overcome their regrettable partiality to such verbiage.—I am, etc.,

Queen Square, London, W.C.1. GEOFFREY BOURNE.

The Fuchsin Treatment of Cholera

SIR,—The fuchsin treatment of cholera consists in giving to the patient in the very first stage of the disease—in which as a rule diarrhoea is present but vomiting is absent—basic fuchsin 0.2 g. in cachet, soft gelatin capsule, or easily disintegrating pill, every 15 minutes until a total of 1.6–2 g. or more has been administered. This method of treatment has in reality never been tried in practice except in three sporadic cases many years ago, which all recovered. It might perhaps be worth while trying it on a fairly large scale at the present time when the disease appears to have a tendency to spread from its endemic areas, and considering also that, notwithstanding some progress made, the treatment of cholera is still unsatisfactory. Naturally with it should be associated all the usual general measures which have been found of benefit in the disease and especially saline and plasma injections.

The rationale of the treatment is as follows. In cholera, in the first stages, the vibrios do not invade the mucosa, but multiply in enormous numbers in the lumen of the intestine. If we possessed an antiseptic that could be given by mouth and was not injurious, it should be possible to attack, and devitalize or kill, a great number of the germs before their toxins are absorbed—whether exotoxins, which are apparently of little importance, or endotoxins liberated by the disintegration of the germs. For years I have thought that basic fuchsin might possibly represent the solution of the problem. It is not a strong general antiseptic, but has a fairly powerful action on *Vibrio cholerae*. In recent investigations it was found that a watery solution of basic fuchsin, 1:1,000, would kill the cholera vibrio and that much weaker solutions had an evident bacteriostatic action. It was also found that basic fuchsin retains its bactericidal and bacteriostatic power on *V. cholerae* when dissolved in liquids containing pepsin and other enzymes and in liquids containing proteins. The fuchsin, as observed by myself, apparently devitalizes and kills the organisms by staining and fixing them without any disintegration taking place, and therefore endotoxins probably should not be able to be set free.

With regard to the toxicity of basic fuchsin, research (unpublished) carried out in 1933–4 on rabbits and other laboratory animals showed that it was very low. In rabbits, to which it was given in 1/2 g. doses, the only phenomena noted were a severe constipation and at times colouring of the urine.

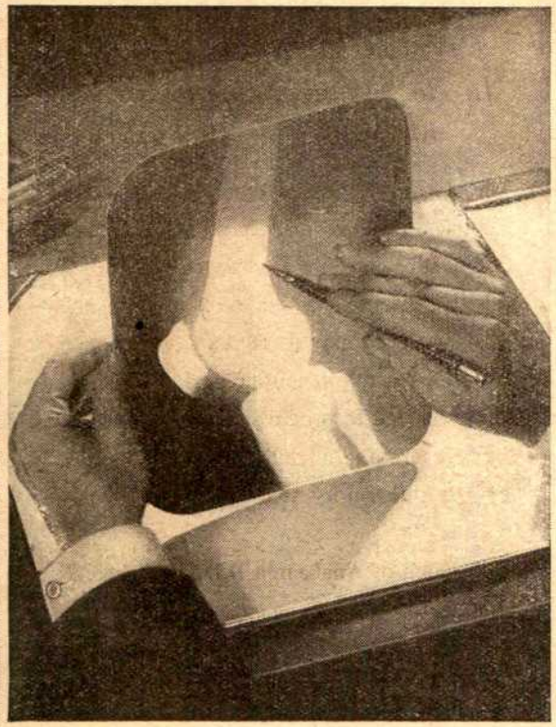
In men, we gave it to several patients with chronic colitis of varying origin, chiefly amoebic and bacterial. The dosage was 1–2 g. daily, divided into 5–10 doses. No very striking improvement followed, but toxic symptoms were not noted. We gave it also to three normal individuals without any untoward effect. The urine became coloured red.—I am, etc.,

Lisbon Institute for Tropical Diseases, Portugal. A. CASTELLANI.

Cholera

SIR,—We have read the annotation on cholera in the *Journal* of Oct. 18, 1947 (p. 619). We would like to amplify the information and correct certain inaccuracies that have crept in. It is stated that "outbreaks of cholera involving some thousands of cases have also been reported from the East Punjab and Delhi." In Delhi, up to Nov. 1, 1947, 425 cases of suspected cholera were admitted into hospitals in the city from refugee camps. There were only three cases of cholera reported from Delhi Province during the whole period, apart from cases

HANDS AND THE MAN . . . NO. 2



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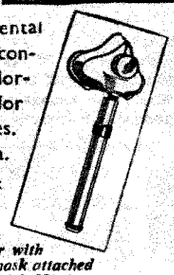

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among the refugees. Under the conditions prevailing at that time it was not possible to investigate each case in detail. The stools of twenty of these cases, however, were examined and in only one case was *V. cholerae* isolated. Taking into consideration the general health of the refugees and conditions prevailing in the camps it is more than likely that the majority of the suspected cholera cases were in fact cases of acute gastro-enteritis. Nevertheless the segregation of all patients suffering from diarrhoea and vomiting was carried out as far as possible.

In the whole of East Punjab, where about nine million people were involved in the exchange of population between the two dominions, 5,432 cases of suspected cholera were reported up to Nov. 1, 1947.

You further state that "both India and Egypt have had to be helped with supplies of vaccine." While offers of vaccine were certainly made to the Government of India from various countries, for which we are indeed grateful, the supply of cholera vaccine manufactured in the various institutes in India was more than sufficient to meet the demand of this country. Not only that, but the Government of India were able to supply 3,140,000 ml. of cholera vaccine to the Government of Pakistan, and 3,000,000 ml. to Egypt, the latter consignment being flown from Bombay to Cairo.—I am, etc.,

Office of the Director-General of Health Services, Government of India, New Delhi. N. JUNGALWALLA, Major.

Morbidity Associated with the Induction of Labour

SIR,—In the *Journal* of Nov. 8, 1947 (p. 738), you published an annotation on the results of induction of labour, quoting a morbidity rate in mothers and infants of 25%. These results are so completely at variance with my own experience of induction that I should like to say a few words on the subject.

In articles written by obstetricians in recent years and at meetings of associations references to induction are frequent, but it is clear that no unanimity has yet been reached as to which method is best. In my own practice I now have records of induction in over 700 cases without any ill effects that could in any way be attributed to the induction in either mother or child. I have used induction for all the usual conditions, such as toxaemia, disproportion, and postmaturity, as well as for mere convenience in patients coming from a distance. I have used it at different stages of pregnancy from 33 weeks onwards, and with unfailing success.

The method used is that of preliminary medicinal induction (castor oil, quinine, etc.), followed immediately by artificial rupture of the membranes at the internal os with curved artery forceps or the special catheter obtainable for the purpose. Labour comes on usually within 2–3 hours but may be delayed for a day or two in exceptional cases. I obtain as free a flow as possible and, if necessary, when the head is deeply engaged I push it up to permit the escape of fluid at the time of rupture.

No anaesthetic is required even in primipara except where there is undue rigidity or spasm of the vagina in a nervous subject. This applies to not more than one case in forty (primipara only). The average time of labour is less than those normally delivered. Since the instrument is never passed further than the tip of the finger by which the cervix is first dilated, no damage can be done to the cervix, the uterus, or the baby.

If there are good reasons for using any other method of induction I should be most interested to hear of them.—I am, etc.,

Trinidad, B.W.I. M. SCHWARTZ.

Natural Position for Childbirth

SIR,—I was greatly interested in Dr. Kathleen Vaughan's letter (Jan. 31, p. 222). Some time ago I was called to attend a confinement in a gipsy encampment on the roadside. The parturient woman was housed in a makeshift tent composed of a few lengths of canvas stretched over a flimsy wooden framework. The patient was well on in her labour, and a short time previously had been going about her duties, drawing water, chopping sticks, etc., until her pains had become too strong to continue doing so. She had taken up a squatting position in the tent, and informed me that she was most comfortable "sitting on her hunkers." Just before the child was born she was supported on each side by two of the women. There was no difficulty in delivery of the baby, and the placenta followed shortly afterwards. On inquiry, the woman informed me that she had had five other children—all born in the squatting position. Several other married women in the encampment told me that this position was adopted amongst them during childbirth as it seemed the "most natural-like."—I am, etc.,

Portadown, N. Ireland. W. A. GREER HEATLEY

Herpes Zoster and Varicella

SIR,—The association of herpes zoster and varicella in the same patient is uncommon. In a comprehensive review of the literature up to 1939, Ferriman (1939) analysed 98 cases. He came to the conclusion that the condition is most common in elderly men, and that the appearance of the varicella usually follows the zoster in five days. The appearance of varicella or herpes in contacts was noted by Kanof and Baer (1939), who described a case where the daughter of a man of 65 developed varicella six weeks after her father's initial herpes lesion. Almeyda (1942) described a case of a woman of 42 who developed herpes and, four days later, varicella. Her daughters, aged 13, 20, and 11, all developed varicella. The woman who worked in this household acted as a carrier, and conveyed the virus to her husband. He developed both diseases and died after a haematemesis. More recently Allen (1944) and Manning (1944) reported cases of a child of 5½ and a man of 63 who showed both diseases.

We therefore feel justified in recording the appearance of both diseases in a man of 65 and the development of varicella in an adult contact.

A man of 65, with no previous history of chicken-pox or herpes, first complained of pain in the left side of the chest on Nov. 27, 1947. Eight days later (Dec. 5) he developed a herpes eruption, but on the right side of the chest and the ulnar side of the right arm. The eruption corresponded to the distribution of C 8, Th 1, 2, 3, 4, 5. Two days later he noticed a few "spots" on the forehead. Examination showed a typical varicella eruption on the face and trunk. Twelve days later (Dec. 19) his daughter, aged 24, developed a varicella eruption on the face, trunk, and arms. She also had no previous history of varicella or herpes. At the time of writing (Jan. 7, 1948) the man has post-herpetic neuralgia, particularly in the arm. The skin surface is now unbroken. The daughter shows no fresh vesicles.

For this case of herpes we have used the method of treatment described by Gross (1947). This consists of the application of the following paint three times a day:

℞
Aneurin hydrochloride (50 mg. per ml.) 1 ml.
Glycerin .. .. 3 ml.

So far we have treated about a dozen cases by this method and in our opinion the results claimed by Gross are justified. There is a diminution of pain when the paint is applied and the vesicles dry more rapidly than with collodion.—We are, etc.,

Middlesbrough. J. W. L. DICKSON, G. BLAIR.

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Treatment of Rheumatoid Arthritis

SIR,—Dr. Imre Barsi (Jan. 31, p. 227) brings up again the question of treating rheumatoid arthritis by transfusion with blood from pregnant women. He dismisses, in my opinion rightly, the possibility that hormonal factors are responsible for the alleged improvement, but fails to find a definite explanation. May I suggest that the beneficial effect of this "new" form of therapy is based on three factors?

(1) It follows the line of treatment practised by rheumatologists for over twenty years as autohaemotherapy, which consists of withdrawing a suitable amount of blood from the patient (generally 5–10 ml.) and immediately injecting it intramuscularly. This method represents without doubt the mildest, yet a most effective, form of protein shock. In the course of several hundreds of such injections I have observed only very rarely an even transitory rise in body temperature. Nor have I found such a rise a necessary accompaniment of therapeutic efficiency.

(2) Having been strongly impressed by the fact that patients suffering from rheumatoid arthritis as a rule show a considerable

spontaneous improvement during the summer months, or when transferred from a harsh to a mild and sunny climate, I myself tried to evaluate the possible biochemical effects of sunshine in such cases, and came to the conclusion that the increased calcium metabolism—i.e., a higher calcium level of the blood produced by the sunshine—is probably playing a certain role in this beneficial effect. Ever since then I have combined the autohaemotherapy with intravenous calcium injections, with gratifying results in every case. As is well known, the calcium metabolism is considerably increased during pregnancy, with a resultant higher calcium content in the blood, and it is difficult not to see the parallel.

(3) It is now twenty years since I drew attention in the *Journal* (1928, 1, 493) to the great importance of proper and systematic treatment of the general debility invariably present in advanced cases of rheumatoid arthritis, which manifests itself by great somatic weakness, loss of weight, and progressive anaemia. I have witnessed on countless occasions a marked and lasting improvement following treatment aimed directly at raising the general resistance. To my mind there is little doubt that the main effect of Barsi's transfusion is due to an amelioration of the patient's anaemia.

The simplicity, effectiveness, and time-proven value of autohaemotherapy, combined with intravenous calcium injections and with orthodox treatment for anaemia and general debility (vitamins, iron tonics, and the rest, and occasionally in very bad cases an ordinary blood transfusion), compare most favourably with Barsi's treatment and make it doubtful whether his therapy is ever justifiable, especially as the repeated taking of blood from a pregnant woman is hardly a matter to be lightly undertaken.

Having treated rheumatic patients for nearly thirty years I consider it somewhat rash to proclaim patients "completely cured" after periods of observation ranging from two months to five years. One often sees even in apparently hopeless cases a remission from symptoms occurring occasionally with dramatic suddenness and lasting sometimes for several years—only to be followed later by a complete setback. Similarly, the rheumatologist will not infrequently encounter a patient suffering from rheumatoid arthritis which is made definitely much worse just by reason of her pregnancy.—I am, etc.,

Linby, Notts. L. SCHMIDT.

Localization of Deep Pain

SIR,—In his paper on "Localization of Deep Pain" (Jan. 31, p. 188) Dr. J. B. Harman propounds a theory of perception which throws light on a clinical experience which is as puzzling as it is common in medical practice among Africans in Central Africa. I refer to the patient who, on being asked of what he complains, touches his elbows, then his wrists, then his knees, then his ankles, often without uttering a word. That is the sum total of symptomatology on which a diagnosis has to be made. Frequent experience of such cases has led to the conclusion that the patient is indicating that he suffers from something that makes his whole body feel weak and ache, such as malaria, leprosy, tuberculosis. But it has remained a puzzle why the joints of the limbs should be picked out in this way, when a short examination shows nothing abnormal in them.

The suggestion of Dr. Harman makes a reasonable and highly probable answer to this problem when he states, with reference to the conception that a person has of his own body (the body image), that "an individual has a clearer consciousness . . . of his limbs than his trunk, and . . . of the joints than the segments between."

The sick African, then, who points mutely to the joints of his limbs as being where he feels ill is corroborating this proposition. Conversely, the proposition corroborates the clinical experience that patients who present themselves in this way are trying to express that they feel ill all over.—I am, etc.,

Grimsby. E. W. PRICE.

Curare

SIR,—The administration of intrahepatic curare described by Mr. G. O. Jelly (Feb. 7, p. 276) has at least the advantage of originality, although it is difficult to find any other recommendations for this bizarre route. However harmless he considers the injection the introduction of any drug into an organ, however vascular, cannot be so effective as its direct injection into a vein. The veins of the foot are convenient for the administration of drugs during abdominal operations, their use avoiding "the disturbance of towels and the discomfiture" of even the most testy surgeon. As for the "administrative difficulties" of intravenous work, these should not present themselves to the experienced anaesthetist. Further, there appear to be no grounds for assuming the presence of an intravenous needle is inadvisable, even if left *in situ* during the operation, while it seems hardly fair to the patient if one includes "nuisance value" to the surgeon among the contraindications to intravenous infusion.

I would consider 2–3 minutes rather long for the appearance of the full effect from an intravenous dose of curare, and I inject the drug about a minute before the peritoneum is to be incised. Mr. Jelly claims for his method that it "requires a reasonable level of anaesthesia before the abdomen is opened," which implies that the curare is not being used to its best advantage. Reduction in the amount of curare employed in favour of a larger dose of anaesthetic should not be a cause for congratulation of any anaesthetist. The anaesthetic drugs should be used to produce the lightest narcosis possible, and the curare to afford the best muscular relaxation obtainable. The picture of a patient leaving the theatre "after a half dose of anaesthetic and the repeated summation of more than a full dose of curare" is difficult to conceive. After a reasonably skilful "curarization" the patient is moved from the theatre with his reflexes regained, usually with movement returned to his limbs, and frequently awake. The respirations are obviously of equal or greater amplitude than presented by comparable cases not receiving curare. If the effect of the curare persists for any reason, there is always prostigmin and atropine which may be injected into a vein or into the liver according to choice.—I am, etc.,

St. Albans. GORDON OSTLERE.

Hay Fever to Eczema via Benadryl?

SIR,—I was very interested in Dr. K. M. Tomlinson's letter (Feb. 7, p. 276) as I had one very similar case last summer. A young woman aged 30 came complaining of hay fever, which condition had appeared every summer since childhood. I gave her a course of "benadryl" with startlingly good results. Three weeks later, however, she returned with a fairly severe eczema which responded well to treatment with tar. She had never previously suffered from eczema and has remained clear ever since.—I am, etc.,

Belfast. PERCY G. HARRIS.

SIR,—In reply to Dr. K. M. Tomlinson (Feb. 7, p. 276) I cannot find any reason for his supposition, particularly as this anti-allergic drug has been used by me for quite a while with beneficial results. I am not assuming that it cures all types of allergy, but it definitely allays the more acute symptoms. It is a well-known fact that allergic individuals display a variety of manifestations of this reaction, which can be produced in many ways by liberation of histamine, as clearly illustrated by Lewis under the heading of "Triple Response from Histamine."

I have had occasion to treat many cases of cutaneous types of allergy associated with bronchial asthma, hay fever, urticaria, etc., and I always try to ascertain the causation, whether it be due to foods, drugs, or a focal infection. As both the cases treated by Dr. Tomlinson were presumably hay fever he omitted a valuable line of investigation, which was to examine the condition of the nasal mucosa and the sinuses for focal infections, such as suppurative sinusitis, polyposis, hyperplastic rhinitis, etc. It is known that bacteria, particularly staphylococci, very often give rise to chronic eczema or bronchial asthma, thus illustrating allergic manifestations due to bacteria. I have seen cases where dual reactions were present in the same patient—asthma and eczema; chronic sinusitis and arthritis; chronic sinusitis and eczema—and I have invariably found beneficial results follow the treatment of the focal infective condition with intramuscular penicillin emulsion (100,000 units for six consecutive days), and "benadryl" as an anti-allergic. I have not yet come across any case displaying any allergic reaction due to benadryl.—I am, etc.,

Cardiff. SYDNEY J. BELLGARD.

SIR,—I was interested in Dr. K. M. Tomlinson's letter (Feb. 7, p. 276) concerning "benadryl" and hay fever. Last August I, too, treated my hay fever with benadryl and had complete relief from the symptoms; in September I developed a form of eczema of the beard area which persisted for some weeks and was eventually proved to be due to sensitivity to a brushless shaving cream which I had been using for about twelve months.

Having never had any skin condition like this before, I assume that benadryl may have been in some way responsible. Is it possible that the absence of histamine action in a tissue renders it more liable to become sensitized by a foreign protein?

It would be interesting to hear of any cases of asthma developing after the use of benadryl.—I am, etc.,

Bristol. A. R. WEAR.

Iridocyclitis Treated with Benadryl

SIR,—I was interested to see Dr. Barbara Shaw's letter (Feb. 7, p. 277) under the above heading. I have been subject to attacks of iridocyclitis since 1944. My last attack started on Dec. 11, 1947, and lasted approximately seven weeks. I performed all the usual investigations, but was unable to find any cause. I was, I found, also liable to sensitivity reactions from various drops which I instilled—namely, hyoscine, hyoscyamine, and atropine—and on this account I used homatropine for a short time. This, however, was not strong enough and I developed approximately 12 posterior synechiae. I was then obliged to revert to atropine and at the same time I began to take "benadryl" 50 mg. t.d.s. This entirely alleviated the sensitivity reaction and I continued to take it for three weeks. It was then discontinued and atropine was exhibited for a further fortnight. In this case, therefore, I do not think that benadryl had the slightest effect on the course of the iridocyclitis.—I am, etc.,

Erdington, Birmingham. J. MOSS.

Test of Death

SIR,—In my letter on this subject (Feb. 14, p. 315) I should have worded one observation as follows:—In one case at least my ophthalmic examination was made some time after death, but whilst the cornea was still not sufficiently clouded to prevent the fundus being seen, and I found *no segmentation present*. Apparently, therefore, the segmentation sign of death had never occurred or had passed off again.—I am, etc.,

London, W.1. F. PARKES WEBER.

Trichlorethylene in General Anaesthesia

SIR,—I have read with great interest the article by Dr. Gordon Ostlere (Jan. 31, p. 195) on the above subject. Although I cannot claim to have employed "trilene" in quite such a number of cases as the Hill End Hospital series, nevertheless I have used this drug on many hundreds of occasions with no untoward sequelae whatsoever. Cardiac arrhythmias have been noted occasionally clinically, but are usually transient and appear to be eliminated by the addition of a higher oxygen percentage. Tachypnoea, I agree, is common, but this again can frequently be controlled by increased oxygen and less trichlorethylene, although in certain cases a change over to some other agent may be necessary to combat this condition. I employ the "pentothal," gas-oxygen, minimaal trichlorethylene sequence almost as a routine for radical mastectomy, and no surgeon has complained of increased bleeding.

In my view trichlorethylene is quite the most useful adjuvant to gas-oxygen anaesthesia in that it obviously permits of the use of a much higher oxygen percentage than if N_2O were the sole agent. Trichlorethylene is practically non-irritant, so that induction is smooth; also it seems to pave the way for the addition of ether vapour. It very rarely causes post-operative nausea, let alone vomiting.

The main disadvantage of trichlorethylene is that it does not give satisfactory muscular relaxation, with the exception, for some reason, of the muscles of the jaw. This latter exception is of particular value in that a pharyngeal airway can be inserted in a light plane of anaesthesia, whereas this manœuvre cannot be accomplished with gas-oxygen alone. It is well known that although the jaw is fully relaxed with pentothal the insertion of an airway will often produce laryngeal spasm.

I also have found gas-oxygen and minimal trichlorethylene excellent for maintenance anaesthesia with curare. Similarly it is most useful, again in minimal quantities with gas-oxygen, for the purpose of keeping a patient asleep during spinal anaesthesia. In the latter circumstances it need only be used intermittently and permits therefore of a high percentage of oxygen being employed.

The non-inflammability of trichlorethylene is particularly valuable as it can be used when a cautery is a part of the operative technique. It is of course now well known that trichlorethylene is contraindicated in a closed circuit owing to the toxic products produced by its interaction with soda lime.—I am, etc.,

Penn Street, Bucks. BERYL L. HARRISON.

Drug Addiction

SIR,—Dr. Eric Coplans (Feb. 14, p. 320) describes a cured case of morphine addiction by slow withdrawal of the drug, but both he and Dr. F. R. Ellis (Jan. 24, p. 175) fail to make clear that there are two types of addicts. The first and more easily cured variety becomes an addict accidentally as the result of pain requiring relief over a prolonged period of time; the second type is the unfortunate possessor of a psychopathic make-up who has neither the desire nor the strength of will to desist from taking the drug and thus frequently reverts to his former ways after a so-called cure.

It does not appear to be generally known that auto-serotherapy—as mentioned by Dr. Margaret Vivian (Feb. 7, p. 277)—will enable both types to get off the drug, with the minimum amount of distress and discomfort, in about two or three weeks.—I am, etc.,

Amesbury, Wilts. G. LOWELL WEBB.

SIR,—The prognosis of drug addiction is quite serious enough without the absurd statement of Dr. F. R. Ellis (Jan. 24, p. 175) that the condition is incurable. Among the ne'er-do-wells and misfits of society morphine addiction is possibly never cured, but there are many doctors in this country who have been cured and remain cured indefinitely. Dr. Ellis does a grave disservice to those others who in the future, as the result of unbearable stress or intolerable pain, may fall victims to the morphine habit.

I do not, of course, know on what tremendous personal experience Dr. Ellis founds his dictum, "notwithstanding all evidence to the contrary," but I hardly think that his proposal to produce "an arrested development stage" of morphinism (whatever that means) will do much to solve the problem. What he calls the "dreadful agony produced by the conventional form of treatment" is really the agony of deprivation which all treatments, with varying success, endeavour to mitigate. It follows that Dr. Ellis has nothing better to offer than a succession of such periods of agony to be inflicted at intervals when the addict, with developing tolerance, loses the enjoyment of his rationed dose. It would be interesting to discover from any practical experience gained by Dr. Ellis in this sort of procedure what sort of doses of "hyoscine or a barbiturate" are recommended when the patient starts breaking the furniture.—I am, etc.,

London, W.1. G. LAUGHTON SCOTT.

The Danger of Warming Transfusion Fluids

SIR,—It was common practice a few years ago to warm transfusion fluids by immersing the container in water at approximately 42° C. Under war-time conditions many medical officers discontinued this practice chiefly on account of the time involved in warming fluids. It was generally found to be satisfactory to allow the temperature of blood taken from the refrigerator to rise to that of the surrounding atmosphere. The rapid administration of even large volumes of fluid at atmospheric temperature did not result in an increased incidence of pyrexial or other reactions.

Apart from the time factor, however, there is another very good reason for discontinuing the practice of warming transfusion fluids—namely, the danger of overheating blood and plasma. That such a danger is not fully realized is illustrated by two recent cases in this Region. In each case the blood had been coagulated by immersion in very hot water. The loss of

fluidity prevented any attempt at administration in those cases, but the real danger is in cases where the warming is not sufficient to produce coagulation, but yet great enough to cause haemolysis. The transfusion of such haemolysed blood may have consequences as serious as the transfusion of blood of the wrong group.

Probably the only condition in which it is advisable to warm the transfusion fluids is in patients with a high titre of cold agglutinins, but even in these cases it is probably more important to keep the patient warm than to warm the blood. If, however, it is felt advisable to warm the blood and plasma as a routine before administration then the dangers of overheating must be impressed on those responsible for warming the fluids.—I am, etc.,

Glasgow and West of Scotland Blood Transfusion Service, Glasgow. JOHN WALLACE.

Vaginal Temperature

SIR,—Although only a medical student I should like to confirm Dr. G. I. M. Swyer's comments (Dec. 6, 1947, p. 931) regarding the adequacy of oral temperature records for the detection of ovulation. In the course of some investigations at the Melbourne University into body temperature it was found that such records showed the monthly biphasic fluctuations satisfactorily—provided due care was taken in obtaining the readings. It was certainly very much easier to persuade fellow students to co-operate by taking their temperatures orally than per rectum or vaginam.

As a matter of interest, for some time I kept a concurrent record of rectal and oral temperature. From this record it can be seen that the curve for oral temperature is reasonably consistently 0.5° F. (0.27° C.) below that for rectal, and shows parallel changes. Even the rise appearing after a restless night is similarly shown in each record.

Records will be most accurate if the temperature is taken immediately on waking, as oral temperature appears to alter more rapidly than rectal or vaginal. Needless to say the most easily interpreted charts are kept by those who wake at a regular time each morning. If the subject is a mouth-breather while asleep the mouth should be closed for five minutes before taking a reading.—I am, etc.,

Melbourne, Australia. JOY L. JAMES.

Radiological Evidence of Age

SIR,—With 25 years' radiological experience, which includes nine years as radiologist to a children's hospital, I would agree with Dr. Bernard Sandler's view (Jan. 31, p. 226) that few experienced radiologists would care to be exact, even within a year, as to age judged by shadows of epiphyses, particularly since persistent non-union of epiphyses is not uncommon.

In forensic medicine lectures as a student I was taught determination of age by epiphyses, but had entirely to change my views with practical radiological experience. In a standard forensic medicine textbook before me it states the cartilages of the first ribs ossify at 20 years and "at the middle of life all the cartilages are ossified." Excluding cases of rheumatoid arthritic conditions, where rib ossifications can occur at quite an early age, I suggest that inspection of thoracic films will not generally show cartilage ossifications of a widespread type until 45 years or even later. If the more delicate radiological demonstration is not possible earlier I fail to see how gross macroscopic section of cartilages can show calcification.

Unfortunately the legal mind requires definite statements rather than true statements involving latitude. In a legal case, in chambers before going into Court, I told a K.C. exactly how far I was prepared to go in my evidence. He therefore had little interest in my evidence and pressed a doctor who had attended the plaintiff to extend his evidence, with the result that under cross-examination this was shown to be false, and the doctor was committed for perjury. I was pleased to hear this doctor had been found not guilty, as his evidence had been given in good but foolish faith and the K.C. was more responsible than the witness. My own experience is that medico-legal witnesses tend to acquire this legal attitude for definite statements only and in consequence give dogmatic statements as to age, height, etc., based on fragments of tissues such as bones. These statements in a very large number of cases must be quite incorrect, but are often undisputed.—I am, etc.,

London, E.7. BERNARD J. LEGGETT.

The Lazy Eye

SIR,—Dr. Margaret L. Foxwell's letter (Jan. 31, p. 228), defending Devon County Council from my allegation that the school ophthalmic service is curative and not preventive, implies that in other parts of the country the position is unsatisfactory, and I am glad to have the support of Dr. Foxwell for my case.

Devon County Council appears to take its ophthalmic service very seriously, and the system seems comprehensive with one important exception. Dr. Foxwell states that in Devon every child has a yearly visual acuity test, and any child not attaining the standard of 6/6 in each eye is referred for ophthalmic examination. This is satisfactory as far as it goes, but it is well known that a child may have 6/6 vision in each eye and yet have fairly high errors of refraction, likely to lead to a squint developing. The Board of Education's 1931 report emphasized the need for a *refractive* yearly examination of each child, and only when this requirement is met will the school ophthalmic service become truly preventive.—I am, etc.,

Henley-on-Thames. S. BLACK.

Child Guidance and Youth Organizations

SIR,—Within recent times much publicity has been given to the increase in juvenile delinquency, while psychological and related features of its treatment and prevention have received frequent mention in the medical press. Does it not seem strange that this increase in juvenile crime should be contemporaneous with greatly enhanced social services and should mark the epoch of child-guidance clinics, of rise in the school-leaving age, and of considerable sums spent by Education Authorities on Youth Centres and other means of, as it has been said, "keeping children off the street"? In seeking some other factor to explain this anomaly one cannot but wonder how far it is related to another of the tendencies of our modern civilization. I refer to the breakaway from religious tenets.

In past times it was the faith of our fathers which underlay the moral standards for which our nation has long been renowned. As the discipline of religion is relaxed and forgotten so do these standards decay. This wide theme deserves much fuller recognition from our medical psychologists than most of them are wont to accord it. What I am here concerned with is a subsidiary of the main topic. Although the medical literature which deals with youthful delinquency and the psychological problems of youth abounds in references to all manner of agencies, preventive, educational, disciplinary, and punitive, mention of the standard youth organizations is all too conspicuous by its absence. The writer's personal association is with the Boy's Brigade, and this organization along with the Boy Scouts, the Church Lads' Brigade, and those groups which come within the sphere of influence of the National Association of Boys' Clubs together comprise a force undoubtedly to be reckoned with. Equally among girls the Girl Guides, the Girls' Guildry, the Girls' Life Brigade, and numerous excellent clubs are playing their part—and it is a big one—in the shaping of the national character.

In a number of instances probation officers and other disciplinary authorities are making use of the facilities our youth organizations offer. There is a real need for liaison between psychiatric workers on the one hand and the youth movements on the other. The latter are handicapped in that they enjoy a smaller financial backing than do the official and statutory bodies, while the standard of academic and technical knowledge possessed by their leaders is often less; and it is in this latter respect that I suggest the psychiatrist and psychologist could offer them genuine service. The morale of the youth organizations, *per contra*, is very high, while the relative hardships they suffer and the competition to which they each are subject are productive of a youthful vitality which is very invigorating. I am certain that were the psychiatrist and the social worker to endeavour to avail themselves of the facilities which the voluntary organizations offer they would find them at their service. It is equally certain that reciprocity of this kind will be mutually stimulating to the workers as well as beneficial to the young people concerned.

One point more—the addresses of the secretaries of the youth movements can readily be obtained from the youth secretary of the municipal or county education department.—I am, etc.,

Leicester. D. T. MACLAY.

POINTS FROM LETTERS

Unpaid Service

Dr. E. H. WALKER (Torrington, Devon) writes: . . . The doctor's wife, already probably one of the most persecuted persons, thinks she will suddenly become the unpaid telephonist and receptionist of the State. She need not. She and all her kin should inform Mr. Bevan that she does this service unpaid no more. It would give Mr. Bevan his worst headache and bust his scheme until he provides his new civil medical service with clerks in the same way as he does his food officer, petroleum officer, or any other officer. He doesn't ask them to employ their wives, unpaid, to enable them to carry out their duties for the State, and the miner and railwayman certainly wouldn't.

Sanatorium Treatment

Dr. G. KEMBLE WELCH (North Auckland, New Zealand) writes: Dr. P. Heffernan (Nov. 22, 1947, p. 837) raises two points about tuberculosis of wider importance than his letter implies.

First, he says that any doctor well acquainted with persons suffering from pulmonary tuberculosis can recall the names of hundreds of patients whose lives have been saved by prolonged sanatorium treatment. But the natural course of phthisis is very uncertain and patients not in sanatoria make astounding recoveries from apparently hopeless disease, while other cases with minimal lesions who are sent to sanatoria in the confident expectation of cure fail to respond and there die quickly.

Surely the only way to discover the value of treatment applied to such a disease, where in any given case it is quite impossible to foretell the outcome, even without treatment, is by a large-scale trial, carefully controlled and statistically examined—a trial such as the tuberculosis specialists demand of the B.C.G. vaccine.

Dr. Heffernan says it is quite impossible to show by statistical methods that sanatorium treatment has any influence whatever on the course of pulmonary tuberculosis. This brings me to my second point, which is that the inescapable conclusion from this lack of statistical benefit is that if any case is cured by sanatorium treatment some other case must be killed by sanatorium treatment—otherwise the benefit must show in the figures.

A Peck of Troubles

Messrs. J. FISHER and R. A. HINDE (Norwich) write: May we use your columns once more to convey our thanks to many of your readers who responded to our request (Jan. 10, p. 79) for information about birds opening milk bottles. We much regret that lack of time prohibits us from replying to all our numerous informants individually, but assure them that the information they have given us will be of the utmost value for our inquiry.

Forms

Dr. W. MUNRO LESLIE (Harrow) writes: Dr. W. C. Colville (Jan. 31, p. 229) says, "There is nothing more exasperating than a panel patient rolling up with his panel card the first time he is ill and yet he has been living in the area for months. . . ." May I submit, Sir, that there is? It is when a panel patient rolls up *without* his panel card the first time he is ill. Apparently the onus is then on the doctor to find out if the patient is really entitled to medical benefit. The doctor must complete the Form 6819/1940—the "notice of account when fee for deposit is not paid in cash." He must keep a copy of the details himself, and must advise the patient to take a receipt from the chemist for the amount paid." The transaction must go through his books and only be cancelled if/when the insurance committee confirm that the patient is a panel patient. This assumes however that the patient has forwarded the form to the insurance committee. Alternatively the doctor may, should the patient be under 6 feet, collect a fee from him. He still must complete a similar set of forms, so that there is no saving of the doctor's time or temper. What other section of the community would tolerate such a preposterous state of affairs? . . .

Thanks to the Consultants

Dr. KENNETH MCFADYEAN (London, S.E.24) writes: I am sure that I am voicing the feelings of many thousands of my fellow practitioners in expressing my deep appreciation of the magnificent stand taken by the consultant section of our profession in regard to the N.H.S. Act. If the behaviour of the present Minister of Health is in any way responsible for bringing about a new sense of unity within the ranks of the medical profession, it must surely be the only thing to his credit.

£300 a Year

Dr. R. W. COCKSHUT (London, N.W.4) writes: Shakespeare knew all about it:

"O, what a world of vile ill-favour'd faults
Looks handsome in three hundred pounds a year!"
—*Merry Wives of Windsor*, Act III, Scene iv.

Obituary

JOSEPH GEOGHEGAN, M.D., F.R.C.S.Ed.

Dr. Joseph Geoghegan died in London on Feb. 4 at the age of 59 after over a year of ill-health. He was a man of many parts, a familiar figure at luncheon at the Royal Society of Medicine, a poet, a frequent contributor to medical and scientific journals, an ardent player of squash rackets, an authority on diseases of the digestive system—the exhaustive book he wrote on the subject, highly commended by the late Sir Arthur Hurst, was never published because of the war, though he was recently revising it. Dr. Geoghegan was the son of the assistant editor of *The Scotsman*, and was educated at George Watson's College and Edinburgh University, graduating M.B., Ch.B. in 1911, taking the F.R.C.S.Ed. in 1917, and proceeding M.D. in 1919. After taking resident posts at the Edinburgh Royal Infirmary he joined the Colonial Medical Service and was posted to the Caicos Islands in the West Indies, but took a commission in the R.A.M.C. on the outbreak of the 1914–18 war and served with distinction as a surgical specialist in France. After the war he returned to the West Indies, but this time to private practice in Kingston, Jamaica, where he was very successful and popular with the English community. Twenty years ago he came to London, was appointed physician to out-patients at the Royal Hospital, Richmond, and carried on a large medical practice in Wimpole Street, W.1, among his patients being many doctors and their families. Dr. Geoghegan married Miss Muriel Kerr-Brown, the Edinburgh pianist, in 1912, and is survived by his widow, a married daughter, and a son, who is a member of the medical profession.—R. S. S.

ETHEL WILLIAMS, M.D., D.P.H.

Dr. Ethel Mary Nucella Williams, who was one of the first women doctors to practise in Newcastle, died at her home on Jan. 29 at the age of 85. She was born at Cromer in 1863 and her father was a country squire, one of whose close friends was Lewis Carroll. She began her education at a high-school in Norwich and went on to Newnham College, Cambridge, where at that time women could attend lectures but could not take degrees. She was unable to obtain her hospital training in this country and so her clinical work as a student was done in Vienna and Paris. She took the London M.B. in 1891 and proceeded M.D. in 1895, going on to take the Cambridge D.P.H. in 1899. She was resident medical officer at the Clapham Maternity Hospital and at the Blackfriars Dispensary for Women and Children before settling in Newcastle and starting in general practice. She distinguished herself in 1906 by being one of the first women in the North of England to drive a motor-car. About this time too she became an active member of the suffragist movement, taking part in the first suffragist procession—the so-called "mud procession" of 1907.

Over the next thirty years, despite the increasing demands of her growing practice, Dr. Williams took an interest in public affairs, and she was concerned in the foundation of a number of women's organizations. She became a J.P. in 1931 and was a member of the old Newcastle School Board and later of the Education Committee. By this time she had retired from active practice but she maintained an unflagging interest in the public life of Newcastle. In 1946 the Newcastle Branch of the National Council of Women presented her with a portrait and a cheque as "some tribute to her long and valuable public service to her fellow men and women in this district." The cheque Dr. Williams immediately handed over to the Northern Women's Hospital. Dr. Williams was at one time president of the National Federation of Medical Women, and in the early days was chairman of the North-eastern Federation of the National Union of Women's Suffrage Societies. She was a member of the Senate of Durham University and acted as medical officer to the Women Students' Day Training Department at Armstrong College.

Dr. OLAF GLEESON died on Jan. 7 at the age of 58. He qualified M.R.C.S., L.R.C.P. in London in 1915, and served as a captain in the R.A.M.C. He had been for some years

honorary physician to St. Margaret's Hospital, Doddington, and to the St. Francis Clinic, London. He had been a member of the Portsmouth Town Council, and he stood unsuccessfully for Parliament in 1924.

G. H. C. writes: Olaf Gleeson, general practitioner and medical psychologist, amateur of sundry arts, and noted master of the craft of cabinet-making, was, more than all these, an "holistic" man, one in whom the professional aspect was always subordinate to the total reality, and therefore one whom friends and patients loved and will remember. This, or something of this sort, seems to have been the secret of "John" Gleeson, the source of that quality of greatness that must have been felt by the thousands who came near him in the various spheres in which he moved. How abundantly it qualified him for the role of psychotherapist. To this role he graduated, practising in Harley Street, after studentship at King's College and Westminster Hospital had led to strenuous services as a general practitioner at Portsmouth, and after World War I had taken him to the firing-line in a medical capacity to become eventually a casualty himself during a poison-gas attack. His personal integration gave him the intuition to perceive the essential problem of a patient before the patient could discover it for himself, and it gave him the courage to modify his treatment in the light of that intuitive perception. Therefore he was not so much a psychologist with a method—the exponent of a theory or the demonstrator of a technique—as a man with a flair and a personal touch guided by a deep understanding. Whether sailing in a boat of his own construction, or cultivating tomatoes hydroponically, or being filmed by Gaumont-British as a maker of superb furniture, or having a "nasty spill" in a ditch as the result of taking out for a trial run a home-made motor-car from which the brake-blocks had been removed, whatever it was that he did for fun he did it with a zest that secured for himself a maximum return of health and enjoyment. Sorrow and illness, however, come to us all, and when they came to Olaf Gleeson he bore them with astonishing fortitude.

Dr. WILLIAM ARTHUR WILSON-SMITH, who died on Jan. 5, graduated at Edinburgh in 1904, proceeding M.D. in 1907. In the same year he took the D.P.H. and went on a trip round the world. He settled in general practice in Long Sutton, Lincs, in 1910, continuing there until 1921. For the next fourteen years he was in practice in Harrow and from 1935 until his retirement in 1946 at Whiteparish, near Salisbury. He served in France in the 1914–18 war. Barely a year ago he retired to his old home in Berwickshire. Dr. Wilson-Smith was well-known in the pig-breeding world for his herd of pure-bred Large White pigs, which he founded at Cumledge in 1932.

W. McK. H. McC. writes: His many friends in the Harrow district will have learned with regret of the death of Dr. Wilson-Smith. He was in practice there for many years and earned a high reputation for conscientious work and painstaking thoroughness in all that had to do with the health of his patients. He was particularly interested in dietetics. He attended the old Harrow Cottage Hospital almost daily and was always ready to assist at operations, to give anaesthetics, or to give help when it was needed. His was an attractive and many-sided character, and the sympathy of his professional friends and former patients goes out to his widow and his only son, a subaltern in the Royal Scots, his grandfather's regiment.

Dr. DEBONNAIRE FREDERICK MAUNSELL died at his home in South Kensington, at the age of 77, on Jan. 18. Dr. Maunsell was the son of the late General J. R. Maunsell, R.E., and he was educated at St. Thomas's Hospital Medical School, where he qualified in 1897. He was a clinical assistant at the Throat, Nose, and Ear Department of the West London Hospital and also at the Brompton Hospital before settling in general practice in the Cromwell Road neighbourhood. Hampered for many years by increasing deafness, he continued his work right to the end, although for two or three years his friends had noticed with increasing apprehension the failing health which he continued to ignore. An innate modesty and kindliness, combined with complete integrity, were among Dr. Maunsell's leading characteristics. He married in 1914 Miss Isabel Margaret Tarbet, who survives him. They had two sons and one daughter. He was a vice-president and former honorary secretary of the West London Medico-Chirurgical Society.—H. R.

Dr. WILLIAM HUGH HILL, who died on Jan. 25, graduated at Edinburgh in 1896, proceeding M.D. in 1902. He was for a few years in private practice in Scotland before becoming resident physician to the Grampian Sanatorium, Kingussie. Later he was appointed assistant medical officer of health to the County of Essex under Dr. Thresh. He was particularly interested in public water supplies, and was made a member of the Ministry of Health Advisory Committee on Water Supplies. During the 1914–18 war he served as a captain in the R.A.M.C. and was awarded the French Médaille des Epidémies. At the end of the war he returned to the post he had taken up in 1911 as medical officer of health of the South Oxfordshire Combined Districts, retiring in 1940. His retirement was spent in Oxford. Of a somewhat reserved temperament, William Hill had a keen sense of humour. Competent in his work, he was impatient of incompetence in others. In his natural courtesy he was a gentleman of "the old school" and will be missed by his many friends.

Dr. ERNEST WHITMORE NEWTON GUINNESS, who died at the age of 82 on Jan. 29 at St. Thomas's Hospital after a short illness, was the son of the late Rev. William Newton Guinness, of Colooney, Co. Sligo. He was educated at Trinity College, Dublin, and shortly after qualifying he joined the medical service of the East India Railways. He was principal medical officer for some years before he retired in 1916. He served with the South Africa Forces in Tanganyika with the rank of lieutenant-colonel in 1916–19, and was mentioned in dispatches and awarded the O.B.E. After the war he farmed for a time in Kenya before turning his attention to public health. He was later appointed medical officer of health for Nairobi. After his wife's death he went to live at West Clandon, Surrey. In 1940, at the age of 74, he volunteered for service with the British India Steam Navigation Company, and was a ship's medical officer for the next three years.

Dr. HERBERT HENRY BROWN, who died at his home in Worthing on Feb. 2, will be remembered by a large number of older Ipswich people as one of the most popular medical men in the town towards the end of the last and the first twenty years of this century. On leaving Harrow School he received his medical education at University College Hospital, where he was a contemporary of Rose Bradford. During his undergraduate career he won a large number of prizes. After taking the M.B., B.S. with honours he proceeded M.D. in 1888, and took the F.R.C.S. in the following year. Dr. Brown had been a member of the British Medical Association for over fifty years. He was honorary secretary of the Section of Surgery when the Association met at Ipswich in 1900, and represented his Division at the Exeter Meeting in 1907. He was president of the Suffolk Branch in Ipswich in 1927–8. After postgraduate experience at University College, and in Worcester, he settled in practice in Ipswich in partnership with the late Dr. Hetherington, succeeding the late Dr. J. H. Bartlett. He was appointed to the staff of the East Suffolk and Ipswich Hospital in June, 1897, retiring under the age limit from the active work of the hospital in 1922. He had a distinguished career both in medicine and surgery, and as a diagnostician he was in a class by himself.—R. C.

F. R. S. writes: The death of Dr. H. H. Brown in his 86th year severs a link with the great days of University College Hospital towards the close of the nineteenth century. Dr. Brown entered as a medical student at University College Hospital, attracted there by the presence of men like Sharpey-Schafer, Sidney Ringer, Thomas Barlow, Henry Gowers, and Victor Horsley. His student career was brilliant; he seemed to obtain gold medals and scholarships without apparent effort. Even as a student he carried out an effective piece of research on spermatogenesis, and his drawings were used in many editions of Sharpey-Schafer's book on histology. Nevertheless the lure of clinical work proved too great and he gave up research. He held his appointment at the East Suffolk and Ipswich Hospital for twenty-five years, and his work there did much to raise its prestige. Dr. Brown was unexcelled as a clinician, and his surgical daring and success were a local wonder. Despite long hours spent at the hospital, he found time to run a busy general practice and to enter into local politics. During World War I he had charge of the military beds at the main and the two auxiliary hospitals, and the enormous labour that this entailed was recognized by the award of the O.B.E. In person Dr. Brown resembled the typical John Bull, and he had many of the characteristics attributed to that mythical figure; his tenacity and pugnacity were well-known and, wedded to a fine intellect, he soon became the final court of appeal in all desperate cases of illness: indeed, not to die when Dr. Brown foretold it was almost an impertinence on the part of the patient. Dr. Brown retired in 1932 but he remained a keen student of medicine until nearly the end, and we in East Anglia say goodbye to a great personality and a fine doctor.

Medical Notes in Parliament

N.H.S. Superannuation in Scotland

On Feb. 9 Mr. J. J. ROBERTSON, Joint Under-Secretary of State for Scotland, moved the approval of the Draft National Health Service (Scotland) Superannuation Regulations, 1948, proposed to be made by the Secretary of State for Scotland under Section 66 of the National Health Service (Scotland) Act, 1947. He said these complicated Regulations were necessary to set up a simple comprehensive superannuation scheme for all persons employed in the National Health Service in Scotland. Except on minor points they made the same provision as the Superannuation Regulations already approved by Parliament for the English Health Service. They provided for all employees and practitioners in the new Service superannuation benefits on a contributory basis, consisting of retiring and incapacity pensions, short-service gratuities, death gratuities, and injury allowances. They also included provision for widows' pensions. They contained special provisions to ensure that the existing superannuation rights of the 60,000 persons who would become subject to the Regulations on the appointed day would be fully preserved and that everyone transferred into the new Service would be at least as well off as before the transfer. Hospital officers who at present had no pension rights would for qualification purposes in the new scheme be able to count all their previous hospital service. Such an officer might become eligible immediately for some benefits of the scheme, such as the incapacity pension, which was normally one-quarter of the officer's remuneration, or the death gratuity, which was a minimum of one year's service salary. A unique feature of these Regulations was the extent to which they preserved the pensions rights of persons who after the appointed day moved from the Health Service into other types of public service or from other types of public service into the Health Service. The Scottish Regulations had been discussed in draft with some forty representative bodies. On one or two points the Government had not been able to go as far as it was asked, but nevertheless it had received a fairly high degree of support for the proposals now made.

Mr. CHARLES WILLIAMS asked the Government to justify the difference in the rates proposed for men and women.

Mr. J. S. C. REID asked whether there was full interchangeability for pensions between the general practitioner, the teacher in the university, the full-time Government servant, and the full-time municipal servant. He asked for an assurance that if full interchangeability did not exist already it would be brought in as soon as might be. He thought the proposals for officers in voluntary hospitals were satisfactory, and he understood with regard to those who had already retired that *ex gratia* payments would be made. These payments would continue the pension which they now enjoyed as a matter of grace from existing hospital authorities and so the position of all was adequately safeguarded. On the general provisions for pensions for general practitioners he said the scheme was fair but would be brought to naught unless a steady level of prices could be maintained over a man's whole professional career. The same consideration applied to payments on goodwill. He asked who determined whether a medical man was finally and totally incapacitated. If he recovered sufficiently to try again had he to give up all rights he had acquired or would he be allowed to see if he was fit enough to practice? He could see no reason why the man who started at 56 and went on working should never be allowed to earn a pension even if he went on to be 70. That seemed quite unjustifiable. He hoped Mr. Robertson would make it clear that a doctor who finished ten years' service, no matter what his age, would be entitled to a pension based on those ten years.

Dr. H. B. MORGAN asked whether any change was proposed in the definition of the words "mental health officer." In England a new interpretation had been put on that term by which many of these officers were precluded from getting the full advantages of the Superannuation Regulations. He also asked for an assurance that employees in mental institutions would have the right of opting to retire and would not be compelled to accept new terms under the new Superannuation Regulations. With regard to mental employees in the Royal Institutions in Scotland the Secretary of State had acknowledged the option of these men to remain in their old schemes. The Secretary of State had given an assurance with regard to the Institution of Dumfries, but was not sure whether the Royal Institutions in Perthshire or Stirling had such schemes, or the Morningside Institution at Edinburgh or the Royal Institution in Glasgow.

Sir WILLIAM DARLING thought the Secretary of State should help doctors who were placed in a difficulty owing to having taken in the earlier years of their lives very substantial insurance policies.

Replying to the debate, Mr. WOODBURN said he was pleased to have an assurance that some doctors were coming into the scheme. It was a great comfort to him that some members of the Opposition were convinced there would be a scheme. There was provision in special cases that practitioners might carry on beyond 65 and so complete the ten years and be entitled to a pension in the normal way. If a practitioner came in at 57 and had only 8 years he would get his contributions returned with compound interest and also the value of his practice in the normal way. He thought the assurance given to the Creighton Royal Institution could be extended to others similarly placed. He thought the general principles laid down were just and fair to young doctors. He would look into a real case of difficulty if Sir William Darling furnished it. The differential rates proposed for men and women were based on the different expectation of life.

The House then approved the Regulations.

Bovine Tuberculosis

Mr. TOM WILLIAMS on Feb. 2 moved the Second Reading of the Animals' Bill, one purpose of which is to extend the authority of the Ministry of Agriculture to make payments to farmers for eradicating bovine tuberculosis from their herds. He said that since the middle of 1944 the number of attested herds in Great Britain had increased from 16,000 to 30,000. There were now nearly 1,200,000 attested cattle in Great Britain, or more than one-eighth of the total cattle population. Scotland had made more progress than England and Wales, although Pembroke, Cardigan, and Carmarthen had done magnificently, England lagged hopelessly behind. Preliminary discussions had taken place on a plan for the elimination of tuberculosis area by area. To clear the whole country of bovine tuberculosis could not take less than ten to fifteen years.

After a brief debate the Bill was read a second time.

Attempted Rape Bill

Mr. YOUNGER, for the Home Office, moved on Jan. 30 the Second Reading of the Attempted Rape Bill which proposed to raise the maximum penalty for the offence from two years' imprisonment to seven years. He said the judges had pointed out that the attempt might cause the victim all the indignity and terror of the full offence.

Colonel LIPSON contended that there was no evidence that the number of convictions for sexual offences was increasing.

The Bill was then read a second time. It was taken in Committee on Feb. 5, when an amendment to substitute 15 for seven years was rejected. The Bill was read a third time by 196 to 17.

Pneumoconiosis.—The number of certificates of disablement or suspension on account of pneumoconiosis issued by the Silicosis Medical Board to coal-miners during 1947 was 3,724. The distribution of these among the regions of the Ministry of National Insurance was Northern 94, East and West Riding 146, North Midland 12, South Eastern 55, South Western 64, Wales 2,837, Midland 102, North Western 105, Scotland 309. No certificates were issued in the Eastern and Southern regions.

Fees for Dentists.—Mr. JAMES GRIFFITHS said on Jan. 27 that the settlement of the dispute about dentists' fees for National Health Insurance work provided for retrospective payments for dentists if, in the light of the forthcoming report of the Spens Committee on Dental Remuneration, present fees were found to have been inadequate. That the great majority of dental letters issued by approved societies were taken up by dentists was evidence that the settlement was widely accepted. There was no compulsion on the dentist to accept a dental letter.

Cars for Doctors.—In response to Colonel WHEATLEY, who asked that doctors might have equal priority with the export trade in securing new motor-cars to replace worn-out ones, Mr. J. JONES regretted it was impossible to increase the supply of motor-cars to the home market at the expense of exports. The motor industry, however, was honouring its undertaking to give as much preference as possible to the delivery of cars ordered by doctors.

Purchase Tax on Drugs.—Sir STAFFORD CRIPPS announced on Jan. 27 that a further Treasury Order exempting certain drugs from the recent increase in Purchase Tax would shortly be announced. He would also consider medicines in a review of the Purchase Tax in connexion with the forthcoming Budget.

Medico-Legal

SHORT WEIGHT IN PILLS

[FROM OUR MEDICO-LEGAL CORRESPONDENT]

A Dorset doctor ordered from a firm of drug suppliers in London some 1-gr. (65-mg.) and 3-gr. (0.2-g.) pills of sodium thiocyanate. The firm obtained them from a large manufacturing concern. The patient did not respond properly to treatment, and the pills were analysed and found to be of short weight by 23 and 28% respectively. The second firm were therefore charged with supplying an article not of the nature and quality demanded by the purchaser. The magistrates found that the firm had adopted the usual trade practice in the manufacture of the pills and were not aware that this deficiency could occur in making pills by hand; they therefore dismissed the case. On appeal by the county inspector, the Divisional Court said that the bench ought to have convicted.[1]

The firm's excuse was that a certain amount of material sticks to the hand or the mortar in the mixing, and they therefore could not guarantee that every pill that went out contained 1 or 3 gr., as the case might be, as it would not pay them to test the pills. The court could not accept this. If the firm knew that the pills might be deficient they should inform the doctor or customer of the fact. There was no evidence that doctors and the public generally knew that they could not expect a pill to weigh as much as it was supposed to. A manufacturer was protected against the consequences of a small deficiency by the provision of the Food and Drugs Act that an accidental abstraction of some constituent did not entail a penalty if it had not affected the quality or potency of the drug and was not made fraudulently, but he could not waive his responsibility for a shortage that really mattered. If manufacturing chemists could not supply the right quantity they, and the retailer, should make it clear to the purchaser that they could not say that a particular pill contained substantially the precise amount of the drug ordered.

[1] *Breed* v. *British Drug Houses*, 1947, 2 All E.R., 613.

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

Air Vice-Marshal Alan Filmer Rook, C.B., O.B.E., F.R.C.P., R.A.F., and Leonard Heber Hawtrey May, M.B., B.Chir., have been appointed Senior Health Officer and Junior Health Officer respectively in the Department of Medicine for a period of three years from May 1.

UNIVERSITY OF LONDON

Prof. G. R. Cameron, D.Sc., F.R.S., F.R.C.P., will deliver the Sydney Ringer Memorial Lecture, on "Pulmonary Oedema," in the lecture theatre of University College Hospital Medical School, University Street, Gower Street, W.C.1, on Tuesday, March 16, at 4.30 p.m. The lecture is open to all qualified medical practitioners and medical students.

The following have been recognized as teachers of the University in the subjects indicated in parentheses: *St. Bartholomew's Hospital Medical College:* Mr. A. W. Badenoch, Mr. A. H. Hunt, and Mr. J. E. A. O'Connell (Surgery); Dr. K. O. Black and Dr. N. C. Oswald (Medicine); Dr. J. W. Aldren Turner (Medicine (Neurology)); Mr. H. Jackson Burrows (Orthopaedics); Dr. A. W. Franklin (Children's Diseases); Mr. D. B. Fraser (Obstetrics and Gynaecology); Dr. R. A. K. Harper and Mr. I. G. Williams (Radiology); Dr. R. M. B. MacKenna (Dermatology); Mr. H. B. Stallard (Ophthalmology). *St. Thomas's Hospital Medical School:* Dr. W. A. Low (Anaesthetics). *St. George's Hospital Medical School:* Dr. J. N. M. Chalmers (Pathology); Dr. M. I. A. Hunter (Medicine); Dr. N. H. Martin (Chemical Pathology). *Middlesex Hospital Medical School:* Dr. F. R. Bettley (Dermatology); Dr. G. W. Hadley and Dr. A. Willcox (Medicine); Mr. R. Sampson Handley (Surgery). *St. Mary's Hospital Medical School:* Dr. J. J. Pritchard (Anatomy). *Royal Free Hospital School of Medicine:* Miss Jean M. Dollar, M.S., F.R.C.S. (Ophthalmology). *Maudsley Hospital:* Dr. E. Guttmann (Mental Diseases (Psychiatry)). Probationary, for two years from November, 1947. *St. Bartholomew's Hospital Medical College:* Dr. W. E. Gibb (Medicine). *St. George's Hospital Medical School:* Sir William P. Mallinson, B.M., B.Ch (Mental Diseases (Psychiatry)). *Middlesex Hospital Medical School:* Dr. E. W. Hart (Children's Diseases); Mr. P. H. Newman (Orthopaedics).

The British Postgraduate Medical Federation, in respect of its facilities at the Postgraduate Medical School of London, has been admitted as a School of the University in the Faculty of Medicine.

The Royal College of Surgeons in Ireland has been recognized for the purposes of the M.B., B.S. degrees for external students for a period of five years from Oct. 1.

The John Marshall Fellowship, of the value of £700 a year for two years, has been awarded to Athol George Riddell, M.B.E., M.B., B.S., University College Hospital Medical School, from Nov. 1, 1947

Dr. J. R. Gilmour has resigned from the post of Reader in Morbid Anatomy at London Hospital Medical College, and Dr. A. C. Stevenson, Reader in Public Health at the London School of Hygiene and Tropical Medicine, resigns from this post on April 1.

George Perkins, *M.C.*, M.Ch., F.R.C.S., has been appointed to the University Chair of Surgery tenable at St. Thomas's Hospital Medical School, as from Jan. 1.

King's College Hospital Medical School

Harold Clifford Edwards, C.B.E., M.S., F.R.C.S., has been appointed Dean of the Medical School in succession to Terence Edward Cawthorne, F.R.C.S., who has resigned.

Henry Adolph Magnus, M.D., Morbid Anatomist to the Hospital and Medical School, has been appointed Director of the Pathology Department.

UNIVERSITY OF WALES

The following candidates for the degrees of M.B., B.Ch. at the Welsh National School of Medicine have satisfied the examiners at the examinations indicated:

OBSTETRICS AND GYNAECOLOGY.—Maureen M. Bassett, Sarah A. Chard N. V. Chivers, S. I. Cohen, A. V. Coleman, G. J. Davies, Joan V. Davis, E. F Griffiths, Anne Guy, E. J. Hargadon, J. M. E. Hyde, Marjorie L. James, Beryl H Jones, Eluned K. Jones, J. H. Jones, Rosina E. Jones, T. D. Jones, D. M. D. King, R. H. Lewis, C. S. Livingstone, Joan A. McLay, J. E. Mitchell, M. A. Owen, C. L. Perry, G. M Reynolds, Frances M. Richards, J. M. Richards, Esme S Rogers, Sybil H. Stephens, *C. E. Stroud, Augusta J. Taylor, J. H. S. Wakelin, J. A. Wilkinson.

* With distinction.

SURGERY.—Maureen M. Bassett, N. V. Chivers, *S. I. Cohen, A. V. Coleman, D. P. Davies, E. F. Griffiths, Anne Guy, *J. M. E. Hyde, E. G. A. Jackson, D. W. James, Marjorie L. James, Dilys W John, J. H. Jones, R. H. Lewis, C. S Livingstone, Joan A McLay, J. E. Mitchell, Lilian M. Morgan, E. G. Rees, Frances M. Richards, J. M. Richards, Sybil H. Stephens, *C. E. Stroud, Augusta J Taylor, J. H. S. Wakelin.

* With distinction.

ROYAL COLLEGE OF PHYSICIANS OF LONDON

At a meeting of the Royal College of Physicians of London held on Jan. 29, with the President, Lord Moran, in the chair, the following resolution was passed:

"That after the plebiscite and the Special Representative Meeting of the British Medical Association on March 17 a special Comitia should be held to determine what action could most usefully be taken in the interests of the public and the profession as a whole."

Dr. G. Bourne was appointed to represent the College on the Central Council for District Nursing and Prof. J. M. Mackintosh at the Royal Sanitary Institute Conference to be held at Harrogate from May 24 to 28.

Membership

The following candidates having satisfied the Censors' Board were elected Members of the College:

J. L. Adams, M.B., D. G. Adamson, M.B., Y. Ez-el-Din Ahmad Azab, M.B., Daphne S. A. Anderson, M.B., W. F. Anderson, M.D., W. B. Armstrong, B.M., P. Arnold, M.B., G. P. Baker, M.B., C. W. Bartley, M.D., A. G. Beckett, B.M., A. B. Black, M.B., V. M. Borrelli, M.B., P. F. Borrie, M.B., B. F. Brearley, M.B., H. T. Calvert, M.B., J. A. G. Carmichael, L.R.C.P., Major, R.A.M.C., H. S. De Silva, M.B., P. E. Dipple, M.D., A. Divaris, M.B., A St. J. Dixon, M.B., H. G. Dunn, M.B., A. M. Edwards, M.D., F. J. Fish, M.B., Constance C. Forsyth, M.B., J. L. Frew, M.D., A. N. Ganguli, M.B., T J. B. Geffen, M.B., Janet B. Gorham, M.B., N. Green, M.D., H. Grusin, M.B., R. T. S. Gunn, M.B., R. T. Hastings-James, M.B., I. F. Hayali, M.D., J. Henneman, M.B., H W. Hickman, M.B., J. A. Hildes, M.D., S. W. Hinds, M.D., J. Hirst, M.D., W. S. Holden, M.B., C. A. Holman, M.B., F. H. Howarth, M.B., I. P. Jaffe, M.B., H. W. F. Jones, M.B., Henriette Lackner, M.B., G. de J. Lee, M.B., J. Lee, M.B., D. Longson, M.B., J. B. Lowe, M.B., D B. Macaulay, M.B., E. McC. McGirr, M.B., A. G. MacGregor, M.B., M. McGregor, M.B., C. S. McKendrick, M.B., T. P. Mann, M.B., P. M. C. Mark, M.D., A. S. Mason, M.B., R. M. Mason, B.M., J. D. H. Matthews, M.B., W. B. Matthews, B.M., D. A. D. Montgomery, M.D., J. A U. Morgan, M.B., J. E. Morris, M.B., A. H. Nakhooda, M.B., F. W. Nash, M.B., W. O'Brien, M.B., D. F. D. O'Neill, M.D., A. G. Parks, B.M., J. C. Pease, B.M., J. Perrin, M.B., J. Pinching, B.M., P. E. Polani, M.D., A. S. Ramsey, M.D., D. G. B. Richards, M.B., P. H. Rogers, M.B., A. J. Rook, M.B., E S. Rowbotham, M.D., J. Rubie, M.B., J. Rudolph, M.B., W. A. M. Seldon, M.B., S. A. Sewell, M.B., S. C. Sheth, M.B., V. Solomon, M.B., J. P. Sparks, M.D., Y. H. Tang, M.D., Jean S. Taylor, M.B., W. H. Trethowan, M.B., O. L. Wade, M.B., J. K. Wagstaff, M.B., G. D. Walker, B.M., R. L. Ward, M.B., A. D Weatherhead, M.B., R. H. Wheeler, M.B., R. H. White-Jones, M.B., E. G. Wilkins, M.D., J. M. Wilson, M.B., R. H. L. Wolfsohn, L.R.C.P., B. S. B. Wood, B.M.

Licences

Licences to practise were conferred upon 100 candidates (including 22 women) who have passed the final examination in Medicine,

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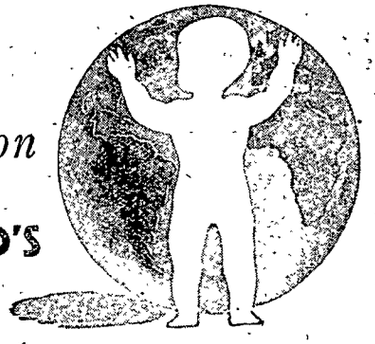

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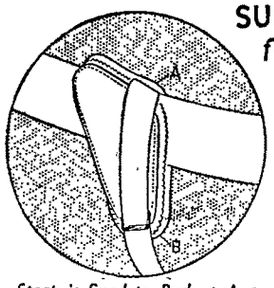

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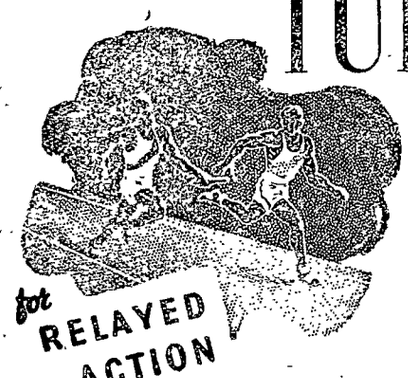

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Diplomas

The following diplomas were granted, jointly with the Royal College of Surgeons of England:

DIPLOMA IN ANAESTHETICS.—J B. Searle; and to the other successful candidates whose names were printed in the report of the meeting of the Royal College of Surgeons of England in the *Journal* of Jan. 24 (p. 178).

DIPLOMA IN PSYCHOLOGICAL MEDICINE.—D. W Rowntree; and to the other successful candidates whose names were printed in the *Journal* of Jan. 24 (p. 178).

DIPLOMA IN TROPICAL MEDICINE AND HYGIENE.—S Khayatt; and to the other successful candidates whose names were printed in the *Journal* of Jan. 24 (p. 178).

Diplomas in Laryngology and Otology and in Industrial Health were granted to the successful candidates recorded in the *Journal* of Jan. 24 (p. 178).

DIPLOMA IN PHYSICAL MEDICINE.—W. R. Grant, A. K. Tyler.

DIPLOMA IN OPHTHALMIC MEDICINE AND SURGERY.—J. Scully.

DIPLOMA IN MEDICAL RADIOTHERAPY.—D. K. Sambrook.

DIPLOMA IN CHILD HEALTH.—M B. Gamat, A. D. M Jackson.

DIPLOMA IN PUBLIC HEALTH.—L. R. B. Birt, P. Coggin Brown, Jessie A. R. Cripps T. M. W. D'Arcy, Margaret B. Davies, J. Dolan, V. O. B Gartside, R. B. Illing, C. L. Knight, S. E. Large, Barbara Law, W. C. D. Lovett J. H. Maughan, A. J. Nelson, J. O'Regan, W. S. Parker, P. Pattison, J. V. Radley, J. Reynolds, H. J. A. Richards, A. F. Ritchie, Mary V. Rose, Marguerite S. Sheare, Elspeth W. Smellie, Agnes A. V. Smyth, W. Stewart, P. Weyman, D. H. J. Williams.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

At an ordinary meeting of the Council of the College, held on Feb. 12, with Sir Alfred Webb-Johnson, Bt., President, in the chair, a proposal to provide residential accommodation for postgraduate students of the College was approved in principle.

It was decided to establish a Faculty of Anaesthetics in the College.

The Hallett Prize was awarded to D. S. Chapman (University of Durham).

The following hospitals were recognized in respect of the resident surgical posts required of candidates for the Final Fellowship examination: Bootle General Hospital (resident surgical officer); City General Hospital, Sheffield (house-surgeon and casualty officer); West Norfolk and King's Lynn Hospital (resident surgical officer for one year only).

The following members of the medical profession were elected Fellows in Dental Surgery: J. B. Parfitt, M.R.C.S., L.R.C.P., G. F. Fawn, M.R.C.S., L.R.C.P., A. L. Packham, M.R.C.S., L.R.C.P., H. L. T. J. Hardwick, M.R.C.S., L.R.C.P.

Diplomas

Diplomas of Membership were granted to M. D. M. Bowen, J. S. Jenkins, and to the recipients of the licence of the Royal College of Physicians of London whose names are printed above in the report of the meeting of the College.

Diplomas in Public Health, in Psychological Medicine, in Anaesthetics, and in Ophthalmic Medicine and Surgery were granted, jointly with the Royal College of Physicians of London, to the successful candidates whose names appear above in the report of the meeting of that College.

Diplomas in Tropical Medicine and Hygiene were granted, jointly with the Royal College of Physicians of London, to M. S. Holman and S. Khayatt, and in Child Health to H. S. de Silva.

The Board of Faculty of Dental Surgery held its first dinner on Jan. 30, when it entertained at the College some of the senior distinguished members of the profession who were recently elected to the Fellowship in Dental Surgery. The President of the College, Sir Alfred Webb-Johnson, who presided, proposed the health of the guests. He took the opportunity of thanking the Board for the silver cup which it had presented to the College to commemorate the inauguration of the Fellowship and the establishment of the Faculty. The cup is of George II period and bears the arms of the Earl of Chatham (William Pitt) who was responsible for Parliament buying the John Hunter Collection and entrusting it to the College. Mr. A. E. Rowlett, replying for the guests, thanked the President and the College for all they had done for dental surgery, particularly in the establishment of the Fellowship and Faculty. They all realized how much they owed to the President. The Dean (Prof. R. V. Bradlaw), Sir Frank Colyer, and Mrs. Lindsay also spoke.

Medical News

Not to Serve under the Act

At the Annual General Meeting of the Association of the Honorary Staffs of the Major (Non-Undergraduate) Voluntary Hospitals of England and Wales held on Jan. 29 the following resolution was passed unanimously:

"That this Association at its Annual General Meeting agrees to recommend that no member of the staffs of its member hospitals should accept service under the National Health Service Act as it now stands."

The Council has been concerned about the possible appointment of Regional Advisers and has passed the following resolution:

"That the Regional Adviser, if appointed, in visiting hospitals should advise, but not have the power of direction in clinical matters."

Unit for Premature Babies

A unit for premature babies was opened at the Hammersmith Hospital on Feb. 12. The medical staff is provided by the Institute of Child Health and the British Postgraduate School. Prof. Alan Moncrieff, Dr. D. de la C. MacCarthy, and Dr. R. R. Gordon are in charge of the unit.

W.H.O. Established

Twenty-nine member States of the United Nations have now ratified the constitution of the World Health Organization, and the Soviet Union has promised to do so shortly. It is therefore established on a permanent basis, and the first World Health Assembly will be held in Geneva in June. Subjects tabled for early discussion by the World Health Organization include such tropical communicable diseases as cholera, yellow fever, and malaria, and more general topics such as child health, standardization of biological products, and rural hygiene.

Bridge of Earn Fitness Centre

The Residential Rehabilitation Centre for male patients formerly at Gleneagles Hospital is now functioning at Bridge of Earn Hospital and Fitness Centre, Perthshire. All classes of male patients, irrespective of their trade or calling, suffering from medical or surgical disabilities and requiring rehabilitation can be accepted, but they must be ambulant and able to feed and clothe themselves. Cases can be admitted from hospital or direct from medical practitioners anywhere in Scotland. Applications for admission of patients should be made to the Medical Superintendent and should give as much information as possible about the clinical condition of each patient; case sheets and *x*-ray photographs should be sent if available. They will be returned on discharge of the patient.

Prize in Ophthalmology Offered

An honorarium of $1,000 to promote research in ophthalmology is offered through the American members of the staff of the International Association for the Prevention of Blindness. The jury will consist of the executive committee together with the president and the officers of the Association. The award will be made in connexion with the Sixteenth Concilium Ophthalmologicum. The subject is "Simple Non-inflammatory Glaucoma" and may include anything relative to the problem. The work must be original. Papers may be written in English or French and should be either previously unpublished or published between now and Oct. 15, 1949. They should reach the secretary of the International Association for the Prevention of Blindness, 66, Boulevard St. Michel, Paris, not later than Oct. 15, 1949.

Institute of Psycho-Analysis Prize

The prize of £25 offered by the Institute of Psycho-Analysis (96, Gloucester Place, London, W.) for the best entry for the students' prize essay competition has been awarded to Mr. H. S Glatt (Sheffield University) for his essay entitled "A Social Approach to Psycho-Neurosis."

Chest Specialist from Chile

Dr. H. Orrego Puelma, Head of the Chest Diseases Department of the San Salvador Hospital and specialist in tuberculosis, is visiting Britain under the auspices of the British Council to study recent developments in the treatment of tuberculosis and particularly rehabilitation problems.

Tuberculosis Research in Germany

An institute has recently been established in Schleswig-Holstein for research in tuberculosis. It is staffed by German experts.

Wills

Dr. Alexander Munro, of Bournemouth, who died on June 10, left £26,419. Dr. George Fyfe Waterston, Kendal, Westmorland, and Bolton, Lancs, who died on Feb. 27, left £40,545.

COMING EVENTS

Speech Therapy

A Speech Therapy Conference will be held at the Royal Society of Medicine, 1, Wimpole Street, London, W.1, on Sept. 20 to 24. Those wishing to submit papers (time limit, 15 minutes) should send the title and a summary to the secretary not later than March 1. Sessions will be held on the following subjects: The Aim and Scope of Speech Therapy; Emotional Background of Stammering; Speech Disorders Arising from Head Injuries; the Speech Clinic and the Speech Defective Child; the Role of Emotional Problems in Producing Disorders of Speech; and general sessions during which members of the Conference will present papers on various aspects of speech therapy and closely related subjects.

Nutritional Status in Great Britain

The Nutrition Society has arranged a whole-day conference on "Results of Recent Investigations into the Nutritional Status in Great Britain" to be held at the London School of Hygiene and Tropical Medicine, Keppel Street, W.C., on Saturday, March 13, at 10 a.m.

School Medical Officers

The School Health Service Group of the Society of Medical Officers of Health will hold a refresher course for school medical officers at the London School of Hygiene, Keppel Street, London, W.C.1, on April 5–10. It is intended primarily for medical officers who are actually engaged in the work of school medical inspection. The lectures will therefore be concerned with disabilities as the school medical officer meets them in his daily work, with special reference to the selection of cases to be referred for specialist investigation and treatment and to the care of children who are kept under observation in ordinary schools. The Minister of Education will recognize for the purposes of grant reasonable expenditure incurred by authorities in connexion with attendance by school medical officers or assistant school medical officers at the course, subject to district auditors passing such expenditure as a proper charge on the education account. Applications should be sent as soon as possible to: The Executive Secretary, Society of Medical Officers of Health, Tavistock House South, Tavistock Square, London, W.C.1. The fee for the course will be £2 12s. 6d. plus a registration fee of 10s. 6d.

Royal Institute of Public Health and Hygiene

A series of lectures will be given at the Royal Institute of Public Health and Hygiene, 28, Portland Place, London, W., on Wednesdays, at 3.30 p.m., from March 3 to April 21 (except March 24). Details will be published in the diary column week by week. Admission to the lectures is free, without ticket.

Guy's Hospital Dental School

The annual clinical meeting of Guy's Hospital Dental School will be held in the Dental Department of the hospital on Saturday, March 6, at 11 a.m., when demonstrations of modern dental procedures will be given by members of the staff and cases of clinical interest shown.

American Association for the Advancement of Science

The centennial celebration of the American Association for the Advancement of Science will be held in Washington, D.C., in Sept., 1948.

SOCIETIES AND LECTURES

Saturday

MIDDLESEX COUNTY MEDICAL SOCIETY.—At North Middlesex County Hospital, Silver Street, Edmonton, Feb. 21, 3 p.m. Demonstration of clinical cases of surgical, medical, and general interest.

MEDICAL SOCIETY FOR THE STUDY OF VENEREAL DISEASES.—At 11, Chandos Street, London, W., Feb. 21, 2.30 p.m. "*Non-bacterial Infection of the Genito-urinary System,*" by Dr. W. E. Coutts (Chili). Discussion.

Monday

HUNTERIAN SOCIETY.—At the Mansion House, London, E.C., Feb. 23, 8.30 p.m. "*Rheumatism in the Time of John Hunter.*" Hunterian Oration by Dr. W. S. C. Copeman.

MEDICAL SOCIETY OF LONDON, 11, Chandos Street, Cavendish Square, W.—Feb. 23, 9 p.m. "*Clinical Pathology in Relation to Medical Practice.*" Second Lettsomian Lecture by Dr. C. E. Dukes.

Tuesday

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C., Feb. 24, 5 p.m.—"*Anomalies of Pigmentation,*" by Dr. W. N. Goldsmith.

ILLUMINATING ENGINEERING SOCIETY.—At Lighting Service Bureau, 2, Savoy Hill, London, W.C., Feb. 24, 6 p.m. Motion: "*That Artificial Lighting is an Adequate Substitute for Natural Lighting.*" Proposers, Mr. L. H. Hubble and Mr. N. Sizer; opposers, Mr. P. V. Burnett and Mr. W. Allen.

Thursday

MEDICO-LEGAL SOCIETY.—At 26, Portland Place, London, W., Feb. 26, 8.15 p.m. "*The Obstetrician and Gynaecologist as a Witness in the Courts,*" by Dame Louise McIlroy.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, S.W.—Feb. 26, 4.30 p.m. *Psychiatric lecture-demonstration,* by Dr. D. Curran.

Friday

BRITISH INSTITUTE OF PHILOSOPHY.—At University Hall, 14, Gordon Square, London, W.C., Feb. 27, 5.15 p.m. "*The Organic State,*" by Mr. G. R. G. Mure.

LONDON CHEST HOSPITAL, Victoria Park, E.—Feb. 27, 5 p.m "*Acute Pericarditis,*" by Dr. Browning Alexander.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—Feb. 27, 8 p.m. "*Infantile Paralysis.*" Dissertation by Mr. T. P. C. Jameson.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—Feb. 27, 5 p.m. "*Epidemics and the Public Health,*" by Dr. E. A. Underwood.

Saturday

MEDICAL SOCIETY FOR THE STUDY OF VENEREAL DISEASES.—At 11, Chandos Street, London, W., Feb. 28, 2.30 p.m. Extraordinary general meeting; "*Crime in Relation to Sex,*" by Dr. H. S. Holden. Discussion.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Beatton.—On Feb. 9, 1948, at Stoneleigh, Dawley, Shropshire, to Jenny, wife of Peter Beatton, M.B., Ch.B., a son.

Bishop.—On Feb. 7, 1948, at Nuffield House, Guy's Hospital, London, S.E., to Phyllis, wife of Dr. Peter Bishop, 122, Harley Street, London, W., a daughter.

Bloom.—On Feb. 8, 1948, at 52, Kensington Mansions, London, S.W., to Freddy, wife of Dr. Philip M. Bloom, of 30, Weymouth Street, London, W., a son.

Cappon.—On Feb 3, 1948, at Berefields Nursing Home, Bradford on Avon, to Barbara Edna (*née* Williams), wife of Dr. D. Cappon, a son—Paul Scott, brother to Ian and Bruce.

Ferguson.—On Feb. 8, 1948, at Jessop Hospital, Sheffield, to Brenda, wife of Malcolm Ferguson, M.B., B.S., D.O.M.S., a daughter—Anthea Joy Collette

MARRIAGE

Hirst—Speight.—On Feb. 7, 1948, at Roundhay, Leeds, John Hirst, M.D., M.R.C.P., and Stella Armitage Speight, M.B., Ch.B.

DEATHS

Adams.—On Feb. 9, 1948, at The Old Rectory, Theberton, Suffolk, Philip Edward Homer Adams, F.R.C.S.

Dickinson.—On Jan. 31, 1948, at 5, Airlie Road, Hoylake, Cheshire, William Henry Dickinson M.R.C.S., L.R.C.P.

Franklin.—On Feb. 1, 1948, at Wadhurst House, Newington Green, London, N., Reginald Franklin, M.R.C.S., L.R.C.P.

Gilbert.—On Jan. 31, 1948, at 47, Painswick Road, Cheltenham, Clarence Edwin Lloyd Gilbert, M.R.C.S., Lieutenant-Colonel, I.M.S., retired, aged 85

Graham.—On Jan. 17, 1948, Roscoe Graham, M.B., F.R.C.S.(C.), aged 58.

Grant.—On Feb. 6, 1948, at 23, Julian Road, Folkestone, Andrew Grant, O.B.E., M.B., Ch.B.

Grenfell.—On Feb. 7, 1948, at Tregeseal, Saltash, Cornwall, Henry Osborne Grenfell, M.R.C.S., L.R.C.P., aged 85.

Guinness.—On Jan. 29, 1948, at St. Thomas's Hospital, London, S.E., Ernest Whitmore Guinness, O.B.E., M.D., aged 82.

Harrison.—On Jan. 10, 1948, at Harington Nursing Home, Calcutta, Cecil Cantilupe Harrison, M.R.C.S., L.R.C.P., Lieutenant-Colonel.

Hasiam.—On Feb. 7, 1948, at 15, Cranmer Road, Cambridge, Henry Cobden Hasiam, D.Sc., M.B., B.Ch., aged 77.

Hodson.—On Feb 9, 1948, Vincent Sutherland Hodson, M.V.O., M.D., F.R.C.P., of Orchard Cottage, Southwater, Horsham, Sussex.

Howell.—On Jan. 28, 1948, at Roque Brune, France, Hector Lionel Howell, O.B.E., M.C., M.R.C.S., L.R.C.P., Colonel A.M.S., retired.

James.—On Jan. 29, 1948, at Southampton Borough Hospital, Henry Walter James, M.R.C.S., L.R.C.P., aged 69.

Johnstone.—On Feb. 2, 1948 at Hairmyres, East Kilbride, Jean Gardner Cathels Johnstone, M.B., Ch.B.Ed.

Lesser.—On Jan. 31, 1948, Samuel Alfred Hugh Lesser, M.B., B.Chir., Major R.A.M.C., of South View, Pinner Hill, Middlesex, aged 36.

McCubbin.—On Feb. 9, 1948, at Portsmouth, Brian Arthur McCubbin, M.B., Ch.B.

McHarg.—On Jan. 29, 1948, at Royal Infirmary, Cardiff, Charles Liddell McHarg, M.B., Ch.B.Glas.

McSorley.—At 442, Antrim Road, Belfast, Frederick McSorley, M.D., F.R.C.P.I., M.P.

Mason.—On Feb. 4, 1948, Philip de Roos Mason, M.R.C.S., L.R.C.P., of 5, De Montfort Street, Leicester, aged 48.

Nunn.—On Feb. 11, 1948 at Victoria Hospital, Barnet, John Wilfred Nunn M.R.C.S., L.R.C.P., of Pymlicoe House, Hadley Green, Barnet, aged 72.

O'Donoghue.—Recently, James O'Donoghue, M.B., B.Ch.

Payne.—On Feb. 5, 1948, Otto Vaughan Payne, M.B., B.Ch., of Lansdowne House, Alton, Hants, aged 68.

Pendred.—On Feb. 7, 1948, Berthon Fleming Pendred, M.R.C.S., L.R.C.P., of Rooky Wood, Telham Lane, Battle.

Reece.—On Jan. 31, 1948, Richard Harold Reece, M.R.C.S., L.R.C.P., of Hallmoor, Tintagel, Cornwall.

Williams.—At Low Bridges, Stocksfield, Ethel Mary Nucella Williams, M.D., aged 85.

No. 5

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Jan. 31.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	48	6	27	2	1	83	5	23	1	2
Deaths		—	—				1	1		
Diphtheria	200	26	56	11	2	176	9	59	28	13
Deaths	4	—	—	—	—	6	2	1	—	1
Dysentery	208	15	29	1	—	61	3	10	2	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	1	—	—	—	—	2	1	—	—	—
Deaths		1					—			
Erysipelas			39	11	3			41	5	1
Deaths		1					—			
Infective enteritis or diarrhoea under 2 years				21					12	
Deaths	64	8	6	2	1	92	9	14	11	3
Measles*	4,233	340	885	88	13	13,501	482	254	50	767
Deaths†			3	—	—	2	1	1	—	5
Ophthalmia neonatorum	69	3	7	—	1	52	—	16	—	—
Deaths										
Paratyphoid fever	4	—	—	—	—	1	—	2 (B)	—	—
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal	850	56	9	6	8	1,278	79	27	18	7
Deaths (from influenza)‡	24	3	2	—	1	148	23	10	12	1
Pneumonia, primary			260	32				310	39	
Deaths	316	59		11	8		94			19
Polio-encephalitis, acute	4	—				12	—			
Deaths							—			
Poliomyelitis, acute	49	6	3	2	—	1	1	1	8	1
Deaths§	3	—					—			
Puerperal fever		—	4		—		—	18		—
Deaths										
Puerperal pyrexia‖	106	7	12	1	1	126	10	10	1	—
Deaths		—					—			
Relapsing fever	—	—			—	—	—			—
Deaths										
Scarlet fever	1,926	105	355	36	48	1,135	89	288	41	36
Deaths†			—	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	2	—	—	8	2	6	1	1	5	—
Deaths	—	—	—	—	—	—	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	2,725	191	32	65	10	1,890	156	295	60	43
Deaths	10	1	—	—	—	13	4	8	3	3
Deaths (0–1 year)	407	66	53	21	14	558	74	78	42	22
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	5,359	871	709	233	150	7,079	1222	775	326	204
Annual death rate (per 1,000 persons living)			14·3	14·6				16·1		
Live births	8,566	1396	958	414	268	9,677	1485	1189	376	266
Annual rate per 1,000 persons living			19·3	25·9				24·0		
Stillbirths	216	21	43			245	30	38		
Rate per 1,000 total births (including stillborn)			43					31		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Poliomyelitis

After the rise last week the figures for the week ended Feb. 7 show a substantial fall in the notifications of poliomyelitis 25 (49). Notifications of polio-encephalitis 6 (4) rose by 2. Figures for the previous week are given in parentheses. The counties with more than one notification were:

	Poliomyelitis	Polio-encephalitis
London	1 (6)	3 (0)
Essex	2 (2)	—
Hertford	2 (0)	—
Lancs	1 (4)	1 (2)
Middlesex	4 (5)	—
Shropshire	2 (0)	—

Discussion of Table

In *England and Wales* infectious diseases were more prevalent during the week, and an increased incidence was reported for measles 776, whooping-cough 178, dysentery 77, scarlet fever 79, acute pneumonia 70, and acute poliomyelitis 14.

A rise in the incidence of measles occurred in most areas. The largest increases were Northamptonshire 108, Warwickshire 91, Cheshire 67, Norfolk 59, London 56, and Essex 51 while the only decrease of any size was 47 in Staffordshire. An increase in the notifications of whooping-cough was recorded in only a few counties; the largest rises were Yorkshire West Riding 89, Essex 47, and London 33.

The incidence of scarlet fever remained practically constant in most areas; the only increases of note were Yorkshire West Riding 39, Staffordshire 31, and Warwickshire 25. The only large local variation in the returns of diphtheria was a decrease of 10 in Lancashire.

A large part of the increase in the notifications of dysentery was contributed by Lancashire, where the cases rose from 61 to 103. The chief centres of infection in this county were Burnley C.B. 42, Liverpool C.B. 11, Lancaster M.B. 14, and Prestwich M.B. 12. The other large returns of dysentery were Yorkshire West Riding 33 (Sheffield C.B. 22), Middlesex 21, and London 15.

The largest returns of acute poliomyelitis were Warwickshire 7, London 6, Lancashire 4, and Yorkshire West Riding 4. Multiple cases of poliomyelitis were notified in only three administrative areas: Warwickshire, Birmingham C.B. 4; Yorkshire West Riding, Bradford C.B. 3; and Cheshire, Wirral R.D. 2.

In *Scotland* falls were recorded in the notifications of measles 138, acute primary pneumonia 18, and dysentery 14. Nearly half of the cases of dysentery were notified in the north-eastern area.

In *Eire* the notifications of measles declined by 33, while those of whooping-cough rose by 23. The fall in the incidence of measles was general throughout the country, while the rise in the notifications of whooping-cough was due to an outbreak in Wicklow, Wicklow U.D. 20.

In *Northern Ireland* only small fluctuations were reported in the incidence of infectious diseases.

Week Ending February 7

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,943, whooping-cough 2,572, diphtheria 223, measles 5,596, acute pneumonia 1,012, cerebrospinal fever 56, acute poliomyelitis 25, dysentery 160, paratyphoid 6, and typhoid 12.

Written by Harlan Hoyt Horner, the Secretary of the Council on Dental Education of the American Dental Association, *Dental Education Today* (Cambridge University Press, 33s.) represents a layman's views on dental education. He presents an exhaustive survey of the dental schools in the U.S.A. with a comparison of their methods of teaching, and makes suggestions for dental education in the future. The writer is clearly advocating autonomy in the dental profession and does not appear to consider that dental surgery should be regarded as a branch of medicine. With this view all may not agree.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Infants in Tuberculous Families

Q.—*Should any special precautions be observed in bringing up infants whose elder brothers and sisters have developed surgical tuberculosis?*

A.—The question implies that two or more members of the family have developed active tuberculous lesions; it is therefore necessary to search for the source of infection and at the same time to build up the general resistance of the infants by giving them an adequate diet, sufficient rest, and a well-regulated life. The source of infection may be a member of the family, or it may be the milk supply. It is essential that all members of the household should be examined by a chest physician and the milk should be tested for tubercle bacilli. The chests of those who have non-respiratory tuberculosis should also be examined, even though they may have recovered from their disability. If the source of infection is found, precautions must be taken to prevent infection reaching the infants. The latter should be tuberculin-tested to determine if they have been infected; if they are, chest radiographs should be taken, and these should be repeated yearly until the age of 6. If the infants have not been infected, they should be tuberculin-tested every four months so long as they remain in the tuberculous household, and if the skin reaction becomes positive chest radiographs should be taken and repeated every three months for a year to trace the course of the primary infection. In a country where B.C.G. vaccination is practised the negative reactors in such a family would be vaccinated. As the household must be regarded as tuberculous the standard of living should be kept high and all should obtain sufficient rest and nourishment.

Overdosage of Vitamin D

Q.—*The answer to a question on "Cod-liver Oil for Adults" (Sept. 6, 1947, p. 403) states that "the fear of excessive doses of vitamin D has now been shown to be groundless." The most recent paper on the subject that I have come across was by Glynn (J. Amer. med. Soc., 1946, 1, 1208), on "Vitamin D Intoxication: Metastatic Calcification from Massive Doses of Vitamin D." In this paper he deals with one case and refers to many others in which metastatic calcification and death were attributed to overdosage with vitamin D. I should be grateful if you could refer me to more recent work which has disproved this, and to any other work on the subject.*

A.—That answer referred to excessive doses of vitamin D received through taking cod-liver oil. There was at one time a suggestion that even the amounts in cod-liver oil might give rise to calcification, but doubt was thrown on this by Cox and Roos (*Johns Hopk. Hosp. Bull.*, 1934, **54**, 430); and Burack and Zimmerman (*J. Nutrit.*, 1937, **14**, 535) have stated that the dosage of cod-liver oil necessary to induce pathological calcification as a result of antirachitic vitamin would have to be calculated in litres. Correll and Wise (*J. Nutrit.*, 1943, **26**, 641) showed that toxic manifestations from the vitamin D of cod-liver oil given to chicks occurred at 5,000 times the minimal dose.

So far as the toxicity of vitamin D apart from cod-liver oil is concerned, calcification and death have occurred as a result of massive overdosage with calciferol. The administration of enormous doses for lupus vulgaris, vitamin-D-resistant rickets, etc., should be accompanied by constant serum-calcium estimations, and a strict watch must be kept for evidence of kidney damage, as well as for the subjective symptoms of intoxication, such as anorexia, nausea, frequency of micturition, etc. However, even in this field, given the necessary supervision, evidence can be adduced for the safety of massive vitamin D therapy. Steck *et al.* (*Ann. intern. Med.*, 1937, **10**, 951) concluded that human subjects can generally survive the administration of 20,000 i.u. per kg. of body weight daily for indefinite periods without intoxication, but emphasized that kidney dysfunction and arteriosclerosis are contraindications. Macrae (*Lancet*, 1947, **1**, 135) found no evidence of renal damage even in patients in a severe toxic state, and abdominal radiography showed no calcification. He states, however, that it is always a possibility, and constant watch is necessary. Dowling (*Lancet*, 1947, **1**, 44) says that even his own dosage of 150,000 units daily is not a "safe dose," because of individual variation in requirement, but thinks it unlikely that its administration for limited periods would entail any great risk of calcification or other serious sequelae.

Control of Cystinuria

Q.—*Can you suggest any treatment or diet that will inhibit the formation of cystine, or increase its elimination without stone or gravel formation?*

A.—Cystinuria is an inborn error of metabolism which appears to be inherited as a Mendelian recessive characteristic; it affects both sexes and occurs at any age. Cystine lithiasis, however, occurs in only a small proportion of cases of cystinuria and is commoner in younger patients. The amount of cystine excreted in the urine has been found to be increased by a high protein diet and by feeding the sulphur-containing amino-acids—methionine and cysteine—but not by feeding cystine itself. A period of starvation, however, does not cause disappearance of the substance from the urine.

A tendency to calculus formation can be prevented, or at least reduced, by a constant high fluid intake and by keeping the urine alkaline with sodium bicarbonate or sodium citrate, since cystine is soluble in an alkaline solution. Reducing the level of protein intake below that of the present ration scale would be undesirable in an abnormality which will last the patient's lifetime, but, obviously, excess protein intake should be avoided. If the patient develops a urinary infection it must be promptly and adequately treated, as infection greatly predisposes to calculus formation. Mandelic acid therapy for such an infection would clearly be strongly contraindicated, but sulphonamide therapy combined with alkalinization and high fluid intake could be used. Cases have been described in which cystine stones have gradually disappeared under alkalinization therapy.

Demodex Infestation

Q.—*What would be the appearance and signs of a demodex infestation in man? Is there a modern certain cure for the condition (a) in man, (b) in dogs?*

A.—Demodex probably occurs in the skin of more than 50% of Europeans. It does not seem to inconvenience its human host in any way, and the statement that it is the cause of acne lacks scientific proof. It is usually accepted that in dogs it may cause a severe form of mange, but the finding of the parasite in at least 10% of normal animals has raised the question whether its presence in association with the lesions is not purely incidental. The treatment of demodectic mange in animals is notoriously difficult, although success has been claimed with the use of both benzyl benzoate and rotenone. The subject is dealt with by Riley and Johannsen, *Med. Entomol.*, 1932, 1st ed., p. 61; Irwin, I., *Vet. Med.*, 1937, **32**, 318; Davidson, J., *Vet. Med.*, 1945, **40**, 377; and Unsworth, K., *J. comp. Path.*, 1946, **56**, 114.

"Man Value" in Dietetics

Q.—*What is meant by the term "man value" in dietetics? What facts should be taken into consideration in deciding whether the diet of a group of "young persons" is adequate?*

A.—The amounts of food eaten by mixed populations cannot be compared directly one with another or with a standard of requirements, because the quantity required and actually eaten varies with age and sex. As a statistical device for making such comparisons it is assumed that women and children eat definite fractions of the amounts eaten by adult males. To each woman and child of stated age and sex a "man value" is given. An adult male is counted as 1 "man value"; in the scale of Cathcart and Murray, still commonly used, the "man value" of an adult female is 0.83, and the "man values" of children range from 0.2 for a child of 0–1 year to 1 for a boy

of 14 or over. Thus the "man value" of a family, consisting of a man, wife, and three children aged 10, 6, and 2 years, is 1+0.83+0.8+0.6+0.4=3.63. If their food supplies 9,440 calories a day they are getting 2,600 per "man value." These "man values" apply to calories only.

According to the Recommended Allowances of the U.S. National Research Council, boys of 13 to 20 require more calories than adult men, and requirements of other nutrients are highest in this age period. According to this scale of allowances girls of 13 to 15 need more protein and calcium and girls of 16 to 20 more calcium than are required by adult males.

Shock Treatment during Pregnancy

Q.—*Can electric convulsion therapy be continued in a young woman during pregnancy? Can insulin-coma therapy safely be carried out during pregnancy?*

A.—Electric convulsion therapy can be safely continued in the early months of pregnancy, but there is said to be some risk of miscarriage or premature birth in the later months. The writer's own experience is limited, but one patient who had E.C.T. on two occasions when 30 weeks pregnant, and later had an induction of labour, now has a healthy and forward infant.

Insulin coma produces a prolonged anoxia, which is likely to be damaging to the foetus. Treatment of the pregnant woman by this method should therefore be postponed if possible.

Closed-plaster Treatment of Fractures

Q.—*What are the indications for Trueta treatment, and is its efficacy proved?*

A.—The closed-plaster treatment of compound fractures and wounds of the limbs, advocated by Winnett Orr between the wars and extensively used by Trueta during the Spanish Civil War, has now achieved an established place in orthopaedic surgery. The method is indicated particularly in the treatment of wounds, with or without bone injury, when it is unwise to attempt suture of the skin, either because the wound is already grossly infected or appears likely to become so, or because there has been actual loss of skin, rendering suture impossible. In circumstances such as these there is no doubt that the treatment is efficacious in helping to overcome wound infection and in facilitating healing by providing complete rest for bones and soft tissues. It has the additional advantages that it is comfortable for the patient, it entails relatively little work for the nursing staff, and it minimizes the possibility of secondary bacterial infection of the wound.

The main potential dangers of the closed-plaster method are: (1) That in cases of recent injury reactionary swelling beneath the plaster may lead to ischaemia of the limb. In fresh cases the plaster should therefore be split throughout its length, and a careful watch be kept on the state of the distal circulation in order to avoid the possibility of such a catastrophe. (2) That infection with gas-gangrene organisms may develop beneath the plaster and may remain undetected in its early stages. A careful watch for the occurrence of unexplained pyrexia or of suggestive pain should lead to the early inspection of the wound in such a case.

In recent years the combination of early and thorough wound excision with the employment of penicillin and other forms of chemotherapy has made possible the early closure of a large proportion of potentially infected wounds by secondary suture, or even by delayed primary suture, and the indications for the closed-plaster method of treatment have become correspondingly less frequent.

Postprandial Pain

Q.—*What are the significance and mechanism of the relief of postprandial pain by alkali in an alcohol-fast achlorhydric patient? The pain is typical of peptic ulcer—coming on 20 minutes after the meal, quite acute, and controlled by mild ulcer diet.*

A.—The question implies that no ulcer has been shown to be present. Nevertheless, acute pain 20 minutes after a meal associated with achlorhydria is almost certainly due to a gastric ulcer. If expert radiology is available and yet no ulcer is seen, the patient should be examined by gastroscope. Achlorhydria without ulceration never gives rise to clear-cut pain, although diffuse epigastric discomfort may be associated with it. In such cases there is often a great excess of mucous secretion in the stomach, probably linked with a chronic gastritis. It is well known that the giving of acid in such cases aggravates the symptoms, whilst alkali relieves them. This is because the latter aids the solution and expulsion of the glairy mucus.

Werdnig–Hoffmann's Paralysis

Q.—*Is there any treatment which may have some chance of success in a case of Werdnig–Hoffmann's paralysis? The patient is a child of 5½ years whose younger brother died of the same disease some months ago.*

A.—There is no known treatment which offers any prospect of cure or even of arrest of the progression of the disease in cases of Werdnig–Hoffmann's paralysis.

Causes of Haemoptysis

Q.—*In all cases of haemoptysis in which the cause is not immediately obvious to the tuberculosis officer about one in twelve are tuberculous in origin. The others are referred back as non-tuberculous, with the report that x-ray examination of the chest is negative. Is the haemoptysis due to the "strain of coughing"?*

A.—There is no doubt that in chronic bronchitis a severe paroxysm of coughing may be followed by a few flecks of blood in the sputum. However, a plain radiograph of the chest, although it can exclude tuberculosis, cannot do the same for other causes of haemoptysis. A common reason is bronchiectasis, the diagnosis of which requires bronchography. For the exclusion of other causes bronchoscopy is necessary. Nevertheless, when all diagnostic weapons have been fully exploited a number of patients remain in whom no reason for the haemoptysis can be found.

Dysmenorrhoea

Q.—*What is the modern treatment of dysmenorrhoea? An unmarried woman aged 33 gets intense pain during the first 24 hours of each menstrual period. Her periods are otherwise regular, and apparently pursue a normal course after the first 24 hours.*

A.—Dysmenorrhoea is a symptom, not a disease, and its treatment varies with its cause. The spasmodic pain which is common in women aged 18 to 25, and which occurs without any apparent gross abnormality in the uterus, does not usually persist after the age of 30, or at least it becomes less intense. In this case all steps should be taken to find the cause; and the possibility of pelvic endometriosis should be kept in mind. It is specially important to know whether the woman has always had dysmenorrhoea or whether it is a comparatively recent development.

Disseminated Sclerosis and Pregnancy

Q.—*In women suffering from disseminated sclerosis I have observed that pregnancy nearly always produces an improvement—sometimes of long duration. Is this a common occurrence? If so, would the transfusion of blood from pregnant women have any therapeutic value in the treatment of this condition?*

A.—The usual experience is that pregnancy produces a deleterious effect upon the course of a disseminated sclerosis. The procedure suggested is unlikely to have any beneficial effect, and might indeed prove harmful.

Pyrogens

Q.—*Could you tell me what pyrogens are and how "pyrogen-free" water is obtained?*

A.—Pyrogens are almost always dead micro-organisms or their products. These organisms are rarely pathogenic, but are nondescript Gram-negative bacilli or even algae which are liable to grow in water which is not sterilized. Not only should all water used for making up intravenous solutions be distilled but the solutions should be made in it and the product autoclaved soon after distillation, before any such growth can occur.

Heating to very high temperatures or special forms of filtration are said to be capable of removing pyrogens from solutions, but it is better to rely on their original absence from the water used. Impure ingredients, such as glucose, used in making intravenous solutions may also contain pyrogens; it is also possible for them to come over from the original water in an inefficient still.

Immunization against Diphtheria and Pertussis

Q.—*An infant aged 10 months was immunized with diphtheria A.P.T., 0.2 ml. followed by 0.5 ml. six weeks later. I now wish to attempt immunization with pertussis vaccine and propose to use a combined pertussis and diphtheria vaccine. Is there any danger in giving the three recommended doses of the combined vaccine in view of the immunization against diphtheria three months ago?*

A.—If a child has just recently been inoculated with diphtheria prophylactic so that its antibody titre is high there is obviously no advantage to the child in giving further doses of the same reagent immediately. It would be better to follow up diphtheria immunization with two or three doses of alum-precipitated pertussis vaccine by itself. It seems to be preferable to give the two reagents separately rather than in combination until more evidence has been produced about the value of vaccination against whooping-cough. Otherwise, if the pertussis vaccine were ineffective, diphtheria immunization might fall into some disrepute from its association with the ineffective reagent.

Iodine and Hydrogen Peroxide

Q.—*A mixture of two parts tincture of iodine to one part hydrogen peroxide (10 vols.) is sometimes used to irrigate chronic abscess cavities in the belief that the interaction of the two solutions causes the liberation of nascent iodine, which acts as an oxidizing agent. Is this supposition correct? Is it an effective method of treatment?*

A.—There is no purpose in mixing tincture of iodine with hydrogen peroxide. Either of these alone is efficient when used to irrigate, and there is no reason to suppose that a more efficient, "nascent" form of iodine is produced when they are mixed. The iodine in the tincture of iodine and the hydrogen peroxide are rapidly inactivated by contact with the wall of an abscess cavity and must be continually replaced—as they are when used in irrigation.

NOTES AND COMMENTS

Iodine in Whalemeat.—Dr. MARTIN B. WATSON, of the Iodine Educational Bureau, writes: Your correspondent (Jan. 24, p. 183) may be interested to know that at least one estimation has been made of the iodine content of whalemeat. Donald K. Tressler and Arthur W. Wells, of the United States Bureau of Fisheries (Document 967 of 1924), determined the iodine content of some sea foods, and found in fresh whale steak less than 10 microgrammes of iodine and in the water-free substance less than 40 microgrammes in a kilogramme. This is equivalent to less than 10 and 40 parts, respectively, of iodine in a thousand million parts of whale steak. Iodine estimations of this sensitivity are technically so difficult that it is never wise to be dogmatic about absolute iodine contents in single samples. But it is more justifiable to draw a conclusion from a series of relative estimations made by one worker. Thus it is that the figures given for the iodine content of fresh-water fish were twice that of whalemeat; of marine fish at least twenty times; and of lobsters, oysters, and clams—the highest value in the table—over a hundred times. Therefore this suggests that, contrary to expectation, whalemeat is *not* a rich source of iodine.

Treatment of Chilblains.—Dr. D. H. GAWITH (Manchester) writes: In recent letters about the treatment of chilblains, little mention has been made of the need to relieve the intense burning and itching associated with this condition. In view of the wide range of skin conditions in which the antihistamine compounds have proved useful in relieving severe itching, I have tried these drugs in cases of chilblains, and have found that 50 mg. of "benadryl" or 100 mg. of "antistin" have given complete relief within twenty to thirty minutes. As I have met only a small number of cases suitable for trial, I should be interested to know if the method has been used elsewhere, and with what success

R.A.F. Badge.—Wing-Commander H. M. STANLEY TURNER writes: It is not generally known that the late Group-Captain Henry Cooper, whose obituary notice appeared in the *Journal* of Jan. 10 (p. 80), designed the very neat badge of the Royal Air Force Medical Branch, the winged caducéus surmounted by a crown. I think this deserves to be placed on record. It replaced the huge and very ugly badge which used to be known as "the coffin-plate."

Persistent Hiccup.—Dr. J. D. LAYCOCK (London, S.E.1) writes: Under the heading "Any Questions?" (Jan. 31, p. 237) I was disappointed to see no mention of hyoscine in your reply to a question on the treatment of hiccup. During the war I saw a large number of cases of severe hiccups in men who had been wounded in the lower chest or upper abdomen. I treated these in practically all cases with hyoscine as soon as it was clear that the simpler methods, such as breath-holding, were of no avail. The results were so good compared with those obtained with other drugs that I became convinced that hyoscine was the first line of attack and that if it failed nothing else would succeed. The usual routine was to give gr. 1/200 (0.32 mg.) under the tongue and to repeat this after half an hour if the attack had not ceased.

It is difficult after a dozen remedies have been tried to be certain which was the successful one in aborting an attack of hiccups. In view of my observations on cases occurring in injuries of the chest and abdomen I was not surprised, however, to meet a case recently in a man who had had a thoracolumbar sympathectomy, and on whom a large variety of remedies had been tried in vain for nearly forty-eight hours. The hiccups stopped as soon as hyoscine was given, and did not return. I once cured myself of a particularly stubborn bout of hiccup, when the more homely remedies had failed, by taking hyoscine orally, while acting as M.O. to a troop ship in rough waters when seasickness was common. It is strange that this simple but very effective remedy for hiccup should be so little known and scarcely mentioned in works on treatment. It must surely be more pleasant than "atropine in large doses" and more easily obtained than pineapple juice.

Constipation in an Infant.—Dr. WINIFRED M. COPPARD (Dunmow, Essex) writes: . . . I am not an advocate of magnesia in any form given to infants, and consider it harmful, although so popular with nurses and doctors. Given daily, as it often is, or even twice daily, it results in an uncomfortable "windy" baby, and in the end a bowel which relies on artificial stimulation. If any doctor would like to prove this let him take a full adult dose once or twice daily for a while (as I have done). Quite recently two infants were brought to me, as they passed blood with the motions. On examination nothing abnormal was found; further questioning evoked the fact that both infants had been given magnesia over a long period. When this was stopped there was no further occurrence. In my opinion, far too little effort is made to adjust feeds and use common-sense methods in these cases of so-called constipation, and a far too frequent resort to laxatives. My opinions are based on and proved by the thousands of infants who have passed through my child-welfare clinics during the last seven years.

Injection of Varicose Veins.—Dr. J. W. HAUGHTON (Truro, Cornwall) writes: In the *Journal* of Jan. 24 (p. 183) under "Any Questions?" there was a note about injection of varicose veins. The questioner complained of the marked discoloration of the vein after injection. I think he might try "empty-vein technique," which I worked out for myself when serving as a surgeon in Falmouth in the first war. I elevate the limb and get the veins empty, put on a mild tourniquet above the area to be treated, and inject a large amount of the sclerosing fluid. Patient rests half an hour with the leg bandaged—and he can then walk off.

Treatment of Warts.—Dr. JEAN WILSON (Glasgow) writes: An excellent treatment for warts on the hands (culled from the *Journal* many years ago and used ever since) is the application of liquor hydrarg. nit. acid. (B.P.C.). "Vaseline" the surrounding skin and apply carefully with a probe (which should be wiped after), allowing to dry in for a few minutes if possible, before the patient goes home. Apply every three or four days. Very soon the warts break down. An intelligent patient can be given the prescription and allowed to use it himself.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone

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SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY FEBRUARY 21 1948

HEARD AT HEADQUARTERS

The Basic Question

The various reasons given for an unwanted basic salary for doctors sent me back to the file of Official Debates. In the House of Lords, when the National Health Service Bill was in committee, an amendment was carried against the Government calling for payment by capitation fee only. In the course of the debate various reasons were given for a basic salary: that it would meet the financial difficulties of early years in practice, give some feeling of security to young doctors, attract doctors to areas inadequately served, and so on. Lord Addison appeared to look forward to a differentiated basic salary according to the difficult character or remoteness of the district. But when the measure came up for third reading in the Lords the Lord Chancellor gave a reason for basic salary which had not been given in the earlier debate. He said that it would help to secure satisfactory certification. When he was Minister of National Insurance he had come across cases—he admitted they were not many—in which doctors had been lax in certification, and insured persons had tended to remove themselves from the list of a doctor who was strict in this respect and attach themselves to one who was lax. The Lord Chancellor said that if the capitation method were abolished in favour of salary it would do away with the temptation to the doctor; but, while such total abolition was not practical politics, a basic salary would be of some assistance. The Government had full warning, even before the long months of "negotiation" began, of what the profession felt on this subject, Lord Horder pointing out in this debate that this was the most vulnerable spot at which the Government could attack the independence of the profession.

Democracy

Sir Stafford Cripps recently accused doctors of striking at the very roots of democracy. The remark of a doctor at Headquarters deserves quotation: "I wish I knew what democracy was. In the old liberal conception it meant individualism and freedom; in the new industrial democracy it appears to mean standardization."

By the Way

We confess to some sympathy with a motion which stands in the name of two members of the London County Council for discussion at the next meeting—that the question of eliminating or diminishing the time spent in complimentary speeches be considered. How often have we wished at medical society meetings for the suppression of votes of thanks and everything else that could be taken as said.

The word "clinical" is in danger. Whether rightly or wrongly, since it merely pertains to a bed, it has been appropriated by medicine for centuries, but now it is being wrenched away by engineering. We heard a speaker at a large meeting the other day, describing the work of a factory, divide it into its administrative and what he called its "clinical"—by which he meant the work at the bench—aspects.

American Comment

"The Handwriting on the White Cliffs of Dover" was the heading to a little article in an American journal which found its way to Headquarters the other day. It proceeds in this fashion: "Britain's physicians are slated to be drawn into the socialized sphere. Most of them are pretty leery of the way nationalized medicine will work out. On the basis of performance to date their qualms seem justified. The situation has important overtones for U.S. physicians too. The spectacle of a foundering nationalized economy in Britain is hardly calculated to inspire the confidence of United States voters in measures that might scuttle private enterprise—or private medicine—here."

CAPITATION FEE FOR DRUGS AND APPLIANCES

Following representations by the Insurance Acts Committee of the B.M.A., the Minister of Health has decided to increase the capitation fee payable to insurance practitioners in respect of the provision of drugs and appliances (except those mentioned in the appendix to the Distribution Scheme) to insured persons in an emergency or before a supply can conveniently be obtained under the Medical Benefit Regulations. The fee will be increased from 1s. 3d. to 2s. 6d. per 100 insured persons on the practitioner's list, other than those for whom he is required to supply all necessary drugs and appliances. In the areas where, by reason of special circumstances, a capitation fee higher than 1s. 3d. per 100 persons has been approved, the higher fee will be similarly doubled. The increase will have effect as from Oct. 1, 1947.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

Correspondence

Liverpool Regional Hospitals Medical Association

SIR,—In the *Supplement* (Jan. 17, p. 13) we read with pleasure the announcement of the formation of the Liverpool Regional Hospitals Medical Association, the objects of which were stated to be (1) the establishment and maintenance of high standards of efficiency in the hospitals of the region, and (2) the promotion of the professional interests of the members. Over a year ago the Association of Medical Officers (Essex), representative of all branches of the profession employed wholly or part-time by the Essex County Council, was formed with similar prime objects. Its committee feels that the time has come when the Association should be merged in the formation of a body covering the whole of the North-east Metropolitan Region. It is in the best interests of the doctors concerned and of the public that there should be a close liaison between those who may be employed by the regional board and their professional

colleagues in the service of local authorities in the Region, and both should be eligible for membership of a regional medical association.

We should welcome the co-operation of interested professional groups or individuals in the Region, and invite them to communicate with our honorary secretary at Delafords, Theydon Bois Road, Epping, Essex.—We are, etc.,

W. L. YELL, *Chairman.*
F. N. FOSTER, *Vice-Chairman.*
L. S. FRY, *Hon. Secretary.*
D. H. IRWIN, *Hon. Treasurer.*
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Executive Committee.

"Intraprofessional Courtesy"

SIR,—When your remarks under "Heard at Headquarters" on "Intraprofessional Courtesy" appeared (*Supplement*, Oct. 11, 1947, p. 87) I was away recovering from a considerable illness and owed much to several colleagues for their skill and care of me in hospital. Hence my failure to notice the paragraph at the time. I had no difficulty in paying them something more than would cover their out-of-pocket expenses, though not an amount that in magnitude would represent a fee. I also obtained a useful sum towards my own hospital private-room expenses.

The simple, and indeed obvious, way of doing this is to insure with the London Association of Hospital Services (of 10, Old Jewry, E.C.2), whose premiums are so reasonable and general scheme so comprehensive. They make special provision for doctors. In a case such as my own a cheque is paid direct to the colleagues involved, with a simple note from the courteous and understanding secretary to point out that these payments are not fees but a contribution from an insurance policy, and therefore may be accepted without any feeling that a direct payment has been made between colleagues.

May I suggest that many more doctors should take advantage of this service, and should keep a brochure of the scheme among the papers in their waiting-rooms for the benefit of their patients? It is a far, far better thing than any offered by the miserable State.—I am, etc.,

London, W.4. THOS. NELSON.

Association Notices

CONSULTANTS AND SPECIALISTS COMMITTEE

As a result of the ballot held to fill the vacancy caused by the resignation of Prof. J. T. Morrison, Mr. Percy Malpas, F.R.C.S. (Liverpool), has been returned unopposed as the representative of Region 3 of the Consultants' Roll upon the Committee for the remainder of the session 1947–8.

CONFERENCE OF REPRESENTATIVES OF SCOTTISH DIVISIONS

With the authority of the Council of the Association a Conference of Representatives of Scottish Divisions will be held in Edinburgh on Wednesday, March 10, 1948, at 11 a.m. under the Chairmanship of Dr. J. B. Miller, Chairman of the Representative Body of the Association. The object of the Conference is to give the profession in Scotland an opportunity for general discussion of the National Health Service (Scotland) Act before the Special Representative Meeting in London on March 17.

It will be composed of (1) Representatives of Scottish constituencies in the Representative Body, or their deputies-acting; (2) Representatives of Scottish constituencies in the Panel Conference or their deputies-acting; (3) Members of the Scottish Committee; (4) Members of the Insurance Acts Sub-committee (Scotland). The business of the meeting will include statements on the negotiations relating to the Scottish Act, consideration of any motions brought forward by Divisions, and probably a statement concerning the position of doctors in the Highlands and Islands Service. Any motions for consideration by the Conference should reach the Scottish Secretary of the Association at the Scottish Office, 7, Drumsheugh Gardens, Edinburgh, as early as possible in March.

GROUP OF OTOLARYNGOLOGISTS

A meeting of the recently formed Group of Otolaryngologists of the Association will be held at B.M.A. House, Tavistock Square, London, W.C.1, on Friday, March 5, 1948, at 4.30 p.m. The Group consists of all those members of the Association who are engaged predominantly in the practice of otolaryngology. The agenda will consist of (*a*) the election of chairman; (*b*) consideration of the size of the Group Committee; and (*c*) a general discussion on the work of the Group.

CHARLES HILL, *Secretary.*

Diary of Central Meetings

FEBRUARY

26 Thurs. Publishing Subcommittee, 11 a.m.

Branch and Division Meetings to be Held

BIRMINGHAM: CENTRAL DIVISION.—At 154, Great Charles Street, Birmingham, Tuesday, Feb. 24, 8.15 p.m. Clinical meeting conducted by Mr. P. Jameson Evans.

CLEVELAND DIVISION.—At Sparks' Cafe Royal, Middlesbrough, Thursday, Feb. 26. Address by Dr. W. F. T. Haultain: The Endocrines in Gynaecology. To be preceded by supper at 7.15 p.m.

Meetings of Branches and Divisions

NORTH OF ENGLAND BRANCH

The first meeting of the autumn course of Scientific Meetings was held at the Royal Victoria Infirmary, Newcastle-upon-Tyne, when Mr. J. V. Todd gave a demonstration of cases dealing with the treatment of poliomyelitis. He was assisted by the staff of the Physiotherapy Department. This interesting demonstration was followed by the Ministry of Health film on the early diagnosis of acute anterior poliomyelitis. Prof. M. J. Stewart, of Leeds, then lectured on "Some Aspects of Silicosis and Asbestosis." He described the morbid anatomy of subclinical silicosis and silicotic apical scars, and discussed silicosis of the spleen and the mode of transmission of the silicotic particles to this organ. He then discussed in detail the pathological problems of asbestosis, and finally gave a résumé of haematite miner's fibrosis. This lecture was attended by about 120 members of the Branch. The President, Dr. T. H. Bates, was in the chair, and a vote of thanks was proposed by Prof. R. C. Browne.

The second meeting was held on Oct. 16, 1947, at the Royal Victoria Infirmary, when Dr. W. G. A. Swan gave a demonstration on thyrotoxic heart failure. He described the symptoms and signs of this condition and discussed the treatment by thiouracil. This was followed by Dr. C. C. Ungley lecturing on the "Neurological Disorders in Pernicious Anaemia." He discussed the aetiology, mentioning its relation to other types of megalocytic anaemia, and described the symptoms and signs of subacute combined degeneration of the cord.

At the third meeting, held in the Dental Hospital, Prof. J. Boyes demonstrated a large number of cases illustrating the diseases of the oral mucosa. A lecture followed by Mr. R. C. L. Batchelor, of Edinburgh, on "Penicillin in the Treatment of Venereal Disease." He discussed the modern treatment of gonorrhoea in detail and mentioned the possibility of oral penicillin. The treatment of syphilis was then presented in all its many aspects and the dangers were emphasized. Dr. W. V. Macfarlane made a considerable contribution to the discussion following Mr. Batchelor's lecture. About 50 members attended the meeting.

The fourth meeting was held in the Royal Victoria Infirmary on Dec. 18, 1947, when the staff of the Thoracic Unit gave a demonstration. Cases were shown of the operative treatment of patent ductus arteriosus, aneurysm of the aorta, diaphragmatic hernia, thrombosis of the superior vena cava, carcinoma of the oesophagus, and chronic pericarditis. Dr. Douglas Guthrie, of Edinburgh, followed this extremely interesting demonstration with an address on "The Patient—a Forgotten Factor in the Progress of Medicine." He gave a short survey of patients in the Egyptian and Greek eras of medicine. He briefly discussed the early days of anaesthesia and antisepsis, and then mentioned several patients who had been turned into famous pathological specimens. Finally he considered the problem of the doctor as a patient. There were about 110 members present at this meeting.

RETURN TO PRACTICE

The Central Medical War Committee announces that Dr. W. E. R. Mons has resumed civilian practice at 118, Harley Street, London, W.1 (Welbeck 1611).

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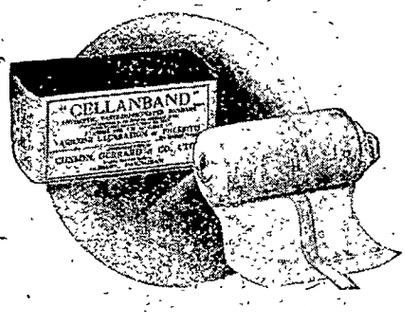

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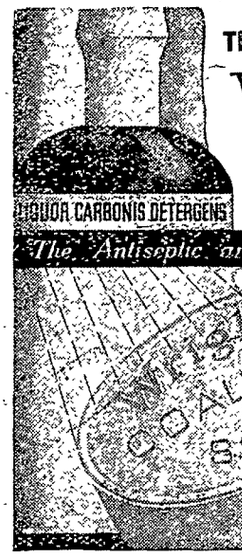

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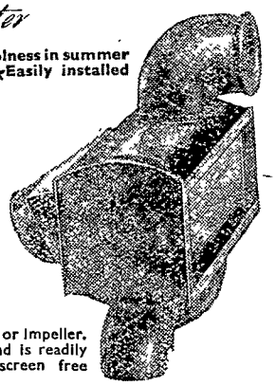

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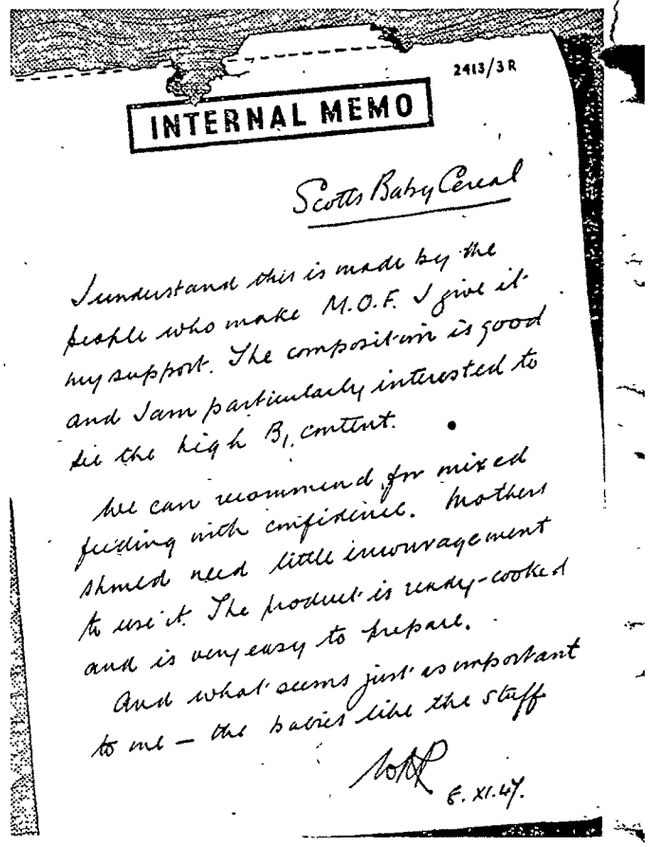

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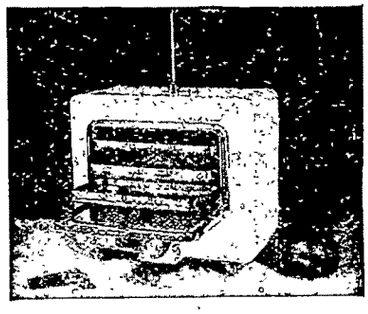

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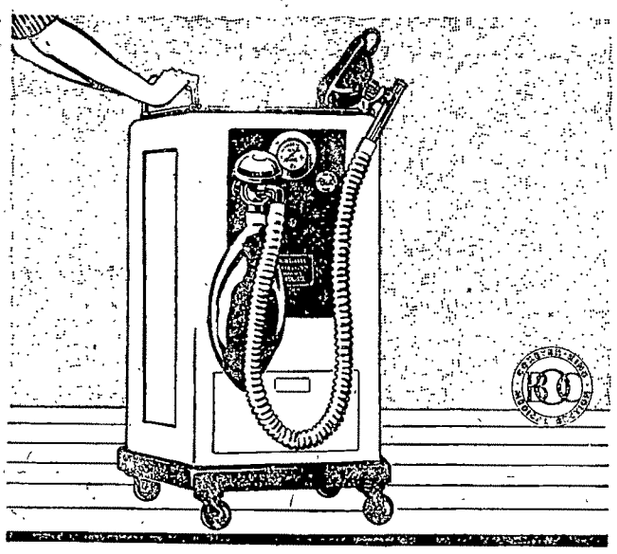

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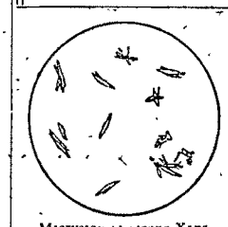
MICRO-CRYSTALLINE HORMONES



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OESTRONE
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SUSTAINED ACTION

Unlike hormone solutions, suspensions of hormone crystals are absorbed slowly and their effect is thereby enhanced and protracted. Micryston Oestrone is thus rational in oestrogenic deficiency and Micryston Testosterone in testicular deficiencies. As, in many cases, one weekly injection produces a sustained flow of hormone, a great economy of material and effort is attained.

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Oestrone 1 mg. per c.c. Testosterone 2 mg. per c.c
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In just 10 minutes this sensitive device will test your plugs, clean the ones that are still good, indicate which should be replaced.

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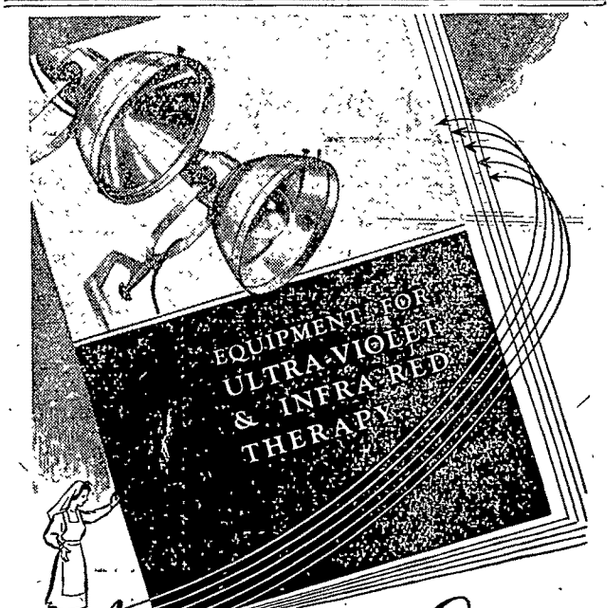

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Bottles of 100,
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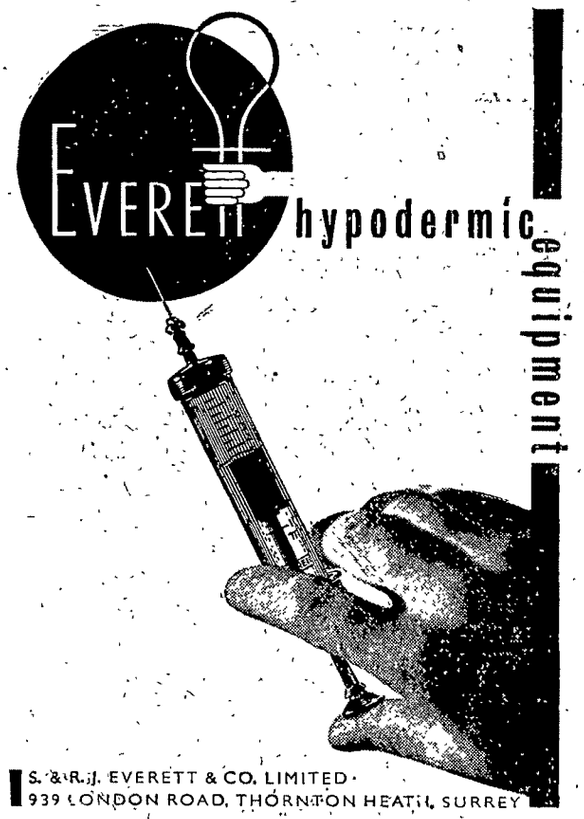

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"Hewlix" brand Vitamin Elixir contains Vitamins A and D. Glycerophosphates, Organic Iron, and Calcium, together with traces of Copper and Manganese. These valuable constituents are distributed with absolute uniformity in a flavoured glucose syrup.

INDICATIONS

In convalescence and debilitated conditions, particularly after illness or operations, "Hewlix" provides the vitamins and minerals necessary for a rapid recovery. Its pleasant flavour makes it of great value where the appetite is small, and it is readily taken by children.

Vitamin A 21,127 *Int. Units, Vitamin D* 10.564 *Int. Units. Ferri et Ammon. Cit.* 3.2, *Calc. Glycerophosph.* 0.46, *Pot. Glycerophosph.* 0.046, *Sod. Glycerophosph.* 0.023, *Mangan. Glycerophosph.* 0.0091, *Cupri Sulph.* 0.0091, *Flavoured Glucose Syrup to* 100 *mils.*

Packed in amber bottles of 8, 20 and 90 fl. ozs.

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Doctors Prescribe

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SALMON ODY

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The ONE granted a Royal Warrant by the late King William IV. Most scientific and reliable yet devised. Unequalled for perfect support, comfort, resiliency and freedom of movement.

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After many bacteriological experiments, this mask was designed to arrest all droplets from the mouth and nose, and so prevent contamination during operations. The "Cestra" mask consists of 4 layers of Fine Dental Gauze. It fastens securely under the chin, has an air gap at the side, is comfortable to wear for long periods, and may be easily sterilized.

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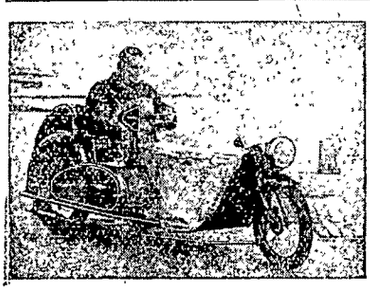

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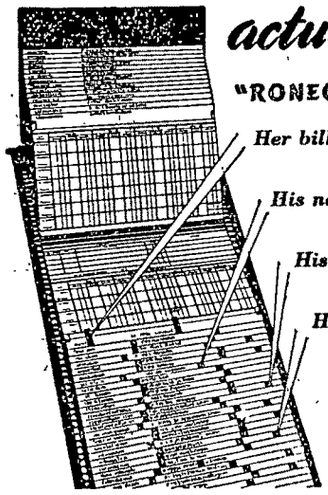

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The above percentages are expressed in weight per given volume

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Applicants should, except where otherwise specified, state name, address, age, nationality, qualifications, and enclose copies of 3 recent testimonials★ with short statement of experience and appointments held. Unless closing date is stated applications should be sent at once.

★ *SERVICE MEMBERS may have difficulty in supplying recent testimonials, but this should not deter them from applying*

A—Whole-time resident house appointments open to practitioners without previous experience.
B1—Whole-time appointments usually resident within the senior establishment—e.g., Registrar, R.S.O., etc.
B2—Whole-time house appointments not within the senior establishment, usually resident, and usually held by practitioners with six months' experience.
R—Male, liable to military service under the National Service Acts.
W—Women practitioners.

APPOINTMENTS

ARAB LEGION TRANSJORDAN
SURGEON TO THE ARAB LEGION

Applications are invited from registered medical practitioners (male) for the post of Surgeon to the Arab Legion. Successful candidates will be required to undertake full surgical responsibility, and preference will be given to candidates with the F.R.C.S. Three months leave (with passage paid) is granted every two years to the United Kingdom and passage is paid to Transjordan on first joining. Salary varies from £848 per annum, single and unaccommodated, to £1.460 married and unaccommodated. Salary is liable to local income tax only (at present 4½%). Applications, accompanied by recent testimonials, should be sent to Senior Medical Officer, Arab Legion, Transjordan, from whom further particulars may be obtained.

UNIVERSITY OF SYDNEY
CHAIR OF PHARMACOLOGY

The Senate will shortly proceed to the appointment to the newly established Chair of Pharmacology. The duty of the Chair includes tuition in Pharmacology to senior medical students and the direction of tuition in Materia Medica and allied Pharmaceutical subjects to Pharmacy and Science students. The Senate will be glad to hear, before June 30, 1948, from anyone who would like to be considered for the appointment. The salary will be at the rate of £1,500 (Australian) per annum. To this salary the University adds a yearly sum equal to 10% by way of contribution to the Sydney University Professorial Superannuation System under which there is a retirement provision on the lines of F.S.S.U.; the Professor's own contribution to the system will be at the rate of 5% of his salary. In addition, the Professor will be entitled to receive a pension of £400 per annum upon retirement after attaining the age of 60 years. In order to encourage research and to maintain the standards of teaching in his Department, one year's sabbatical leave may be granted on full pay every seven years or thereabouts. Travelling expenses will be paid as arranged at time of appointment; generally speaking they will cover first class steamer fare in the case of a successful applicant coming from abroad.—G. Dale, Registrar.

BERKSHIRE EDUCATION COMMITTEE
ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from registered medical practitioners for the above appointment. The person appointed will be required to execute, under the direction of the County and School Medical Officer, the medical inspection of children in public primary and secondary schools and such other work as may be prescribed. He/she will be required to devote his/her whole time to the duties. The salary will be at the rate of £650 per annum, rising by annual increments of £25 to £850 per annum, plus cost-of-living bonus. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. Possession of a car is essential and travelling expenses will be paid according to County Council scale. Preference will be given to candidates already approved by the Minister of Education under Regulation 53 of the Handicapped Pupils and School Health Service Regulations, 1945. The successful candidate will be required to undergo a medical examination and to produce his/her birth certificate. The appointment will be subject to three calendar months' notice on either side. Canvassing, either directly or indirectly, will be a disqualification. Candidates for any appointment under the Council shall, when making application, disclose in writing to the Clerk whether to their knowledge they are related to any member of or the holder of any senior office under the Council. Forms of application may be obtained from the School Medical Officer, 11, Abbot's Walk, Reading, and should be returned within 14 days of the appearance of this notice, together with copies of three testimonials.—H. J. C. Neobard, Clerk of the Council, Shire Hall, Reading.

UNIVERSITY OF BRISTOL
SURGEON-IN-CHARGE
of Genito-Urinary Surgery

The University of Bristol, in conjunction with the Bristol Royal Hospital, gives notice that there is a vacancy on the Honorary Staff of the Royal Hospital for a Surgeon-in-Charge of Genito-Urinary Surgery. One of the General Surgeons on the Honorary Staff of the Bristol Royal Hospital is a candidate for the post. Applications, giving full names, age, qualifications, details of education and experience, together with the names of not more than three referees and copies of not more than three recent testimonials, should reach the undersigned on or before March 1, 1948.—Winifred Shapland, Secretary and Registrar, the University of Bristol, Bristol, 8.

MINISTRY OF NATIONAL INSURANCE

The Minister of National Insurance proposes to constitute panels of doctors in current practice, for part-time duties (normally on a half-day sessional basis) in England, Scotland, and Wales, from which will be formed, as occasion requires, Medical Boards for assessing the extent of disablement by injury or disease in claims and for other related matters arising under the National Insurance (Industrial Injuries) Act, 1946.

Sessional remuneration, Chairmen, £3 3s., Ordinary Members, £2 12s. 6d.

The Boarding Centres proposed are listed below under their Regional Centre. The Regional Controllers of the Ministry of National Insurance at the Regional Centres will supply on request an application form and all particulars to doctors desiring to be appointed for centres in their regions :

Apply to Regional Controller, Ministry of National Insurance, at	*for Boarding Centres at*
NEWCASTLE-UPON-TYNE	*Carlisle*, Darlington, *Middlesbrough*, *Newcastle*, *South Shields*, *Sunderland*, Workington.
LEEDS (Darley House, West Street, 1)	Bradford, *Doncaster*, Halifax, *Huddersfield*, *Kingston-on-Hull*, *Leeds*, *Sheffield*, *York*
NOTTINGHAM (Block 3, Government Buildings, Chalfont Drive, Western Boulevard)	Derby, *Grimsby*, *Leicester*, *Lincoln*, Mansfield, *Northampton*, *Nottingham*, Peterborough
CAMBRIDGE (Old Post Office Buildings, Petty Cury)	*Cambridge*, *Chelmsford*, *Ipswich*, King's Lynn, *Luton*, *Norwich*, *Southend-on-Sea*, Watford
LONDON (105–6, New Bond Street, W.1) ..	*Great Smith Street*, *S.W.*1, and 25, *Gordon Street*, *W.C.*1, *Brighton*, *Canterbury*, *Guildford*, *Rochester*, *Tunbridge Wells*
READING (22, Southcote Road)	*Aylesbury*, *Bournemouth*, Oxford, *Portsmouth*, *Reading*, *Ryde*, Slough, *Southampton*
BRISTOL ("Avonleigh," Stoke Park Road South, 9)	*Bristol*, *Exeter*, *Gloucester*, *Plymouth*, *Salisbury*, Swindon, Taunton, *Truro*, Yeovil
CARDIFF (Cathays Park)	Aberystwyth, *Bangor*, *Cardiff*, *Carmarthen*, Haverfordwest, Llanelly, *Newport*, Pontypridd, *Swansea*, *Wrexham*
BIRMINGHAM (Civic Centre, Broad Street, 1)	*Birmingham*, Burton-on-Trent, *Coventry*, Hereford, *Shrewsbury*, Stafford, *Stoke-on-Trent*, *Wolverhampton*, *Worcester*
MANCHESTER ("Heyscroft," Palatine Road, Didsbury)	Barrow, *Blackpool*, *Bolton*, Burnley, Chester, Crewe, Lancaster, *Liverpool*, *Manchester*, *Preston*
EDINBURGH (60, Melville Street, 3)	*Aberdeen*, Dumfries, *Dundee*, *Edinburgh*, *Glasgow*, *Inverness*, Kilmarnock, Kirkcaldy, *Motherwell*, *Paisley*, Selkirk, Stirling, Stornoway, Wick

At the towns shown in italics above, boards will be held in the existing centres of the Ministry of Pensions. Doctors who are on the Ministry of Pensions panels for these centres will receive an application form from that Department.

Completed application forms should be returned to the Regional Controller not later than March 31.

MINISTRY OF HEALTH
REGIONAL BLOOD TRANSFUSION SERVICE
Sheffield
JUNIOR MEDICAL OFFICER

The Minister of Health invites applications for the under-mentioned appointment in the Blood Transfusion Service with Headquarters at Sheffield. In addition to routine blood transfusion work good opportunities are afforded for serological and clinical work. Junior Medical Officer at a salary of £363 to £522 per annum according to experience, payable by the Ministry of Health. This salary is assessed on a non-resident basis and will be at the rate of £100 per annum less if free board and lodging are provided. The appointment is terminable by a month's notice on either side. Applications stating age, qualifications with dates, present appointment, if any, previous experience and three testimonials should be sent to the Regional Blood Transfusion Officer, Regional Blood Transfusion Centre, Northfield Road, Crookes, Sheffield, 10, not later than March 6, 1948.

MINISTRY OF HEALTH
INDUSTRIAL MEDICAL OFFICER

Applications are invited from medical practitioners with experience in industrial medicine for appointment to Medical Interviewing Committees which are being established in (1) the Cardiff Royal Infirmary, Cardiff, (2) the Swansea General and Eye Hospital, Swansea, to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable for Session of 1½ to 2½ hours £2 12s. 6d. plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Establishment Officer, Welsh Board of Health, Cathays Park, Cardiff.

ADMINISTRATIVE COUNTY OF ESSEX
TEMPORARY ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The County Council invite applications for the above-mentioned temporary appointment from registered medical practitioners, with experience in maternity and child welfare and school health work The appointment will be for a limited period but so far as can be ascertained will be continued for at least one year. Salary will be at the rate of not exceeding £950 a year according to experience, plus bonus and travelling expenses. Applications, on forms obtainable from me and accompanied by copies of not more than three recent testimonials, which will not be returned, should be addressed to me and delivered at the County Hall, Chelmsford, as soon as practicable. Full information should also be given as to the applicant's position in relation to military service. Canvassing directly or indirectly will disqualify.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

MINISTRY OF HEALTH
INDUSTRIAL MEDICAL OFFICER

Applications are invited from medical practitioners with experience in industrial medicine for appointment to a Medical Interviewing Committee which is being established in Middlesbrough, to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable per session of 1½-2½ hours £2 12s. 6d., plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Senior Medical Officer, Ministry of Health, 11, Osborne Terrace, Newcastle-upon-Tyne, 2, not later than March 6, 1948.

UNIVERSITY OF BRISTOL
ASSISTANT RADIO-DIAGNOSTICIAN
(Whole-time)

The University of Bristol, in conjunction with the Bristol Royal Hospital, invites applications for the post of Assistant Radio-Diagnostician (whole-time) to be appointed in a salary range of £900 to £1,200 per annum. Candidates, who should possess a higher qualification in Radiology, should submit applications, stating age, nationality, full details of education and experience, and copies of three recent testimonials, together with the names of three referees, to the undersigned not later than March 1, 1948.—Winifred Shapland, Secretary and Registrar, the University of Bristol, Bristol, 8.

SOUTH CANTERBURY HOSPITAL BOARD
Timaru, New Zealand
Practice in Radiology
PART-TIME RADIOLOGIST

Applications by airmail closing with the undersigned on March 31, 1948, are invited for the position of part time Radiologist to the Timaru Public Hospital with the right of private practice. Competent full time Radiographer employed. Salary at the rate of £800 N.Z. per annum with four weeks annual leave. In addition successful applicant will have option of operating a private Hospital Radiology practice on the following basis: A guaranteed fee of £200 per annum plus half the net profits which last year were £360. There are good prospects in this practice. In any case the Hospital Board guarantees a total annual income of not less than £1,200 N.Z. per annum. Applicants to state age, married or single, qualifications, previous experience and to enclose not more than three copies only of recent testimonials. Also approximate date could take up duties. New 5 roomed house, modern conveniences, available for appointee at moderate rental. Further particulars may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London.—H. G. Naylor, Secretary to Board, P.O. Box 88, Timaru, New Zealand.

Have you read the notice at top of page 13 ?

NORTH-EAST METROPOLITAN REGIONAL HOSPITAL BOARD
ASSISTANT SENIOR MEDICAL OFFICER

Applications are invited for the whole-time appointment of Assistant Senior Medical Officer to the North-East Metropolitan Regional Hospital Board at an inclusive salary of £1,500 by £50 to £1,700. The appointment is subject to the provisions of the National Health Service (Superannuation) Regulations, 1947. The officer appointed will be required to devote his time mainly, but not wholly, to the tuberculosis services, and will be subject to the general direction of the Senior Administrative Medical Officer. Clinical and administrative experience in tuberculosis is essential. Applications, giving particulars of qualifications and experience, together with the names of three referees, should be addressed to the Secretary, North-East Metropolitan Regional Hospital Board, 13, Portland Place, London, W.1, to reach him not later than Monday, March 8, 1948.

NORTH-EAST METROPOLITAN REGIONAL HOSPITAL BOARD
REGIONAL PSYCHIATRIST

Applications are invited for the whole-time appointment of Regional Psychiatrist to the North-East Metropolitan Regional Hospital Board at an inclusive salary of £2,000 per annum. The appointment is subject to the provisions of the National Health Service (Superannuation) Regulations, 1947. Applicants should have a wide knowledge of general psychiatry, including administrative experience of both in-patient and out-patient work. The officer appointed will, subject to the general direction of the Senior Administrative Medical Officer, be responsible for surveying and advising on the organization and planning of the Mental Health Services in the Region. He will be given opportunities for clinical work. Applications, giving particulars of qualifications and experience, together with the names of three referees, should be addressed to the Secretary, North-East Metropolitan Regional Hospital Board, 13, Portland Place, London, W.1, to reach him not later than Monday, March 8, 1948.

WEST RIDING OF YORKSHIRE MENTAL HOSPITALS BOARD
STORTHES HALL MENTAL HOSPITAL
Kirkburton, near Huddersfield
HOUSE PHYSICIAN (B1)

Applications are invited from recently qualified doctors, who are interested in Psychiatry, for the position of House Physician (B1) at the above Hospital. The post offers facilities for experience in modern methods of treatment and ample opportunities will be provided for postgraduate study. Salary will be at the rate of £455 per annum, rising by annual increments of £25 to the maximum of £555 per annum, together with full residential emoluments valued at £200 per annum and war bonus will be payable at the rate of £30 per annum. In the case of non-resident officers, an allowance of £200 per annum is made in lieu of emoluments and war bonus is at the rate of £60 per annum. An additional £50 per annum is payable to holders of the D.P.M. or M.D. in Psychological Medicine (London). Applications from R practitioners now holding B1 appointments cannot be considered unless eligible for H.M. Forces. The appointment will be subject to the provisions of the Asylums Officers' Superannuation Act, 1909, Class I, and deductions from total salary, emoluments, etc., will be made at the rate of 3 per cent in respect of contributions. Applications should be addressed as soon as possible to the Medical Superintendent, Storthes Hall Mental Hospital, Kirkburton, near Huddersfield, together with the names and addresses of two persons to whom reference may be made.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

ABERDEEN ROYAL INFIRMARY
FULL-TIME RADIOLOGIST

The Board of Directors invites applications from suitably qualified registered medical practitioners for the full-time post of Radiologist in charge of the Department of Radiodiagnosis. The salary will be at the rate of £1,750 per annum. There is no provision for superannuation at present, but this is subject to review with the inception of the National Health Service. A copy of the conditions of appointment may be had on application to the undersigned, with whom applications and testimonials and the names of two persons for reference should be lodged on or before March 13, 1948.—John A. McConachie, Clerk and Treasurer, 1, Albyn Place, Aberdeen.

ABERDEEN ROYAL INFIRMARY
FULL-TIME RADIOTHERAPIST

The Board of Directors invites applications from suitably qualified registered medical practitioners for the full-time post of Radiotherapist. The salary will be at the rate of £1,500 per annum. There is no provision for superannuation at present, but this is subject to review with the inception of the National Health Service. A copy of the conditions of appointment may be had on application to the undersigned, with whom applications and testimonials and the names of two persons for reference should be lodged on or before March 13, 1948.—John A. McConachie, Clerk and Treasurer, 1, Albyn Place, Aberdeen.

BEDFORDSHIRE COUNTY COUNCIL
ST. PETER'S HOSPITAL, Bedford
Assistant RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, including R practitioners who now hold A posts, for the appointment of Assistant Resident Medical Officer (B2). Salary will be at the rate of £250 per annum together with cost-of-living bonus at present £59 16s. If non-resident, an allowance of £100 per annum will be made in lieu of board and lodging. If held by an R practitioner the appointment will be limited to six months. In the event of a demobilised medical officer being appointed, application will be made for upgrading under the scheme. Applications should be addressed to the County Medical Officer, Shire Hall, Bedford, from whom further particulars may be obtained, in order to reach him not later than March 13, 1948.—J. B. Graham, Clerk of the County Council, Shire Hall, Bedford.

BOROUGH OF DOVER
MEDICAL OFFICER OF HEALTH AND PORT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the combined appointment of Medical Officer of Health of the Borough, Medical Officer to the Dover Port Health Authority and Medical Inspector of Aliens, at a salary of £1,100 per annum, including bonus, plus car allowance on mileage basis. Candidates must have had experience in public health work and hold a Diploma in Public Health, or an equivalent qualification. The successful candidate will be required to devote his whole time to the service of the Corporation, and will not be permitted to engage in private practice. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937. Further particulars and form of application may be obtained from the undersigned, to whom applications, accompanied by copies of not more than three recent testimonials should be sent not later than March 20, 1948.—James A. Johnson, Town Clerk, Brook House, Dover.

BOROUGH OF EDMONTON
ASSISTANT MEDICAL OFFICER OF HEALTH SCHOOL MEDICAL OFFICER

Candidates must hold the D.P.H. or other Diploma in Sanitary Science or State Medicine. Salary £650 to £850 per annum, plus bonus, commencing at a figure appropriate to qualifications and experience. Forms of application and conditions of appointment to be obtained from and returned to the undersigned not later than February 28, 1948.—H. Backhouse, Town Clerk, Town Hall, Edmonton, N.9.

CORPORATION OF GLASGOW
Public Health Department
Central Bacteriological Laboratory
MEDICAL DEPUTY BACTERIOLOGIST

Applications are invited for the whole-time pointment of a medical Deputy Bacteriologist. Applicants should have had experience in the bacteriological and serological work required in a public health service. Salary scale, £900 per annum rising by annual increments of £50 to £1,150 per annum. The appointment is superannuable and the successful candidate will be required to pass a medical examination. Applications should reach the Town Clerk, City Chambers, Glasgow, in envelope marked "Appointment Deputy Bacteriologist" not later than March 12, 1948.—William Kerr, Town Clerk, City Chambers, Glasgow.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL (1,050 beds)
CHIEF ASSISTANT RADIOLOGIST

Applications are invited for the appointment of Chief Assistant Radiologist at Dudley Road Hospital. The X-ray Department comprises Diagnostic and Therapeutic sections and has a Deep X-ray Therapy Unit. Candidates should be suitably qualified and hold the D.M.R. (combined Diploma or Diagnostic Diploma only). The scale of salary will be at the rate of £1,000 by £50 to £1,200, this is a total inclusive salary. The appointment will be renewable annually for three years in the first instance but will be subject to one month's notice on either side. The officer appointed will be required to pay to the Council all extraneous fees and allowances received. The appointment will be subject to a medical examination and to the provisions of the Local Government Superannuation Act, 1937, and to the Widows and Orphans Pension Scheme (if applicable). Applications should be sent to the Medical Officer of Health, Public Health Department, Birmingham, 3, to reach him not later than February 27, 1948.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL
(Municipal General Hospital with 1,050 beds)
HOUSE SURGEON (A)
Gynaecological and Obstetrical Department

Applications are invited from registered medical practitioners (male or female) for appointment as House Surgeon (A) in the Gynaecological and Obstetrical Department at the above hospital. The vacancy will occur in the middle of March. The salary is at the rate of £250 per annum, plus residential emoluments. This is approved as a resident post required for the D.R.C.O.G. Practitioners within three months of qualification and liable under the National Service Acts, may apply. If such a practitioner is appointed the appointment will be limited to six months. Applications should be sent to the Medical Superintendent, Dudley Road Hospital, Birmingham, 18, as soon as possible.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL
(Municipal General Hospital with 1,050 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female) for appointment as House Surgeon (A), at the above hospital. The vacancy will occur in the middle of March. The salary is at the rate of £250 per annum plus residential emoluments. This is approved as a resident post required for the final F.R.C.S.(Eng.). Practitioners within three months of qualification and liable under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Applications should be sent to the Medical Superintendent, Dudley Road Hospital, Birmingham, 18, as soon as possible.

CITY OF BIRMINGHAM
YARDLEY GREEN ROAD SANATORIUM
(415 beds)
ASSISTANT TUBERCULOSIS OFFICER AND RESIDENT ASSISTANT MEDICAL OFFICER

Applications are invited from male medical practitioners for the above resident whole-time appointment. In addition to duties at the Sanatorium, the successful candidate will be required to undertake duties as an Assistant Tuberculosis Officer at the Anti-Tuberculosis Centre. Candidates should have held a resident hospital appointment and have had experience of sanatorium and dispensary work. Salary £675 by £25 to £875, including residential emoluments, plus cost-of-living bonus. The appointment will be subject to the passing of a medical examination, to the Local Government Superannuation Act, 1937, to the Widows and Orphans Pension Scheme (if applicable) and to one month's notice on either side. Applications should be addressed to the Medical Officer of Health, Public Health Department, The Council House, Birmingham, 3, not later than February 27, 1948.

CITY OF BIRMINGHAM
ROMSLEY HILL SANATORIUM (120 beds)
RESIDENT ASSISTANT MEDICAL OFFICER
(Male or Female)
(Married Quarters are not available)

Applications are invited for the position of Resident Assistant Medical Officer at the above Sanatorium. Candidates should have held a hospital appointment and have had previous experience in the treatment and diagnosis of tuberculosis. Opportunities will be made available for occasional work at the central City Dispensary. Salary £675 per annum rising by £25 to £875 (including emoluments valued at £150 per annum), plus cost-of-living bonus. The appointment will be subject to the passing of a medical examination, to the Local Government Superannuation Act, 1937, to the Widows and Orphans Pension Scheme (if applicable) and to one month's notice on either side. Applications should be addressed to the Medical Officer of Health, Public Health Department, The Council House, Birmingham, 3, not later than February 27, 1948.

CITY OF BIRMINGHAM
ASSISTANT THORACIC SURGEON
to the Birmingham Tuberculosis Service

Applications are invited for the above full-time appointment. Candidates should hold higher surgical qualifications and have considerable experience in their speciality and in general tuberculosis work. The appointment is non-resident but the officer appointed would require to live within reasonable distance from the Yardley Green Road Sanatorium. Duties will relate mainly to work in the surgical unit of the service, but the officer will also have certain general clinical responsibilities at the Yardley Green Road Sanatorium. Salary £1,000 by £50 to £1,200 per annum inclusive. The appointment will be subject to the passing of a medical examination, to the Local Government Superannuation Act, 1937, to the Widows and Orphans Pension Scheme (if applicable) and to one month's notice on either side. Applications should be addressed to the Medical Officer of Health, Public Health Department, The Council House, Birmingham, 3, not later than February 27, 1948.

CITY OF LIVERPOOL
FAZAKERLEY SANATORIUM
Lower Lane, Liverpool, 9 (466 beds)
CLEAVER SANATORIUM
Oldfield Road, Heswall, Cheshire (220 beds)
Resident ASSISTANT MEDICAL OFFICERS (B2)

Applications are invited for the above appointments from fully qualified registered medical practitioners, including R practitioners now holding A posts. If held by R practitioners, the appointments will be limited to six months, otherwise they will be for a period of twelve months. Fazakerley Sanatorium is for the treatment of pulmonary and non-pulmonary tuberculosis, and is a centre for Thoracic Surgery. Salary will be at the rate of £350 per annum, together with cost-of-living bonus and full residential emoluments in each case. All fees received in connexion with the appointments to be handed over to the City Council. The appointments will be made subject to the Standing Orders of the City Council, and will be determinable by one month's notice on either side. Applications, stating whether R practitioner and qualifications (with dates), should be endorsed "Resident Medical Officer," and indicate the Sanatorium for which application is being made, and returned to the undersigned not later than Monday March 1, 1948.—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool.

CITY OF LIVERPOOL
CLINICAL TUBERCULOSIS OFFICER

Applications are invited from registered medical practitioners for the appointment of whole-time Clinical Tuberculosis Officer in the Liverpool Public Health Department, under the administrative control of the Medical Officer of Health and the Chief Clinical Tuberculosis Officer. Candidates must possess special knowledge and experience of modern methods of diagnosis and treatment of tuberculosis including interpretation of chest radiographs. Salary scale £800 to £1,000 per annum, with commencing point according to experience, together with cost-of-living bonus as approved by the City Council. The appointment, terminable by three months' notice on either side, will be subject to the standing orders of the City Council, and to the provisions of the Local Government Superannuation Act, 1937. The successful candidate will have to pass a medical examination. Forms of application may be obtained from the Medical Officer of Health, Gordon House, Belmont Grove, Liverpool, 6, and should be returned to the undersigned, accompanied by copies of not more than three recent testimonials, in envelopes endorsed "Clinical Tuberculosis Officer" so as to be received not later than Friday March 5, 1948. Canvassing of members of the City Council, either directly or indirectly, will be a disqualification.—Thomas Alker, Town Clerk, Municipal Offices, Dale Street, Liverpool, 2.

CITY AND COUNTY BOROUGH OF CARLISLE
CITY MATERNITY HOSPITAL
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Senior Resident Medical Officer (B1) at the above hospital. The hospital is recognized for the training of medical students, and is approved as a Part I Training School for Midwives. Applicants should have at least six months' experience as a Resident in a Maternity Hospital as well as experience as House Surgeon or House Physician in a General or Children's Hospital. Applications from R practitioners holding B1 appointments cannot be considered unless they have been rejected by H.M. Forces. Facilities are available for the person appointed proceeding to higher Diplomas or Degrees. The salary offered is £350 plus residential emoluments, and the appointment will be held for one year. Further particulars may be obtained from the Medical Officer of Health, Public Health Department, 22, Fisher Street, Carlisle, with whom all applications, stating age, nationality, medical school, qualifications, appointments and experience, together with copies of not more than three testimonials, should be lodged not later than February 25, 1948.—H. D. A. Robertson, Town Clerk, Town Clerk's Office, 15, Fisher Street, Carlisle.

CITY OF CARDIFF
LLANDOUGH HOSPITAL, Penarth, Glam.
(The Cardiff Municipal General Hospital)
RESIDENT SPECIALIST ANAESTHETIST

Applications are invited for the appointment of Resident Specialist Anaesthetist at Llandough Hospital (345 beds). Applicants must have had extensive experience in the administration of anaesthetics, and must possess the Diploma in Anaesthetics. The salary for the post will be £800 per annum, rising by annual increments of £25, to £1,000 per annum, plus full residential emoluments valued at £140 per annum. The successful candidate (who will be required to pass a medical examination and to contribute to the Local Government Superannuation Act Fund) will work under the direction of the Medical Superintendent of the Hospital. Applications, on forms obtainable from the Medical Officer of Health, City Hall, Cardiff, to be returned to him not later than March 1, 1948. Canvassing will disqualify.—S. Tapper Jones, Town Clerk, City Hall, Cardiff

CITY OF EDINBURGH
Public Health Department
SENIOR RESIDENT MEDICAL OFFICER (B1)

Required for Northern General Hospital, at present 100 general medical beds, including research unit (30 beds) for rheumatic diseases under direction of Professor of Medicine. Hospital being upgraded to form part of University Medical Teaching Unit and will comprise 180 beds. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Candidates should possess, or be working for, M.R.C.P. Salary at the rate of £350 per annum, plus bonus at present £60 13s. 4d. and emoluments valued at £100 Candidates may be holders of an ex-Service Class III appointment. Appointment on a yearly basis. Applications should be lodged with the Medical Officer of Heath, Johnston Terrace, Edinburgh, not later than March 10, 1948.

CITY OF PERTH
MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of Medical Officer of Health of the City of Perth. Candidates must possess the necessary Public Health qualifications (D.P.H. or equivalent). The salary will be in accordance with the scale £1,040 to £1,170 with bonus of £60 in addition with placing on the scale in accordance with qualifications and experience. The successful applicant must devote his whole time to his duties, which will include the supervision of and responsibility for all medical services controlled by the Town Council. Applications to be lodged with the Subscriber not later than fourteen days from the appearance of this advertisement.—Robt. Adam, Town Clerk, City Chambers, Perth.

CITY OF STOKE-ON-TRENT
CITY MATERNITY HOSPITAL
MEDICAL OFFICER

Applications are invited from registered medical practitioners (male or female), with obstetrical experience and preferably a higher diploma in obstetrics, for the position of Resident Medical Officer at the City Maternity Hospital, Hartshill. (46 beds, Part II Training School, C.M.B.) The commencing salary will be £500 per annum rising by annual increments of £25 to £700 per annum plus emoluments valued at £150 per annum and bonus. The person appointed will be attached to the staff of the City General Hospital, Stoke-on-Trent, under the Consultant Obstetrician and Medical Superintendent. The duties include attendance at certain Ante-Natal and Infant Welfare Clinics in the City. Further particulars may be obtained from Dr. C. Gordon Lewis, Medical Superintendent of the City General and City Maternity Hospitals, Stoke-on-Trent. Applications should be forwarded as soon as possible to the undersigned.—Harry Taylor, Town Clerk.

CITY OF BRADFORD
MUNICIPAL GENERAL HOSPITAL (St. Luke's)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the following appointment: Resident Anaesthetist (B1). Salary £350 per annum, plus full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also holding B1 and ineligible for H.M. Forces may apply. Candidates must have special experience in anaesthesia, and if not in possession of the D.A. should be studying for such Diploma. The hospital is recognized for the D.A. This appointment is limited to one year.—W. H. Leathem, Town Clerk, Town Hall, Bradford.

CITY OF LONDON MATERNITY HOSPITAL
102, City Road, E.C.1
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Resident Medical Officer (B1), including R practitioners holding B2 appointments, at the London Unit of the above Hospital. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary at the rate of £200 per annum with board, residence, etc. The appointment is for a period of six months commencing April 1, 1948. Applications to be sent not later than March 5 to G. G. Panter, Secretary.

CITY OF LONDON MATERNITY HOSPITAL
102, City Road, E.C.1
TWO ASSISTANT OBSTETRIC SURGEONS

Vacancies occur at the above Hospital for two Assistant Obstetric Surgeons. Candidates must be members of the Royal College of Obstetricians and Gynaecologists. Applications to be sent not later than March 5 to Gilbert G. Panter, Secretary.

COUNTY BOROUGH OF SOUTHPORT
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from male or female registered medical practitioners for the whole time appointment of Assistant Medical Officer of Health. The duties involved will be in the main the care of patients at the Sanatorium (36 beds) and the conduct of the Tuberculosis Dispensary and Contact Clinics. As and when required the successful candidate will also be expected to act as Medical Officer to the Infectious Diseases Hospital and so take part in the other activities of the Health Department. Candidates should be under 45 years of age and experience in an infectious diseases hospital and sanatorium is essential. The salary grade for the position is £650, rising by annual increments of £25 to a maximum of £850 per annum and the commencing salary will be fixed within this grade according to the qualifications and experience of the successful candidate. A cost-of-living award is payable and also a motor car allowance of £75 per annum. Accommodation for an unmarried doctor is available at New Hall Hospital for which a deduction of £100 will be made from the salary. Forms of application can be obtained from the Medical Officer of Health, 2, Church Street, Southport. Completed application forms endorsed "Assistant Medical Officer of Health," together with three copies of recent testimonials, to be sent to the undersigned so as to reach him not later than the first post on March 19, 1948. Canvassing directly or indirectly will be a disqualification.—R. Edgar Perrins, Town Clerk, Town Hall, Southport.

COUNTY BOROUGH OF WEST HAM
WHIPPS CROSS HOSPITAL (1,200 beds)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) for the post of Assistant Medical Officer (B1) at Whipps Cross Hospital, Leytonstone E.11. Suitably qualified R practitioners holding B2 appointments may apply R practitioners holding B1 appointments cannot apply unless they have been rejected by the R.A.M.C. Salary for post £455 per annum rising by annual increments of £25 to a maximum of £555 per annum, plus a temporary cost-of-living bonus, with full emoluments. Duties mainly in medical wards. Further particulars and forms of application from Medical Officer of Health, 225, Romford Road, West Ham, London, E.7, to be returned to him not later than March 10, 1948.—E. E. King, Town Clerk, West Ham Town Hall, Stratford, London, E.15.

COUNTY BOROUGH OF WEST HAM
FOREST GATE HOSPITAL
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for appointment as Resident Assistant Medical Officer (B1) at the Council's Forest Gate Hospital. Suitably qualified R practitioners holding B2 appointments may apply R practitioners holding B1 appointments cannot apply unless they have been rejected by the R.A.M.C. Duties principally in connection with maternity unit and Council's ante-natal and post-natal clinics. Previous experience of midwifery essential. Preference given to candidates who have held resident hospital appointment, and experience in administration of anaesthetics an advantage. Appointment for period of one year in first instance but may be extended. Salary scale £455 to £555 per annum and emoluments, plus temporary cost-of-living bonus. Further particulars and application forms from Medical Officer of Health, 225, Romford Road, West Ham, E.7, to be returned to him not later than March 10, 1948.—E. E. King, Town Clerk, West Ham Town Hall, Stratford, E.15.

COUNTY BOROUGH OF SUNDERLAND
CHERRY KNOWLE (E.M.S.) HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1) at the above-named hospital. Suitably qualified R practitioners holding B2 appointments may apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary will be at the rate of £455 per annum, rising by annual increments of £25 to £555 per annum, with full residential emoluments valued at £100 per annum, and cost-of-living bonus, at present £29 19s. 7d. per annum. The selected candidate will be required to pass a medical examination and to commence duty in early March. The appointment will be determinable by one month's notice given in writing at any time by either party to the other of them. Applications must be addressed to the undersigned, endorsed on cover "Resident Surgical Officer (B1), Cherry Knowle (E.M.S.) Hospital," and delivered at my office not later than March 6.—G. S. McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY BOROUGH OF BLACKBURN
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered women medical practitioners for the appointment of Assistant Medical Officer of Health (Female). The duties will be mainly connected with Maternity and Child Welfare. A Diploma in Public Health, though not essential, will be considered an additional qualification for the position. The salary will be £650 rising by annual increments of £25 to a maximum of £850 per annum plus war bonus (at present £48 2s. per annum). The commencing salary may be fixed at a rate higher than £650 plus bonus in the case of a candidate who has had previous experience as an Assistant Medical Officer of Health. Forms of application may be obtained from the Medical Officer of Health, Victoria Street, Blackburn, and should be returned to him as soon as possible and in no case later than Monday, March 8, 1948.—C. S Robinson, Town Clerk.

COUNTY BOROUGH OF BLACKBURN
QUEEN'S PARK HOSPITAL, Blackburn
ASSISTANT MEDICAL OFFICER (B1)
for the Obstetrical Unit

Applications are invited for the post of Assistant Medical Officer (B1) for the Obstetrical Unit, Queen's Park Hospital, Blackburn, which deals with all the abnormal midwifery of the area. The Unit is under the clinical direction of a Consultant Obstetrician. Salary £455 per annum (plus cost-of-living bonus) increasing by annual increments of £25 to £555 per annum, together with residential emoluments. The appointment will in the first instance be for a period of two years, or, in the case of an R practitioner, one year. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Further particulars may be obtained from the Public Assistance Officer, Cardwell Place, Blackburn, to whom applications accompanied by copies of two recent testimonials must be sent.—Chas. S. Robinson, Town Clerk.

COUNTY BOROUGH OF BLACKBURN
Public Assistance Department
QUEEN'S PARK HOSPITAL
AND INSTITUTION, Blackburn
Resident Junior Assistant MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the post of Resident Junior Assistant Medical Officer (A) at Queen's Park Hospital and Institution, Blackburn, at a salary of £325 per annum plus cost-of-living bonus, together with board, apartments and attendance. Practitioners within three months of qualification who are liable for Service under the National Service Acts may apply, when appointment will be for a period of six months, otherwise the appointment will be limited to a term not exceeding one year. Further particulars may be obtained from the Public Assistance Officer, Cardwell Place, Blackburn, to whom applications must be sent.—Chas S. Robinson, Town Clerk.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

COUNTY BOROUGH OF IPSWICH
BOROUGH GENERAL HOSPITAL (312 beds)

Applications are invited from registered medical practitioners (male or female) for the following posts, including practitioners within three months of qualification and liable under the National Service Acts for the A post, and R practitioners holding A posts for the B2 posts :—

HOUSE SURGEON (A)
HOUSE SURGEON (B2)

Salary in the case of the A post will be £250 per annum and the B2 post £350 per annum, with full residential emoluments. The appointments will be for six months in the first instance and will be limited to six months in the event of practitioners being appointed who are liable for military service. Applications should be sent to the Acting Medical Officer of Health, Public Health Department, Elm Street, Ipswich.

COUNTY BOROUGH OF MIDDLESBROUGH
MIDDLESBROUGH GENERAL HOSPITAL (355 beds)
MEDICAL STAFF

Applications are invited for the following appointments at the above Hospital which is an Acute General Hospital :—

HOUSE PHYSICIAN (A)
HOUSE SURGEON (A)

Salary in both cases is at the rate of £200 per annum, together with full residential emoluments. The successful candidates will be required to pass a medical examination. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be limited to a period of six months, otherwise the appointment will be for twelve months. Applications should be sent not later than Wednesday, March 3, 1948, to the Medical Officer of Health, Municipal Buildings, Middlesbrough, from whom further information may be obtained.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough.

COUNTY OF DENBIGH
WREXHAM EMERGENCY HOSPITAL (225 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of a House Physician (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by practitioner who is liable under these Acts appointment will be for a period of six months, otherwise it will be for a period not exceeding one year. Salary is at the rate of £300 per annum, rising by one increment of £50 to a maximum of £350 per annum after six months' satisfactory service, plus temporary cost-of-living bonus £29 18s. per annum, with full residential emoluments. Applications to be sent immediately to Dr H. Arwel Thomas, County Medical Officer of Health, 16, Grosvenor Road, Wrexham, Denbighshire.

COUNTY OF WARWICK
STRATFORD-ON-AVON EMERGENCY HOSPITAL (220 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male and female, for the appointment of Resident Surgical Officer (B1), now vacant. The appointment will be limited to a period of one year. Salary £350 per annum, together with cost-of-living bonus, plus the usual residential emoluments. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. or have completed their term of military service. Applications, on forms obtainable from H. K. Kotch, Shire Hall, Warwick, should be returned to him not later than March 3, 1948.

COUNTY BOROUGH OF CROYDON
LADY ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applicants must have been qualified for at least three years with special experience in Diseases of Childhood, and recently in Ante-natal Clinics and practical obstetric work. The post is permanent and superannuable subject to medical examination. Salary £800 per annum, rising by annual increments of £50 to a maximum of £1,000 per annum plus bonus at present £48 2s. per annum. Application forms may be obtained from the Medical Officer of Health, 20, Katherine Street, Croydon, and should be returned to him not later than February 28, 1948. Canvassing will disqualify.—E. Taberner, Town Clerk, Town Hall, Croydon.

COUNTY BOROUGH OF SWANSEA
MORRISTON HOSPITAL (450 beds)
TWO HOUSE SURGEONS (A)

Applications are invited for the above mentioned posts from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointments carry salaries at the rate of £150 per annum, in addition medical quarters are provided, emoluments being valued at £100 per annum. Applications should be addressed to the Medical Superintendent, Morriston Hospital, Swansea, as early as possible.—T. B. Bowen, Town Clerk, The Guildhall, Swansea.

COUNTY BOROUGH OF GREAT YARMOUTH
MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

Applications are invited from qualified medical practitioners holding a Degree in or Diploma of Public Health for the appointment of Medical Officer of Health and School Medical Officer, at a salary of £1,170 per annum, rising by two annual increments of £50 and one increment of £30 to a maximum of £1,300 per annum, inclusive of all fees and emoluments, plus a car allowance at the Council's scale, and cost-of-living bonus. Applicants must be fully qualified to carry out all the duties of Medical Officer of Health, School Medical Officer, Chief Tuberculosis Officer, Superintendent of the Borough Isolation Hospital, Port Medical Officer and such other duties as may from time to time be prescribed by the Council. Forms of application and further particulars may be obtained from me. Applications must reach me not later than noon on March 5, 1948.—Farra Conway, Town Clerk, Town Hall, Great Yarmouth.

COUNTY BOROUGH OF NEWPORT
ST. CADOC'S HOSPITAL
(for Mental and Nervous Diseases)
Caerleon, Newport, Mon
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the appointment of Assistant Medical Officer (B1), commencing salary £505 per annum rising by annual increments of £25 to £555, plus cost-of-living bonus (£59 16s. per annum), together with emoluments valued for the purpose of the Asylum Officers' Superannuation Act, 1909, at £150 per annum. A further £50 per annum is payable to holders of the D.P.M. Registered practitioners holding B2 appointments and those holding B1 posts and ineligible for H.M. Forces may apply. Applications to be sent to the Medical Superintendent, St. Cadoc's Hospital Caerleon, Newport, Mon.

COUNTY COUNCIL OF DURHAM
ASSISTANT MATERNITY AND CHILD WELFARE MEDICAL OFFICER

Applications are invited from registered medical practitioners (female) for the post of Assistant Maternity and Child Welfare Medical Officer at a commencing salary of £675 per annum, rising by annual increments of £25 to £875 per annum plus cost-of-living bonus. Travelling expenses will be paid in accordance with the scale approved by the County Council from time to time. The appointment is subject to certain conditions, particulars of which may be obtained from the County Medical Officer, Shire Hall, Durham, to whom applications, together with the names of not more than three referees, should be addressed not later than Saturday, February 28, 1948.—J. K. Hope, Clerk of the County Council, Shire Hall, Durham.

DURHAM COUNTY COUNCIL
DRYBURN EMERGENCY HOSPITAL, Durham
TEMPORARY RESIDENT ASSISTANT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male and female) for the post of Temporary Assistant Medical Officer, now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period of twelve months. Salary is at the rate of £120 per annum, plus full residential emoluments valued at £100 per annum together with cost-of-living bonus equal to £59 19s. 3d. per annum (cash £29 19s. 8d., emoluments £29 19s. 7d.). The appointment is subject to the regulations for the time being of the County Council relative to the payment of salary in case of sickness, and the successful applicant will be required to pass the County Council's medical examination. The appointment is terminable by one calendar month's notice on either side. Applications stating age, liability for military service, medical fitness, position as regards deferment, etc. should be sent to the County Medical Officer of Health, Shire Hall, Durham.—J. K. Hope, Clerk of the County Council, Shire Hall, Durham.

HERTFORDSHIRE COUNTY COUNCIL
SHRODELLS HOSPITAL, Watford
HOUSE SURGEON (B2)

Applications are invited, including those from R practitioners holding A posts, for the post of House Surgeon (B2) at Shrodells Hospital, Watford (General Hospital, 400 beds). The duties are mainly in connection with the Ear, Nose and Throat Unit, but include a certain amount of general surgical work. The post can be non-resident by arrangement. The appointment will be for six months in the first instance, but may be renewed for a similar period except in the case of R practitioners. Salary £240 per annum and full residential emoluments. Applications should reach F. Wilson, 7, Church Street, Watford, as soon as possible.

HERTFORDSHIRE COUNTY COUNCIL
WELLHOUSE HOSPITAL, Barnet, Herts
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the following temporary appointment, House Surgeon (A). Salary at the rate of £150 per annum plus full residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner were appointed the appointment would be limited to six months. Applications should be addressed to the Medical Superintendent.

ISLE OF ELY COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from duly qualified persons for an appointment as Assistant County Medical Officer on the permanent staff, at a salary of £675 per annum, rising by annual increments of £25 to £875 per annum. The selected candidate should possess the approval of the Minister of Education under Reg. 53 of the Handicapped Pupils and School Health Services Regulations, 1945. The duties will include school medical examination, maternity and child welfare, etc. Experience in refraction or mental deficiency will be an additional recommendation. The possession of a car will be required, and travelling expenses will be payable in accordance with the Council's scale. The person appointed will be required to devote his whole-time to the duties involved. The Local Government Superannuation Act, 1937, will apply, and it will be necessary for the successful candidate to pass a medical examination. Applications, on forms available upon request, accompanied by copies of not more than three recent testimonials, should be submitted to the County Medical Officer, County Hall, March, not later than March 6, 1948. Canvassing directly or indirectly will disqualify.—R. F. G. Thurlow, Clerk of the County Council, County Hall, March.

KENT COUNTY COUNCIL
SENIOR Assistant COUNTY MEDICAL OFFICER
for Mental Health Services
(Second Advertisement)

Applications are invited from suitably qualified and experienced practitioners, including those in H.M. Forces, for the above appointment on the central staff of the Public Health Department. The successful candidate will be responsible to the County Medical Officer for the general conduct of the Mental Health Services of the Health Committee as prescribed in the National Health Service Act, 1946, and will be required to undertake clinical duties, particularly in connexion with mental defectives. The salary scale is £1,100 a year rising by biennial increments of £50 to £1,210, and the commencing point will be fixed according to qualifications and experience. A cost-of-living allowance will also be paid. The appointment is superannuable and the successful candidate will be required to pass a medical examination and to provide a motor car, for which a travelling allowance will be paid on the County Council's scale. Applications, stating age, qualifications and experience, accompanied by the names and addresses of two persons to whom reference may be made as to professional ability and character, should be addressed to the County Medical Officer, Public Health Department, County Hall, Maidstone, not later than March 2, 1948. No forms of application are being issued.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

KINGSTON UPON HULL CORPORATION
Health Department
BEVERLEY ROAD HOSPITAL (432 beds)

Applications are invited for the undermentioned appointments from registered medical practitioners of either sex, including those now serving in H.M. Forces :—

SENIOR HOUSE OFFICER (SURGICAL) (B1), tenable for three years, salary £455 per annum, plus cost-of-living bonus, rising to £555 per annum by annual increments of £25, plus full residential emoluments. If non-resident, the salary is plus £200 per annum in lieu of residential emoluments. Applications from R practitioners holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C.

JUNIOR HOUSE OFFICER (SURGICAL) (A), tenable for one year; salary £250 per annum, plus cost-of-living bonus and plus full residential emoluments. If non-resident, the salary is plus £150 per annum in lieu of residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months.

Forms of application, conditions of appointment, etc., may be obtained from, and the form should be returned duly completed to, the Medical Officer of Health, Guildhall, Kingston upon Hull, as soon as possible.

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL
Ashton-under-Lyne (300 beds)
ASSISTANT PHYSICIAN (B1) (Non-resident)

Applications are invited for the above appointment. Candidates should possess a higher medical qualification and be experienced in general medicine. The appointment will be whole-time and the successful candidate will be required to reside within reasonable distance of the hospital. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The appointment is rendered vacant by the calling of the present Assistant Physician to service in H.M. Forces. It is intended that it should be held by the successful candidate during the period of absence on service. Salary £1,000 per annum, rising by annual increments of £50 to a maximum of £1,200 per annum, plus cost-of-living bonus. Form of application and terms of appointment may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom applications must be forwarded by Monday, March 8, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

KENT COUNTY COUNCIL
COUNTY HOSPITAL, Dartford (430 beds)
Resident ASSISTANT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male and female) for appointment at the above hospital for general duties. Salary £200 a year, plus cost-of-living allowance and full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply for this post, when the appointment will be for a period of six months. Medical examination necessary and superannuation can be arranged. Applications, stating age, qualifications, experience and the names and addresses of two responsible persons to whom reference may be made as to professional ability and character, should be addressed to the Surgeon Superintendent at the hospital as soon as possible.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

LIVERPOOL COUNTY BOROUGH
Local Education Authority
CHILD GUIDANCE CLINIC
PSYCHIATRIST

Applications are invited from suitably qualified practitioners for the whole-time post of Psychiatrist in the School Health Service. The salary offered is £1,000 per annum. The officer appointed will be required to reside within the City and devote whole-time service to the Local Education Authority under the direction of the School Medical Officer, and will not be allowed to undertake any private practice. The appointment will be subject to the Standing Orders of the City Council and to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Application forms may be obtained from the School Medical Officer, Municipal Annexe, Dale Street, Liverpool, 2, and should be returned together with copies of three recent testimonials not later than March 22, 1948, and endorsed "Child Guidance Clinic," to the Town Clerk, Municipal Buildings, Liverpool, 2. Candidates serving in H.M. Forces overseas need not complete the official form of application, but may submit direct applications giving particulars of age, qualifications and experience, the number of their Release Group, and the names of not more than three persons to whom the Local Education Authority may refer. The canvassing of members of the Education Committee or the City Council is strictly prohibited, and will be considered a disqualification.—Thomas Alker, Town Clerk, and Clerk to the Local Education Authority.

LONDON COUNTY COUNCIL

Medical practitioners required for the Thoracic Surgery Unit (in conjunction with Brompton Hospital for Consumption) at

ST. CHARLES' HOSPITAL
St. Charles' Square, Ladbroke Grove, W.10

ONE ASSISTANT MEDICAL OFFICER Class I (B1). Salary £530 a year, rising by £25 to £630 a year.

TWO ASSISTANT MEDICAL OFFICERS, Class II (B2). Salary £400 a year.

In each case with board, lodging, washing, or an allowance in lieu in certain instances.

Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply for the B1 position, and R practitioners holding A posts may apply for B2 appointments, which will be limited to six months. Application forms, obtainable from Medical Officer of Health (S.D.2), London County Council, County Hall, S.E.1 (stamped foolscap envelope necessary), must be returned by March 1, 1948, to the House Governor, Brompton Hospital for Consumption, Fulham Road, S.W.3. (337).

LONDON COUNTY COUNCIL

Medical practitioners required for:—

TEMPORARY ASSISTANT DISTRICT MEDICAL OFFICER for Area IV District D (Part of the Metropolitan Borough of St. Pancras). Salary £245 a year, plus a surgery allowance of £12 10s. a year.

ASSISTANT MEDICAL OFFICER (Institutions) at Alexandra House, Maitland Park Road, N.W.3. Salary £285 a year.

Persons appointed required to carry out duties prescribed by Public Assistance Order, 1930, and to reside in or near district. Application form, obtainable (stamped addressed foolscap envelope necessary) from the Medical Officer of Health (S.D.2), County Hall, S.E.1, must be returned not later than March 1, 1948. Canvassing disqualifies. (352A)

LONDON COUNTY COUNCIL
FULHAM HOSPITAL
WHOLE-TIME SENIOR PHYSICIAN

Medical practitioner required for the whole-time position of Senior Physician at Fulham Hospital, St. Dunstan's Road, Hammersmith W.6. The salary is £1,500 a year, rising by annual increments of £100 to £1,800. No emoluments are payable. The Officer selected for appointment will be subject to the administrative direction and control of the medical superintendent, but will have full clinical responsibility for the work of his department at the hospital. Applications should be made on the prescribed form obtainable on written application from the Medical Officer of Health (S.D.2), The County Hall, Westminster Bridge, S.E.1. (Stamped foolscap envelope necessary.) The completed form should be returned by March 8, 1948. Canvassing disqualifies. (405)

MID-WALES COUNTIES MENTAL HOSPITAL
Talgarth, Brecon
MEDICAL SUPERINTENDENT

The Visiting Committee invite applications for the post of Medical Superintendent of this Hospital (403 beds). Salary commencing £1,000 rising by annual increments of £50 to £1,200 per annum with, in addition, the following emoluments valued for Superannuation purposes at £220 per annum: Partly furnished house, laundry, coal and light, garden produce, milk and the privilege of purchasing from the hospital stores at contract prices. A war bonus of £39 17s. 4d. is also payable. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Candidates must be fully qualified medical practitioners. They should have had extensive experience in the practice of psychological medicine, including resident appointments in Mental Hospitals. Applications, stating experience and posts held with dates, to be sent to the undersigned not later than April 10, 1948.—G. Lewis, Clerk to the Visiting Committee.

MIDDLESEX COUNTY COUNCIL
RESIDENT MEDICAL SUPERINTENDENT
at Middlesex Colony, Shenley, near St. Albans

Resident Medical Superintendent (qualified medical practitioner) required at Middlesex Colony Shenley, Nr. St. Albans (Certified Institution). Salary scale £1,100 by £50 to £1,200 per annum, plus any temporary bonus (now £60 per annum). Unfurnished house provided rent free (general and water rates paid by Council), valued at £130 per annum; no other emoluments. Established post, subject to Asylums' Officers Superannuation Acts, medical examination and to the Council's General Conditions, etc. The candidate appointed must devote whole time to the Council's service and pay over any fees received. Experience in Mental Deficiency work essential; D.P.M. an advantage. Candidates not on the Council's established staff must be under 46 years of age on April 1, 1947. Canvassing disqualifies. Applications with copies of three testimonials to the undersigned by March 6. (Quoting D.593, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
NAPSBURY MENTAL HOSPITAL
near St. Albans, Herts

CLINICAL ASSISTANT (B1). Salary £300 per annum, plus any temporary bonus (now £30 per annum cash) plus full residential emoluments (bachelor quarters). Previous experience not essential. Excellent travelling facilities. Six to twelve months appointment. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications to Medical Superintendent at once, with recent testimonials or referees. (Quoting D592, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CENTRAL MIDDLESEX COUNTY HOSPITAL
Park Royal, N.W.10
DENTAL HOUSE OFFICER

Dental House Officer for Central Middlesex County Hospital, Park Royal, N.W.10, with registered dental qualification. Salary £350 per annum, plus any temporary bonus (now £60 per annum). Whole-time six to twelve months' appointment, non-resident. Application to Medical Director of Hospital immediately (quoting D.591, B.M.J.). No forms.—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
PART-TIME MEDICAL OFFICER

Part-time Medical Officer required for Ickenham and Northwood Maternity and Child Welfare and Ante-Natal clinics; two sessions per week (Friday a.m. and p.m.). Remuneration £2 5s. per session. Applications (no forms) to the undersigned by February 28. (Quoting D628, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1

NOTTINGHAMSHIRE COUNTY COUNCIL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for appointment as House Physician (A) at the Mansfield Public Assistance Institution and Children's Homes. The Institution Sick Wards include a Maternity Department of 32 beds. Applicants who are within three months of qualification and who are liable to service under the National Service Acts should note that the appointment will be for a period of six months if held by a practitioner to whom these conditions apply. Salary £260 per annum, together with residential allowances valued at £100 per annum. Applications to be sent to me as soon as possible.—K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

ACTON HOSPITAL
Gunnersbury Lane, Acton, W.3
CASUALTY OFFICER (A) AND
RESIDENT MEDICAL OFFICER

Applications are invited from registered medical practitioners, male or female (including practitioners within three months of qualification who are liable to service under the National Service Acts), for the appointment of Casualty Officer (A) immediately for three months, and Resident Medical Officer for a further three months. Salary at the rate of £150 per annum, with full residential emoluments. Applications, with copies of two testimonials, to be sent to the undersigned as soon as possible.—Donald C. D. Sword, House Governor.

NORTHUMBERLAND COUNTY COUNCIL
Health Department
ASSISTANT TUBERCULOSIS OFFICER
(Whole-time)

Applications are invited from registered medical practitioners for the appointment of Assistant Tuberculosis Officer. Candidates should possess special knowledge and have experience of the modern methods of diagnosis and treatment of tuberculosis, including the ability to interpret chest x-ray films and also be able to undertake A.P. refills. The successful candidate will work under the general administrative control of the County Medical Officer and the clinical control of the Senior Tuberculosis Officer. The salary will be in accordance with the recommendations of interim revision of the Askwith memorandum for Medical Officers employed in Departments—namely £650 per annum rising by annual increments of £25 to a maximum of £850 per annum, plus cost-of-living bonus. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment is terminable by three months' notice on either side. Applications, giving liability for military service, should reach the County Medical Officer, County Hall, Newcastle-upon-Tyne, 1, not later than March 12, 1948.—J. B. Tilley, County Medical Officer.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM GENERAL HOSPITAL
(Regional Orthopaedic Centre—440 beds)
TWO RESIDENT MEDICAL OFFICERS (B2)
including ANAESTHETIST

Applications are invited from registered medical practitioners (male or female) for the appointment of two Resident Medical Officers (B2), the duties of one of whom will include those of Anaesthetist. R practitioners who now hold A posts may apply, when appointment will be limited to six months; otherwise it will be for a period of one year. The salary is at the rate of £200 per annum, with full residential emoluments. In addition to the orthopaedic work, a large amount of general surgery is carried out. Applications should be sent to the undersigned, not later than March 6, 1948.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

RUTLAND COUNTY COUNCIL
PART-TIME COUNTY MEDICAL OFFICER AND
SCHOOL MEDICAL OFFICER

Applications are invited from registered medical practitioners holding the Diploma in Public Health for the part-time appointment of County Medical Officer of Health and School Medical Officer, three days a week at a salary of £600 per annum together with travelling allowance under the Council's scales. Candidates should have administrative ability and a knowledge and experience of the organization of Public Health Services. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937. Canvassing, directly or indirectly, will be a disqualification. Applications must be delivered to me, the undersigned, not later than March 31, 1948.—R. C. Dalton, Clerk of the County Council, County Offices, Catmose, Oakham.

SURREY COUNTY COUNCIL
BOTLEYS PARK, Chertsey
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners interested in the treatment of Mental Deficiency for the post of Assistant Medical Officer (B1) at the above-named Colony for Mental Defectives. Applications from R practitioners now holding B1 posts cannot be considered unless they are ineligible for H.M. Forces. The Colony is a modern one of 1,200 to 1,500 beds, with a fully equipped Hospital Block including operating theatre, laboratory and X-ray departments. There are also adult and juvenile occupation centres with departments dealing with remedial exercises, and all facilities for the care, treatment and study of mental defectives of both sexes, all ages and grades. The Colony is recognized by the London University for the D.P.M. (Mental Deficiency), and by the A.O.T. and G.N.C. as a school for the training of Occupational Therapists (Psychological section) and Mental Deficiency Nurses respectively. The successful candidate may be required to assist in giving lectures to Occupational Therapy and Nursing Students. Salary at the rate of £514 16s. by £25 to £614 16s. per annum inclusive, plus £50 per annum if in possession of the D.P.M., and emoluments valued at £150 per annum or cash in lieu if permitted to live out. Applications to the Physician Superintendent.

SURREY COUNTY COUNCIL
FARNHAM COUNTY HOSPITAL
Hale Road, Farnham
ASSISTANT SURGICAL OFFICER (B2)

Appointment for six months (renewable for further six months if candidate appointed not liable for service with H.M. Forces). R practitioners holding A posts may apply. Candidates must have had experience in a house appointment. Salary £250 per annum, plus bonus, and full residential emoluments valued at £150 per annum. Applications with one to three recent testimonials (copies) to the Medical Superintendent of the Hospital by February 28, 1948.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

SURREY COUNTY COUNCIL
Mental Hospitals Department
BOTLEYS PARK CERTIFIED INSTITUTION
Chertsey, Surrey
PHYSICIAN

Applications are invited (including applications from Officers serving in H.M. Forces) for the post of Physician at the Botleys Park Certified Institution commencing at a point, according to qualifications and experience, on a salary scale of £1,200 by £50 to £1,500 a year inclusive. The appointment, which is non-resident, will be on the permanent staff of the Council; will be subject, for the present, to the Asylums and Certified Institutions (Officers' Pensions) Act, 1918, and to the staffing regulations of the Council. The Physician appointed will be expected to live within a reasonable distance of the hospital. The successful candidate will be required to pass a medical examination and the appointment will be terminable by three months' notice on either side. The Colony is a modern Institution of 1,200 to 1,500 beds, carries out all forms of modern treatment, and has facilities for all types of research work amongst a population of mental defectives of both sexes and all ages and grades. Candidates must hold a degree or Diploma in psychological medicine, and have a wide psychiatric experience including mental deficiency experience. Preference will be given to those with a higher medical qualification. Further information may be obtained from the Physician Superintendent of the Institution at the above address. Canvassing is strictly forbidden and will disqualify. Applications by letter stating age, qualifications and experience with a copy of three recent testimonials and/or the names of three referees should be sent to the County Medical Officer, County Hall Kinston-upon-Thames by February 28, 1948.—Dudley Aukland, Clerk of the Council.

SURREY COUNTY COUNCIL
KINGSTON COUNTY HOSPITAL
Wolverton Avenue, Kingston-on-Thames (450 beds)
ASSISTANT MEDICAL OFFICER (B1)
in Paediatric Department

Applications are invited from suitably qualified medical practitioners, including those serving in H.M. Forces, for the above appointment. Candidates must have experience in house appointments and preferably some experience in the treatment of children's diseases. Salary £350, £400 or £450 per annum according to qualifications and experience plus bonus and full residential emoluments. Appointment is for six months from April 1, 1948, renewable for a second period of six months. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from practitioners now holding B1 appointments cannot be considered unless they have already completed a period of service with H.M. Forces or have been rejected for such service. Applications by letter should reach the Medical Superintendent of the Hospital by March 6, 1948.

WEST RIDING COUNTY COUNCIL
Public Health Department
CHILD HEALTH OFFICER

The West Riding County Council invite applications for the appointment of a Child Health Officer. This will be a senior clinical post in the School Health and Child Welfare Services, and will include also the charge of children's beds in one or more hospitals. There are three such posts, two of which have been filled, and the remaining post is in the North Western Area of the County. Applicants must have a wide experience and specialist knowledge of paediatrics and be a member of the Royal College of Physicians of London. The successful candidate should be willing to undertake additional duties if required in the department of the Professor of Child Health of a University. The salary range will be £1,300 to £1,450 per annum, plus cost-of-living bonus at present valued at £59 16s. per annum. Experience will be taken into account when determining the commencing salary. Travelling and subsistence allowance will be paid in accordance with the County Scale. The appointment will be subject to the Local Government Superannuation Act, and the successful candidate will be required to pass a medical examination. Forms of application can be obtained from the undersigned and should be returned, together with the names of three persons to whom reference can be made, not later than February 28, 1948.—Fraser Brockington, County Medical Officer, County Hall, Wakefield.

WILTSHIRE COUNTY COUNCIL
ODSTOCK HOSPITAL, Salisbury
JUNIOR ASSISTANT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, including those within three months of qualification who are, liable for service under the National Service Acts, for the appointment of a Junior Assistant Medical Officer (A) (resident), at a salary of £200 per annum, with board, lodging and laundry, plus temporary bonus, now £29 18s. per annum cash. Whole-time duties under Medical Superintendent. Six months' appointment. Vacant April 1, 1948. Applications should be forwarded to the County Medical Officer, County Hall, Trowbridge, not later than March 1, 1948.—P. A. Selborne Stringer, Clerk of the County Council, County Hall, Trowbridge.

LONDON COUNTY COUNCIL

[Medical practitioners required for the undermentioned positions:—

(1) **Senior Resident Surgeon (B1)**—St. Nicholas' Hospital, 79, Tewson Road, Plumstead, S.E.18.
Senior Resident Anaesthetist (B1)—Lewisham Hospital, Lewisham, S.E.13.
(Salary in each case £700 a year rising by annual increments of £30 to a maximum of £820 a year.)

(2) **Assistant Medical Officers Class I (B1)**—Salary £530 a year, rising by £25 to £630 a year. The appointment will not exceed four years unless the officer's name is placed on promotion list.

Hospital	*Duties*
Lambeth Hospital, Brook Drive, Kennington, S.E.11	Obstetrics and gynaecology
Mile End Hospital, Bancroft Road, Mile End, E.1	Surgical
St. Mary Islington Hospital, Highgate Hill, N.19	Fracture and emergency surgery
South-Western Hospital, Landor Road, Stockwell, S.W.9	Chronic sick, infectious ward and tuberculosis
St. John's Hospital, St. John's Hill, S.W.11	Chronic sick, some psychiatry

(3) **Assistant Medical Officers Class II (B2)**—Salary £400 a year. Appointment for one year only in first instance, renewable for second year under certain conditions.

Hospital	*Duties*
Mile End Hospital, Bancroft Road, Mile End, E.1	Obstetrics
Paddington Hospital, Harrow Road, W.9	Obstetrics and gynaecology
St. James' Hospital, Ouseley Road, Balham, S.W.12	Obstetrics and gynaecology
New End Hospital, Hampstead, N.W.3	General medical
Highgate Hospital, Dartmouth Park Hill, N.19	General medical
St. Alfege's Hospital, 48, Vanbrugh Hill, Greenwich, S.E.10	Junior resident anaesthetist with care of medical ward
Paddington Hospital, Harrow Road, W.9	Junior resident anaesthetist with care of medical ward
St. Francis' Hospital, East Dulwich, S.E.22	Mainly chronic sick

Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply for the B1 positions, and R practitioners holding A posts may apply for B2 appointments, which, if an R practitioner is appointed, will be limited to six months.

(4) **House Surgeons (A)**—Salary £200 a year. Including R practitioners within three months of qualification. If held by an R practitioner appointment will be for a period of six months. Otherwise, it will be for six-monthly periods, to a maximum of two years.

All the above positions are with board, lodging and washing.

Married quarters are not available, but in certain instances non-residence (excepting house surgeons) with the appropriate allowance is permitted.

Application forms, obtainable from Medical Officer of Health, S.D.2, County Hall, S.E.1 (stamped foolscap envelope necessary), must be returned by March 1, 1948.

Canvassing disqualifies. (356)

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
WHOLE-TIME REGISTRAR (B1) (Non-resident)
to the Casualty Department at the General Hospital

Applications are invited for the post of whole-time Registrar to the Casualty Department at the General Hospital (non-resident) B1. Candidates must be registered medical practitioners and preference will be given to those holding a higher qualification. Salary £500 per annum. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications should be sent to the undersigned (from whom all further information may be obtained) not later than March 24.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM ACCIDENT HOSPITAL
Bath Row, Birmingham, 15
HOUSE SURGEON (B2)
for the Medical Research Council Burns Unit

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2) now vacant, including R practitioners who now hold A posts. The appointment will be for six months. The salary for newly qualified practitioners is at the rate of £200 per annum, with full residential emoluments. The salary for practitioners who have already held hospital appointments is at the rate of £300 per annum with full residential emoluments.—W. George Spencer, Secretary.

BIRMINGHAM AND MIDLAND EAR AND THROAT HOSPITAL
Edmund Street, Birmingham, 3 (76 beds)
HOUSE SURGEON (A)

Applications are invited for the appointment of a House Surgeon (A). Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts appointment will be for a period of six months. Duties to commence March 15, 1948. Salary at the rate of £250 per annum with full residential emoluments. Applications should be forwarded to the undersigned immediately.—W. H. Lomas, House Governor.

BROCKHALL CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Langho, near Blackburn, Lancs
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female), including R practitioners holding B2 and (if ineligible for H.M. Forces) those holding B1 appointments, for the post of Assistant Medical Officer (B1). Salary £465 rising by annual increments of £30 to £555 per annum, with full residential emoluments valued at £200 per annum. An additional £50 per annum is payable to holders of the D.P.M. or recognized equivalent, together with the current cost-of-living bonus. There is no accommodation at present for a married man. The appointment will be pensionable and the successful applicant will be required to pass a medical examination. The Institution is modern, fully equipped and accommodates 1,996 patients, affording extensive experience in mental deficiency practice. Applications giving the usual particulars should be sent to the Medical Superintendent as soon as possible

BRISTOL MENTAL HOSPITALS
BARROW HOSPITAL
SENIOR PSYCHIATRIC PHYSICIAN and/or DEPUTY MEDICAL SUPERINTENDENT

Applications are invited for the post of Senior Psychiatric Physician to the Barrow Hospital (Barrow Gurney) unit of Bristol Mental Hospital. A candidate might be nominated for the post of Deputy Medical Superintendent, now vacant, if of sufficient experience. Salary scale, according to qualifications and experience, will be within the range of £1,150 to £1,500 (which includes £50 for D.P.M.), plus cost-of-living bonus and house, coal, light and laundry, valued for superannuation purposes at £250 per annum. Applicants must possess the D.P.M. and should have a higher qualification as well. The post offers considerable opportunities in all branches of general psychiatry, research, and clinical teaching. The hospital has departments of electro-encephalography and psychology, with clinical research laboratories now being extended; the main research unit at present is at the old hospital at Fishponds. Applications should be sent as soon as possible to the Medical Superintendent, Bristol Mental Hospital, Fishponds, Bristol.

BIRKENHEAD GENERAL HOSPITAL

Applications are invited from resident medical practitioners (male or female) including R practitioners holding A posts, for the following resident appointment, vacant on April 1, 1948.

CASUALTY OFFICER (B2). Salary £200 per annum.

The appointment is with full residential emoluments, and, in the first instance, for a period of six months terminating on September 30, 1948, but this may be extended by mutual arrangement. If an R practitioner is appointed the period will be limited to six months. Membership of a Medical Defence Society is a condition of appointment. Applications should be sent to the undersigned as soon as possible.—H. Hewitt Cooke, Secretary-Superintendent.

BERKSHIRE MENTAL HOSPITAL, Wallingford
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Medical Officer (B1). Commencing salary £550, rising by annual increments of £25 to £650 per annum, together with board, furnished apartments, and laundry valued at £130 per annum. Additional amount of £50 per annum is payable if in possession of the D.P.M. There is no married accommodation available, but, if non-resident, emoluments will be adjusted accordingly. Applications from R practitioners now holding B1 posts cannot be considered unless they are ineligible for H.M. Forces. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Applications, in writing, should reach the Medical Superintendent as soon as possible.

BRIDGWATER AND DISTRICT GENERAL HOSPITAL
HONORARY PHYSICIAN

Applications are invited for the post of Honorary Physician, on the staff of the above hospital. Applicants must be full time consultants and be members of the Royal College of Physicians, London, or Graduates in Medicine of a University of which the Degree is recognized by the General Medical Council. They must be residents within the district. Applications to be sent to the Chairman of the Management Committee of the Bridgwater and District General Hospital, Bridgwater, Somerset, within the next fourteen days.

BURY INFIRMARY, Lancashire (159 beds)
HOUSE SURGEON (A) (Gynaecology and Obstetrics) and HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (Gynaecology and Obstetrics) (A) and House Physician (A), which posts will become vacant early in March, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by practitioners who are liable under the National Service Acts the appointments will be for six months; otherwise renewable. Salary at the rate of £200 per annum in each instance, with full residential emoluments. Applications to the undersigned as soon as possible.—H. Wilkinson, Superintendent.

CUMBERLAND INFIRMARY, Carlisle (289 beds)

Applications are invited from registered medical practitioners for the post of:—

CASUALTY OFFICER AND ORTHOPAEDIC HOUSE SURGEON (B2)

including R practitioners who hold A posts. Salary at the rate of £240 per annum, with full residential emoluments.

And for the following A or B2 posts:

HOUSE PHYSICIAN

THREE HOUSE SURGEONS (one combining General Surgery with Ear, Nose and Throat duties, one with Ophthalmic duties and one with Gynaecological duties)

including R practitioners within three months of qualification who are liable under the National Service Acts and R practitioners who hold A posts. Salary in each case at the rate of £175 per annum, with full residential emoluments. The appointments are for a period of six months from April 1, 1948. Applications must be made on forms obtainable from the undersigned, and must be received by February 28, 1948.—K. C. Booker, Secretary-Superintendent.

CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE, Manchester, 20
RESIDENT RADIOLOGICAL OFFICER (B1)
ASSISTANT RESIDENT RADIOLOGICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for appointments as Resident Radiological Officer (B1) and Assistant Resident Radiological Officer (B2) to the Radiotherapy Department. The appointments are for six months commencing April 1. Salary in each case is at the rate of £200 per annum, with full residential emoluments. The positions will enable the holders of the appointments to gain useful introductory experience in the practice of deep X-ray Therapy and Radium treatment. Applications from R practitioners now holding B1 posts cannot be considered for the B1 appointment unless they are ineligible for H.M. Forces. R practitioners holding A posts may apply for the B2 appointment. Applications with the names of three persons to whom reference may be made should be sent before February 28, 1948, to A. H. Keates, Superintendent.

CITY MENTAL HOSPITAL
Winson Green, Birmingham, 18
SENIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Senior Assistant Medical Officer (B1). Candidates should possess the Diploma in Psychological Medicine and have practical experience of modern methods of treatment. Commencing salary £617 10s., rising to £667 10s., together with cost-of-living bonus at present £59 19s. and residential emoluments valued at £150. Holders of the D.P.M. will be paid £50 in addition. There will be a house available. Bonus, in cash, will be payable at reduced rates in accordance with the type of emoluments provided, the balance being added to the value of emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply. Applications, accompanied by two testimonials, to be addressed to the Medical Superintendent not later than March 8, 1948.

CARDIFF ROYAL INFIRMARY
(Teaching Hospital of the Welsh National School of Medicine)
MEDICAL or SURGICAL OFFICER
in Charge of the Physiotherapy Department

Applications are invited for the appointment of a Medical or Surgical Officer in Charge of the Physiotherapy Department. Candidates must hold a higher qualification and the appointment will be either part-time or full-time. The Regulations provide that the successful candidate shall confine himself to his speciality, but if a part-time appointment is made, he shall be permitted to engage in private work. Salary £1,500 to £2,000 per annum for a full-time appointment; £700 per annum for a part-time appointment. Applications should be sent to the undersigned not later than March 22, 1948. Candidates are required to submit fifty copies of their applications and testimonials.—Arnold Tunstall, House Governor.

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital—200 beds)
RESIDENT ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic Officer (B2), including R practitioners who hold A posts. Salary £250 per annum, with full residential emoluments. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL
FULL-TIME REGISTRAR (B1) (non-resident)
to the Ear, Nose and Throat Department

Applications are invited from medical practitioners (male or female) suitably qualified and experienced for the post of non-resident Registrar (B1) to the Ear, Nose and Throat Department. The work of this Department is exceptionally heavy both in regard to out-patient consultative and treatment services and in-patient operative services and the post offers considerable scope to one intending to specialize in Otorhinolaryngology. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months in the first instance; salary at the rate of £800 per annum. Applications, stating full details as to age, married or single, nationality, medical training, qualifications and experience and accompanied by copies of testimonials, should be addressed to the House Governor, Coventry and Warwickshire Hospital, Coventry.

COVENTRY AND WARWICKSHIRE HOSPITAL
RESIDENT FRACTURE AND ORTHOPAEDIC REGISTRAR (B1)

Applications are invited from medical practitioners (male) for the post of Resident Orthopaedic and Fracture Registrar (B1). Salary at the rate of £500 per annum, with full residential emoluments. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Applications should be addressed to the House Governor and Secretary, Coventry and Warwickshire Hospital, Coventry.

CITY LODGE HOSPITAL
Cowbridge Road, Cardiff
ASSISTANT MEDICAL OFFICER (B2)
Maternity Department

Applications are invited from registered practitioners, including R practitioners holding A posts, for the appointment of Assistant Medical Officer (B2), Maternity Department, City Lodge Hospital. Salary £250 per annum, plus proportionate cost-of-living bonus and full residential emoluments. To R practitioners the appointment is limited to six months. Applications, stating age, qualifications, etc., with copies of two recent testimonials and the names of two referees, to be sent immediately to the Medical Officer of Health, City Hall, Cardiff.

CITY HOSPITAL, Chester
RESIDENT MEDICAL OFFICER
HOUSE PHYSICIAN (A)

Applications are invited for the post of Resident Medical Officer (House Physician) (A) for the above General Hospital, to take up duty on March 1, 1948, or as soon after as possible. Salary £200 per annum plus residential emoluments and cost-of-living bonus. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months. Applications should be sent immediately to the Medical Officer of Health, Town Hall, Chester. Relationship to members or senior officials of the Council must be disclosed.—G. Burkinshaw, Town Clerk.

CITY OF YORK GENERAL HOSPITAL
Haxby Road, York
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer (B1). Salary at present £455 per annum, rising to £555 per annum plus cost-of-living bonus and full residential emoluments. The appointment to be for six months in the first place and if satisfactory thereafter on one month's notice on either side, and subject to the Local Government Superannuation Act and the passing of a medical examination. The duties of the person appointed will be mainly medical and preference will be given to applicants interested in Pathology and Bacteriology. Suitably qualified R practitioners holding B2 appointments and also R practitioners holding B1 appointments who have been rejected by the Services may apply. Applications as soon as possible to the Medical Superintendent.

CITY OF YORK GENERAL HOSPITAL
Haxby Road, York

Applications from registered medical practitioners are invited for the following posts:—

HOUSE PHYSICIAN (A) (including children's beds) This post becomes vacant on April 14, 1948.

HOUSE SURGEON (A). This post becomes vacant on April 24, 1948. The salaries of the above posts are £270 per annum respectively, plus cost-of-living bonus and full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply. Applications should be sent to the Medical Superintendent as soon as possible.

CHARING CROSS HOSPITAL
RESIDENT HOUSE PHYSICIAN (B2)
Children's and Dermatological Departments

Applications including those from R practitioners holding A posts are invited for the post of House Physician (B2) for the Children's and Dermatological Departments. Commencing March 15, 1948. Salary £200 per annum with full board, lodging, laundry, etc. If held by an R practitioner the appointment will be limited to six months. Applications, with names of three referees to be sent to the undersigned immediately.—George J. Jones, House Governor, Charing Cross Hospital, Agar Street, Strand, W.C.2.

CANADIAN RED CROSS MEMORIAL HOSPITAL, Taplow, Maidenhead, Berks
RESEARCH BACTERIOLOGIST
(whole-time non-resident)

Applications are invited for the post of whole-time non-resident Research Bacteriologist in the special unit of the hospital. The hospital will ultimately have over 400 beds (at present 235) Approximately half of these are devoted to the special unit for the study and treatment of juvenile rheumatism. Salary to be at a point according to experience on the scale £900, rising by annual increments of £50 to £1,100 a year with membership of the Federated Superannuation Scheme. Applications in writing, stating nationality, age, qualifications and experience with the names of three persons to whom reference may be made, should reach the undersigned within seven days of this advertisement.—John R. Griffith, House Governor.

CANADIAN RED CROSS MEMORIAL HOSPITAL, Taplow, Maidenhead, Berks
OBSTETRICAL HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of Obstetrical House Surgeon (B2) for Maternity Unit of new Hospital. Preference will be given to candidates who have had previous midwifery experience. Salary £200 per annum plus residential emoluments Appointment for six months. R practitioners holding A posts may apply. Applications with copies of two recent testimonials should be sent immediately to the undersigned.—John R Griffith House Governor.

CHILDREN'S HOSPITAL
King Edward VII Memorial, Birmingham, 16
MORBID ANATOMIST

Applications are invited for the post of Morbid Anatomist. Applicants, who will be in charge of the Department of Morbid Anatomy, must be registered medical practitioners with hospital experience, and preferably holding one of the higher qualifications The commencing salary will be determined by the experience and qualifications of applicants, within a range of £800 per annum to £1,800 per annum Further details of this appointment can be obtained from the undersigned, to whom applications and testimonials (50 copies) should be submitted not later than March 15, 1948 —N R. Winwood, House Governor.

CONNAUGHT HOSPITAL, Walthamstow, E.17

Applications are invited from registered medical practitioners (male) for the following two positions each tenable for six months from March 15, 1948.

CASUALTY OFFICER (A), including practitioners within three months of qualification and who are liable for service under the National Service Acts. Salary with full residential emoluments at the rate of £120 per annum.

RESIDENT ANAESTHETIST (B2), including R practitioners holding A posts Salary of £200 per annum. The hospital is recognized by the Royal College of Surgeons for the Diploma in Anaesthetics If held by an R practitioner the appointment will be limited to six months. Applications should be sent to R. Halton Harrison, General Secretary.

CONNAUGHT HOSPITAL, Walthamstow, E.17
CLINICAL ASSISTANT
Ear, Nose and Throat Department

Applications are invited from registered medical practitioners for the appointment of Clinical Assistant for the Ear, Nose and Throat Department to attend one Out-Patient session per week (Thursday 2 p.m.) Sessional fee of £2 12s. 6d. attaches to the appointment. Candidates must hold the Fellowship of one of the Royal Colleges of Surgeons. Applications with names and addresses of two referees to be sent to the undersigned not later than March 5, 1948.—R. Halton Harrison, General Secretary.

COUNTY MENTAL HOSPITAL
Lancaster (3,000 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the post of House Physician (B2). Salary £300 per annum with full residential emoluments. The appointment will be limited to six months but may be extended to twelve months unless held by an R practitioner. Previous general hospital experience desirable. The persons appointed will work under the direction of Senior Psychiatrists. Apply Medical Superintendent.

DERBYSHIRE ROYAL INFIRMARY, Derby

Applications are invited from registered medical practitioners for the following posts:—

ORTHOPAEDIC AND ACCIDENT SERVICE—
HOUSE SURGEON (B2), vacant March 9, 1948
CASUALTY OFFICER (A), vacant immediately.

The two posts form part of the Surgical team and duties may be alternated to allow officers to gain experience of primary and final treatment in the wards. Salary in each case £200 per annum with full residential emoluments. Six months' appointments. For the A post practitioners within three months of qualification may apply and for the B2 post R practitioners who hold A posts may apply. Applications to be sent to the undersigned as early as possible.—Arthur Taylor, Superintendent and Secretary.

Have you read the notice at top of page 13 ?

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CARLTON HAYES HOSPITAL
Narborough, near Leicester
ASSISTANT PHYSICIAN

The inclusive commencing salary will be £760 per annum, rising by £25 per annum to £860, but £50 extra will be given for the possession of the Diploma in Psychological Medicine. A house is available for a married man at a rental of £30 per annum. Forms of application can be obtained from the Medical Superintendent and these should be completed and returned as soon as possible.

DONCASTER ROYAL INFIRMARY (330 beds)
(Recognized under the Regulations for the D.O.)
EYE AND EAR, NOSE AND THROAT HOUSE SURGEON (A) (male)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification and liable under the National Service Acts, for an Eye and Ear, Nose and Throat House Surgeon (A) (male). The appointment will be limited to six months. Salary £225 per annum, with full residential emoluments. This large industrial area offers excellent opportunities for gaining experience. Applications should be sent immediately to A. Jones, Secretary-Superintendent.

DONCASTER ROYAL INFIRMARY (330 beds)
HOUSE SURGEON (A) (male)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) (male), including R practitioners within three months of qualification. If held by an R practitioner, appointment will be for a period of six months. Salary is at the rate of £225 per annum, with full residential emoluments. Applications should be sent immediately, addressed to the Secretary-Superintendent.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited from medical practitioners (male and female) for the post of Senior Resident Medical Officer (B1) for a period of six months in the first instance, from May 1, 1948. Salary £350 per annum with full emoluments. Candidates must have experience in paediatrics and higher qualifications are desirable. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces, may apply. Applications to be sent by March 8, 1948, to Louise Gillespie, Secretary.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from medical practitioners (male and female), including practitioners within three months of qualification and liable under the National Service Acts, for the post of Junior Resident Medical Officer (A) for six months from April 16, 1948. Salary £150 per annum with full emoluments. Applications to be sent by March 8, 1948, to Louise Gillespie, Secretary.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19
HONORARY ASSISTANT PHYSICIAN

Applications are invited for the post of Honorary Assistant Physician with beds and to do Out-patient sessions. Applications to be sent by March 1, 1948, to Louise Gillespie, Secretary.

DEWSBURY AND DISTRICT GENERAL INFIRMARY, Dewsbury
RESIDENT HOUSE PHYSICIAN (A)
(Male or Female)

Vacant April 10, 1948. Appointment for six months in first instance. Salary £200 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment would be limited to six months. Applications to be sent as soon as possible to G. W. Batchelor, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification, who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

ESSEX COUNTY HOSPITAL
Colchester (201 beds)
CASUALTY OFFICER AND HOUSE SURGEON (A) to E.N.T. Department

Applications are invited for the post of Casualty Officer and House Surgeon (A) to E.N.T. Dept., including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointment is approved under D.L.O. arrangements. The appointment will be for six months, salary £170 per annum and residential emoluments. Applications should be forwarded to the House Governor.

DURHAM COUNTY HOSPITAL
North Road, Durham City (12 beds)
RESIDENT HOUSE SURGEON (B2) (Male)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the appointment of a Resident House Surgeon (B2) (male). The appointment is for six months, duties to commence on or about April 20, 1948. Salary at the rate of £250 per annum with full residential emoluments. Applications to be sent immediately to the Secretary-Superintendent.

ECCLES AND PATRICROFT HOSPITAL
Eccles, Manchester (88 beds)
HOUSE SURGEON (B2)

House Surgeon (B2) required, six months' appointment. R practitioners holding A posts may apply. Salary at the rate of £300 per annum plus full residential emoluments. Surgical, Medical and Obstetric Units. Apply Secretary as above.

FINCHLEY MEMORIAL HOSPITAL
Granville Road, London, N.12 (84 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Medical Officer (B2), vacant March 1 next, including R practitioners who now hold A posts. Appointments will be for a period of six months at the rate of £200 per annum, with full residential emoluments. Applications should be sent immediately to the undersigned.—T. E. Jarvis, House Governor and Secretary.

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A) vacant now, including practitioners within three months of qualification who are liable for service under the National Service Acts. Salary £200 per annum with full residential emoluments. If held by an R practitioner, appointment will be limited to six months. Applications to the undersigned immediately.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE SURGEON (A)
(E.N.T., Gynaecological, etc.)

Applications are invited for the post of House Surgeon (A) for duty with special departments, i.e. E.N.T., Gynaecological, etc., vacant now. Salary £200 per annum with full residential emoluments. The appointment will be for six months in the first instance but will be terminable by one month's notice on either side. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to H. B. Coates, Secretary Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL
ACCIDENT SERVICE AND ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Accident Service and Orthopaedic Officer (B2), including R practitioners who hold A posts. If held by an R practitioner this post will be limited to six months. Salary is at the rate of £300 per annum with full residential emoluments. Post vacant on March 16, 1948. Applications should be sent to the undersigned.—H. B. Coates, Secretary-Superintendent.

GRIMSBY AND DISTRICT GENERAL HOSPITAL (220 beds)
HOUSE PHYSICIAN (A)

Applications are invited for the post of House Physician (A), vacant February 16. Salary £200 per annum with full residential emoluments. The appointment will be for six months in the first instance but will be terminable by one month's notice on either side. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to H. B. Coates, Secretary-Superintendent.

GENERAL INFIRMARY AT LEEDS
HONORARY ASSISTANT SURGEON
to the Thoracic Surgical Department

Applications are invited from Fellows of the Royal College of Surgeons of England, with special experience in Thoracic Surgery, for the post of Honorary Assistant Surgeon to the Thoracic Surgical Department. Information relating to the post will be supplied on reference to the House Governor. Suitably qualified practitioners serving with His Majesty's Forces are eligible to apply. Thirty-five copies of applications, with a similar number of copies of three recent testimonials, should reach the undersigned not later than March 31. Neither applications nor testimonials need be printed.—S. Clayton Fryers, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham (589 beds)
JUNIOR CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification who are liable to service under the National Service Acts, for the appointment of Junior Casualty Officer (A) for the above hospital. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned. Duties to commence about February 24.—Henry M. Stanley, House Governor and Secretary.

GENERAL INFIRMARY AT LEEDS
HONORARY ASSISTANT PHYSICIAN

Applications are invited for the post of Honorary Assistant Physician to the General Infirmary at Leeds. Candidates must hold a degree in Medicine of a British University and be Fellows or Members of the Royal College of Physicians of London. Information relating to the post will be supplied on reference to the House Governor. Suitably qualified practitioners serving with His Majesty's Forces are eligible to apply. Thirty-five copies of applications, with a similar number of copies of three recent testimonials, should reach the undersigned not later than March 31. Neither applications nor testimonials need be printed.—S. Clayton Fryers, House Governor and Secretary.

GENERAL INFIRMARY AT LEEDS
HONORARY AURAL SURGEON

Applications are invited from Fellows of the Royal College of Surgeons of England for the post of Honorary Aural Surgeon to the General Infirmary at Leeds. Information relating to the post will be supplied on reference to the House Governor. Suitably qualified practitioners serving with His Majesty's Forces are eligible to apply. Thirty-five copies of applications, with a similar number of copies of three recent testimonials, should reach the undersigned not later than March 31.—S Clayton Fryers, House Governor and Secretary.

GRAYLINGWELL HOSPITAL, Chichester
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (ladies or gentlemen), including R practitioners holding A posts, for the appointment of House Physician (B2). The post provides special facilities in the hospital for organized tuition and practice of modern psychiatry. The salary is at the rate of £350 per annum, with full residential emoluments. The appointment will be limited to a period of six months but, unless held by an R practitioner, may be extended to twelve months. Applications to be sent to the Medical Superintendent as soon as possible.

GREAT YARMOUTH AND GORLESTON HOSPITALS
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) (male), now vacant, including practitioners within three months of qualification, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £250 per annum, with full residential emoluments. Applications should be sent to John S Egerton, Secretary-Superintendent, immediately.

GLOUCESTERSHIRE ROYAL INFIRMARY
Gloucester
CASUALTY HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male or female), including R practitioners who hold A posts, for the post of Casualty House Surgeon (B2), which will become vacant on March 7, 1948. Salary is at the rate of £250 per annum, with full residential emoluments, and the appointment is for six months in the first instance. Applications should be sent to C. J. Adams, House Governor and Secretary, Royal Infirmary, Gloucester, as soon as possible.

GERMAN HOSPITAL, Dalston, London, E.8
(British Voluntary Hospital)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of House Surgeon (B2), vacant March 1, 1948. Salary £200 per annum to start with, with full residential emoluments. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications to be sent to the Secretary

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)

RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty on April 1, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150 with full residential emoluments.

HOUSE SURGEON (A) required to commence duty on March 18, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)
RESIDENT SURGICAL OFFICER (B1)

Immediate applications are invited from medical practitioners (male) for the post of Resident Surgical Officer (B1). Applicants should have held house appointments and have had surgical experience. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £250 per annum, with full residential emoluments. The appointment is for twelve months, and applications should be sent to the undersigned.—T. W. Upton, Secretary.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts :—

RESIDENT JUNIOR HOUSE SURGEON (A). In charge of Casualty, Ear, Nose and Throat, and Fracture Department. Salary £200 per annum.

HOUSE PHYSICIAN (A). Salary £200 per annum.

Practitioners within three months of qualification and liable to service under the National Service Acts are invited to apply.

The appointments are for six months. Applications should be sent to T. W. Upton, Secretary.

HOSPITAL OF ST. CROSS, Rugby

Applications are invited from registered medical practitioners, male and female, for the following resident appointments :—

HOUSE PHYSICIAN (B1), vacant March 1, 1948. Salary £300 per annum.

HOUSE SURGEON (A), vacant May 1, 1948. Salary £175 per annum.

ORTHOPAEDIC HOUSE SURGEON (A), vacant May 1, 1948. Salary £175 per annum.

HOUSE SURGEON (B2) for Gynaecological and Obstetric Department, vacant May 1, 1948. Salary £200 per annum.

Practitioners within three months of qualification who are liable under the National Service Acts may apply for the A appointments. R practitioners holding A posts may apply for the B2 appointment. For practitioners in either of these classes the appointments will be limited to six months. Applications for the B1 appointment from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces Applications to be sent to the House Governor immediately.

HARROGATE AND DISTRICT GENERAL HOSPITAL (272 beds)

Applications are invited from registered medical practitioners for the following appointments :—

HOUSE PHYSICIAN (A), vacant April 1, 1948.

HOUSE PHYSICIAN/RESIDENT PATHOLOGIST (A), vacant April 1, 1948.

R practitioners within three months of qualification may apply. The appointments are for a period of six months. Salary at the rate of £150 per annum with full residential emoluments. Applications to the House Governor as soon as possible.

HOSPITAL OF ST. CROSS, Rugby (195 beds)
RADIOLOGIST

The Board of Management invite applications from duly qualified medical men for the post of Radiologist. Salary £1,000 per annum with private practice. Applications to the House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
Assistant RESIDENT MEDICAL OFFICER (B1) at the Country Branch Hospital, Hadworth, Surrey

There is a vacancy for an Assistant Resident Medical Officer (B1) at the Country Branch Hospital, Tadworth, Surrey, 101 beds; duties to commence on April 15, 1948. Salary £200 per annum, with full residential emoluments. R practitioners now holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Further particulars, and form of application, which must be returned not later than Monday, March 8, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1

There will be vacancies on April 15, 1948, for the following :—

TWO HOUSE PHYSICIANS (B2)
ONE HOUSE SURGEON (B2)
ONE HOUSE SURGEON (B2)
to the Ear, Nose and Throat Department

All appointments are tenable for six months at a salary of £100 per annum with full residential emoluments. R practitioners now holding A posts and practitioners of either sex, ineligible for military service or rejected by the R.A.M.C., may apply. Further particulars and form of application, which must be returned not later than March 8, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HULL ROYAL INFIRMARY

Applications are invited for the following posts (male) :—

FIRST HOUSE SURGEON (B2), vacant now.

HOUSE PHYSICIAN (B2) at Sutton Branch.

HOUSE SURGEON (B2), Sutton Branch.

Both posts vacant April. Suitably qualified R practitioners who now hold A posts may apply.

CASUALTY OFFICER (A), vacant April. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.

Salary for each of the above posts £200 per annum, with full residential emoluments. The appointments will be for six months in the first instance (limited to six months if R practitioners are appointed), but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HARROW HOSPITAL
SENIOR HOUSE SURGEON (B2)

Applications are invited for the appointment of a Senior House Surgeon (B2) becoming vacant on March 9, 1948, including R practitioners who now hold A posts. The appointment will be for a period of six months. The salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent as soon as possible to the Secretary, Harrow Hospital, Roxeth Hill, Harrow, Middlesex.

HOSPITAL OF ST. JOHN AND ST. ELIZABETH
60, Grove End Road, N.W.8
SURGEON-IN-CHARGE
of the Department for Diseases of the Ear, Nose and Throat

Applications are invited for the post of Surgeon in charge of the Department for Diseases of the Ear, Nose and Throat. Candidates must be Fellows of one of the Royal Colleges of Surgeons. Twenty-five copies of the application should be sent to the undersigned on or before March 23, 1948. Testimonials are not required but the names of three persons willing to act as referees should be furnished.—F. Dudley Hobbs, M.A., Secretary.

KING GEORGE HOSPITAL, Ilford
RESIDENT ANAESTHETIST

Applications, including applications from practitioners within three months of qualification who are liable under the National Service Acts, and from R practitioners holding A appointments, are invited for the post of Resident Anaesthetist Grade A or B according to experience, for six months commencing April 12, 1948. Salary is at the rate of £180 or £350 per annum. Applications should be sent to the undersigned as soon as possible.—G. Austin Hepworth, Secretary and Superintendent.

Have you read the notice at top of page 13 ?

ABSTRACTS OF WORLD MEDICINE

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ABSTRACTS OF WORLD SURGERY, OBSTETRICS AND GYNAECOLOGY

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Have you read the notice at top of page 13 ?

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)

Applications are invited from registered medical practitioners for the following posts:—

RESIDENT MEDICAL OFFICER (B2), vacant March 1, 1948. This appointment is for six months at a salary of £225 per annum with full residential emoluments. R practitioners holding A posts may apply.

HOUSE SURGEON (A), vacant March 1, 1948. Salary £175 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications, with testimonials, to E. Barber, Secretary.

HORTON GENERAL HOSPITAL, Banbury, Oxon (220 beds)
(Oxford Hospital Board Area)

Applications are invited from registered medical practitioners (male or female) for the appointment of **JUNIOR RESIDENT HOUSE SURGEON (A).** Salary at the rate of £200 per annum with full residential emoluments. Appointment, which is for six months, is now vacant. Practitioners within three months of qualification and liable for National Service may apply.

TEMPORARY RESIDENT HOUSE SURGEON (B1). Post vacant for three months commencing on March 1. Salary at the rate of £350 with full residential emoluments. Applications with testimonials should be sent at an early date to Richard H. Prescott. House Governor.

HALIFAX GENERAL HOSPITAL
RESIDENT OBSTETRICAL OFFICER

Applications are invited from registered medical practitioners, men and women, for the post of Resident Obstetrical Officer at the above hospital. The post is recognized for the M.R.C.O.G. and is for six months. There are 100 maternity beds and 35 gynaecological beds : over 2,000 deliveries are dealt with per annum. The salary is £485 per annum, together with full residential emoluments. Previous obstetric experience is essential. The successful candidate will be expected to take up duties during March, 1948. Applications should be sent as soon as possible to the Medical Superintendent, General Hospital, Halifax, Yorks.

HARLOW WOOD ORTHOPAEDIC HOSPITAL
Nr. Mansfield, Notts (355 beds)
E.M.S. and Civilian (Regional Orthopaedic Centre)
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2), including R practitioners who now hold A posts. Appointment will be for a period of six months. Salary, with full residential emoluments, at the rate of £200 per annum. The hospital is recognized under the Government's scheme for the Postgraduate Education of Medical Officers released from the Forces and falling within Classes I and III, where applicable. Applications to be sent to the undersigned.—D. Roberts, Secretary-Superintendent.

HOSPITAL OF ST. JOHN AND ST. ELIZABETH
60, Grove End Road, N.W.8
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) to become vacant on Monday, March 15, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts. Appointment will be for a period of six months. Salary is at the rate of £150 per annum with full residential emoluments. Applications should reach the undersigned on or before Thursday, February 26, 1948.—F. Dudley Hobbs, M.A., Secretary.

KNOWLE MENTAL HOSPITAL, Fareham, Hants
DEPUTY MEDICAL SUPERINTENDENT (Male)

Applications are invited for the post of Deputy Medical Superintendent (male) at the above hospital. Candidates must be in possession of the D.P.M. and have had considerable experience in Psychiatry. The salary will be £1,100 per annum, with cost-of-living allowance of £49 16s. 8d., plus emoluments consisting of house, rates, water, fuel and light valued at £109 19s. 4d. per annum. The person appointed will be subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Applications should be made on a form which can be obtained from the Medical Superintendent, Knowle Mental Hospital, Fareham, Hants, and should be returned not later than March 5, 1948.

KENT AND SUSSEX HOSPITAL
Tunbridge Wells (350 beds)

Applications are invited from registered medical practitioners (male or female) including R practitioners who hold A posts for the following appointment:—

RESIDENT HOUSE SURGEON and CASUALTY OFFICER (B2), vacant on March 8.

If held by an R practitioner the appointment will be limited to six months. This post is mainly Orthopaedic and an excellent one for working for Primary or Final F.R.C.S Salary £200 per annum with full residential emoluments.—E. A. Wagstaff, Superintendent-Secretary.

INGHAM INFIRMARY, South Shields
HOUSE SURGEON (A)
CASUALTY OFFICER AND "SPECIALS" HOUSE SURGEON (A)

Applications are invited from medical practitioners, including those within three months of qualification and liable under the National Service Acts, for the posts of (1) House Surgeon (A), and (2) Casualty Officer and "Specials" House Surgeon (A) now vacant. The appointments are for a period of six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned.—R. Hood Coulthard Jr., House Governor and Secretary.

KNOWLE MENTAL HOSPITAL, Fareham, Hants
WHOLE-TIME SENIOR PSYCHIATRIST

Applications are invited for the whole-time post of Senior Psychiatrist at the above hospital. Applicants must have had considerable mental hospital experience, be fully conversant with modern methods of treatment in Psychiatry and with out-patient work. A D.P.M. is essential and a higher medical qualification is desirable. The successful candidate, whilst having beds under his care in the hospital, will be expected to devote a considerable portion of his time to work in Out-Patient Clinics. A car is essential and travelling allowance will be paid. The salary will be £1,200 per annum, plus £59 16s. cost-of-living allowance. There are no emoluments, but quarters are available for a single man, for which deductions will be made. A married man would be required to live within a reasonable distance of the hospital. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Applications, together with the names of three referees, should be addressed to the Medical Superintendent, Knowle Mental Hospital, Fareham, Hants, to arrive not later than March 5, 1948.

KENT AND CANTERBURY HOSPITAL,
Canterbury (221 beds—5 Resident Medical Officers)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by practitioners who are liable under these Acts, appointment will be for a period of six months. The salary is £200 per annum, with full residential emoluments. Duties include work for the Ophthalmic and Ear, Nose and Throat Specialists, and Casualty Department. This appointment commences early in April, 1948. Applications should be sent to the Superintendent and Secretary immediately.

KING EDWARD MEMORIAL HOSPITAL, Ealing
HOUSE SURGEON (A)
to the Orthopaedic and Fracture Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A) to the Orthopaedic and Fracture Department, vacant now. Six months appointment. Salary at the rate of £175 per annum with full residential emoluments. Applications together with copies of two recent testimonials should be sent to the undersigned immediately.—R. A. Mickelwright, House Governor.

KING EDWARD VII HOSPITAL
Windsor (200 beds)
CASUALTY OFFICER

Applications are invited from registered medical practitioners (male or female) for the appointment of Casualty Officer, to become vacant on April 13, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £150 per annum with full residential emoluments. The duties include assistant to the Resident Accident Service Officer, also House Surgeon to Eye and Dental Departments. Applications should be sent to the Secretary as soon as possible.

MONMOUTHSHIRE MENTAL HOSPITAL
Abergavenny
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from unmarried male or female medical practitioners for the whole-time appointment of Assistant Medical Officer (B1) at the above hospital. Salary £455 per annum rising by £25 to £555 plus full residential emoluments valued at £150 per annum, plus cost-of-living bonus. An additional £50 will be paid to holders of the D.P.M. The appointment will be subject to the Asylums' Officers' Superannuation Act, 1909. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications to be sent in writing to the Medical Superintendent by Saturday, February 28, 1948. Previous experience of mental hospital work not essential.

MAIDA VALE HOSPITAL FOR NERVOUS DISEASES, London, W.9
FULL-TIME PATHOLOGIST

Applicants must have full training and specialised experience in Neuro-Pathology. The successful candidate will be expected to undertake Postgraduate teaching. Salary will be at the rate of £1,800 to £2,000 per annum, according to qualifications and experience. Applications with the names of two referees, should be addressed to the Secretary not later than March 20, 1948.

LEICESTER ROYAL INFIRMARY
(650 Beds, 18 Residents)

Invites candidates for the following vacancies on April 1, 1948.

	Salary p.a
3 RESIDENT HOUSE SURGEONS (A)	£150
1 ORTHOPAEDIC HOUSE SURGEON (B2)	£200
1 EAR, NOSE AND THROAT HOUSE SURGEON (A)	£150
1 GYNAECOLOGICAL HOUSE SURGEON (A)	£150
1 OBSTETRIC HOUSE SURGEON (A) (Maternity Hospital, Causeway Lane Leicester)	£150
1 RESIDENT HOUSE PHYSICIAN (A)	£175
1 JUNIOR CASUALTY OFFICER (A)	£150
1 RESIDENT ANAESTHETIST (B2)	£200

Six months' appointments, all with full residential emoluments. For the A appointments practitioners within three months of qualification and liable under the National Service Acts may apply. For the B2 appointments R practitioners holding A posts may apply. Applications should be forwarded to the House Governor or Secretary on or before March 1.

LIVERPOOL RADIUM INSTITUTE
SECOND HONORARY DERMATOLOGIST

The Board of Management will shortly proceed to the appointment of a second Honorary Dermatologist. Applications are invited and should reach the undersigned by March 15.—Frank Dean, F.C.I.S., Secretary-Superintendent.

MILLER GENERAL HOSPITAL
Greenwich High Road, S.E.10
1st and 2nd HOUSE SURGEONS (B2)

Applications are invited from registered medical practitioners (male) for the appointments of 1st and 2nd House Surgeons (B2) to become vacant on April 1, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Form of application can be obtained from the Secretary. Applications to be submitted not later than February 28, 1948.

MILLER GENERAL HOSPITAL
Greenwich High Road, S.E.10
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (male) for the appointment of House Physician (B2) to become vacant on April 1, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Form of application can be obtained from the Secretary. Applications to be submitted not later than February 28, 1948.

MIDDLESEX HOSPITAL, W.1
ACTING REGISTRAR (B1)
to the Department for Nervous Diseases

Applications are invited for the appointment of Acting Registrar to the Department for Nervous Diseases (B1). The appointment will be until December 31, 1948, in the first instance, and the successful candidate will be eligible to apply for re-appointment. Initial salary £600 per annum, non-resident. R practitioners holding B2 appointments may apply. R practitioners holding B1 appointments are ineligible unless rejected for service with H.M. Forces. Copies of the rules and forms of application are obtainable from the Secretary-Superintendent to whom applications with copies of testimonials should be submitted by March 13, 1948.

NATIONAL HOSPITAL FOR NERVOUS DISEASES, Queen Square, London, W.C.1
HOUSE PHYSICIAN (B1)

Applications are invited from registered medical practitioners for the appointment of House Physician (B1). The appointment will be for six months in the first instance. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Demobilized members of H.M. Forces are invited to apply. Salary is at the rate of £200 per annum with full residential emoluments. Applications to be sent to the undersigned not later than February 28, 1948.—H. Ewart Mitchell, Secretary.

NUNEATON GENERAL HOSPITAL
(130 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon to the Casualty, E.N.T. and Ophthalmic Departments, vacant on March 1, 1948. The appointment is for six months at a salary of £250 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.—H. W. Williams, House Governor and Secretary.

NORTH GLOUCESTERSHIRE CENTRAL HOSPITAL GROUP
HONORARY EAR, NOSE AND THROAT SURGEON

The Joint Administrative Committee invite applications for the post of Honorary Ear, Nose and Throat Surgeon for duties at the Gloucestershire Royal Infirmary. The present Honorary Assistant Ear, Nose and Throat Surgeon is a candidate for the post. Applications should be sent to the Honorary Secretary, Dr. S. L. Mucklow, 8, Imperial Square, Cheltenham, not later than February 27, 1948.

NATIONAL HOSPITAL FOR NERVOUS DISEASES, Queen Square, London, W.C.1
RESIDENT MEDICAL OFFICER (B1)

The Board of Management invites applications from registered medical practitioners for the appointment of Resident Medical Officer (B1). The appointment will be for a period of six months in the first instance. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Demobilized members of H.M. Forces are invited to apply. Salary is at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned not later than February 28, 1948.—H. Ewart Mitchell, Secretary.

NATIONAL HOSPITAL FOR NERVOUS DISEASES, Queen Square, London, W.C.1
HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B1). The appointment will be for six months in the first instance. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Demobilized members of H.M. Forces are invited to apply, particularly those having experience as graded surgeons or experienced in neurosurgery. Salary is at the rate of £200 per annum with full residential emoluments. Applications to be sent to the undersigned not later than February 28, 1948.—H. Ewart Mitchell, Secretary.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PATHOLOGIST

Applications are invited from registered medical practitioners for the post of full-time Pathologist at the above hospital. Applicants should be exclusively engaged in the practice of Pathology, with wide training in Clinical Pathology and Morbid Anatomy. The post will be non-resident with a commencing salary of £1,100, the successful candidate being permitted to engage in private practice, restricted to the private wing of the hospital, at present 23 beds. Applications should reach the Secretary not later than February 28, 1948.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B1). Salary is at the rate of £350 per annum, with board, residence, etc. Some previous residential experience essential. The appointment is for a period of six months dating as from April 1, 1948. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces, may apply. Applications must reach Secretary and House Governor by March 3, 1948.

NORTHAMPTON GENERAL HOSPITAL
(410 beds)

Applications are invited from registered medical practitioners for the following posts which are vacant on April 1, 1948:—

TWO HOUSE SURGEONS (A)
HOUSE SURGEON (A)
to the Orthopaedic and Fracture Department

Salary at the rate of £200 per annum with full residential emoluments. Appointments will run until September 30, 1948, and may be renewed. Any further employment at the hospital beyond that date will be at the rate of £225 per annum. Practitioners within three months of qualification and liable under the National Service Acts may apply, in which case the appointment will be limited to a period of six months. Applications should be received at the Hospital by March 4, 1948.—S. G. Hill, Superintendent.

NUNEATON GENERAL HOSPITAL (130 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited immediately for the post of Resident Surgical Officer (B1). Candidates should have held house appointments and have had surgical experience. Suitably qualified R practitioner holding B2 or A appointments or medical practitioners recently discharged from H.M. Forces may apply. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for one year at a salary of £450, with full residential emoluments. Applications to H. W. Williams, House Governor and Secretary

OLDHAM ROYAL INFIRMARY
FIRST ASSISTANT TO THE ORTHOPAEDIC AND ACCIDENT SERVICE
(Whole-time non-resident)

Applications are invited for the post of First Assistant to the Orthopaedic and Accident Service. Applicants must have specialized in Orthopaedics and Fracture work and hold the qualification of F.R.C.S (England) or a special qualification in Orthopaedics. The person appointed will be expected to devote the whole of his time to the duties of the office. The commencing salary will be at the rate of £750 to £1,000 per annum, according to experience. Applications, which should contain full particulars of experience, and be accompanied by copies of three testimonials, should be forwarded to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)
to the Gynaecologist and Aural Surgeon

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply and the appointment will be for six months. The person appointed will act as House Surgeon to the Gynaecologist and the Aural Surgeon and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F W. Barnett, House Governor and Secretary

OLDHAM ROYAL INFIRMARY
(203 beds)
HOUSE SURGEON (A)
to the Ophthalmic Surgeon and Orthopaedic Dept.

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Ophthalmic Surgeon and Orthopaedic Department, and will assist in the Casualty Department. The salary is at the rate of £200 per annum with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRINCE OF WALES'S HOSPITAL, Plymouth
Amalgamating: SOUTH DEVON AND EAST CORNWALL HOSPITAL, Greenbank Road
ROYAL ALBERT HOSPITAL, Devonport
CENTRAL HOSPITAL, Lockyer Street
HONORARY NEUROLOGIST

Applications are invited from registered medical practitioners for the post of Honorary Neurologist. Candidates must be Fellows or Members of one of the Royal Colleges of Physicians and have had special experience in Neurology. The recent holder of the temporary and supernumerary post of Consultant Neurologist, under Ministry of Health Circular 202/46, is an applicant. Applications should be sent to the undersigned by February 28. —Arthur R. Cash. General Superintendent, Head Office: Greenbank Road.

PRINCE OF WALES'S HOSPITAL, Plymouth
CASUALTY OFFICER (A)
(Ear, Nose and Throat)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (A), with Ear, Nose and Throat, vacant March 17, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL, Plymouth
HOUSE OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of House Officer (A) post, Surgery with casualty, for duty at the Devonport Section, vacant immediately, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15 (240 beds)
RESIDENT SENIOR HOUSE PHYSICIAN (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Senior House Physician (B1). Applicants should have held house appointments. Salary £350 per annum, plus full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and eligible for H.M. Forces, are invited to apply. Applications should reach the undersigned as soon as possible.—J. C. Burdett, Director and House Governor.

PRINCE OF WALES'S HOSPITAL, Plymouth
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male and female, preferably with the D.A., for the appointment of Resident Anaesthetist (B2), including R practitioners who now hold A posts, vacant April 13. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications to reach the undersigned by February 28.—Arthur R. Cash General Superintendent Head Office, Greenbank Road, Plymouth.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
HOUSE SURGEON (A)
to the Urological Department

Applications are invited from registered medical practitioners for the post of House Surgeon (A) to the Urological Department. Practitioners within three months of qualification and liable under the National Service Acts may also apply. Six months appointment. Salary at the rate of £175 per annum with the usual residential allowances. Application should be made as soon as possible to the Superintendent, Royal Infirmary Preston.

PRINCESS ELIZABETH ORTHOPAEDIC HOSPITAL, Exeter (150 beds for Annexe)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the post of House Surgeon (B2), which will be vacant on March 1 next. The appointment is for six months at a salary of £250 per annum, with full residential emoluments. Applications should be sent to the Secretary and Administrator.

Have you read the notice at top of page 13 ?

Established 1885

THE Medical Defence Union

MUSeum 1337

Annual Subscription £1 **MEMBERSHIP EXCEEDS 31,500** *Assets exceed £170,000*

THE cost of litigation and the damages awarded to successful litigants are steadily rising. The Union's subscription remains at its pre-war figure. Can you afford to remain outside?

SEVERAL MEMBERS have applied for assistance only to find to their discomfiture that the current subscription is unpaid; the completion of a "Banker's Order" avoids this oversight.

IMMUNITY from medico-legal actions, from slander or the receipt of accusatory letters does not exist; the Union proffers financial assistance, legal advice and defensive measures at a minimal annual cost.

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Protection is also provided on special terms to Medical and Dental practitioners resident and practising overseas.

Full particulars from the Secretary (Dr. Robert Forbes), The Medical Defence Union, Ltd., 49, Bedford Sq., London, W.C.1.

Have you read the notice at top of page 13 ?

PARK PREWETT MENTAL HOSPITAL
Basingstoke, Hants
DEPUTY MEDICAL SUPERINTENDENT

Applications are invited for the above appointment. Candidates must have had considerable experience in Psychiatry, including both in-patient and out-patient work. The salary will be £1,100 per annum plus emoluments valued at £100, consisting of house, rates, water, fuel and light. The salary may be reviewed following the Report of the Committee now considering the salaries of Medical Officers. Applications should be made on a form to be obtained from the Medical Superintendent, Park Prewett Mental Hospital, Basingstoke, and returned not later than March 15, 1948.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, E.2
PART-TIME PSYCHOTHERAPIST

Applications are invited for appointment as part-time Psychotherapist in the psychiatric department. Applicants must have experience in child psychiatry. Remuneration £2 12s. 6d. per session More than one appointment will be made. Applications, giving two references, should be submitted to the undersigned within fourteen days of the publication of this advertisement.—Charles H. Bessell, General Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, E.15
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Physician (B2), including R practitioners who now hold A posts. The appointment will be for a period of six months, salary at the rate of £200 per annum, with full residential emoluments. Candidates should send applications to the undersigned not later than March 10, 1948.—M. J. Huntley, House Governor and Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, E.15
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), including R practitioners within three months of qualification. Salary will be at the rate of £200 per annum, with residential emoluments, lodging being provided temporarily outside the hospital pending the extension of residential accommodation. The appointment will be for a period of six months. Candidates should send their applications to the undersigned as soon as possible.—M. J. Huntley, House Governor and Secretary.

ROYAL LIVERPOOL UNITED HOSPITAL
RESIDENT MEDICAL OFFICERS (A and B2)

Applications are invited from registered medical practitioners (male and female) for appointments as Resident Medical Officers (A and B2) at the Liverpool Royal Infirmary, the David Lewis Northern Hospital the Royal Southern Hospital and the Liverpool Stanley Hospital for the six months from April 1, 1948, to September 30, 1948. R practitioners at present holding A posts may apply for the B2 appointments. Salaries of Casualty Officer posts are at the rate of £110 per annum or £130 per annum if a previous six months' appointment has been held; salaries of all other posts are at the rate of £100 per annum or £120 per annum if a previous six months' appointment has been held. Salaries in all cases include full residential emoluments. Applications should be made on forms which may be obtained from the undersigned, to whom they should be returned not later than 10 a.m. on Monday, March 8, 1948. Testimonials are not required from students of the Liverpool Medical School.—A. V. J. Hinds, Secretary, The Royal Liverpool United Hospital, 80, Rodney Street, Liverpool, 1.

ROYAL LIVERPOOL UNITED HOSPITAL
HONORARY ANAESTHETIST

Applications are invited for the post of Honorary Anaesthetist. Candidates must possess a registrable qualification, the Diploma in Anaesthetics, and either the degree of M.D. of a University of the British Empire or the Membership of the Royal College of Physicians of London, Edinburgh or Ireland, or the Fellowship of the Royal College of Surgeons of England, Edinburgh or Ireland. Testimonials are not required, but candidates should give the names of three persons to whom reference may be made. Applications should reach the undersigned not later than March 13, 1948.—A. V. J. Hinds, Secretary, The Royal Liverpool United Hospital, 80, Rodney Street, Liverpool, 1.

ROYAL LIVERPOOL UNITED HOSPITAL
HONORARY ASSISTANT ANAESTHETIST

Applications are invited for posts as Honorary Assistant Anaesthetist. Candidates must possess a registrable qualification and the Diploma in Anaesthetics. Testimonials are not required but candidates should give the names of three persons to whom reference may be made. Applications should reach the undersigned not later than March 13, 1948.—A. V. J. Hinds, Secretary, The Royal Liverpool United Hospital, 80, Rodney Street, Liverpool, 1.

ROYAL SUSSEX COUNTY HOSPITAL, Brighton, 7 (310 beds, 9 Resident Medical Officers)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification, for the posts of:

CASUALTY HOUSE SURGEON (A), vacant about the end of February.

E.N.T. HOUSE SURGEON (A), now vacant.

The appointment will be limited to six months to R practitioners. Salary at the rate of £200 per annum with full residential emoluments. In the case of the Casualty House Surgeon, the successful candidate will, if desired, be favourably considered for one of the appointments of House Surgeon on the termination of appointment as Casualty House Surgeon. Applications should be sent to the Secretary-Superintendent immediately.

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury
JUNIOR HOUSE SURGEON (A)

Applications are invited from male registered medical practitioners, including those within three months of qualification and liable under the National Service Acts, for the post of Junior House Surgeon (A). The term of appointment will be for six months. Opportunities to work with London consultants and to undertake duties in all branches of surgery, including some casualty work. Salary at the rate of £200 per annum, together with full residential emoluments. Post vacant now. Applications should be sent immediately to the Secretary-Superintendent.

ROYAL NATIONAL THROAT, NOSE AND EAR HOSPITAL
Gray's Inn Road, W.C.1, and Golden Square, W.1
ASSISTANTS IN THE OUT-PATIENT DEPT.

There are vacancies for attendance at both Gray's Inn Road and Golden Square Hospitals on several morning and afternoon clinics. The appointments afford good opportunities for acquiring clinical experience in the speciality, as the duties consist of seeing the old patients under the supervision of the Surgeons. An honorarium of £2 2s. per session is paid. Applications, which may be for periods of six or twelve months and for one or more sessions weekly, should be sent to the undersigned without delay, stating for which clinic the application is made.—John H. Young, House Governor.

ROYAL SUSSEX COUNTY HOSPITAL, Brighton
DIRECTOR OF THE X-RAY DIAGNOSTIC DEPARTMENT

Applications are invited for the new post of Director of the X-Ray Diagnostic Department, which will be full-time and carry a salary at the rate of £2,250 per annum. Full information concerning the vacancy may be obtained from the Secretary-Superintendent at the Hospital, to whom detailed applications, supported by copies of three recent testimonials, should be sent to reach him not later than March 8, 1948.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton
HONORARY ANAESTHETIST

The Board of Management of the hospital will meet on Friday, March 5, 1948, at 3.30 p.m. for the purpose of electing an Honorary Anaesthetist. Candidates must be registered under the Medical Acts. All candidates are required to transmit their applications and testimonials, under cover, to the undersigned, not later than February 25, 1948, and must hold themselves in readiness to attend the meeting of the Committee on the day of election. The Committee does not bind itself to appoint any candidate. Every candidate will have an opportunity of appearing before the Committee.—Percy F. Spooner, Secretary-Superintendent.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Dyke Road, Brighton
TWO HONORARY CLINICAL ASSISTANT ANAESTHETISTS

The Board of Management of the hospital will meet on Friday, March 5, 1948, at 3.30 p.m. for the purpose of electing two Honorary Clinical Assistant Anaesthetists. The appointments will be for two years each as from the beginning of April. Candidates must be registered under the Medical Acts. All candidates are required to transmit their applications and testimonials, under cover, to the undersigned, not later than February 25, 1948, and must hold themselves in readiness to attend the meeting of the Committee on the day of election. The Committee does not bind itself to appoint any candidate. Every candidate will have an opportunity of appearing before the Committee.—Percy F Spooner, Secretary-Superintendent.

ROYAL GWENT HOSPITAL, Newport, Mon. (255 beds)

Applications are invited from registered medical practitioners (male or female) for the following appointments:—

HOUSE SURGEON (A) for the Fracture and Orthopaedic Department, vacant now. Practitioners within three months of qualification and liable under the National Service Acts may apply. Salary at the rate of £175 per annum, with residential emoluments.

CASUALTY OFFICER (A) or (B2), vacant on March 8, 1948, for a period of six months. R practitioners who now hold A posts may apply. Salary at the rate of £175 (A) or £210 (B2) per annum, with residential emoluments. Applications should be sent to the undersigned.—T.A. Jones, Secretary-Superintendent.

ROYAL INFIRMARY, Sunderland (312 beds)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable to serve under the National Service Acts, for the following resident appointments, which are tenable for a period of six months:—

TWO HOUSE SURGEONS (A), vacant immediately. This hospital is recognized by the Royal College of Surgeons for the Fellowship. Salary £175 per annum, with full residential emoluments.

Applications to be forwarded to F. Dagnall, House Governor and Secretary, Royal Infirmary, Sunderland

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL Southampton
ASSISTANT PATHOLOGIST

Applications are invited for the post of Assistant Pathologist. The post is whole-time and applicants should have had considerable experience in clinical pathology. The salary will be within the range of £1,300 to £1,500 per annum (non-resident), according to experience, and the post will carry superannuation benefits. Applications, and names of three referees, should be addressed to the undersigned, from whom further particulars may be obtained.—Frank Jennings, House Governor and Secretary.

ROTHERHAM HOSPITAL
Doncaster Gate, Rotherham
General Voluntary Hospital (150 beds)
SECOND CASUALTY OFFICER (A)

Salary £225 per annum, with full residential emoluments. Applications are invited from registered medical practitioners, male or female, for the above appointment which will become vacant about March 1, 1948. Practitioners within three months of qualification and liable to service under the National Service Acts may also apply, when the appointment will be for six months. Applications should be sent at once to the Secretary-Superintendent.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), now vacant. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months; otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A Stanley Brunt, General Superintendent and Secretary.

ROYAL SURREY COUNTY HOSPITAL
Guildford (228 beds)
HOUSE SURGEON (A) (GYNAECOLOGY)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable to service under the National Service Acts, for the House Surgeon (A) (Gynaecology) appointment, to become vacant on March 1, 1948. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications should reach the Secretary-Superintendent as soon as possible.

ROYAL BERKSHIRE HOSPITAL, Reading

Applications are invited from registered medical practitioners, male, for the following posts:—

TWO CASUALTY OFFICERS (A). Salary is at the rate of £150 per annum, with full residential emoluments. Duties will involve alternating with each other in the Casualty Department, Fracture Clinic and Accident Wards, and assisting in the treatment of all cases of traumatic origin. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL EAST SUSSEX HOSPITAL, Hastings
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), vacant March 30, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to Wilfrid G. Kemsley, Secretary and House Governor

ROYAL EAST SUSSEX HOSPITAL, Hastings
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant March 30, 1948. This is the Senior Resident appointment of the Hospital and applications are invited from persons who possess a higher degree or are working to obtain one and from practitioners at present holding a B2 post and those holding a B1 post and ineligible for service with H.M. Forces. Salary is at the rate of £400 per annum with full residential emoluments. Applications, to be received not later than March 6, to Wilfrid G. Kemsley, Secretary and House Governor.

ROYAL LANCASTER INFIRMARY
Lancaster (226 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male and female) for the post of House Physician (A). Salary £225 per annum with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts, may apply. The appointment will be limited to six months. Vacant April 1, 1948. Applications should be sent to the undersigned.—F. A. Milnes, Superintendent-Secretary.

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road, London, S.W.3
PART-TIME SURGICAL REGISTRAR

Applications are invited for the post of Part-time Surgical Registrar. Candidates must be duly qualified and registered under the Medical Act and engaged in consulting practice only. Preference will be given to those holding the Diploma F.R.C.S. (Eng.). The appointment will be for one year, subject to re-election for a maximum of three years. Remuneration will be at the rate of £500 per annum, and the successful candidate will be required to attend a minimum of five half-days per week. A copy of the rules and further information may be obtained from the Secretary. Applications to be made on a form which will be supplied by the Secretary, accompanied by copies of not more than three recent testimonials to be sent to the Secretary not later than the first post on Wednesday, March 10, 1948.—Victor H. Pinkham, Secretary.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL INFIRMARY, Sheffield
BLOOD TRANSFUSION OFFICER

Applications are invited for the post of Blood Transfusion Officer Salary £650 per annum non-resident. This is a full-time post and the appointment will be for twelve months in the first instance. Candidates must have had some experience in blood transfusion work, or in connexion with blood bank organization. The selected candidate will be required to serve part time in the haematological and serological section of the Department of Pathology, and part time in the Sheffield Region organization of the National Blood Transfusion Service. Applications to be forwarded immediately to the General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ANAESTHETISTS

The Court of Management will shortly proceed to appoint a limited number of Anaesthetists to take effect on or after March 27, 1948. Applications are now invited. Candidates must possess the Diploma in Anaesthetics of the Royal College of Physicians and Surgeons and must not engage in General Practice. Private practice in the speciality will be allowed. Remuneration will be on a sessional basis, and the fee recommended by the B.M.A. is under consideration. It is anticipated that the number of sessions will normally not be less than two per week Further particulars may be obtained from the undernamed. Applications, together with names of three referees, to be forwarded to General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL INFIRMARY, Sheffield
FIRST ASSISTANT (B1) to the Orthopaedic Dept.

Applications are invited from registered medical practitioners for the post of First Assistant (B1) to the Orthopaedic Department, at a salary of £650 per annum, non-resident. Recently demobilized members of H.M. Forces or R practitioners holding B1 appointments (if ineligible for H.M. Forces) may apply. Previous experience in Orthopaedics is desirable and preference will be given to applicants who are Fellows of one of the Royal Colleges of Surgeons. Applications to be forwarded to the General Superintendent, Royal Infirmary, Sheffield.

ROYAL NATIONAL THROAT, NOSE AND EAR HOSPITAL
Gray's Inn Road, W.C.1, and Golden Square, W.1
NEURO-SURGEON

Applications are invited for the newly-created post of Neuro-Surgeon on the honorary medical staff of the hospital. Attendances will be arranged as the necessity arises. It is a rule that all members of the Surgical Staff must be Fellows of the Royal College of Surgeons of England. Further information regarding the post may be obtained from the undersigned, to whom applications should be sent not later than March 5, 1948.—John H. Young, House Governor.

IMPORTANT NOTICE
APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM
(Whole-time Temporary Assistant Medical Officer of Health (male).)

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
February 17, 1948. Secretary.

ROYAL NATIONAL THROAT, NOSE AND EAR HOSPITAL
Gray's Inn Road, W.C.1, and Golden Square, W.1
PLASTIC SURGEON

Applications are invited for the newly created post of Plastic Surgeon on the honorary medical staff of the hospital. Attendances will be arranged as the necessity arises. It is a rule that all members of the Surgical Staff must be Fellows of the Royal College of Surgeons of England. Further information regarding the post may be obtained from the undersigned, to whom applications should be sent not later than March 5, 1948.—John H. Young, House Governor

ROYAL HALIFAX INFIRMARY
(283 beds, Resident Medical Staff 6)
HOUSE PHYSICIAN (A) (Male)

Applications are invited for the post of House Physician (A) (male), including practitioners within three months of qualification who are liable for service under the National Service Acts, for a period of six months from February 27, 1948. Salary £200 per annum, with full residential emoluments. Applications should be sent to R. W. Ranson, Secretary.

ROCHDALE INFIRMARY
PATHOLOGIST

The Board of Management invites applications for the appointment of Pathologist. Salary is at the rate of £900 per annum, plus private fees, guaranteed up to £100 by the Committee. Applications for the appointment should be made immediately to the undersigned, from whom further information regarding the appointment may be obtained.—W. Wynn, Infirmary Office.

ROYAL VICTORIA HOSPITAL, Belfast
HONORARY ASSISTANT RADIOLOGIST IN X-RAY DIAGNOSIS

Applications are invited from suitably qualified candidates for the post of Honorary Assistant Radiologist. Applications should be forwarded to the Medical Superintendent not later than March 8, 1948. Canvassing forbidden.—William McKinney, Honorary Secretary.

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL, Southampton (290 beds)
PHYSICIAN-IN-CHARGE
of the Physical Medicine Department

Applications are invited for the post of Physician-in-Charge of the Physical Medicine Department. Applicants should hold the Diploma in Physical Medicine. Previous experience in the treatment of industrial injury will be an advantage. The post will be full-time, non-resident. The commencing salary will be £1,500 per annum with participation in the Superannuation Scheme. Applications, together with the names of three referees, should be addressed to the undersigned from whom further information can be obtained.—Frank Jennings, House Governor and Secretary.

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL, Southampton (290 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (B2) including R practitioners who now hold A posts. The appointment will be for a period of six months. The salary is £175 per annum, with full residential emoluments. Applications stating qualifications with dates should be sent to the undersigned immediately.—Frank Jennings, House Governor and Secretary.

ROYAL WATERLOO HOSPITAL FOR CHILDREN AND WOMEN
Waterloo Road, S.E.1

Applications are invited from medical practitioners within three months of qualification who are liable under the National Service Acts for the following appointments vacant March 1, 1948:

HOUSE PHYSICIAN (A)
HOUSE SURGEON (A)

Appointments are for six months. Salary at the rate of £175 per annum with full residential emoluments. Applications should be sent to the Secretary.

ROYAL BERKSHIRE HOSPITAL, Reading
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A) as from March 6, 1948. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Anaesthetist (B2), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. R practitioners who now hold A posts may apply, when the appointment will be limited to six months. Applications, stating present post, should be sent immediately to H. E. Ryan, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
HONORARY ASSISTANT PHYSICIAN

The Board of Management invites applications for the appointment of Honorary Assistant Physician. Candidates must be Fellows or Members of the Royal College of Physicians, London, or Medical Graduates of one of the Universities of the British Empire and their names entered on the *Medical Register*. Canvassing on the part of a candidate or on his behalf will disqualify him. Candidates are required to provide six copies of their applications and testimonials which should be addressed to the House Governor and reach him not later than Saturday, March 27, 1948. No testimonials will be required from candidates who are members of the existing medical staff. The present Medical Registrar is a candidate for the post.—H. E. Ryan, House Governor.

ROYAL CORNWALL INFIRMARY, Truro
ORTHOPAEDIC AND CASUALTY HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for this appointment, vacant April 1 next, including R practitioners now holding A posts. If an R practitioner the appointment will be limited to six months. Salary at the rate of £200 per annum with residential emoluments. Applications with copies of testimonials to the Secretary-Superintendent.

(Continued on page 30)

Have you read the notice at top of page 13?

THE MEDICAL PROTECTION SOCIETY LIMITED

Founded 1892. **Assets exceed £100,000.**

Members receive advice and assistance in all matters affecting the practice of their profession and are afforded COMPLETE INDEMNITY against costs and damages in cases undertaken on their behalf.

Subscription £1. **No entrance fee to those joining within twelve months of registration.** **Entrance fee, 10/-.**

Full Particulars from the **Secretary, VICTORY HOUSE, LEICESTER SQUARE, W.C.2.** **Gerrard 4553 and 4814.**

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

DO PLEASE WRITE ADVERTISEMENTS CLEARLY. NAME AND ADDRESS SHOULD BE IN BLOCK LETTERS.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To **all other** advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and **3s. 6d.** for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d.; or 30 words 22s.; and **3s. 6d.** for each six words *or less* thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and **6s.** for each six words *or less* thereafter.

If a BOX NO is used the charges are: 18 words, 25s. (minimum); or 24 words, 31s.; or 30 words, 37s.; and **6s.** for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and **5s.** per line thereafter.

(5) To **ALL** advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.
Telephone: Euston 2111.
Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 13.

PERSONAL

COULD WOMAN DOCTOR CONSIDER taking widow, 38 years, into her home (could pay reasonably well) to assist her regain confidence, anxiety neurosis on the up-grade now. Not hypochondriacal. Ex-State-registered nurse. Social references given.—Box 8485, B.M.J.

DOCTOR'S DAUGHTER, 17, ST. PAUL'S SCHOOL, requires Accommodation p.g. near school, or train journey from Hammersmith. Facilities for practising required.—Dr. Enid Hughes, The Manor House, Ruthin.

ONE THOUSAND POUNDS for a Short Story. Full details in the Sunday Dispatch.

OVER EASTER IN DEVON. REALLY GOOD HOTEL at Torquay, entirely reserved for C.T.U. Party, March 24 to 31. **PROPOSED PARTIES TO SWITZERLAND:** May 6 to 20, Lugano and Lucerne; June 16 to 30, Pontresina and Zurich; June 30 to July 14, Zermatt; August 5 to 19, Lauterbrunnen and Kiental; August 17 to 31, Kiental and Saas-Fee; September 1 to 15, Thun and Wengen. All above in hotels. September 1 to 11, Bernese Oberland Walking Party, in hotels and huts. Write C.T.U., Established 1913. (Dr. C. F. Fothergill), "Hensol," Chorley Wood, Herts. 'Phone: Chorley Wood 24.

NOTICES

BRITISH COUNCIL FOR THE WELFARE OF SPASTICS. MEDICAL FELLOWSHIP.—Applications are invited from physicians with special experience in child health and development for a Fellowship tenable in the United States for three months. The object of the fellowship is to promote the study of cerebral palsy in Great Britain and the physician appointed will be expected to advise on the medical care of children suffering from cerebral palsy including attendance at clinics and special schools. All expenses will be paid and a small stipend will be provided in addition during the period of the fellowship. The date of commencement is subject to arrangement, but it is hoped that it will operate during the summer of 1948. For particulars apply to: Henry F. Weston, Esq., M.A., The Executive Secretary, British Council for the Welfare of Spastics, "Lullington," 107, Norfolk Avenue, Sanderstead, Surrey.

GENERAL HOSPITAL, Nottingham.—A **RE-UNION** of all past and present members of Medical and Nursing Staffs will be held at Lenton Grove Rheumatism Clinic, Beeston Lane, Nottingham, on Saturday, June 5, 1948. Please notify the House Governor as soon as possible, or in any event not later than May 1, of your intention to be present, stating whether hospitality will be required.

RESEARCH BOARD FOR THE CORRELATION OF MEDICAL SCIENCE AND PHYSICAL EDUCATION. RESEARCH PRIZE, 1948.—A first prize of £250, a second prize of £50, will be offered in 1948 for a thesis embodying original research on some aspects of the following field of enquiry: **The Predisposing Factors in the Development of Chronic Rheumatic Conditions in Early Adult Life.** Entrants for this Research Prize should be of either British nationality or ordinarily resident in the British Empire. Five typewritten copies of the thesis should be submitted to the Research Board by September 30, 1948. To be sure that the thesis falls within the relevant field of enquiry, candidates should previously submit for the approval of the Research Board a statement of the nature of their proposed investigation. Further information and suggestions can be obtained from the Secretary of the Research Board for the Correlation of Medical Science and Education, Apothecaries' Hall, Black Friars Lane, Queen Victoria Street, London, E.C.4.

THE FLORENCE NIGHTINGALE HOSPITAL, 19, Lisson Grove, N.W.1, for educated women of limited means has been entirely re-decorated and is now open for the reception of patients. Telephone: Paddington 2341. Patroness: H.R.H. The Princess Royal. Chairman: Caroline, Viscountess Bridgeman, D.B.E.

UNIVERSITY OF LONDON. GRANTS FOR RESEARCH. Applications are invited from members* of the University for grants from the Central Research Fund for assisting specific projects of research and for the provision of special materials and apparatus. Applications will be considered three times a year and must be received not later than March 31, July 31, and November 30. Forms of application and further particulars may be obtained from the Academic Registrar, University of London, Senate House, London, W.C.1.

*Members of the University are defined by Statute as the Chancellor, the existing Fellows thereof for their respective lives, the members for the time being of the Court and of the Senate respectively, the Professors and Readers and other Teachers of the University during their tenure of office, the graduates and the students.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

APPLICATIONS ARE INVITED for the post of LECTURER IN CLINICAL TROPICAL MEDICINE AT THE LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE. The duties of the post will include participation in teaching and in research on tropical diseases. Applicants should hold a higher qualification in medicine and should have special experience in the diagnosis, treatment and investigation of tropical diseases. The salary of the post is £1,000 per annum. There is an additional grant of £250 per annum from a Research Fund. Applications, together with three copies of recent testimonials, should be sent by April 30, 1948, to: The Assistant Dean, London School of Hygiene and Tropical Medicine, Keppel Street (Gower Street), London, W.C.1.

UNIVERSITY OF DURHAM. KING'S COLLEGE, Newcastle-upon-Tyne. Department of Anatomy.—The Council of King's College invite applications for the post of **LECTURER IN ANATOMY.** The salary scale rises by annual increments of £25 to a maximum of £850. The commencing salary of the successful applicant will be fixed at a point on that scale in accordance with his qualifications and experience, but will not, in any case, be less than £500. Ten copies of application, together with the names of three persons to whom reference may be made, should be submitted as early as possible to the undersigned, from whom further particulars may be obtained.—G. R. Hanson, Registrar of King's College.

DALHOUSIE UNIVERSITY, Halifax, Nova Scotia, invites applications for the post of **PROFESSOR OF PHARMACOLOGY.** Good facilities for teaching and research. Salary $4500.00, increasing by annual increments to $5500.00. Preference for medical graduate. Apply giving qualifications and references to Dean H. G. Grant The Medical Faculty, Dalhousie University, Halifax, Nova Scotia.

GUY'S HOSPITAL DENTAL SCHOOL, LONDON UNIVERSITY.—Applications are invited for the post of **DENTAL RESEARCH FELLOW.** Appointment will be for three years in the first instance. Salary not less than £750 per annum, plus superannuation and family allowance. Candidates, who should have experience of research in biochemistry, bacteriology, or a relevant branch of science, should apply to the Dean, Medical School, Guy's Hospital, London, S.E.1, before May 31, 1948, and give the names of two referees.

ROYAL FREE HOSPITAL SCHOOL OF MEDICINE, 8, Hunter Street, Brunswick Square, W.C.1.—Applications are invited from men and women holding degrees in Physiology or Medicine for the post of **DEMONSTRATOR** in the **PHYSIOLOGY DEPARTMENT,** from October 1, 1948, at a salary of £400 per annum, rising by annual increments of £25 to a maximum of £500 per annum, with superannuation benefits and family allowances. Further particulars may be obtained from the Warden and Secretary, to whom applications should be sent as soon as possible.

THE BRITISH COUNCIL invites applications for the post of **DIRECTOR OF THE MEDICINE DEPARTMENT.** Applicants should have a wide general knowledge of medical science combined with experience of administration and of medical editing or other aspect of medical documentation. A knowledge of European languages would be an advantage. Duties involve principally editing or supervision of a medical journal in several languages, supervision of a medical information service, and technical supervision of schemes for medical scholarships and for senior medical visitors to the U.K. Gross salary within the range £1,300 to £1,500 per annum, according to qualifications. Application forms and further particulars may be obtained from the Director, Personnel Department, the British Council, 3, Hanover Street, London, W.1; to whom completed forms should be returned after three weeks of to-day's date.

UNIVERSITY OF BRISTOL.—Applications are invited for the SIDNEY ROBINSON FELLOWSHIP IN RHEUMATIC DISEASES tenable at the University of Bristol and the Royal National Hospital for Rheumatic Diseases, Bath. The Fellow will be required to devote the whole of his time to research work in rheumatic diseases at the Royal National Hospital for Rheumatic Diseases. The subject of the research will be approved by the University after consultation with the Empire Rheumatism Council. Salary according to qualifications and experience, minimum £650 per annum. The appointment will be for one year but may be renewable for a further period. Applications, giving full names, age, qualifications, details of education and experience, together with the names of not more than three referees and copies of not more than three recent testimonials, should reach the undersigned on or before March 8, 1948.—Winifred Shapland, Secretary and Registrar, The University of Bristol, Bristol, 8.

UNIVERSITY OF SHEFFIELD.—Applications are invited for the post of **RESEARCH ASSISTANT in the Department of Child Health,** to carry out original investigations under the Professor, which will be mainly in the clinical field. Experience in laboratory work would be an advantage. Salary in the range £500 to £700 per annum, according to qualifications and experience, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. Candidates must possess a medical qualification, and have had clinical experience. The successful candidate will be expected to begin duties as soon as possible. Applications (three copies), with the names and addresses of referees and, if desired, copies of testimonials, should reach the undersigned (from whom further particulars may be obtained) by February 24, 1948.—A. W. Chapman, Registrar.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN PATHOLOGY.—Applications are invited for a **LECTURER IN PATHOLOGY.** Salary £750 to £900 according to qualifications and experience. In addition a Children's Allowance is payable. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than February 29, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

UNIVERSITY OF LONDON.—The Senate invite applications for the **READERSHIP IN THERAPEUTICS** tenable at St. Thomas's Hospital Medical School (salary £900 to £1,300). Applications must be received not later than April 5, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF ABERDEEN. ASSISTANTSHIP IN PATHOLOGY.—Applications are invited for an Assistant in the Department of Pathology. Salary £450.—H. J. Butchart, Secretary, The University, Aberdeen

UNIVERSITY OF LONDON.—The Senate invite applications for the **CHAIR OF OBSTETRICS and GYNAECOLOGY** tenable at the Postgraduate Medical School of London (salary £2,500). Applications must be received not later than April 15, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF BIRMINGHAM. PART-TIME MEDICAL OFFICER.—Part-time woman Medical Officer required to carry out routine examinations of women students. Three half-day sessions per week will be required for about nine months of the year, less at other times. Stipend £300 per annum. Further particulars may be obtained from the undersigned, who should receive applications immediately.—C. G. Burton, Secretary, The University, Edmund Street, Birmingham, 3.

VICTORIA INFIRMARY OF GLASGOW.—The Governors invite applications for the whole-time post of **MEDICAL BIOCHEMIST** at a commencing salary within the range of £1,000 per annum by £50 to £1,250 per annum according to qualifications and experience. The successful candidate will also be appointed to a University Lectureship with an honorarium of £100 per annum. If under 45 years of age, he will be required to participate in an appropriate superannuation scheme. Particulars of the post may be obtained from the Medical Superintendent at the Infirmary, Glasgow, S.2. Twelve copies of application, with names of not more than three referees, should be lodged with the undersigned by March 27, 1948.—Ian J. Hamilton, M.A., C.A., Secretary and Treasurer, The Victoria Infirmary of Glasgow, 40, St. Vincent Place, Glasgow, C.1.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

CRANLEIGH SCHOOL, SURREY. ENTRANCE SCHOLARSHIPS, £120—£30. **INSTRUMENTAL** and **CHORAL,** £50—£30, are offered in March and June. At each examination one close Scholarship of not less than £50 per annum will be awarded to the son of a member of the Medical or Dental profession. Details from Bursar.

EXPERIENCED COACHING IN PHYSIOLOGY, Pathology and Medicine by M.D., M.R.C.P., B.Sc. (Physiol.), all exams.—Box 8577, B.M.J.

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE. Postgraduate Academic Diploma in Bacteriology.—The **COURSE** for the **POSTGRADUATE DIPLOMA IN BACTERIOLOGY** for the Session 1948-49 will commence in October, 1948. This is a full-time day course extending over one academic year. The course may be taken by: (a) Graduates in Medicine or Veterinary Science desiring to study Bacteriology as applied to Medicine and Hygiene, (b) Graduates in Science with a First or Second Class Honours degree in Chemistry, or its equivalent. For such students, the course covers the fields of General Bacteriology, Chemical Microbiology and Industrial Microbiology. Applications for admission to the Diploma course must be received not later than the end of March. Further information and application forms can be obtained from the Registrar, London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1.

OXFORD POSTGRADUATE CENTRE.—A TWO-WEEKS' REFRESHER COURSE for General Practitioners and ex-Service Medical Officers (Class II) will be held at the following hospitals:—

ROYAL BUCKINGHAMSHIRE HOSPITAL, Aylesbury, May 10 to May 22, 1948, inclusive.

ROYAL HAMPSHIRE COUNTY HOSPITAL, Winchester, June 7 to June 19, 1948, inclusive.

The fee for the Course will be 10 guineas. Schemes for financial assistance are available under which the cost of both the fee and travelling and subsistence allowances will, subject to certain conditions, be repaid to: (a) demobilized general practitioners within one year of release from the Forces; and (b) doctors engaged in practice under the National Health Insurance Acts. Applications for places in the Course and for particulars of the financial assistance available, should be made to the Chairman, University of Oxford Postgraduate Medical Education Committee, 91, Banbury Road, Oxford, and not to the Hospital.

RHEUMATIC DISEASES; March 19, 20 and 21. Friday afternoon, and all day Saturday and Sunday. Rheumatic Unit, St. Stephen's Hospital. Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

POSTGRADUATE STUDY. Diploma in Anaesthetics; Diploma in Psychological Medicine; Diploma in Ophthalmology; Diploma in Radiology; Diploma in Laryngology; Diploma in Child Health; F.R.C.S.Eng. and all Surgical Examinations; M.R.C.P.Lond. and all Medical Examinations; M.D. Thesis of all Universities; Courses for all Qualifying Examinations. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested. Address: Secretary, Medical Correspondence College, 19, Welbeck St., London, W.1.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work, and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects; with emphasis on recent advances in treatment. 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LICENCE IN DENTAL SURGERY

Notice is hereby given that the following Examination will commence on the date stated below:—

GENERAL AND SPECIAL ANATOMY AND PHYSIOLOGY

Friday, March 19

Candidates who have fulfilled the necessary conditions, and who desire to present themselves for examination, must give notice in writing to the Examinations Secretary, Examination Hall, 8—11, Queen Square, London, W.C.1, at least 21 days before the Examination, transmitting at the same time such certificates as may be required by the regulations, together with the full amount of the fee for the part or parts of the Examination for which they desire to enter.

F. M STENT, Examinations Secretary.

POSTAL COACHING for all Medical Examinations. Examination Successes, 1901-47; M.D Lond., 454; M.B., B.S.Lond., Final, 436; F.R.C.S.Eng., Primary, 411; F.R.C.S.Eng., Final, 308; M.R.C.P. Lond., 427; M.R.C.S., L.R.C.P., Final, 891; D.A. (1936-47), 143; F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

SOCIETY OF APOTHECARIES OF LONDON.—Surgery: March 8, April 12, May 10. Medicine and Pathology: March 15, April 19, May 18. Midwifery: March 16, April 20, May 18. Mastery of Midwifery: May and November. Diploma in Industrial Health: July and December. For regulations apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

SOCIETY OF APOTHECARIES OF LONDON.—DIPLOMA IN INDUSTRIAL HEALTH.—The next Examination will begin on Monday, July 5, 1948. The following Examination will be held in December, 1948. For regulations, apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

TANCRED'S STUDENTSHIPS

DIVINITY: MEDICINE: LAW. £100 p.a. each. About Whitsuntide next the Governors propose to elect ONE STUDENT IN DIVINITY at Christ's College, Cambridge, ONE STUDENT IN PHYSIC at Gonville and Caius College, Cambridge, and ONE MALE STUDENT IN LAW at Lincoln's Inn. Candidates must have been born in England, Scotland or Wales, and be members of the Church of England and unmarried. An examination will be held at Caius College on Thursday, April 15, for Divinity and Physic candidates, who must be within the ages of 17 and 20 years. The Law candidates, who must be within the ages of 20 and 23 years, must have passed an approved examination; exception will be made at the discretion of the Governors in favour of older candidates who have been prevented by war service from previous application. The last day for sending in Petitions is March 9. Apply stating kind of Studentship and mentioning this Journal to the Clerk, Mr. Howard, 28, Lincoln's Inn Fields, London, W.C.2.

THE ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE.—THE CERTIFICATE AND THE DIPLOMA IN PUBLIC HEALTH AND THE DIPLOMA IN INDUSTRIAL HEALTH.—The next **COURSE OF INSTRUCTION** for the Certificate in Public Health (C.P.H.) will commence on Tuesday, March 23, 1948, for the Preliminary Examination of the Conjoint Board of the Royal Colleges of Physicians and Surgeons. The Courses, both for the Certificate and for the Diploma in Public Health, can be taken either whole- or part-time. A Course of Instruction, part-time or whole-time, is also provided for the Diploma in Industrial Health, Part I is the same as, and commences concurrently with, the C.P.H. Course. Those already holding a Certificate in Public Health are exempt from that part. A Course for Part II (D.I.H.) commences in July, 1948. Prospectuses, enrolment forms, and full details of both may be obtained from the Secretary, 28, Portland Place, W.1. (Telephone: LANgham 2731-2.)

THE GROCERS' COMPANY OFFER EACH YEAR—ONE SCHOLARSHIP for the encouragement of **ORIGINAL MEDICAL RESEARCH** into the **CAUSATION, PREVENTION or TREATMENT or DISEASE.** The award, which is tenable for two years from September 1, is of £350 for the first year and £400 for the second year, in addition to which the Court will grant up to £150 a year towards the cost of special apparatus, etc., required by the scholar. Candidates should not be more than 35 years of age, and should submit their applications to the undersigned before June 1.—L. Hickman Barnes, Clerk, Grocers' Hall, E.C.2.

UNIVERSITY OF MANCHESTER. Nuffield Department of Occupational Health. A three weeks' full time postgraduate course in occupational health will be held during the period April 26 to May 14, 1948, for practising industrial medical officers. The course has been specially arranged for those who are qualified to take the Diploma in Industrial Health of the Conjoint Board. Admissions to this course are limited to 24. The syllabus and application forms may be obtained from the Dean of the Medical School, The University, Manchester, 13. All applications should be accompanied by a registration fee of 2 guineas and should be received not later than April 1. The fee for the course (including registration fee) will be £7 7s.

UNIVERSITY OF BRISTOL. COURSE IN ANAESTHESIA.—A four week course in Anaesthesia will be held from April 12 to May 7, 1948. It will include instruction in the basic sciences as well as lectures and demonstrations in clinical anaesthesia. The fee for the course will be 15 guineas. Numbers will be limited. Applications should be made as soon as possible to, and further particulars can be obtained from, the Director of Medical Postgraduate Studies, University of Bristol.

LECTURES

ANAESTHETIC LECTURES: March 1 to 13. Dept. of Anaesthetics, Radcliffe Infirmary, Oxford, Limited. Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266

HONYMAN GILLESPIE TRUST. POSTGRADUATE TEACHING OF HOMOEOPATHY IN GLASGOW.—A three months' introductory course of Lectures and Clinical Demonstrations in Homoeotherapeutics for registered medical practitioners will commence in the Homoeopathic Hospital Dispensary, 5, Lynedoch Crescent, Glasgow, C.3, on Wednesday, March 10, at 7 p.m. Details of subsequent classes will be arranged then. This course prepares those wishing to sit the examination for the Diploma, M.F. Hom. (Member of the Faculty of Homoeopathy). For further particulars apply to the Superintendent, Glasgow Homoeopathic Hospital, 1,000 Great Western Road, Glasgow, W.2.

UNIVERSITY OF LONDON.—A course of three lectures on "Recent Developments in Physiochemical Methods of Separation and Analysis in Biochemistry" will be given at 5.15 p.m. on February 25, February 27, and March 2 at the London School of Hygiene and Tropical Medicine, Keppel Street, Gower Street, W.C.1, by Professor A. Tiselius (Uppsala). Admission free, without ticket.—James Henderson, Academic Registrar.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES—MARCH, 1948

The following Lectures will be delivered at the College in Lincoln's Inn Fields, W.C.2.

			ERASMUS WILSON DEMONSTRATIONS	
Mon.	1	5 p.m.	MR. R. J. MCNEILL LOVE ..	The Biliary Apparatus
Wed.	3	5 p.m.	MR P. H. MITCHINER ..	Enlargement of the Testis and Epididymis
			IMPERIAL CANCER RESEARCH FUND LECTURE	
Thurs.	4	3.45 p.m.	PROF. M. GREENWOOD ..	Simple Statistics of Cancer
			ERASMUS WILSON DEMONSTRATIONS	
Fri.	5	5 p.m.	DR. L. W. PROGER	Giant Cells
Mon.	8	5 p.m.	DR. L. W. PROGER	Giant Cells
Wed.	10	5 p.m.	MR. R. W. RAVEN	The Surgical Manifestations of Boeck's Sarcoid
Thurs.	11	5 p.m.	MR. V. ZACHARY COPE ..	Varieties of Intestinal Obstruction
			ARRIS AND GALE LECTURES	
Fri.	12	5 p.m.	MR. LEON GILLIS	Recent Advances in the Treatment of Arm Amputations, Cineplastic Surgery, and Arm Prostheses
Mon.	15	5 p.m	DR. E. M. DARMADY	Acute Uraemia: its Aetiology and Basis for Treatment
			ARNOTT DEMONSTRATIONS	
Tues.	23	3.45 p.m.	MR. R. J. LAST	The Kidneys
Wed.	24	3.45 p.m.	MR. R. J. LAST	The Pectoral Girdle
Thurs.	25	3.45 p.m.	MR. R. J. LAST	The Knee Joint

The Lectures are open to those attending Courses in the College and also to all other Medical Practitioners, Dental Surgeons, and advanced students.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

EMPIRE RHEUMATISM COUNCIL

The Spring Week-end Course will be held at THE APOTHECARIES' HALL, BLACKFRIARS LANE, QUEEN VICTORIA STREET, E.C.4 (Blackfriars Tube Station), on Friday, Saturday, and Sunday, March 12, 13, and 14, 1948.

LECTURES

	FRIDAY, MARCH 12	
4.30–5.30 p.m. ..	Introductory Lecture	PROFESSOR L. S. P. DAVIDSON, F.R.C.P., F.R.S.E.
5.30–6.30 p.m. ..	Gout	G. D. KERSLEY, ESQ., F.R.C.P.
	SATURDAY, MARCH 13	
10–11 a.m.	Osteoarthritis	ERNEST FLETCHER, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Spondylitis	W. S. TEGNER, ESQ., M.R.C.P.
2–3 p.m.	Juvenile Rheumatism and Still's Disease	R. E. BONHAM-CARTER, ESQ., M.R.C.P.
3–4 p.m.	Non-Articular Rheumatism and Sciatica	W. S. C. COPEMAN, ESQ., O.B.E., F.R.C.P
4 p.m.	Tea	
4.30–5.30 p.m. ..	Rheumatoid Arthritis	OSWALD SAVAGE, ESQ., O.B.E., M.R.C.P
	SUNDAY, MARCH 14.	
10–11 a.m.	Physical Treatment in the Rheumatic Diseases	H. A. BURT, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Orthopaedic Aspects of the Rheumatic Diseases	W. D. COLTART, ESQ., F.R.C.S.

The fee for the course will be One Guinea, limited to 100 entries, to be received with remittance, at least one week before, by the General Secretary, Empire Rheumatism Council, Tavistock House (N), Tavistock Square, W.C.1.

ASSISTANTSHIPS

VACANT

Wanted, Outdoor Assistant for mixed practice, St. John's Wood. Car owner preferred.—Box 8160, B.M.J.

Wanted, a young woman doctor with experience in obstetrics and gynaecology for Assistantship, with or without View, in a large South of England Private Practice consisting of four partners, one of whom is a woman.—Box 8486, B.M.J.

Wanted, Experienced Male Assistant, with or without View, Bristol, salary £840 including allowance for own car, available share approx. £1,700 gross. Interest in midwifery, full details and testimonials, ready March 1.—Apply Box 8457, B.M.J.

Wanted immediately, Indoor or Outdoor Assistant, Yorkshire Town. Car essential. Partnership prospects for suitable man. Good salary and car allowance.—Box 8458, B.M.J.

Wanted, Outdoor Assistant with View, male, first-class practice, residential seaside resort, Wirral Peninsula firm of three doctors.—Box 8427, B.M.J.

Wanted, April 1, Outdoor Assistant. Car preferable. Salary and car allowance by arrangement. Industrial practice, Sheffield.—Box 8429, B.M.J.

Wanted, Indoor Assistant, male, single, N.W. town. Work light Experience essential. Salary by arrangement.—Box 8428, B.M.J.

Wanted, Assistant male, single. Outdoor, able to drive car. Midlands rural. Salary by arrangement.—Box 8409, P.M.J.

Wanted, male Assistant, R.C., single, live in, car provided, country practice, work light. Southern County.—Box 8103, B.M.J.

Wanted, Indoor Assistant, mixed practice. About £700 all found, prospects of succession this year.—Box 8143, B.M.J.

Wanted, Assistant, S.E. London suburb, from early April, for few months at least, work light.—Box 8125, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Assistant, preferably married, for medium-sized industrial and suburban mixed practice, Sheffield. Excellent conditions and good salary. Little experience only necessary. Unfurnished, centrally situated house (free with all services) with resident caretakers. Car essential.—Box 8426, B.M.J.

Assistant wanted, male, outdoor, Midland City mixed practice. Good salary and prospects for keen suitable man. Own car essential.—Box 8425, B.M.J.

Assistant with View wanted immediately for mixed country practice in South Hampshire.—Box 8416, B.M.J.

Male Assistant wanted in pleasant South Coast Mixed Practice. Car essential, allowance given. Send particulars to Box 8424, B.M.J.

Part-time Assistant required. Duties are night calls (average one a fortnight), being on call Thursdays and Sundays and doing a Saturday Evening Surgery. Duties very light and have previously admirably suited doctors studying for higher degrees in return Furnished Modern House at Stratford, E.15, with resident housekeeper and full hospitality and small fee. 'Phone: Dr. Lee, Grangewood 0506.

Permanent Assistant wanted. Good position for right man.—Box 8161, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

WANTED

Wanted, Assistantship with or without View, by Scotsman, M.B., Ch.B., aged 27, married. House appointments, surgery and casualty. Postgraduate paediatrics. Experience G.P. and anaesthetics. Three years R.A.M.C. Own car. House essential. Semi-rural town preferred. Free middle March.—Box 8436, B.M.J.

Wanted, Assistantship in South or West England by M.B., B.Ch., B.A.O., ex-R.A.M.C. Excellent hospital and G.P., dispensing and anaesthetics experience. Married, aged 29. Own car and furniture. Good references.—Box 8410, B.M.J.

Wanted, Assistantship by married woman doctor in South Manchester. Hospital and G.P. experience.—Box 8461, B.M.J.

Wanted, Assistantship by experienced man. No car. Can drive No objection obstetrics or dispensing, aged 50. South preferred.—Box 8478, B.M.J.

Wanted, Assistantship with or without View, ex-Major R.A.M.C., aged 31, married. Hospital and G.P. experience. Own car. Preferably Northern England.—Box 8435, B.M.J.

Wanted, Assistantship in southern half of England by keen young Irishman, M.B. (T.C.D.). Good hospital and G.P. experience. Ex-R.A.M.C., aged 30, married Car owner.—Box 8411, B.M.J.

Wanted by postgraduate student (Hospital and G.P. experience), Part-time Work, London area, with or without accommodation. Surgeries by arrangement.—Box 8163, B.M.J.

Wanted, Long Term Assistantship in England, with or without View, by Protestant ex-R.A.M.C. practitioner, aged 31, qualified 1941. English, married, no children. Hospital and G.P. experience. Car owner. House or flat essential. Free April.—Box 8433, B.M.J.

Wanted, Assistantship, gentleman, M.B. (Lond.), free one morning, one evening weekly. London area.—Box 8432, B.M.J.

Wanted, Assistantship with View in Partnership or Group Practice, preferably rural, by M.D. R.A.M.C., hospital (including obstetric) and G.P. experience, D.C.H., aged 30, married, one child. Free April.—Box 8430, B.M.J.

Wanted, Assistantship with View by M.B., B.Ch., B.A.O. (Belfast), ex-R.A.F.V.R., 28, married, one child, 1½ years hospital experience, keen interest and experience obstetrics. Home Counties or South preferred. House desirable Free March.—Box 8408, B.M.J.

Wanted, Assistantship, Full or Part-time, London or Suburbs by experienced practitioner, obstetric and gynaecological experience, 33, single.—Box 8460, B.M.J.

Aberdeen graduate 1938, desires Assistantship with definite early View. Hospital, R.N.V.R. and three years G.P. experience Married, own car. Keen, willing and able for hard work. Free early March.—Box 8487, B.M.J.

Assistantship, with definite View, by B.A., B.M., B.Ch.(Oxford), 31, married, children, car Ex-R.A.M.C. Since demob. G.P., hospital experience at own hospital (obstetrics and gynaecology). Tunbridge Wells or area preferred.—Box 8434, B.M.J.

Assistantship, preferably with View, wanted with partnership of two or more, country or country town Southern England. Aged 30, married, one child. Qualified 1942 (Guys). Hospital, R.A.M.C., and sixteen months G.P. experience. Own car. Free April.—Box 8431, B.M.J.

Assistantship with View wanted by M.B., Ch.B., ex-R.N.V.R., aged 27, married Hospital and G.P. experience Own car.—Box 8166, B.M.J.

Evening Surgeries, London graduate (M.B., B.S.), aged 34, available immediately for Evening Surgeries in South London. Five years R.N.V.R. Medical Registrar.—Box 8479, B.M.J.

Married woman doctor, M.B., B.Ch. Hospital, G.P. experience. Ex-R.N.V.R. Own car, requires Part-time Work Portsmouth or district.—Box 8463, B.M.J.

Ruislip, Part-time Assistantship (view Full-time or Partner) required, 5 mile radius Ruislip. Qualified 12 months, H.P. and G.P. experience. Age 34, good appearance, energetic, available March.—Carter, Ruislip 2023.

Southampton area, woman doctor, 34 years, requires Part-time Work. Hospital experience. Children and some general practice.—Box 8464, B.M.J.

Woman doctor (1934 graduate) wants Assistantship, Full or Part-time, preferably with separate accommodation.—Box 8462, B.M.J.

LOCUMS

VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars.—British Medical Bureau, 33, Cross Street, Manchester, 2.

Wanted, Locum, from March 15 to June 1, 1948. Apply, 104, Highbury New Park, London, N.5.

Locum wanted immediately for three months. Male, single, under 40. Salary £750 to £800 all found, plus car allowance. Midlands.—Box 8412, B.M.J.

AVAILABLE

Experienced G.P., woman, 40, on Locums exclusively for past 12 months, accustomed to "taking over." Free April 6 to June 6; June 25 to July 23; August 15 to 28, all dates inclusive for locums.—Box 8181, B.M.J.

Keen energetic doctor, 32, single, Hospital and G.P. experience, seeks Locums or Assistantship with or without View Partnership or Succession, Portsmouth, Southampton areas.—Box 8401, B.M.J.

PARTNERSHIPS

OFFERED

Co. Durham. Partner required. Short preliminary Assistantship preferred. Substantial income. Might at present suit single man best as no house is immediately available, although there are definite prospects in this direction. Scot or Englishman.—Box P8439, B.M.J.

Partnership, after three months' Assistantship, from April 1, Country town Essex 1/4 share yielding over £1,500. Experience of midwifery an advantage.—Box P8440, B.M.J.

North-West London Suburb, 1/3 to 1/2 share of £5,000, good class practice Panel 2,000 House to rent. Early application essential. Terms 1½ years' purchase or terms.—Apply Box P8466, B.M.J.

South West Seaport Town. Partnership (after short preliminary Assistantship if desired) in old-established growing practice in pleasant area. Tremendous scope for energetic man. 1/4 to 1/2 share of £10,000 at 1½ years' purchase. Premium partly out of income if necessary, or would consider sale of total practice. House can be arranged.—Box P8441, B.M.J.

London, N. One-third Share producing approximately £1,500 in old-established sound practice. Panel 3,300 increasing. Great scope.—Box P8413, B.M.J.

WANTED

Wanted by experienced G.P. Partnership, £1,500 approx. in country town, preferably in West England. Good house essential.—Box P8467, B.M.J.

Wanted by Cambridge M.D., introduction to Partnership or succession in first-class West End practice. Full details Box P8136, B.M.J.

Wanted by Cambridge Graduate, aged 36, Partnership, with or without View to Succession, in first-class practice in country town in Southern Counties, preferably Surrey, Sussex, Hants, Wilts, or Berks. Commencing share £1,500 to £2,000. Full particulars Box P8137, B.M.J.

Married doctor, aged 43, retired from Tropics, arriving early March seeks Partnership in England. Capital and references available. Own car.—Reply Box P8468, B.M.J.

MEDICAL POSTS

VACANT

Wanted, Voluntary Worker for Psychological Testing in research project. Training provided.—Box 8451, B.M.J.

Hull Royal Infirmary. Laboratory Technician required. Grade B Certificate desirable, but not essential if previous experience satisfactory. Applications, together with copies of recent testimonials, should be sent to the undersigned as soon as possible.—R. J. Carless, House Governor.

St. Thomas's Hospital Medical School require Laboratory Technicians with experience in cutting and staining sections. Salary according to experience.—Apply Dean's Office, St. Thomas's Hospital Medical School, London, S.E.1.

University College Hospital, Gower Street, W.C.1. Immediate vacancy for Graduate in Chemistry for Biochemical Section of Department of Clinical Pathology. Commencing salary £350 per annum. Applications should be submitted to the Secretary with the names of three referees.

WANTED

Doctor, experienced G.P., ophthalmology, desires appointment nursing home, school, hotel. Part-time Assistantship, practice or partnership, Bournemouth preferred.—Box 8465, B.M.J.

M.R.C.S., L.R.C.P. Forty years' experience. From India. Immediately available anywhere. Surgeries, Private School, Ship's Surgeon, any indoor work, secretary of hospital, infirmary, etc. Capable administrator. Knowledge accounts. Unable drive car Church of England. Abstainer.—Box 8480, B.M.J.

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Derby-Staffs border town. Easily managed, single-handed. Income £4,000. Panel 2,400. Well fitted, centrally heated surgery in town centre, on lease. Choice of two modern houses for sale, freehold £6,500 or £2,500 mortgage available. Practice 1½ years. Details in confidence, to applicants with sufficient capital.—Box P8470, B.M.J.

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For Sale owing to ill health, an old established unopposed Country Practice, Devon. Panel 630, average receipts for last 3 years £1,400. Premium 2 years purchase. House to rent.—Box P8115, B.M.J.

For Sale owing to death. Old established Medical Practice of the late Dr. R. M. Beatty of Westfield House, Heckmondwike. Panel list 850. Further particulars from Watts & Son, Solicitors, Dewsbury.

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In the estate of Dan Heearty, M.D., deceased, late of Magherafelt, in the County of Londonderry.—The Private and Panel Practice of the above named is for sale together with a modern and up-to-date surgery situated in the town of Magherafelt and offers for the purchase of same will be received by the undermentioned solicitors up to and including March 1, 1948, and from whom particulars may be had on request. Dated this 10th day of February, 1948. John J. McNally & Co., Solicitors, Magherafelt, Co. Derry.

Manchester. High-class residential suburb. Very old-established Practice. Receipts £4,660 (average last three years), accountants figures. Panel 1,550. Appointments (prob. transferable) £255 per annum. Premium 1½ years. Assistant kept. Could be worked by one energetic man. Excellent modern type house, specially built for doctor, with separate surgery quarters. For sale at valuation.—Box P8443, B.M.J.

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Wanted immediately, Practice, Panel and Private or nucleus. South Coast, or within 40 miles, preferably Hastings. Modern house or bungalow. Leasehold. Freehold. Capital available.—Box P7823, B.M.J.

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Experienced doctor wishes to hear from practitioners who intend retiring later in year, Bournemouth district or Oxford area preferred. Panel essential. Capital available.—Box P8472, B.M.J.

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Well qualified doctor, thoroughly used to seaside practice, wishes to buy Coast Practice or would consider Partnership. Ample capital available.—Box P8449, B.M.J.

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Dispenser-Secretary required for February. Apply, stating experience.—Drs. Shaw, Beverley and Wood, Claremont House, Cleckheaton, Yorks.

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Lady Dispenser required (Hull), three doctors, Chichester. Secretary and Receptionist employed. Salary £6 6s. Board residence can be arranged.—Box 8418, B.M.J.

London College of Pharmacy for Women supplies Dispenser-Bookkeeper or Laboratory Technician. Training for Apothecaries' Hall Assistants' Examination, and in Clinical Pathology.—Secretary, 7, Westbourne Park Road, W.2. (Bayswater 0969).

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

Secretary-Dispenser required for non-panel practice.—Apply Dr. J. G. Bird, 64, London Road, Reading.

HOUSEKEEPERS

Doctor, Indian, 39, single, requires Housekeeper-Receptionist Lancashire town. Apply, with full details.—Box 8450, B.M.J.

Woman doctor requires Housekeeper, capable of taking full charge of household in capacity normally taken by wife. Permanent happy home and good scope provided to right person.—Box 8490, B.M.J.

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

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The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

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Ex-Wren, competent driver, with knowledge of London, requires Post Receptionist-Chauffeuse to doctor, West End.—Miss J. E. Tailby, Conifers, Repton, Derbyshire.

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HOUSEKEEPER

Experienced Housekeeper, doctor's wife, girl three years, requires situation, drive car, own typewriter, no objection to another child in house. Capable of full charge.—Apply, 44, Spring Grove, Loughton, Essex.

MISCELLANEOUS

PRIVATE

Wanted to borrow or buy, "Die Atembewegungen Der Norm Und Fehlform," by R. Dittrich (Stuttgart 1937).—Box 8415, B.M.J.

Wanted, set of Flowmeters for N_2O, O_2, and CO_2, bobbin or rotameter, any condition.—Box 8404, B.M.J.

British Encyclopaedia of Medical Practice (Butterworth). Complete set to date with all Supplements, in original covers. What offers? What have you? —Box 8420, B.M.J.

A Set of Medical Pathology Slides required. Details.—Box 8403, B.M.J.

For Sale, Siemens "Ultratherm" S/W Diathermy with adjustable arms and several electrodes, £130. Schnee Bath outfit complete adjustable chair and arms, 4 baths, £25. Kromayer lamp high-pressure burner several quartz applicators and filters, £40. Eight Element I/R tunnel on castors to fit over tubular steel massage couch, £30. Hanovia U.V.L. Ward Model, £27. Two Ritchie Electronic muscle/nerve stimulators £40 each. Two Electro-magnetic surgery, £11 each. Suite treatment room furniture consisting desk, 3 chairs, 2 tables and cabinet, all matching chrome tubular steel and black lacquered wood, £95. Apply, Mr. Sharpe, A. L. Hawkins, Ltd., 15, New Cavendish Street, W.1. WEL. 1233

For Sale. Small Portable N_2O Apparatus, suitable for minor operations and denustry. Red sorbo face piece and mineralized bag. Good working order, £8 8s. Two 25-gallon cylinders included.—Box 8484, B.M.J.

For Sale, a Swift Microscope, 1/12, 1/6 and 1/3. No moving stage, £25. An Examination Couch in good condition, £5.—Box 8454, B.M.J.

For Sale. Equipment of Masseuse lately deceased, including: Long Wave Diathermy Set. Intertherm Diathermy Set. Standard Radio Diathermy Set. Portable Diathermy. Infra Red in Case.—Box 8493, B.M.J.

For Sale. Disarticulated Skull, £12. Small Chemistry Balance Agate Knife Edges, Box Weights, £15. Very good condition—Box 8453, B.M.J.

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For Sale. Complete Disarticulated Skeleton in very good condition. £17. Seen in London.—Box 8402, B.M.J.

Microscope for sale, Bausch and Lomb, comp'ete in case, plus Leitz oil condenser. Fixed stage. Condition excellent. £40. For inspection phone Mountview 6692.

Natural Canadian Mink Coat, length 39 in., shoulder 13 in. Little worn. Sacrifice £500. Seen Edinburgh.—Box 8455, B.M.J.

Readson Portasun Quartz Mercury Vapour Lamp complete with goggles, table model, 12 in. reflector, as new, £35.—Piper, 16, Kemps Western Road, Hurstpierpoint, Sussex.

Urgently wanted, Singer's Studies in the History and Method of Science, Vol. 1. 1917 (Clarendon Press) and Bulloch's The History of Bacteriology (O.U.P. 1938). Offers to Box 8491, B.M.J.

X-Ray Equipment for Sale. Solus 10 K.V.A. 4-valve non-shockproof diagnostic set with control Table, Screening Stand (No. 3526.M), Tube Stand (No. 3534.M), Couch (No. 3515.M), and Couch (No. 3517.M), also Solus 30 M.A. Ward Trolley Set (No. 3503 W.D.).—Apply to Secretary-Superintendent, East Ham Memorial Hospital, Shrewsbury Road, London, E.7.

TRADE

Wanted, Second-hand Surgical Instruments, furniture for surgery and consulting room, blood pressure apparatus, electric diagnostic sets, ophthalmoscopes, auriscopes, microscopes, etc.—Particulars to A. Fleming & Co. (Succrs.), 51, Mortimer Street, London, W.1. (Telephone: Mus. 6292.)

Wanted to Purchase. Good quality used Microscopes and Accessories. Highest prices paid.—Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. MAYfair 7311.

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire

Doctors' Watches.—Franklands can still supply your requirements in watches. Write for particulars.—E. J. Frankland & Co., Ltd., Marle House, South Godstone, Surrey; or London Showroom, New Bridge Street House, 30-34, New Bridge Street, Ludgate Circus, E.C.4.

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept. B.M.J.), 3, Railton Road, London, S.E.24.

Parker-Knoll Easy Chairs can now be supplied to doctors for surgeries, waiting rooms, etc., by D. Matthews & Son, Ltd., 14/16, Manchester Street, Liverpool, 1.

Queen Non-Irritant Toilet Range for prescription in allergic cases. Leaders of the profession have found these of great use as an alternative to beauty preparations and cosmetics suspected of giving rise to allergic symptoms or other irritants. Small supplies of "QUEEN" non-allergic skin soap are now available, 1s. 6d. tablet.—Boutalis, Ltd., 150, Southampton Row, London, W.C.1.

Wigmore's, Ltd., 63, Baker Street, London, W.1. (Welbeck 5668). Dispensing Opticians by appointment to Western Ophthalmic Hospital, Marylebone Road, London, N.W.1. Doctors' prescriptions accurately dispensed.

APARTMENTS, BOARD, ETC.

AVAILABLE

Bushey, Herts. Gentlewoman offers comfortable home to one or couple (private sitting-room). Large garden. Convenient station.—Owner, 122A, Aldenham Road, Watford, 5740.

Good Accommodation in Bayswater for single man or married man with furniture. Available for very occasional night calls and part week-ends.—Box 8492 B.M.J.

London, N.W. Well-furnished Bedroom, private bath, use of small sitting-room, including breakfast, 6 guineas weekly. Dinner by arrangement.—Box 8456, B.M.J.

Residential Service Rooms with telephone at Osborne Court, 6, Cornwall Gardens, Kensington, S.W.7. Single room now available, terms including breakfast, 5 guineas weekly. Other meals to order. Write or telephone Manager, WEStern 1663.

WANTED

Doctor, holding specialist hospital appointments, requires to rent, before mid-summer, Unfurnished House, Self-contained Wing, or Ground-floor Flat in or within fifteen miles of London; preferably north.—Box 8406, B.M.J.

Ex-R.N.V.R postgraduate shortly requires Lodgings in London, within easy access to West End. Must include morning and evening meals. Moderate terms.—Box 8419, B.M.J.

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"A Model Hotel in Miniature" (Press), Chequers, Pulborough, Sussex. One hour London, near station. Unusual comfort, old-world charm. Central heating, log fires, etc.—really warm. Delightful sunny location. Farm and garden produce, varied and appetizing meals—invariably commended Excellent golf and riding; lovely walks. Licensed. Telephone: Pulborough 86.

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Old Red Lion Hotel, Stow-on-the-Wold, Glos. (Tel.: 66). Cotswolds, easily reached by train, well heated, good cooking, own poultry, garden, magnificent country, restful. Winter terms from 3½ gns. Summer 5 to 6½ gns.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild, allowing visitors to be out in the wonderful air. The Hotel is central heated, individual heating in bedrooms. H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

St. Ives, Cornwall, Porthminster Hotel. Winter at sunny St. Ives and enjoy the charm and first-class service and comfort at this noted hotel, from 6 gns. for extended visits. Overlooks sea. Fully licensed. Tel.: 321.

Seaton, S. Devon, Seaton Beach Hotel, A.A.**,** R.A.C. Just the place for Easter and Spring. Faces due South on sea front. Cheerful, warm and very comfortable—it's one of Devon's best hotels. Cocktail lounges and bar. Billiards, golf. Tel.: 17.

HOUSES, CONSULTING ROOMS

A Prerequisite for a successful Nursing Home is a healthy position, and the pineclad hills of Surrey have few rivals in this respect. Couple this position with a superbly built modern house of most pleasing elevation, excellently planned and with all main services, and you have something approaching the ideal. The house of 12 bedrooms, 4 reception rooms and 3 bathrooms stands in grounds of about 4 acres, and the views therefrom are beautiful in the extreme. The property is freehold and for sale at £12,000 with vacant possession. Sole Agents: Gribble, Booth & Shepherd, Basingstoke (and Yeovil).

Cornwall. To Let April to June, fully Furnished (no linen) 4 Bedroom House. H.C., electric, c/h., 'phone, garage. Unrivalled sea views. Shops near. —Box 8407, B.M.J.

For Houses and Consulting Rooms in Harley Street and the medical area apply to C. E. Bedford & Co., Ltd., 10, Wigmore Street, W.1. Telephone: Langham 3927 and 3928.

For Sale. 26 roomed House in East Kent, prominent sea front position. In excellent condition. At present a Nursing Home. Admirably suited for hotel. Price, including freehold, equipment, and furniture, etc., £16,000. £10,000 can remain on mortgage. Ref. F/8160. Apply, Tellwright, 2, Potter Street, Bishop's Stortford. Phone 758.

Lister House, 11-12, Wimpole Street. An opportunity occurs to secure a consulting room here. Managing Agents, C. E. Bedford & Co., Ltd., 10, Wigmore Street, W.1. Langham 3927.

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1946 (first regis.ered) Rolls Royce Phantom III semi-razor edge 7-seater limousine Mulliner. 6,500 miles only.

1939 Standard 12 saloon. Speedometer reading 30,000.

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1938 Rover 20 sports saloon.

1933 Rolls Royce 20-25 sports saloon. Thrupp and Maberly.

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For Sale. Austin Ten. Mileage 50,365. Insured £450. Details, write 5, Amberley Road, Rustington, Sussex.

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1935 Daimler 15.9. Recent complete overhaul at Daimler works. Low mileage. Offers.—Box 8422, B.M.J.

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Plas Amherst, Harlech, N. Wales. Residential Nursing Home for convalescent and medical cases and aged people. Facing sea. H. & c., central heating. Resident doctor. From six guineas.—Apply Secretary. Tel. 2.

FOR SALE

Bournemouth. Thriving Nursing Home (Chronic and Medical), panoramic views, 3 communicating detached houses, 30 patients' rooms. 4½ acres grounds. £25,000 freehold and furniture.—Rumsey & Rumsey, 111, Old Christchurch Road, Bournemouth, 7080.

APPOINTMENTS

(Continued from page 25)

BERKS AND BUCKS JOINT SANATORIUM
Peppard Common, Henley-on-Thames, Oxon
Assistant RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Medical Officer (B1). The salary scale is £472 10s. by annual increments of £25 to £577 10s. together with a cost-of-living bonus at present £29 19s. 8d. and board residence, valued for superannuation purposes at £150 per annum. Married quarters are not available. The post is subject to the provisions of the Local Government Superannuation Act, 1937, and to one calendar month's notice on either side. Previous experience in modern methods of treatment of pulmonary tuberculosis is required. The sanatorium contains 250 beds and a major thoracic surgical unit. Suitably qualified R practitioners holding B2 appointments, also those occupying B1 posts who are ineligible for H.M. Forces, may apply. Applications with copies of three recent testimonials or the names of three referees, should reach the undersigned not later than February 25, 1948.—Harley Stevens, Superintendent Physician.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £225 per annum, plus full residential emoluments. Applications should be forwarded as soon as possible to C. E. Lowndes, Secretary.

BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY (248 beds—7 Residents)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) to become vacant on March 1, 1948, including R practitioners within three months of qualification. Salary at the rate of £175 per annum with full residential emoluments. Applications are also invited from ex-Service medical officers under the Rehabilitation Scheme. Applications should be sent to the undersigned.—T. Dewhurst, General Superintendent and Secretary, Royal Infirmary, Blackburn.

BOLTON ROYAL INFIRMARY
HONORARY ASSISTANT GYNAECOLOGIST

The Committee invite applications from registered medical practitioners for the post of Honorary Assistant Gynaecologist to the Royal Infirmary. Applications, giving details of posts held and qualifications, to be addressed to the undersigned immediately.—H. P. Travis, General Superintendent.

ALTRINCHAM GENERAL HOSPITAL
PATHOLOGIST

Applications are invited for the post of Pathologist. The appointment is intended to be full-time, but daily attendance amounting to not less than six half-day sessions weekly would be considered. Applicants must be exclusively engaged in the practice of pathology, and experience in all branches of pathology is desirable. The post is non-resident with a salary of £750 to £1,000 per annum. The successful candidate will be encouraged to engage in private practice, for which there is considerable scope, and this will not be limited to patients in the private wards. He will be expected to undertake such work in the hospital laboratory, a proportion of the private fees being retained by the hospital. Duties to begin on or soon after April 1, 1948. Applications giving full particulars and the names of two referees should be sent by February 28, 1948, to the General Superintendent and Secretary.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ASSISTANT PATHOLOGIST (A)

Applications are invited from registered medical practitioners (male) for the appointment of Resident Assistant Pathologist (A). Salary at the rate of £150 per annum with full residential emoluments. Previous experience in Pathology not necessary. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications, stating present post, should be sent immediately to H. E. Ryan, House Governor.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
Myrtle Street, Liverpool, 7
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the above appointment, vacant April 1, 1948, for a period of six months. The post qualifies the holder to sit for the D.C.H. Salary £120 to £180 per annum according to experience, with full residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. Applications and the name of a referee should be sent to the Secretary by March 6, 1948.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
Myrtle Street, Liverpool, 7
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the above appointment vacant April 1, 1948, for a period of six months. The post qualifies the holder to sit for the D.C.H. Salary £120 to £180 per annum according to experience, with full residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. Applications and the name of a referee should be sent to the Secretary by March 6, 1948.

ST. MARK'S HOSPITAL FOR CANCER, FISTULA AND OTHER DISEASES OF THE RECTUM, City Road, London, E.C.1
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1) for a period of six months from April 1, 1948. Preference will be given to candidates holding a higher surgical qualification. Salary at the rate of £250 per annum, with full residential emoluments, and certain fees. R practitioners holding B2 appointments and those holding B1 appointments and rejected by the R.A.M.C. may apply. Applications should be sent to the undersigned not later than February 27, 1948.—Raymond Bull, Secretary.

SAINT MARY'S HOSPITALS, Manchester
OBSTETRICAL HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitions now holding A posts, for the appointment of Obstetrical House Surgeon (B2) at the Country Branch, Prestbury, Cheshire (60 beds). The duties include attendance at antenatal clinics at the hospital in Manchester, and the appointment is suitable for a candidate taking the D.R.C.O.G. Salary at the rate of £75 per annum. The appointment will be made at the end of March and will date from April 1, 1948, for a period of six months. Applications to be sent to the undersigned not later than March 6, 1948.—A. R. Wise, General Superintendent.

ST. THOMAS'S HOSPITAL, S.E.1
Temporary ASSISTANT MEDICAL OFFICER in the Venereal Diseases Department

Applications are invited for the post of Temporary Assistant Medical Officer in the Venereal Diseases Department, for a period of one year. Salary £500 to £650 per annum according to experience, for a 25 hour week. Applications, stating age, qualifications with dates, details of experience, and names and addresses of three referees, should be sent by March 4 to the Clerk of the Governors.

ST. MARY'S HOSPITAL FOR WOMEN AND CHILDREN, Plaistow, E.13
(General Hospital, no Maternity)

Applications are invited from registered medical practitioners for the following appointment:—

RESIDENT PHYSICIAN (B2), vacant March 1, 1948. Salary £250 per annum with full residential emoluments. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications to be sent to the Secretary.

ST. PETER'S HOSPITAL FOR STONE
Henrietta Street, Covent Garden, W.C.2
HOUSE SURGEON (B1)

The office of House Surgeon (B1) will fall vacant on April 1, 1948 and applications are invited from male candidates on the British Register with previous experience in a similar office at a general hospital. The salary is at the rate of £150 per annum, with board, lodging and laundry. At the expiration of six months' term of office, and subject to the recommendation of the Medical Committee, the House Surgeon may be appointed Resident Surgical Officer (B1) for a further similar period. Candidates should therefore be prepared, if successful, to remain at the hospital for twelve months in all. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Twelve copies of application, accompanied by copies of three testimonials, should be forwarded to reach the Hospital Secretary not later than the first post on Monday, March 15, 1948.

ST. THOMAS' HOSPITAL, S.E.1
CHIEF ASSISTANT
to the Radiotherapy Department

Applications are invited from registered medical practitioners, including those serving in H.M. Forces, for the post of Chief Assistant to the Radiotherapy Department, vacant on April 1. Maximum tenure four years, subject to annual reappointment. Salary for full-time duty £950 per annum, part-time duty on a pro rata basis. Twelve copies of applications are required and should state age, qualifications with dates, and be sent by February 28 to the Clerk of the Governors.

SAINT MARY'S HOSPITALS, Manchester
TWO OBSTETRICAL HOUSE SURGEONS (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners now holding A posts, for the appointments of two Obstetrical House Surgeons (B2) for a period of six months. The appointments will be made at the end of March and will date from April 1, 1948. Salary at the rate of £75 per annum, with full residential emoluments. Applications to be sent to the undersigned by March 6, 1948.—A. R. Wise, General Superintendent.

ST. MARY'S HOSPITAL, London, W.2
WHOLE-TIME PATHOLOGIST

Applications are invited for the appointment of a Pathologist (whole-time) to St. Mary's Hospital and Paddington Green Children's Hospital. Salary £1,000 per annum. The appointment is for a period of twelve months. Applications stating nationality, age, qualifications and experience, together with names of three referees, should reach the undersigned by March 3, 1948.—W. Parkes, House Governor, St. Mary's Hospital, W.2.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN, 5, Lisle Street, W.C.2
PART-TIME PATHOLOGIST

Applications are invited for the post of Part-time Pathologist. Salary £700 per annum. For times of attendance and regulations governing the appointment, apply to the Secretary.

SWANSEA GENERAL AND EYE HOSPITAL

Applications are invited from registered medical practitioners (male or female) for the undermentioned appointments:—

HOUSE SURGEON (A), vacant March 11, 1948.
HOUSE PHYSICIAN (A), vacant March 14, 1948.

Including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by practitioners who are liable under these Acts, the appointments will be for a period of six months. Salary for each appointment at the rate of £200 per annum with full residential emoluments. Applications should be forwarded to the undersigned.—O. C. Howells, Secretary-Superintendent.

SWANSEA GENERAL AND EYE HOSPITAL
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners male or female, for the appointment of House Surgeon (A), now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these acts, appointment will be for a period of six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications should be forwarded to the undersigned.—O. C. Howells, Secretary-Superintendent.

SEAMEN'S HOSPITAL SOCIETY
DREADNOUGHT HOSPITAL, Greenwich, S.E.10
ASSISTANT RADIOLOGIST

Applications are invited from fully qualified medical practitioners (preferably holding the D.M.R.E.) for the appointment of Assistant Radiologist. Initially one Session per week will be required for which an annual honorarium of £250 will be paid. Applications, together with names of not less than two recent referees, to be sent on or before February 25, 1948, to the undersigned.—F. A. Lyon, Administrator and Secretary.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
CLINICAL PATHOLOGIST

Applications are invited for the post of Clinical Pathologist. The position will be whole-time and non-resident at a salary of £1,250 per annum. Applications should be forwarded to the undersigned as soon as possible.—A. E. Collins, Secretary

SOUTHPORT GENERAL INFIRMARY (156 beds)
ORTHOPAEDIC HOUSE SURGEON AND CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Orthopaedic House Surgeon and Casualty Officer (B1), to commence immediately for six months. Applicants should have held House appointments and have had Orthopaedic experience. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary at the rate of £225 per annum with full residential emoluments. Applications stating age, qualifications, with dates and nationality and accompanied by copies of recent testimonials should be sent to the Superintendent and Secretary.

STAFFORDSHIRE GENERAL INFIRMARY
Stafford
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the post of House Physician (A), including practitioners within three months of qualification who are liable for service under the National Service Acts, which is now vacant. If held by an R practitioner, the appointment will be limited to six months. Salary £250 per annum, with usual emoluments. Applications should be submitted to the undersigned immediately.—A. E. Collins, Secretary.

SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common, S.W.4
HOUSE SURGEON (A)

Applications are invited from registered women medical practitioners for the appointment of House Surgeon (A), now vacant. The appointment will be for a period of six months. Salary is at the rate of £150 per annum with full residential emoluments. Applications should reach the Secretary at the Hospital as soon as possible.

VICTORIA HOSPITAL, Accrington, Lancs
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, including those within three months of qualification and liable under the National Service Acts, for the appointment of House Physician (A). Salary at the rate of £250 per annum, with full residential emoluments. The appointment is for a period of six months. The hospital employs three residents. Applications to be sent as soon as possible to the Secretary-Superintendent.

WHITE LODGE HOSPITAL, E.M.S.
Newmarket (312 beds)
RESIDENT MEDICAL REGISTRAR (B1)

Applications are invited for the appointment of Resident Medical Registrar (B1) at the above hospital. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applicants should have had previous hospital experience in general medicine. Special experience in Chest Diseases (including pulmonary tuberculosis) would be an advantage. Salary payable by the Ministry of Health at the rate of £750 per annum on non-residential basis, less £100 for board and lodging. Applications should be sent to the Medical Superintendent before February 27, 1948.

WESTON-SUPER-MARE GENERAL HOSPITAL
(100 beds)
HOUSE SURGEON (A) and HOUSE PHYSICIAN (A)

Applications are invited from medical practitioners for the appointments of House Surgeon (A) and House Physician (A). Duties to commence as follows: House Surgeon, immediately, and House Physician from March 1, 1948. Salary for both posts at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary.

WESTMINSTER CHILDREN'S HOSPITAL
(formerly the Infants' Hospital)
Vincent Square, S.W.1
HOUSE PHYSICIAN (B2)

Applications are invited for the office of House Physician (B2), including R practitioners who hold A appointments. The appointment will be tenable for a period of six months from April 21, at a salary of £150 per annum, with full residential emoluments. Candidates should have held previous house appointments and have had some experience with children. Applications should be submitted to the undersigned within fourteen days of the date of publication.—Charles M. Power, House Governor and Secretary, Westminster Hospital, S.W.1.

WORKINGTON INFIRMARY (capacity 60 beds)
HOUSE SURGEON (B2) (male)

Applications are invited for the appointment of House Surgeon (B2) (male), vacant now, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £300 per annum, with full residential emoluments Applications should be sent immediately to Dr T. T. Graham, Honorary Medical Secretary.

Have you read the notice at top of page 13 ?

Have you read the notice at top of page 13 ?

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
Watford, Herts (206 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of House Surgeon (B2) vacant March 15. R practitioners who hold A posts may also apply when appointment will be limited to six months. Salary will be at the rate of £200 per annum with full residential emoluments. Applications, stating age, qualifications and experience, together with copies of two recent testimonials, should be sent to the undersigned.—H. M. Maskell, Administrator.

WEST HAM MENTAL HOSPITAL, Goodmayes, Ilford
Junior ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for a Junior Assistant Medical Officer (B1). Salary £455 by annual increments of £25 to £555 per annum plus war bonus, plus full residential emoluments valued for Superannuation purposes at £150 per annum. R practitioners holding B1 appointments cannot apply unless they have been rejected by the R.A.M.C. The hospital is situated within easy access to the centre of London, and there are opportunities for postgraduate study. Applications should be sent to the Medical Superintendent as above as soon as possible.

WATERLOO AND DISTRICT GENERAL HOSPITAL, Liverpool, 22
HOUSE SURGEON (A or B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (A or B2) for a period of six months as from April 1, 1948. The appointment is open to practitioners within three months of qualification who are liable for service under the National Service Acts and A practitioners. Salary is at the rate of £250 per annum with full residential emoluments. Applications should be lodged with the undersigned as soon as possible.—G. Lawson McGregor, Secretary-Superintendent.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
CHILD PSYCHIATRIST (Male or female)

Applications are invited for this post. Adequate premises, equipment and full staff available. The post has honorary status but sessional payments will be made. At least two attendances per week will be required. Responsible experience of child guidance essential. Applications (without testimonials) should be sent to the undersigned by March 6, 1948, giving full particulars of age, qualifications and experience and the names and addresses of two referees.—C. R. Lockhart, Secretary.

WEST CORNWALL HOSPITAL
Penzance (116 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) vacant now. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent to K. I. Newell, Secretary-Superintendent.

WEST END HOSPITAL FOR NERVOUS DISEASES, 73, Welbeck Street, W.1
In-Patient Department at St. Charles Hospital, Ladbroke Grove, W.10
ANAESTHETISTS

There are vacancies on the visiting medical staff for two Anaesthetics to the hospital. Payment will be at the rate of £2 2s. per session (under review). Applications together with the names of three referees should be sent to the undersigned by March 10 from whom further particulars may be obtained.—V. F. Marshall, Secretary.

WOKING VICTORIA HOSPITAL
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Medical Officer (B2), vacant immediately. Salary £240 per annum, with full residential emoluments. R practitioners who hold A posts may apply, when the appointment will be limited to six months. Applications to be addressed to the Honorary Secretary.

W. J. SANDERSON ORTHOPAEDIC HOSPITAL SCHOOL FOR CHILDREN
Gosforth, Newcastle-upon-Tyne, 3
RADIOLOGIST (part-time)

Applications are invited for the part-time appointment of Radiologist. Remuneration will be on a sessional basis, in accordance with the recommendations of the B.M.A., and initially one session per week, plus special sessions as may be necessary, will be required. Applications should be sent to Alexander Lawther, House Governor.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
Watford, Herts (206 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A), vacant immediately. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M. Maskell, Administrator.

WIMBLEDON HOSPITAL
Thurston Road, Copse Hill, Wimbledon, S.W.20
HONORARY CONSULTING UROLOGIST

Applications are invited for the post of Honorary Consulting Urologist. Candidates should hold a higher surgical qualification and be engaged wholly in consulting practice. Applications to the Secretary of the Honorary Medical Board of the Hospital by February 28.

YORK COUNTY HOSPITAL (222 beds)
HOUSE SURGEON (B2)
mainly Eye, Ear, Nose and Throat Department

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) whose main duties are in the Eye, Ear Nose and Throat Department (37 beds, with busy Out-patient Clinics), but who will share in the general work of the hospital and in casualty duty, including R practitioners who now hold A posts. If held by an R practitioner appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments. This post is recognized for D.O.M.S. and D.L.O. examinations and becomes vacant on April 1, 1948. Applications to be sent to the undersigned by March 15, 1948.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ORTHOPAEDIC HOUSE SURGEON AND CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic House Surgeon and Casualty Officer (B1), vacant now. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £350 per annum, with full residential emoluments. Applications should be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Physician (B2), vacant on March 9, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B1), now vacant. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. The Hospital is recognized for the D.A. Salary £350 per annum with full residential emoluments. Applications should be sent to the undersigned immediately. —J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of Second House Surgeon (A), now vacant, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK DISPENSARY
RESIDENT MEDICAL OFFICER

Applications are invited for the post of Resident Medical Officer, male or female. As duties not onerous, post suitable for an applicant wishing to devote considerable time to further study. Salary £300 to £500 (according to experience). Applications should be sent by February 28 to J. C. Peters, Secretary, 4, New Street, York.

HOMES

LAVERSTOCK HOUSE, nr. SALISBURY, WILTS

Private Mental Home for Certified and Uncertified Ladies and Gentlemen. Lovely house and garden (18 acres). ESTABLISHED 200 YEARS, MODERN TREATMENTS. Illustrated brochure may be obtained from Dr. Horace Hill, M.R.C.P., Physician-Superintendent. Tel.: Salisbury 2612.

ST. ANDREW'S HOSPITAL, NORTHAMPTON
For Nervous and Mental Disorders

President: The Most Hon. the MARQUESS OF EXETER, K.G., C.M.G., A.D.C. Medical Supt.: Thomas Tennent, M.D., F.R.C.P., D.P.H., D.P.M. This Registered Hospital is situated in 130 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or who wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in Hospital or in one of the numerous villas in grounds of the various branches can be provided.

WANTAGE HOUSE.—This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped with all the apparatus for the complete investigation and treatment of Mental and Nervous Disorders by the most modern methods; insulin treatment is available for suitable cases. It contains special departments for hydrotherapy by various methods, including Turkish and Russian baths, the prolonged immersion bath. Vichy Douche, Scotch Douche, Electrical baths, Plombières treatment, etc. There is an Operating Theatre, a Dental Surgery, an X-ray Room, an Ultra-Violet Apparatus, and a Department for Diathermy and High-frequency Treatment. It also contains laboratories for biochemical, bacteriological, and pathological research. Psychotherapeutic treatment is employed when indicated.

MOULTON PARK.—Two miles from the main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres. Milk, meat, fruit, and vegetables are supplied to the Hospital from the farm, gardens and orchards of Moulton Park. Occupational Therapy is a feature of this branch, and patients are given every facility for occupying themselves in farming, gardening and fruit-growing.

BRYN-Y-NEUADD HALL.—The seaside house of St. Andrew's Hospital is beautifully situated in a park of 330 acres at Llanfairfechan amidst the finest scenery in North Wales. On the North-West side of the Estate, a mile of sea-coast forms the boundary. Patients may visit this branch for a short seaside change or for longer periods. The hospital has its own private bathing house on the seashore. There is trout-fishing in the park.

At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts (grass and hard courts), croquet grounds, golf courses, and bowling greens. Ladies and gentlemen have their own garden, and facilities are provided for handicrafts such as carpentry, etc.

For terms and further particulars apply to the Medical Superintendent (Telephone Nos.: 2356 and 2357 Northampton), who can be seen in London by appointment.

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BOWDEN HOUSE
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Diagnostic Week.—All patients are put through a routine series of clinical, pathological and radiological tests, as well as undergoing a session of narco-analysis. For this an inclusive fee of 25 guineas is charged. There is no commitment on either side for further treatment.

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Open air occupation and recreation for patients, farming, gardening, football, cricket, tennis, bowls, etc. School recognized by Ministry of Education. Fees: 1st class (men only), from £3 3s. per week; 2nd class (men and women), from £2 2s. per week; 3rd class (men and women) supported by Public Assistance Committees, from 35s. per week; Education Committees, from 41s. 6d. per week private, from 23s. 6d. per week. For further particulars apply to the Secretary, G. Millington, A.L.A.A., The Thomas Bartlett Home, Liverpool Road South, Maghull, near Liverpool.

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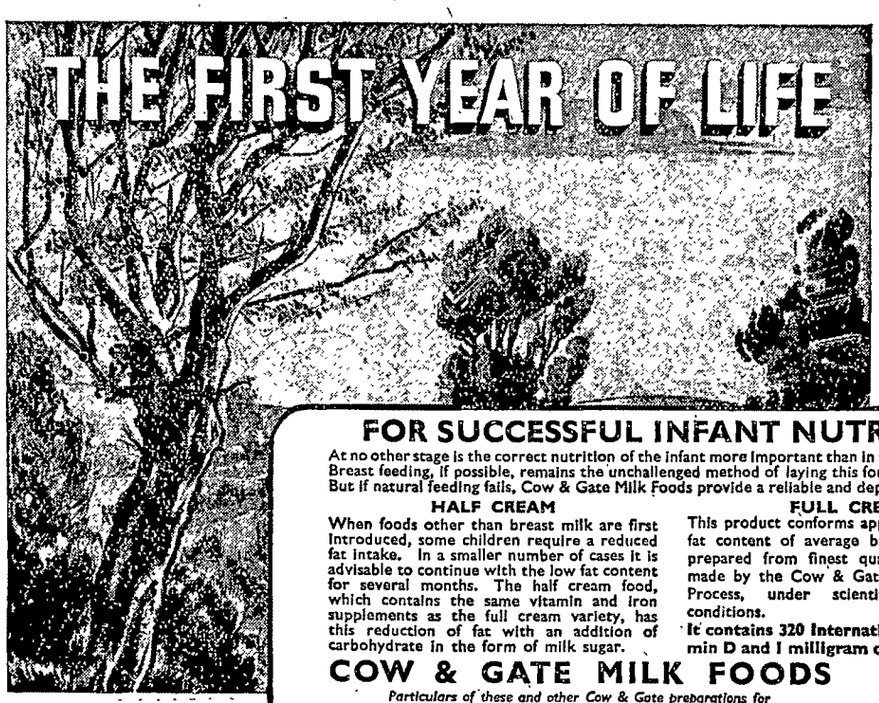

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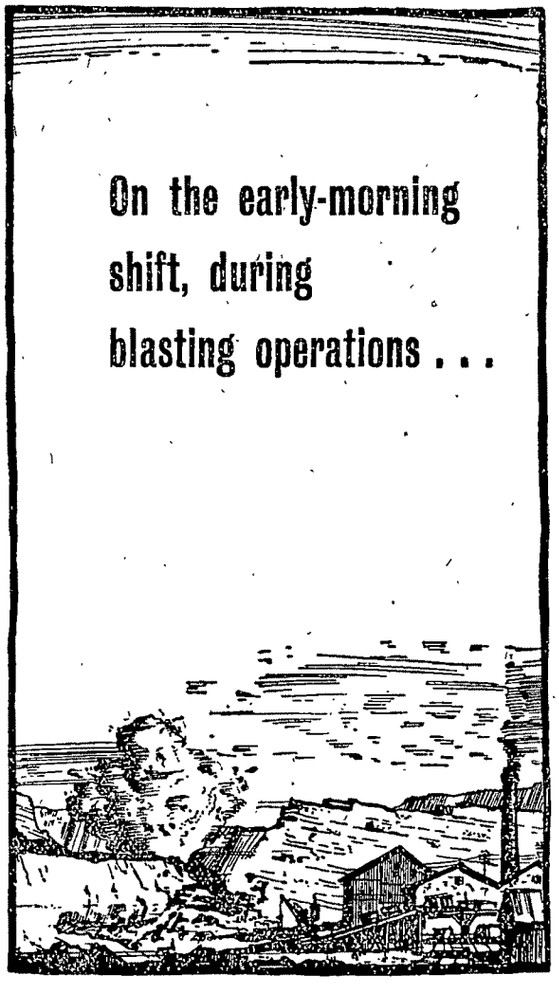

Casualties in circumstances of this sort frequently call for ophthalmic surgery.

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D.3.

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vitamin A	2,000 i.u.	vitamin E	1 mg.	iodine	not less than 10 p.p.m. each
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References:—Shortage of space precludes list of references, but full documentation may be obtained on application to Clinical Research Dept. 39.A.

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY FEBRUARY 28 1948

SCEPSIS SCIENTIFICA*

BY

GEOFFREY JEFFERSON, C.B.E., F.R.S.

Professor of Neurosurgery, University of Manchester

The habit of mind of any scientist is sceptical in so far as he is, or should be, unwilling to admit the truth of anything without proof. The antithesis is a habit of faith in beliefs, usually expressed in abstract ideas, that make so strong an appeal to the individual as to require no proof; to him they seem self-evident. The habit of faith is one shared by scientists, who must accept teachings and beliefs that they have not personally inquired into. There is this difference, that the latter know they can obtain verification of the facts if they turn to the original experiments or calculations. If after that they feel sceptical they will try a rigidly identical experiment themselves or will devise new ones to test the results previously given. Belief in abstractions, on the other hand, can only refer for confirmation to others, contemporary and past, who attest them with equal or greater vividness and force.

The definition of the scientific outlook just given might be commented upon by philosophers. They might somewhat cynically say that in history it was observable that individual scientists had seemed to be readier to accept the truth of personal researches than that of others. They might observe also that the answer to an experiment is always a special answer since it is conditioned by the nature of the experiment itself, and that its applicability in a chain of reasoning depends on the choice of that particular experiment out of all possible experiments. They would almost certainly object that the word "truth" was misused, for science has nothing to do with truth in the sense in which scholars for centuries have employed the word—"correctness" or "accuracy" would be better. The amended definition would then run that a sceptical habit of mind is proper for scientists with reference to their own as well as to other people's work, that it embraces unwillingness to accept without adequate proof the correctness of a certain type of observation, usually with limited aim; and it might be added that this proof should preferably be quantitative, should take the form of measurement.

Essential Irrationality of Science

The philosopher would perhaps go on to add his own sceptical reflections on the limitations of the scientific method and of the orthodox scientific mind. He would find it difficult to express himself better than A. N. Whitehead or to add anything to what that philosopher wrote in his classic *Science and the Modern World*. He there speaks of the essential irrationality of science, by which he means its pursuit of crude and brutal fact and imperative acceptance of fact irrespective of its having any recognizable meaning.

This charge of irrationality is at first a little shocking, but it is valid For science takes a special pride in the necessity for such acceptance and is particularly suspicious of first causes and purpose. It is simpler when the results of experiments or biological observations are in line with orthodox beliefs; when they are not, the observer must still record them even when they puzzle him, are even more "irrational" than he expected. Within its own framework science presents mental difficulties, for clearly the scientific outlook requires a discipline of mind not quite natural or intuitive. There is a possibility then that the discipline may prove to be too rigorous. We can find two very different examples of suggestions for minimizing the risks of personal bias. The first is inherent in the Baconian notion of the value of the collective brains of a scientific committee. It was perhaps a Lord Chancellor's idea of science, as William Harvey, his doctor, might have said of it, recalling what he had said of Bacon's philosophy. An entirely different and individual concept, that of ridding the observer of all preconceptions and emotional content, was that of François Magendie 200 years later.

Magendie claimed that he went into the animal laboratory with a head empty of any expectation of what he would discover. He had two hands, two eyes, and no brain, or, rather, no mind. It would be tedious to explore the labyrinths of Magendie's illusions; he could not possibly have been as ingenuous as he thought he was, a kind of Parsifal transplanted, the wise fool of the laboratory. None the less it is quite certain that Magendie's ideal is theoretically necessary if the observer is to maintain the discipline that science demands. Unless extreme care is taken the experimenter or inductive reasoner may find himself falling into the errors which Olmsted finds in Brown-Séquard's later work. He no longer asked, says Olmsted, "How will Nature act under certain conditions?" but, "What conditions can I set up so that I can demonstrate to others the way I think that Nature will act?" The classical dilemma of science emerges: the necessity for an idea, a preconception, a theory which is to be put to experimental test, and the consequent danger that the manner in which the experiment is conducted may prescribe a wanted, an emotionally desired, result.

It is not without interest to seek from contemporary sources further amplification of the necessity seen at the beginning of the scientific era for three things—freedom to submit anything whatever to sceptical criticism, the danger of the scientist being deceived in his own experiments, and recognition that the scientific method could not expect to solve all the problems that might be put to test. Let us listen to some of those contemporaries.

Joseph Glanvil

Nearly 300 years ago there was published a book bearing the title of this article. It was by Joseph Glanvil, who died too young; it contained a reprint of an essay that later became famous—"The Vanity of Dogmatizing or Confidence in Opinions," originally printed in 1661, the year in which

*The substance of an inaugural lecture delivered to Leeds University Medical Faculty.

Newton entered Trinity College as an undergraduate. It was also the year of publication of Robert Boyle's *Sceptical Chymist*, the book that laid the foundations of modern chemistry. Glanvil desired, apart from the pleasure that he no doubt derived from a manner of writing so felicitous that it made him notable even in an exceptionally gifted century, to attack the belief that the old ways of thinking were the best. The investigation of nature started to flower with what now looks like astonishing abruptness in the sixteenth and seventeenth centuries. It found itself immediately in conflict with rationality, with a whole congress of scholastic erudition hammered out by thinking, by meditation, by logic, and by reason from suppositions not subjected and often not amenable to test. The perfection of the logic, the impeccability of the argument, raised a superstructure so imposing that the fallacy of the premises that were its foundation was not perceived. So great had been the success of these intellectual exercises that the answers to all questions were already known, or so it seemed.

On the other hand, the discoveries and propositions of Copernicus, Gilbert, Galileo, Kepler, Harvey, and Robert Boyle had been arrived at differently; what was more, Descartes 30 years before had announced in the *Discours de la Méthode*, that momentous charter for independence and certainty in thinking, the overthrow of mediaeval learning as an active force. Here was a new age dawning, created by a new method. The new method was science, the object of which was to examine data and to report on them without prejudice and particularly without prejudice emanating from ancient and dogmatic teaching; for, as to that, "What hath it been," said Glanvil, "but a pretty toy in an Heiroglyphick; a very slender something in a Fable; or an old nothing in a disputation."

The battle in which Glanvil was engaged was won so decisively by science that in our own times the teachings of the mediaeval thinkers have become more the property and happy hunting-ground for the scholar, the humanist, or the epistemologist than for the scientist. None the less the educational background of the scientist was furnished by the universities and monasteries, which in late mediaeval times were the abodes of men of quite exceptional intellect. That they were engaged in studies which later times rejected should not obscure the fact of their quality. That quality was there to be deflected little by little, a process fortunately not to this day completed, into the new paths of science. Nearly all the greatest scientists gave some acknowledgment that the wonders of the natural world which they had done something to unfold increased their reverence for God. These scientists therein showed their deeply rooted unity with the body of thought from which they sprang, had corrected but not destroyed.

Francis Bacon

In our own generation the average scientist is not permitted to do more than thank, not God, but his parents for the happy consortium of chromosomes with which they have unwittingly endowed him, so great has become the gap between us and that monastic thinking in which scepticism was barely permitted. But was the mind the supremely reliable tool that scholars and savants had believed it to be? In England, Glanvil, like Descartes, had been antedated by Francis Bacon. His *Novum Organum*, outlining further the ingenious but impossible method for the advancement of learning already mentioned, had advocated the cutting of strings that bound his age too firmly to the past. He proclaimed his doubts on the speculative and reasoning powers of the human brain, belief in which had been the discovery and joy of the Greeks. Brilliant indeed had been their use of the new weapon, but it was clear that speculation could lead to absurdity.

Bacon mistrusted the powers of the mind to such a degree that in the *Novum Organum* he exclaimed, "And so we must add not wings but weights and leads to the intellect so as to hinder all leaping and flying." The wit of man, he said, when it worked on facts, on matter, was limited by its material and could indulge in no great excess. But when it came to pure thought—that was where the danger lay: "If it work upon itself as the spider worketh his web, then it is endless, and brings forth indeed cobwebs of learning, admirable for the fineness of thread and work but of no substance or profit" (Preface to *Advancement of Learning*).

Bacon gave further examples of the mind's weaknesses—it presented mixed qualities: "Facility to believe, impatience to doubt, temerity to answer, glory to know, doubt to contradict, end to gain, sloth to search . . . these and the like have been the things which have forbidden the happy match between the mind of man and the nature of things, and in place thereof have married it to vain notions and blind experiments" (*Praise of Knowledge*). Wilfred Trotter has, within our lifetimes, re-expounded the Baconian scepticism in language more suited to our present-day ears, with a compact brilliance and inventiveness that at least equals the original. Trotter's proposal that minds needed calibration to take account of inherent and acquired bias was as engaging as impossible. Nevertheless, the idea of necessary calibration remains a useful short statement that we need at all times to remember. Trotter's deduction that ideas which aroused emotion were the most dangerous because the most violently defended was extremely important.

Glanvil's period denied him the concept of emotionalism—it would have been called passion; but he put forward a very similar idea: "Do what we can," he said, "Prejudices will creep in and hinder our Intellectual Perfection: And although by this means we may get some comfortable allay to our distempers, yet can it not perfectly cure us of a disease that sticks as close to us as our natures." In many respects this was no more than an old theological doctrine, one befitting the rector of the Abbey Church at Bath, to whom all man's imperfections could be explained by the Temptation and Fall. Bacon subscribed to the same belief. This made some frailties inevitable, inescapable, but man's tendency to err about everything was not hopeless if he would stick to facts. Science was useful and as exemplified by the new Royal Society, of which Glanvil was a Fellow, might do much to correct some of man's mistakes.

World of Ideas

It is interesting to observe how quickly all philosophers came face to face with the problem of mind and inevitably with that of brain. Berkeley, with his proposition that nothing existed save as an idea in the mind, is a ready, if the extreme, example. His superb sentences carried almost complete conviction: "Some truths there are so near and obvious to the mind that a man need only open his eyes to see them. Such I take this important one to be—viz., that all the choir of Heaven and furniture of the earth, in a word, all those bodies that compose the mighty frame of the world, have not any subsistence without a mind; that their *being* is to be perceived or known." It seemed almost an anticlimax when David Hume dismissed Berkeley's statements with the laconic remark that they "admit of no answer and produce no conviction." The great Dr. Johnson misunderstood Berkeley when he kicked his foot violently against a stone and said, "I refute him thus!" for the Bishop would have retorted that the solidity encountered and the pain felt were still no other than ideas in the mind.

Attractive though the ideal theory was, man's instinctive belief in the permanence and reality of a world which tangibly and visibly exists whether he is there to see it or not has overtopped the doctrine of pure ideas. We believe that things still exist even in our absence because experience has taught us that this is so, even though the strictest philosophy must forbid us to assume it. A modern minatory example of the possible deception by the senses is given by astronomers, who tell us that the light that reaches us from many stars has been so long on the way that the star from which it comes may now be dead or destroyed. That has not yet been proved by example, and even if it were our people, rightly empirical, are content to wait until such an event affects their lives before they adjust their thinking to consequences, from the distant empyrean.

Alexander Pope was more in touch with the first principles when he defined the proper study of mankind. For such close-range corrections within the reach of

everybody are easily made. We recognize that the world may look the same or a little different to other people; we know from the cell layers in the retina and from the presence or not of a chiasma that it must look different, sometimes very different, to other animals, both in colour and in perspective. We admit that our senses may mislead us, that what in the distance we thought was a man is a bush, and so forth; but we have spent our lives from our cradles in correcting these errors and have developed a built-in theory of probability that minimizes mistakes. Man only rarely raises his eyes to the firmament, and when he does it with scientific intent he finds mathematics there. He can conclude that the Universe was constructed by a Supreme Mathematician, one who had pre-knowledge of the discoveries of Newton, Einstein, Planck, and Rutherford and then hid them in nature to give reason for a terrific university game of hunt-the-slipper. But we can be sure, with Eddington, that the mathematics was not there until man put it there.

Kant in one of his more intelligible passages rightly held that space and time are not inherent in the objects of our knowledge but are elements in the knowledge itself—i.e., we put them there by our methods of observation. None the less, it has to be admitted that there is something to measure and that mathematical accounts are almost the only ones so far available. Man looks at the Universe, and if the Universe looks back at him he does not know, nor, except in rare moments, does he greatly care. There have been those so impressed by the vastness of space that man has seemed to them an unimportant object. It cannot be shown that this deduction has had any recognizable effect on those thinkers' manner of living or their relation with their fellow men. It is a view to point an argument or to be subject matter for a reverie. Man remains the most important subject in the world; his own nature and that of the furniture of the earth provide him with urgent problems enough.

The Brain and the Mind

Philosophy has agreed with the doctors that whatever mankind studies he has only one tool to use, his mind. It is the instrument of progress. We have seen how fallible its qualities, especially when attempting to make a right use of knowledge, have been held to be, and that not only recently but for centuries. It would be easy by presenting passages from Descartes' and Hume's writings to show two great thinkers struggling with this problem, the use of knowledge, and after long meditation concluding that the only way in which they could advance was by rejecting everything that they had ever learned and beginning anew. This they tried, and it was not the solution they required. Prejudices, emotions, illogical successions of reasoning would creep in.

Could anything be learned from the structure and workings of the brain? To this old question we have no modern answer. It had early been a matter for wonder that a cold, grey, soft mass such as the brain could be the seat of those powerful mental qualities that can so delight and inform us—and so deceive us. In its gross morphology the brain is not difficult to understand, but it yielded grudging fruit to the early experimenters. It has required the two centuries after 1740 to formulate the nervous impulse from the mediaeval concept of the animal spirits. And except that we admit now that we have no reason to believe that mental activities are carried out by processes very different from the impulses in the peripheral nerves and spinal cord, we still do not know how they produce the aggregate of mental processes that we call mind. That was Sherrington's conclusion. In that failure we greatly disappoint the philosophers, who imagine that we know more than we do, and, what is worse, build on that belief.

[*Passages on growth of knowledge of nervous impulse have been omitted.*]

The advance of basic knowledge of the brain's structure and its working could be made to apppear as a swiftly moving panorama of events that were in reality long and laborious in the enacting. It could be made to read like a smooth tale of success, a scientific rise from log cabin to White House. We know that what really happened is what happens now, that one man here possesses a piece of information, a man there another. It may be a long or a short while before it is realized that they fit together to make something else. But on the matter of mind it may seem strange that the great philosophers who have communed and speculated about man, his meaning and his purpose, should have known so little of the intimate mechanisms of integration in the brain.

The great innovators in psychology—Freud, Jung, and Adler—have shown no more interest in structure than Plato. It is actually of less moment than might be imagined; for the definition of correct method, of what we can hope to know, how we know it, what are our lets and hindrance, and what is beyond knowing, requires next to no neurological knowledge. It was no detriment, for example, to David Hume, who, supposedly the arch sceptic, comes nearest to the scientist's ideal of a philosopher in his axiom that given a cause we cannot foretell what the result will be unless we have previous experience of that cause acting in rigidly identical circumstances. This is pure science. The difficulty is that causes do not arise in isolation but, too often for our composure, derive from events further back again. Generalized, Hume's doctrine is expressed by saying that we know nothing except by experience—again the basis of pure science. Distrust of dogma, of far-reaching planning based on a concept, is a characteristic of British political and philosophical thinking, as Bertrand Russell has recently so brilliantly demonstrated.

Application of the Scientific Method

What is the use, we say, of a logician's theory neatly pursued when experience has taught us that so many adventitious variables will force their way in. Better far not to attempt to see too far ahead; better to correct the bias as each variable appears. That, too, is the method of science. Are we to infer that speculation is never permissible in science? By no means. The difficulty is to get the dosage right. Science, at conceptional level, is as speculative as art; every good piece of research begins as an idea coming unsought into a mind. "All the thinking in the world," said Goethe, commenting on someone's remark that thinking is so difficult, "does not bring us to thought; we must be right by nature, so that good thoughts may come before us like free children of God, and cry, 'Here we are!'" We know not how this is, but in its highest form the inspiration is the same as that which visits poets and artists. The difference lies in the method applied to the idea.

Science is more fertile than art in suggesting trains of thought with one thing arising out of another. It does not do this smoothly without pause nor in a straight line, for not only may it seem more profitable and enlightening to swerve into a side-chain but something may be discovered that casts doubts not so much on the main truth of the argument as on its being the whole truth and sends us back to examine the beginnings anew. This happened, of course, classically with Newton, and it is unlikely that Einstein's correction will stand permanently unaltered. Hence all scientists must harbour, as most of them do, a grain of scepticism in their composition. To be too great a sceptic is not a sign of greatness, for it is easier and less laborious to doubt than to discover truth. Reflection suggests that the

only sciences which have succeeded in producing immediate conviction and durable results are mathematics and those into which mathematics enters to a very great degree. The biological sciences are more difficult because of their incalculable variables. But we advance none the less, step by step.

When we look back we can be impressed by the ignorance that was our forefathers'. The mathematicians of Elizabethan times were totally ignorant of the quantum theory, of nuclear physics, of wave mechanics. That is scarcely 400 years ago. What will they say of us 400 years from now! We are aware of vague discomforts in our minds about so many things. So must they have been. Until we can get our uneasinesses to the point of crisp formulation they admit of no answer, for we cannot investigate them. Let us not therefore laugh too loud at our fathers lest posterity overhears us! Their ignorances were of things that they could not have known; they lacked the interlocking discoveries and precision instruments that little by little advance learning. This is implicit in all that I have said of the nervous impulse and the cellular nature of the nervous system and the body. It is true of chemistry, physics, and astronomy.

It was nearly 300 years before instruments of sufficient delicacy were available to confirm the parallax of the fixed stars which the Copernican theory of the earth's motion demanded. It would be absurd to imagine that progress in instrumentation is a process which has now ceased, that further improvements will not disclose our present ignorances. We can be very sure that there are a dozen things under our noses which we misconceive or do not even see. The greatest source of error lies in our having explanations that satisfy us or with which we make do because we can see no other. That was where our forerunners came to grief, though I deprecate such a manner of expressing it. It is unquestionably where we ourselves shall be found to have erred. Our greatest ignorances must by definition be those of which we are unaware. Wilfred Trotter speaks of our natural resistance to new truths, our battle to throw them off at once because they irritate like an acid or sting. That seems to be particularly so when we are satisfied with what we already know of the subject. When our minds are vacant of explanation we seem to be extraordinarily gullible, ready to accept any theory, however nonsensical.

The Emotions in Science

Whatever means science theoretically should use, the scientist is a man more imaginative than Bacon would allow or Magendie would admit. He does require a presupposition which it is his intention to investigate. He is in fact a good deal more rational, more emotional, in a word more human, than argument can hold him to be. Hence his scepticism must be wilful. There have been important scientists who have appeared to maintain a scrupulous exactness in their researches but who have displayed emotion, bias, prejudice, and temper in their pronouncements on other subjects, notably on politics. It is difficult to believe that none of these qualities are to be found in their scientific work. Everything that a scientist does must have a personal flavour and be subject to those vagaries which personality implies. The intellectual cold purity of scientific work, something that is like a flame without heat, is a supposition without possibility of realization. Orderly scepticism is a discipline, not an intuitive possession; the proper name for the intuitive variety is prejudice.

There are other large fields of knowledge besides science: there is knowledge to be gained from literature, history; there are the arts: there is philosophy that embraces all kinds of knowledge. In these others the emotional side of men's nature is permitted a freer rein, and in the arts its fullest development is positively demanded. Men cannot lead contented lives unless they store their minds with goods bearing different kinds of trade-mark. There are many who believe that scientific certainty is not the only kind, who would agree with Descartes that they could recognize some ideas as so clear and so distinct that they brought instantaneous conviction and were immediately acceptable as truths. But unless they can be demonstrated, can be shown to be indestructible on attack, they must remain truths only for the individual who holds them. This seems a depressing conclusion, however well it may explain man's permanent liability to disagree with his fellows.

Conclusion

However, it is, as Glanvil would have said, "more perpendicular to our discourse" to conclude that our task in keeping emotions in control in science is difficult, since they are so permissible in much else that occupies our thoughts, colour our lives, and are at all times ineradicable. The rules that we live by have been made by experience as curbs on unfettered emotional behaviours. The rules of science have a shorter history, but are in the main of the same kind narrowed by a sharper focus to a different end. We have seen that better knowledge of the brain gives us no hope for lenses that will automatically correct the astigmatism of our minds. Let us then live our lives according to rules of historical experience, and in our scientific thinking let them be tempered, but with our actions not paralysed, by scepticism.

THE BACTERICIDAL ACTION OF STREPTOMYCIN

BY

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Streptomycin, an antibiotic derived from *Actinomyces griseus*, and discovered by Schatz, Bugie, and Waksman (1944), owes its therapeutic value to action on bacteria which are insensitive to penicillin, notably *Myco. tuberculosis* and many species of Gram-negative bacilli. The original description credits it with "strong bactericidal properties" without giving evidence for this statement. Several subsequent authors, including Hegarty, Thiele, and Verwey (1945), Hamre, Rake, and Donovick (1946), Strauss (1947), and Smith and Waksman (1947), have shown that low concentrations added to susceptible bacteria in a nutrient medium cause a slow fall in the viable count; it has also been observed that in a non-nutrient medium there is no such effect unless a considerably greater concentration is used. The only published example of a test employing a high concentration in a nutrient medium is an experiment by Helmholz (1945), who inoculated the urine of a patient under treatment with streptomycin and containing 1,330 units (micrograms) per ml. with various bacteria, and found that they were all killed within one hour. Since concentrations of this order can easily be attained in the urine, and local treatment can produce similar conditions elsewhere, it is clearly of interest to know more about their effect on bacteria.

In so far as the action of a chemotherapeutic agent is bactericidal, that action must be influenced by the various factors such as concentration, temperature, medium, and

inoculum size, which are known to affect chemical disinfection generally. Since there appears to be little information on these points, the following experiments were undertaken to provide it.

Method.—The organism used was *Staph. aureus* (Oxford H strain), the inoculum being derived from a 24-hour culture in ox-heart-extract peptone broth. The basis of the test mixture was usually the same broth, to which was added streptomycin and such an amount of culture as to give an initial viable count of about 50,000,000 per ml. Tubes or flasks containing these mixtures were maintained at the desired temperature, usually 37° C., in a water-bath, and viable counts were performed at intervals, either by the conventional method of pour plates made from decimal dilutions or by the surface viable count method (Miles. 1937), which is more economical in medium, and quite accurate enough when large changes in population are taking place.

Bactericidal Action

The Effect of Concentration

It is evident from Fig. 1, showing the fall in the viable count over a period of eight hours produced by four different concentrations of streptomycin in broth at 37° C., that streptomycin is bactericidal. An original population of 95,000,000 per ml is entirely extinguished by 20 μg. per ml. in eight hours, by 50 or 100 μg. per ml. in four hours,

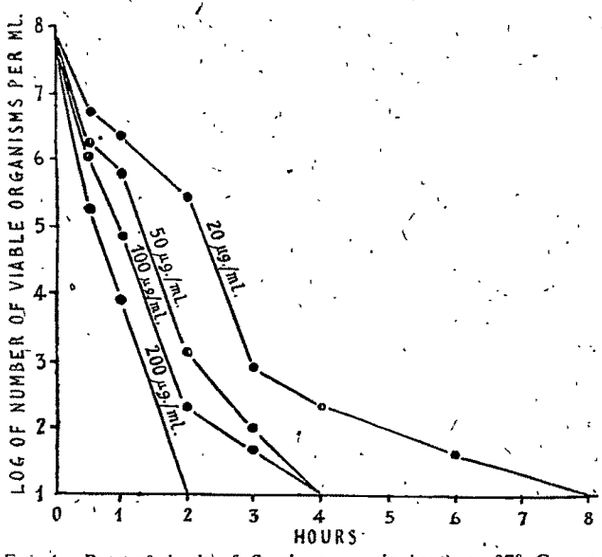

FIG. 1.—Rate of death of *Staph. aureus* in broth at 37° C. containing 20, 50, 100, and 200 μg. of streptomycin per ml.

and by 200 μg. per ml. in two hours. It also appears that the death rate varies with the concentration of the drug; this is still more evident in Fig. 2, in which it should be noted that the time scale covers a period of only two hours. Here a concentration of 200 μg. per ml. has not quite extinguished a rather larger inoculum within that period, but 2,000 μg. per ml. has an exceedingly rapid lethal action. Counts made at short intervals, not all of which are plotted on the graph, showed a marked fall within one minute and a mortality of 99.8% within ten minutes. How soon this mixture was completely sterilized cannot exactly be stated, because cultures made from the first dilution of it contained too much transferred streptomycin to permit growth. It can, however, be stated that the number of survivors per ml. after 20 minutes was less than 5,000 (mortality of over 99.995%).

The action of streptomycin thus differs radically from that of penicillin, which is not accelerated by increase in concentration above a minimum level. I found three years ago (Garrod, 1945) that a concentration of 1,000 units of grossly impure penicillin per ml. was actually less rapidly bactericidal than one of only 1 unit per ml., owing presumably to the retarding effect of some impurity. On the other hand, the LT 50 (time required to kill 50% of

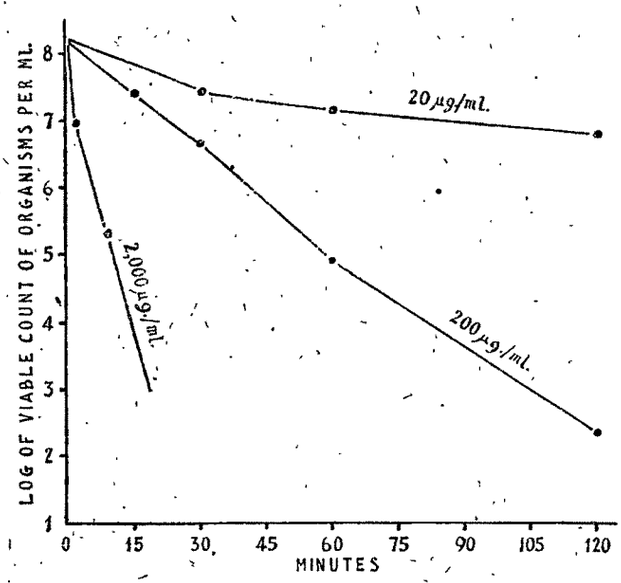

FIG. 2.—Rate of death of *Staph. aureus* in broth at 37° C. containing 20, 200, and 2,000 μg. of streptomycin per ml.

the inoculum) of a sample of 85% purity—the best then available—was between 100 and 89 minutes for all concentrations tested from 1 to 1,000 units per ml. I have recently repeated this experiment with pure penicillin G, and the results are shown in Fig. 3. The fall in the viable count produced by concentrations of 1, 10, 100, 1,000 and even 10,000 units per ml. is so similar that the graph is too tangled for its individual lines to be labelled or even followed clearly. It will also be noticed that this lethal effect is much slower that that of even moderate concentrations of streptomycin. (It appears in this experiment with pure penicillin G to have been even slower than that usually produced by commercial penicillin. This point has not been further investigated, but if such a difference were found it would be of interest in view of recent observations on the therapeutic inferiority of the pure product.)

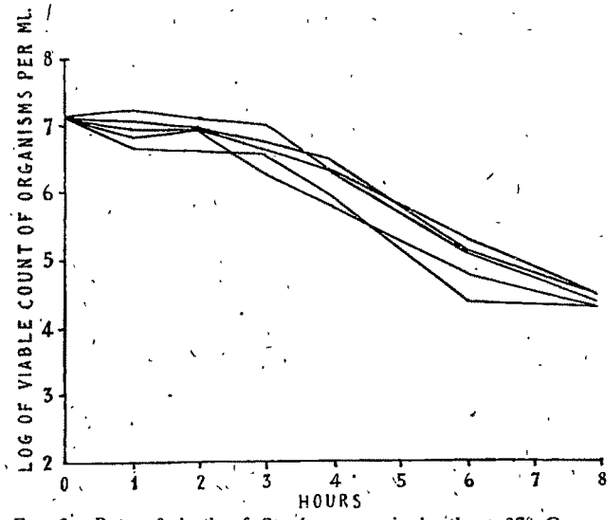

FIG. 3.—Rate of death of *Staph. aureus* in broth at 37° C. containing 1, 10, 100, 1,000, and 10,000 units of pure penicillin G per ml.

That streptomycin in higher concentrations is rapidly lethal is of practical as well as theoretical interest; an example of the former will be mentioned later.

Effect of Temperature

All bactericidal action is accelerated by increase in temperature, and streptomycin forms no exception to this rule. Fig. 4 illustrates the results of an experiment in

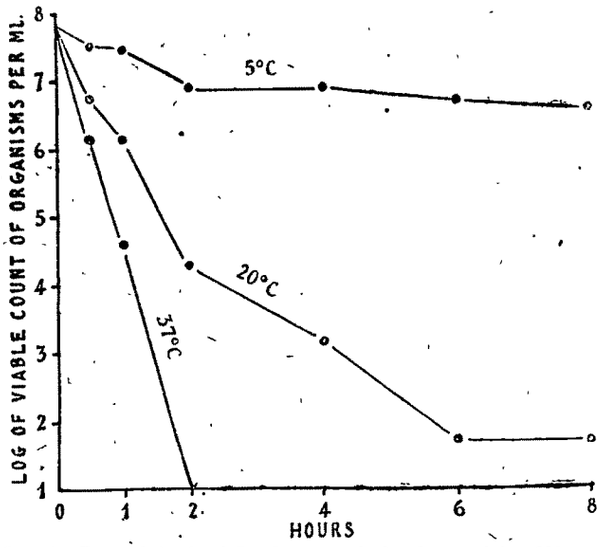

FIG. 4.—Rate of death of *Staph. aureus* in broth containing 200 μg. of streptomycin per ml. at 5°, 20°, and 37° C.

which the effect of 200 μg. of streptomycin per ml. on *Staph. aureus* in broth was observed simultaneously at 5°, 20°, and 37° C.

Effect on Different Species

The effects observed are not peculiar to staphylococci; Fig. 5 shows the death rate of *Bact. coli* and *Str. pyogenes* in comparison with that of *Staph. aureus* under the same

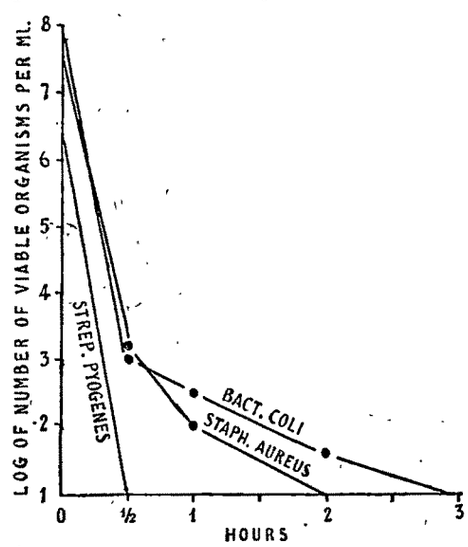

FIG. 5.—Rate of death of three species of bacteria in broth containing 200 μg. of streptomycin per ml. at 37° C.

conditions (200 μg. of streptomycin per ml. in broth at 37° C.). Slight differences between the rates of disinfection in this experiment should be disregarded; the susceptibility of different strains within a single species is much more variable than susceptibility to penicillin. It is stated (Report, 1946) that the minimum concentrations of streptomycin required to inhibit growth are 0.5 –> 16 μg. per ml. for *Staph. aureus*, 2.0 – > 16 for *Str. pyogenes*, and 0.3–3.75 for *Bact. coli*; the rate of disinfection presumably varies correspondingly, and the behaviour of single strains is therefore not exactly representative of the species as a whole.

Effect of the Medium

In all the foregoing experiments the medium was broth. In order to determine the effect of other media, broth culture of *Staph. aureus* was thoroughly washed (centrifuged three times and resuspended in saline); when such a suspension was added to defibrinated blood or serum containing 200 μg. of streptomycin per ml. at 37° C. the rate of fall in the viable count approximated closely to that observed in broth. In urine (sterilized by filtration and adjusted to *p*H 7.4) the effect was similar but less rapid. On the other hand, washed culture added to saline containing 200 μg. of streptomycin per ml. was completely unaffected; the viable count, as in the saline control containing no streptomycin, remained almost stationary throughout the eight-hour period of observation.

In view of the finding of Strauss (1947) that higher concentrations are bactericidal even in a non-nutrient medium, this experiment was amplified as follows. The same inoculum of washed *Staph. aureus* was added to four media, giving an initial viable count of approximately 50,000,000 per ml. In broth containing 200 μg. of streptomycin per ml. the count fell to *nil* in one hour. In saline with or without 200 μg. of streptomycin per ml. it remained stationary. In saline containing 2,000 μg. of streptomycin per ml. it fell in 30 minutes to 850,000, and thereafter fluctuated round this level; individual colony counts were inconsistent, suggesting that the cells were in a condition in which chance affected their capacity for growth. It thus appears that very high concentrations of streptomycin are incompletely and irregularly bactericidal in a non-nutrient medium.

In its dependence on a nutrient medium for rapid bactericidal action streptomycin resembles penicillin, but there is a striking difference in their effects. That of penicillin becomes evident only after a lapse of time amounting to about one hour, during which one generation of division may occur (Chain and Duthie, 1945; Schuler, 1945). That of streptomycin is immediate: under favourable conditions it begins within one minute and may be far advanced in ten minutes. So far as I am aware, no other bactericidal agent having so rapid an effect is dependent on a nutrient medium for its efficacy. This peculiar behaviour will have to be taken into account in any hypothesis about the mode of action of streptomycin.

It was not considered necessary to study the effect of *p*H, since it has been amply demonstrated by Abraham and Duthie (1946) that alkalinity (*p*H 8.0) favours the action of streptomycin, whereas on the acid side of neutrality (e.g., *p*H 6.0) its activity is much diminished.

Effect of Bacterial Numbers

That the size of the inoculum affects the concentration of streptomycin required to inhibit growth has been shown by May, Voureka, and Fleming (1947), Berkman, Henry, and Housewright (1947), and Lenert and Hobby (1947). The dependence of bactericidal action on the same factor was observed by Strauss (1947). It was clearly of interest to determine the effect of inoculum size on bactericidal action under the conditions of the present experiments. Broth culture of *Staph. aureus* was spun down and resuspended in one-tenth of its original volume, this suspension and three decimal dilutions of it being added to fresh broth containing 200 μg. of streptomycin per ml.

These mixtures were maintained at 37° C., viable counts being made as usual (Fig. 6). The mixture with an initial count of the order of tens of millions was sterilized in two hours, as had repeatedly been observed before. Those containing tenfold lower bacterial concentrations were sterilized in 30 minutes; that containing the highest bacterial concentration was not sterilized at all, the count falling by over 99% in 30 minutes and then remaining stationary for the remainder of the experimental period (eight hours). This experiment was repeated several times with different concentrations of both streptomycin and bacteria, always with the same type of result. The absolute concentration of streptomycin is not the determining factor; it is the relation between that concentration and the numbers of bacteria. It appears that a given concentration of streptomycin can kill only a population of a certain density; if more are present some will survive.

Several possible explanations of this unusual finding have been explored with negative results. Subcultures from surviving bacteria were retested by the same technique and found not to display any markedly increased resistance.

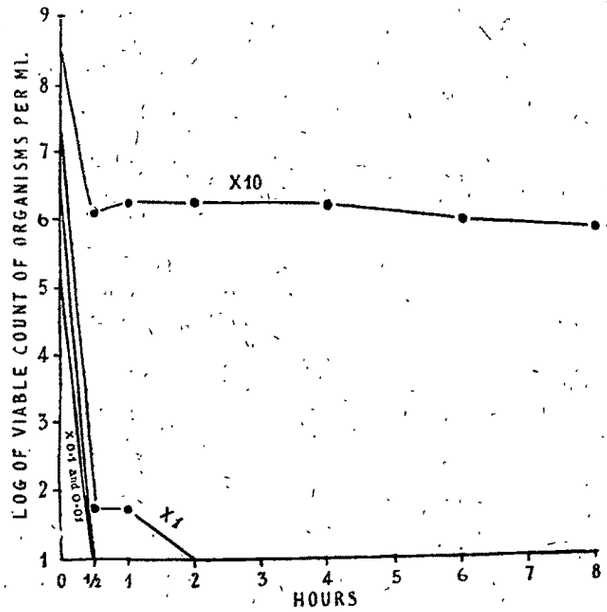

FIG. 6.—Rate of death of *Staph. aureus* in broth containing 200 μg. of streptomycin per ml. at 37° C.: inoculum of four different sizes—×10, 1, 0.1, and 0.01 of broth culture.

The streptomycin is not inactivated by an excess of bacteria; when these are removed and fresh culture of either *Staph. aureus* or *Bact. friedländeri* is added its bactericidal activity is undiminished. The presence of additional dead bacteria does not prevent the killing of living ones, provided the numbers of the living are within the capacity of the streptomycin concentration used.

Despite the apparently normal streptomycin sensitivity of cultures derived from survivors in such experiments the suspicion remains that a greater resistance possessed by a small proportion of cells in a culture must account for survival. It appears that no culture is homogeneous from this standpoint: Klein and Kimmelman (1946) have shown in the case of dysentery bacilli, and Alexander and Leidy (1947) in that of *H. influenzae*, that an enormous inoculum will yield growth in a medium containing 1,000 μg. of streptomycin per ml., indicating that one cell in some billions is resistant even to this concentration. The Oxford strain of *Staph. aureus* behaves similarly; a heavy inoculum (about 500,000,000 living cells) produced hundreds of colonies on agar containing 10 or 20 μg. of streptomycin per ml.; and 16, 2, and 1 colonies respectively on agar containing 50, 100, and 200 μg. per ml. It seems likely that this is only another aspect of the same phenomenon as survival in tests of bactericidal action, although the present experiments have not proved this. Further observations are desirable both on the effects of the ratio weight of streptomycin/bacterial numbers on bactericidal action and on the properties of cells surviving under such conditions.

Clinical Applications

It is generally assumed that parenteral streptomycin treatment has only a bacteriostatic effect, but the concentration attained in the blood for a time after a single dose may exceed 30 μg. per ml., and this may well be bactericidal. Lower concentrations than this, according to Smith and Waksman (1947), will kill *Myco. tuberculosis* in vitro. The present tendency in the U.S.A. is to administer the drug only twice daily for the treatment of tuberculosis—a proceeding which does not maintain a constantly bacteriostatic concentration in the blood. Feldman (1946), treating tuberculosis in guinea-pigs, found that doses given once, twice, or four times daily, or four times daily only during alternate weeks, had an "essentially equal efficacy." These otherwise anomalous findings could be explained by assuming that each dose actually kills many of the more susceptible bacilli which are accessible and actively multiplying at the time of its administration.

The fact that higher concentrations are more rapidly bactericidal has an important bearing on local treatment. Of this there are various forms, including intrathecal injection in meningitis, application to infected surfaces, and the treatment of urinary-tract infections. Streptomycin, like penicillin, is excreted in the urine, where it attains a high concentration. If its effect *in vivo* parallels that here described *in vitro*, susceptible bacteria should disappear rapidly from the urine soon after excretion has begun. In fact they do. In a number of patients receiving 0.5 g. (500,000 units) of streptomycin four-hourly for the treatment of long-established and otherwise resistant urinary-tract infections due to *Bact. aerogenes*, *Bact. coli*, or *Ps. pyocyanea* a series of specimens has been obtained at short intervals during the early stage of treatment and cultivated quantitatively. A viable count which is usually several hundred millions per ml. before treatment falls to a few thousands two hours after the first dose—i.e., even before excretion has become maximal. After six, eight, or twelve hours, if treatment is going to succeed, the urine is completely sterile. If treatment is to fail, specimens continue to yield counts of a few hundreds or thousands per ml. until the second day, when there is a sharp rise and the organism is found to be already much more resistant. It seems as if the issue is settled one way or the other within 24 hours or less. It also appears that an exceedingly brief period of treatment may suffice: in our experience apparently permanent cures of long-standing infections have been achieved by giving only six, four, or even three 0.5-gm. doses. Whether so small a total dose is always advisable only further experience can show. If so, the economy secured is an obvious advantage.

Conclusions

1. Streptomycin is bactericidal. The rapidity and extent of its bactericidal action depend on: (*a*) concentration—high concentrations having an exceedingly rapid effect: (*b*) temperature; (*c*) medium, the effect being exerted in all nutrient media, including certain body fluids, but only to a slight extent in non-nutrient media; (*d*) the size of the inoculum, a small population being destroyed rapidly, whereas a proportion of a large one survives.

2. It seems possible that the therapeutic effects of streptomycin are due to bactericidal rather than to bacteriostatic action. This is certainly so when high concentrations are attained locally, as in the treatment of infections of the urinary tract.

The streptomycin used in this work (streptomycin hydrochloride Merck) was supplied for studies in this hospital by the Streptomycin (Non-tuberculous Conditions) Clinical Trials Committee of the Medical Research Council, to whom I express my thanks. I am indebted for valuable technical assistance to Miss P. M. Waterworth.

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CALCIFEROL IN THE TREATMENT OF CUTANEOUS TUBERCULOSIS

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The value of calciferol in the treatment of lupus vulgaris is now generally known. Its mode of action is still a matter for speculation, and is likely to remain so until more serial observations upon cases undergoing this treatment have been made. This report describes a series of such cases treated at Charing Cross Hospital.

The advantage of calciferol over previous methods, with the results of which it seems to compare most favourably, is almost as much a social and economic as a medical one. That a large number of man-hours are saved by patients taking a drug by mouth rather than attending a department for heliotherapy, etc., for many hours a week is obvious. In the present need for maximum effort and full employment this is a factor of considerable importance, and does not seem to have been sufficiently stressed.

This method of treatment seems to have started on both sides of the Channel at about the same time, and similar results were reached quite independently, which seems to us to add great value to these conclusions. Charpy (1943), in France, Fanielle, in Belgium, and Dowling and Prosser Thomas (1946), in London, appear to share the honours of being the pioneers in this treatment.

For the sake of brevity the cases are reported in tabular form, and those of special interest are referred to separately.

Details of Cases

Case No.	Sex	Age	Duration of Lesion	Class of Lesion	Site of Lesion	Treatment	Result
1	F	5	3 mths.	A	Malar	1	a
2	F	43	25 years	A	,,	1	c
3	M	34	30 ,,	B	L. hip	1, 2	a
4	F	31	6 ,,	A	Malar	1	a
5	F	62	20 ,,	A	Face	1, 2	b
6	F	46	28 ,,	A	Malar	1	a
7	M	26	14 ,,	A	Neck	1	a
8	F	56	3 ,,	A	Both legs	1, 2	b
9	F	68	20 ,,	C	Face	1	c
10	F	71	50 ,,	B	Face, neck	1	a
11	F	59	25 ,,	Scrofulodermia	Neck	1	b
12	F	20	4 ,,	Miliaris faciei	Face	1, 2 U.V.L.	d

Key to Table

Class of Lesion (the Typical Nodules were of course Present in All Cases).

A. Lesions less than 4 in. (10 cm.) in diameter. No deformity produced by scarring.

B. Lesion greater than 4 in. in diameter; scarring may be extensive but no disabling deformities present.

C. A severe lesion producing extensive scarring and disabling deformities—e.g., ectropion or destruction of nasal cartilages.

Treatment Groups

1. Calciferol 50,000 units with added calcium thrice daily ("high potency ostelin" tablets).
2. Calciferol, either in pure alcoholic solution or in oily solution ("sterogyl"), 600,000 units per ml. twice weekly.

Result Groups

(a) Lesion clinically healed.
(b) Lesion very much improved, but one or two possible foci of activity still remaining.
(c) Progress of lesion arrested; "minimal favourable response."
(d) No apparent response; lesion continuing to progress.

Discussion of Results

The twelve cases reported (see Table) have been under treatment for nine months or longer. Six were cured, three were very much improved, two have shown very little improvement, while one has shown no response to treatment.

These figures may be compared with the results obtained by Dowling and Prosser Thomas (1946) up to December, 1945—18 cured, 9 much improved, and 5 somewhat improved—also with those of Kuske (1946) at Berne—50% excellent, 20% arrest of lesion, and in the remainder a "minimal favourable response." (The assumption that this last group corresponds to result group "c" in our table of results is our own.) Two other series which give figures for results are those of Dowling, Macrae, and Jones (1946) with 20 cases and 14 (70%) recoveries, and of Dr. Emrys Jones, of Cardiff, who had 18 cases with 16 "cleared" (89%).

Thus in some 82 cases we find 54 (66%) which have healed under the influence of calciferol, and it is probable that with further treatment this figure will be higher still. It must, however, be remembered that the Einsen Institute in Denmark claimed 735 cures out of 975 cases (75%) between 1914 and 1923 using methods other than the administration of large doses of calciferol.

It is probably safe to assume that about 60% of cases of lupus vulgaris in this country at this time may be cured by calciferol therapy alone (the reason for qualifying this statement is discussed on p. 388). It is of interest to note that streptomycin has been tried out in America on cases with lupus vulgaris, but the results have so far not been as successful as with calciferol.

Two Cases of Special Interest

Case 10.—This patient complained of flatulence, sickness, and diarrhoea after taking one "ostelin" tablet thrice daily for 14 days. She was told to continue with the tablets unless the symptoms got worse, when she was to stop taking them and report to

us. She returned two weeks later, having stopped the tablets for a week. She complained of some frequency of micturition. Her urine was found to be normal but perhaps increased in amount. A plain radiograph of the abdomen revealed fusion of L3 and L4, with calcified mesenteric glands probably of tuberculous origin; also possibly, in view of the history, a large amount of calcium in the colon. The patient continued without calciferol and was examined two weeks later. Her symptoms were then quite relieved. A plain radiograph appeared the same as before. Barium was given by mouth, and later the patient was examined under the *x*-ray screen, when it was obvious that the calcium deposits were not in the caecum or colon but only in the mesenteric glands. More intensive questioning revealed that there was some suggestion of a tuberculous kidney 30 to 40 years ago because of backache then, but it had not been very thoroughly investigated and there was nothing else that the patient could recall.

This case is reported in detail because we have already been warned of the possibility of "flaring up a lesion" with calciferol (Dowling and Prosser Thomas, 1946; Dowling, Macrae, and Jones, 1946). In this case there may have been a quiescent tuberculosis of the mesenteric glands, which seem so well calcified now but which the calciferol may have temporarily stimulated. It is therefore important before starting treatment to consider the possibility of an exacerbation not only of the skin lesion but of a lesion elsewhere.

Case 12.—This was a resistant case of lupus miliaris faciei. (Another case of lupus miliaris faciei has been treated by us with calciferol, but was not under observation long enough to qualify for the table of case results.) The patient presented with symmetrical aggregations of lupus nodules on forehead, cheeks, chin, and neck. There was no family history of tuberculous diseases, and thorough investigation revealed no evidence of tuberculosis elsewhere. One "ostelin" tablet thrice daily (150,000 units of calciferol daily) resulted only in intense thirst and troublesome borborygmi: no effect was observed on the lupus lesions. After two weeks' rest the course was restarted, but again symptoms of intolerance caused us to stop it.

We then tried the effect of calciferol locally. An ointment was made up with "radiostol" in a base of paraff. molle to give a concentration of approximately 70 units of calciferol per gramme. This was applied to the lesions and rubbed well in twice daily. Within three weeks there was a most dramatic improvement in the lesions: the erythema faded and the papular eruption almost faded. A stronger ointment was therefore tried, using pure calciferol in alcoholic solution in the same base at a concentration of 150,000 units per gramme. After two weeks' use of this ointment the condition had relapsed to its original state. This may well have been a flare-up caused by the very high local concentration of calciferol, or the alcohol solution may not have been absorbed through the skin. A return to the "radiostol" ointment now had no effect, nor did the oral administration of pure calciferol in doses of 300,000 units twice weekly.

An ointment corresponding to the stronger of the above was then made up, substituting A.T.10 (dehydrotachysterol) for the calciferol (0.375 mg. per g.); the patient applied this to the left half of her face and the calciferol ointment to the right half for four weeks. Neither appeared to affect the lesions. She has completed a course of ultra-violet irradiation, but her face remained in much the same state when last seen.

Methods of Administration

Ostelin High-potency Tablets.—Each tablet contains 50,000 units of calciferol with added calcium. The usual dose is three tablets a day for 14 days when the patient starts treatment. The blood chemistry is investigated beforehand (see below). When the patient is seen in 14 days the blood chemistry is again investigated and the dose is maintained if there are no untoward symptoms. After a further 14 days the patient is seen again and, if no toxic symptoms have developed, carries on with the same dose for a month. A further specimen of the blood is then taken, and if all is well the patient comes up once a month for observation. If toxic symptoms develop either the calciferol is withheld or the dose is reduced for a week or two. After about four months the patient is usually given a rest from calciferol for two to eight weeks. This method is based on the original method used by Dowling and Prosser Thomas (1946) in 1943.

Pure Calciferol in Alcoholic Solution (5 mg. per ml.: 1 mg. corresponds to 40,000 units of activity).—We diluted this to an emulsion with 1 fl. oz. (28 ml.) of water, and the patient took it in three doses during the week. This corresponds to the solution in propylene glycol used by Charpy (1943), the administration of which, combined with the giving of calcium (as calcium gluconate) or 1 to 2 litres of milk a day for one or two months, is becoming known on the Continent as the "méthode de Charpy."

Sterogyl calciferol—600,000 units in ampoules for oral or intramuscular use. We did not give any by injection to these cases.

Radiostol, employed to make up the ointment for Case 12.

Toxic Effects

At some stage of treatment most of our cases showed symptoms attributable to the large doses of calciferol. These were: salty taste in the mouth, thirst, anorexia, nausea, vomiting, flatulence, abdominal pains, diarrhoea, giddiness, lassitude, and frequency of micturition. Case 8 complained of headaches and cramps in the legs.

It was most noticeable that the symptoms occurred almost entirely when the patients were taking ostelin tablets. Furthermore, we found that two cases developed severe symptoms with ostelin tablets but were unaffected by the pure vitamin (started six weeks after the last course of ostelin) in dosages of 1,200,000 units weekly for three weeks. Cases 3 and 7 had no toxic symptoms at any time. All cases which showed symptoms apart from a salty taste in the mouth or thirst had chest and plain abdominal radiographs taken. Only in Case 10 was any abnormality found.

Case 8 was carefully investigated for hypertension or peripheral vascular failure. There was some tenderness of the calf muscles, but the circulation of the feet was always good and *x*-ray examination of the legs showed no evidence of calcified arteries. Blood pressure was normal.

Comparison of Intolerance of Calciferol and A.T.10

A.T.10 is probably the best substance to use as a control in calciferol investigations. A synthetic compound resembling tachysterol (the precursor to calciferol in the ergosterol–calciferol synthesis), it has the same effects upon the blood chemistry but does not cure rickets. We are grateful to Dr. Nathan for a gift of A.T.10 produced by Bayer (Darmstadt), which was used as our control.

A healthy man aged 24 was given a course of pure calciferol for eight days. When the blood chemistry had been normal for one week after this a similar course of A.T.10 was given, the symptoms being noted as they occurred. On neither occasion was calcium added. Intense thirst developed on the fifth day of taking calciferol and on the fourth day when taking A.T.10; anorexia developed on the seventh day with both substances, and marked borborygmi were noticed a few hours later. Also at this time there developed a definite "sensitivity," hardly amounting to pain, over the whole abdomen on palpation. This suggests that the above symptoms are not specific for calciferol in high doses but follow some effect of calciferol which is also produced by A.T.10.

Experience suggests that it is intensified by giving additional calcium. It has, however, been previously recorded that these symptoms bear no definite relation to the serum calcium (Dowling and Prosser Thomas, 1946), an observation which we can confirm.

Blood Chemistry

The reactions of the following factors in the patients' blood to dosage with calciferol were investigated: (1) the serum calcium; (2) the serum alkaline phosphatase; (3) the serum cholesterol. The serum calcium was estimated on each sample of blood before the other tests, and these were then done in the above order. (Our debt to Dr. Patterson, of the Institute of Pathology, and to his assistants for performing nearly 200 estimations is such that we feel compelled to acknowledge it in the text, where we hope it is less likely to be overlooked.) These are first done before any calciferol is given.

Serum Calcium.—Our results agree with those of others. After an initial lag of a few days up to two to three months the serum calcium rose in all cases, usually to about 11 mg. per 100 ml. (normal 9–11 mg.). At this level there were usually no symptoms except for some thirst. In some cases it rose to over 14 mg., and in one case to 15.2 mg. These higher levels were nearly always associated with symptoms of a fairly severe nature, but, apart from these cases, we did not notice any definite relation between the severity of the symptoms and the serum calcium level. However, we are of the opinion that a steady rise in the serum calcium is an indication for a reduction in the dose of calciferol if not for its complete withdrawal. All our observations have been on the total serum calcium levels. There is need for further research on the effects of the different forms in which calcium is present in the blood.

Serum Alkaline Phosphatase.—(Our results are given in King–Armstrong units, the normal values being 3 to 13 units.) Before starting treatment with calciferol the normal alkaline phosphatase in all our cases of lupus vulgaris was between 5 and 8.5 units. With the administration of calciferol there was sometimes an almost immediate fall in this figure, which then continued more slowly while the dose was maintained. In some cases it rose again while the patient was still on calciferol. When the reading became less than 4.5 there were nearly always some signs of intolerance. These symptoms, however, did not always disappear when the alkaline phosphatase rose again. Although inconclusive, it is interesting to note that at times there seemed to be some relation between the intensity of the fibrous reaction to the lesion and the relative value of the alkaline phosphatase. Although within normal limits it appeared that the better the fibrous reaction and the more scar tissue in the lesion the lower was the original reading. Thus in a case with few nodules of activity and a firm scar a reading of 4.8 units was found. A case showing more activity gave the figure of 8.2 units. As this finding seemed fairly constant it was suggested that a lesion showing chronic inflammation with a minimum of scarring would give a high figure: some weeks later the case with a lymphocytoma was seen, and the reading here was 14.7 (later readings have been 10 units and over). Finally, it was noticed that the serum alkaline phosphatase reacted on the whole much more rapidly to the administration of calciferol than the serum calcium. Experiments with a control subject showed a fall in the alkaline phosphatase to have started within one hour of taking 100,000 units of calciferol by mouth.

Serum Cholesterol.—It has been stated (Eichelberger and McCluskey, 1927) that in a case of tuberculous infection in which the resistance is good the serum cholesterol is nearly always raised above normal, and that if it returns to normal under treatment the prognosis is favourable. Conversely, in severe infections where the resistance is not so good the cholesterol level is low and the prognosis poor. The method used by Dr. Patterson for estimating serum cholesterol gives a reading in normal individuals of 140 to 240 mg. per 100 ml. Cases of lupus vulgaris all showed a relatively good resistance, and our initial figures were all greater than the normal. Two cases were over 300 mg. With calciferol the figures tended to rise at first, in some cases to 360 mg. or more. But with continuing treatment they began to fall towards normal. All these cases showed recovery or marked improvement. It was as a check on these figures that a case of bronchopneumonic phthisis was investigated. Before treatment (the patient came from the casualty ward and was severely ill) his serum cholesterol was only 92 mg. per 100 ml. After three months' rest and intensive treatment with calciferol by mouth the figure had risen to normal (184 mg.) and he was able to go to a sanatorium. Our findings would therefore seem to confirm the above statement. There appeared to be a definite relation between the value of the serum cholesterol and the administration of calciferol in lupus vulgaris, and this relation follows the clinical course of the disease.

We should mention here the thorough investigation of the effect of calciferol on the blood sedimentation rate by Dr. Feeny (1946), at the London Hospital; he found that it is not constantly affected.

Discussion of the Effects of Calciferol

There are two ways in which calciferol may exert its effect.

1. *By Direct Inhibition of the Tubercle Bacillus.*—The only apparently serious suggestion that this may be the mechanism is contained in an unsupported statement by Bicknell (1946). So significant a finding would no doubt have been supported by the fullest evidence if this had been available. Nevertheless it is important that the effect should be investigated. We are grateful to Dr. Walker for permission to quote an experiment undertaken by him at the Glaxo Laboratories in which cultures of *Mycobacterium tuberculosis* were grown on media containing increasing concentrations of calciferol. There was no inhibition of the growth in concentrations approaching those *in vivo*. To investigate the possible effect upon the resistant "envelope" of the organisms cultures of fresh pathogenic tubercle bacilli were incubated for 24 hours with fresh human serum, and calciferol in various concentrations, in the Bacteriological Laboratory of Charing Cross Hospital. The "envelopes" were morphologically unaltered, and the organisms retained their vitality and pathogenicity up to a concentration of 500 units of calciferol per ml., where the serial concentrations were discontinued. It would appear, therefore, that calciferol has no specific effect on *M. tuberculosis*.

2. *By Increasing the Body Resistance.*—It is more probable that this is the effect of calciferol. In favourable cases the rate of tissue repair exceeds that of tissue destruction. The relatively raised alkaline phosphatase sometimes seen at the start of treatment may be an expression of a relative tissue lack of calciferol to meet the demands of local inflammation and repair. When repair and fibrosis become pathologically overactive we find a tendency to depression of the serum alkaline phosphatase. This was found in cases of sclerodermia (Medvei, 1945) provided there was no element of hyperparathyroidism (Wigley and Hunter, 1945).

Earlier in this article the average recovery figures were qualified by the statement "in this country at this time." This refers to the variation of calciferol in the average diet of the population at different times—a factor already noted by Jaeger (1946) at Lausanne.

Effects of Calciferol on Some Other Diseases

1. Other Tuberculous Diseases.—(*a*) *Cerebral Tuberculomata* (2 cases):—No apparent effect. (*b*) *Tuberculous Meningitis* (2 cases, both fatal):—During the terminal stages the effect of giving calciferol intrathecally was investigated—in one case it was apparently well tolerated, but in the other it caused a reaction. (*c*) *Bronchopneumonic Phthisis* (1 case, quoted above):—Clinical and radiological improvement in three months.

2. *Skin Diseases.*—(*a*) *Pemphigus Vulgaris*:—A case of some years' duration in a woman of 53. At start of treatment with ostelin tablets there were several blisters, ulceration of the throat, cough and dysphagia. After 14 days she felt better and the blisters were fewer, so the tablets were increased from two to three a day. This was continued for two months, during

which time the blisters varied in size and number, although the patient felt well all the time. Then thirst developed and a rest of two weeks was given, during which time the blisters got worse. Calciferol was resumed, one tablet twice daily for three months with a month's rest between courses. Her present condition is good, with few blisters, and she feels much better. (*b*) *Lymphocytoma* :—This occurred in a woman aged 55. Biopsy showed dense aggregations of lymphocytes with very little fibrosis; there was a history of its having been present for one year. The Wassermann reaction was negative. This lesion improved under *x*-ray treatment, but when a fresh lesion appeared calciferol was tried—ostelin one tablet twice daily. With *x*-ray treatment the previous lesion was considered healed after six courses over two years. The fresh lesion was healed clinically with calciferol in four months. A further biopsy now showed a reversal of the histological picture, with dense fibrosis, dilated capillaries, and small discrete foci of lymphocytes. "Apparently a remnant of a pre-existing lymphocytoma" (Dr. Muende, St. John's Hospital, Leicester Square). (*c*) *Granuloma Annulare* :—One case, that of a woman aged 33. Calciferol had no effect on this lesion in any dosage orally or by local inunction.

3. A case of *multiple myelomatosis* improved while on calciferol.

Summary

Twelve cases of cutaneous tuberculosis are presented and the results discussed. Four methods of administration are outlined and some toxic symptoms described.

The effects of calciferol on blood chemistry were found to be as follows :—(*a*) a rise in the serum calcium usually occurs after prolonged administration : (*b*) an almost constant fall in the serum alkaline phosphatase generally occurs soon after the calciferol is given; and (*c*) the usually slightly raised serum cholesterol tends to increase before returning to normal.

The effect of calciferol appears to be that of increasing the body's resistance, and it does not seem to have any direct toxic effect on the tubercle bacillus.

Brief notes are given on some other diseases treated with calciferol.

We wish to thank members of the honorary medical staff, especially Dr. H. A. Dunlop, for valuable suggestions and advice and for permission to investigate the effect of calciferol on some of their patients; and Mr. Whittet, late chief pharmacist at Charing Cross Hospital, now at University College Hospital, for preparing the calciferol in various ways. We are also greatly indebted to Dr. Walker, of Glaxo Laboratories, for supplies of pure crystalline calciferol in nitrogen-sealed ampoules for these investigations and for undertaking the assay of the (oily) solution of A.T.10.

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Preventive Medicine and Public Health, by Prof. Wilson G. Smillie (New York, the Macmillan Company, 30s.), is an interesting book intended for the medical student who expects to practise medicine in the community. The greater part of most textbooks of public health are on environmental hygiene and the communicable diseases. Nearly half this is on child hygiene, adult health protection and promotion, and public-health administration, much of this last section being devoted to health education, medical social work, and allied subjects. The part on adult health protection will break new ground to many readers; it includes sections on geriatrics, the preventive aspects of peptic ulcer, appendicitis, heart disease, obesity, diabetes, arthritis, allergy, and alcoholism. Treatment as well as prevention is discussed in some of these sections. British readers will find much food for thought in all parts of the book—for instance, the table showing positive Wassermann reactions found in a variety of economic and social groups giving rates per thousand varying from 1 in university students, 8 in prospective blood donors, and 12 in premarital tests, up to 110 in street beggars, 240 in convicts, and 300–700 in prostitutes; the psychological implications are obvious. The diagrams are most instructive.

RETROPERITONEAL HAEMORRHAGE IN PREGNANCY

BY

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The following case may be of interest because of the great rarity of retroperitoneal haemorrhage complicating pregnancy (six cases have previously been reported), and because of its association with a condition of eclampsia and a concealed accidental haemorrhage.

Case History

The patient was a 2-gravida, aged 25, whose general health was good. She had had scarlet fever at the age of 16. In September, 1945, she had a normal pregnancy—labour of 36 hours' duration terminating in the spontaneous breech delivery of a male child weighing 8 lb. (3.6 kg.) which died from cerebral haemorrhage after half an hour.

Her menstrual history showed menarche at 14; periods regular, 28-day cycle; normal loss; no dysmenorrhoea; no intermenstrual discharge. Her last menstrual period began on Aug. 11, 1946, and the expected date of confinement was May 18, 1947. The patient had made regular attendances at her antenatal clinic. Her last visit was on April 3, when the uterus was found to be of the size of 34 weeks. The position was vertex R.O.A., the head not engaged; the foetal heart was heard. She was admitted as an emergency case at 3.30 p.m. on April 10.

At 3 p.m. that day she had felt weak and sick and had suddenly collapsed with sharp pain in the hypogastrium. She was reported to have had one fit at home and two fits while in the ambulance en route to the hospital. Pain was severe and constant. There was no history of a "show," and she had not had any frequency of micturition or dysuria. The rectum had been evacuated in the morning.

On examination she was pale and restless. The pulse varied between 110 and 120, and was of very poor volume. The blood pressure was 70/45. Nothing abnormal was detected in the heart, and the lungs were clear. The uterus was of 36 weeks' size; the position of the foetus was difficult to detect, but was thought to be vertex R.O.A. The foetal heart could not be heard. The uterus was tense, tender, and ligneous. There was no loss per vaginam. A catheter specimen of urine revealed albumin (Esbach's reaction, 10 parts per 1,000). The haemoglobin was 50%. A provisional diagnosis of concealed accidental haemorrhage and antepartum eclampsia was made.

In view of the condition of the uterus and the state of profound shock a conservative attitude was adopted and anti-shock therapy was immediately instituted. Morphine, 1/4 gr. (16 mg.), was given immediately and again four hours later. A blood transfusion of group O cross-matched blood was begun, and the patient was put on to a half-hourly pulse chart, four-hourly blood-pressure chart and fluid-balance chart, and a half-hourly respiration chart. Over a period of three hours 1½ pints (850 ml.) of blood was given and the drip was continued as a slow intravenous 10% glucose infusion in order to improve the urinary output. Potassium citrate, 15 gr. (1 g.), and phenobarbitone, 1/2 gr. (32 mg.), were given every four hours.

At 6.30 p.m., three hours after admission, the blood pressure had risen to 98/60, the pulse was 90 and regular, and the patient felt better in herself, although she still had some pain over the lower pole of the uterus. By 10.15 p.m. she was feeling much better; her blood pressure had risen to 118/60, and her uterus was softer and less tender. The foetal presentation and position could be made out distinctly as vertex R.O.A. with the head unengaged. The foetal heart was not heard.

At 10 a.m. the next day (April 11) the blood pressure was 118/70 and the pulse rate 80, and the patient was quite comfortable. The urinary output for the previous 16 hours was 10 oz. (284 ml.) and the Esbach reaction had come down to 5 parts per 1,000. Four hours later the patient complained of a recurrence of the severe abdominal pain. She was again shocked, her pulse having risen to 124 and her blood pressure

having dropped to 90/60. The fundus of the uterus had risen 2 in. (5 cm.), and the uterus had again become tense and tender. It was obvious that the patient was bleeding again into the retroplacental space. The intravenous glucose drip was changed over to cross-matched group O blood, and atropine, 1/100 gr. (0.65 mg.), was given intravenously. In view of the gravity of the situation a classical caesarean section was performed for the sake of speed, and a stillborn macerated male foetus was delivered at 2.30 p.m.

A large retroplacental haematoma was found at operation, and petechial haemorrhages were apparent deep to the peritoneal covering of the uterus. Following the injection of 5 mg. of ergometrine and 5 units of "pitocin" direct into the uterine musculature, and the application of a hot saline pack, the uterus retracted well enough to obviate the necessity for performing a hysterectomy. The patient's post-operative condition was reasonably good, her pulse being 120 and her blood pressure 100/60. "Omnopon," 1/3 gr. (22 mg.), was given post-operatively. At 6 p.m.—three and a half hours after operation—the patient was comfortable and her pulse rate was 100. The following day the pulse remained in the region of 100, the abdominal distension was slight, and 25 oz. (710 ml.) of urine was passed spontaneously after an injection of 1 ml. of carbachol. Esbach's reaction was 1 part per 1,000.

On the second post-operative day (April 13) the blood pressure remained in the region of 124/80, pulse 100, temperature 99° F. (37.2° C.). The patient was comfortable and her urinary output was 30 oz. (850 ml.). No albumin was present in the urine. Next day the blood pressure was 120/70 and the pulse round about 84. Fluid output was satisfactory and there was no albumin in the urine.

At 6 a.m. on the 15th the patient was reported to have had a fit, and on examination a few minutes later she was found to be in a state of extreme collapse, with a pulse rate in the region of 150 and almost imperceptible, blood pressure 60/?, and air hunger. It was obvious that a severe internal haemorrhage had occurred. Blood transfusion was immediately begun and 2 ml. of nikethamide given in an effort to combat the profound shock present. Moderate heat was applied in the form of a heat-cradle, the foot of the bed was raised, and 1/6 gr. (11 mg.) of omnopon was given. There was no response, and two hours later the patient died.

Post-mortem Examination

The relevant post-mortem findings were as follows: *Abdomen:* The incision was clean and uniting well. The general peritoneal cavity contained about 4 pints (2.25 litres) of blood. *Uterus:* The fundus was 4½ in. (11.25 cm.) above the symphysis pubis. No adhesions were present. A classical caesarean scar was clean and uniting well. Bisection of the uterus following removal revealed a normal placental site. The uterine wall appeared pale but otherwise normal. *Intestines:* N.A.D. *Liver:* Enlarged; no obvious necrosis; areas of petechial haemorrhage beneath the peritoneum. *Spleen:* Three times normal size, lobulated, on section appeared normal. *Kidneys:* Slightly enlarged, pale, capsule stripped easily. *Stomach:* Mucosa normal. Linear retroperitoneal haemorrhage extending along the greater and lesser curvatures of the stomach.

Pancreas.—The whole region within the curvature of the first, second, and third parts of the duodenum was occupied by a large retroperitoneal haemorrhage which completely obliterated the normal situation of the pancreas. On section of this area the pancreatic tissue was seen to be broken up into scattered islets surrounded by a mass of blood clot. The peritoneum covering the floor of the lesser sac was ruptured over the superior surface of the body of the pancreas; it appeared that the haemorrhage had started near the junction of the body and neck of the pancreas, and had ruptured into the lesser sac of peritoneum and so through the aditus of the lesser sac into the general peritoneal cavity, resulting in the massive intra-peritoneal haemorrhage that had caused death.

Microscopical Examination.—Kidney: Glomeruli showed increased cellularity, thickening of the basement membrane, and cloudy swelling of the convoluted tubules. *Liver:* Patchy necrosis of the periphery of the lobules. *Spleen:* Some increase of the inflammatory cells. *Suprarenals:* N.A.D.

Discussion

Kenny and Doniach (1945) reported the first case of retroperitoneal haemorrhage associated with a condition of pre-eclampsia. The patient was at full term and had severe pain and shock following intercourse. At operation a retroperitoneal haemorrhage was found extending from the pelvic brim to the diaphragm. The patient died; the source of the bleeding was not found at necropsy.

Potocki (1918) was the first to describe a retroperitoneal haemorrhage associated with pregnancy. His patient was only 10 weeks pregnant, and was operated upon for a suspected ruptured ectopic gestation. At laparotomy an extensive retroperitoneal haemorrhage was found in the region of the transverse mesocolon, pancreas, stomach, and the left kidney. The patient died, the cause of death being considered to be due to a ruptured miliary aneurysm of the left renal artery.

Low (1944) reported a fatal case of retroperitoneal haemorrhage occurring two weeks from term. At necropsy a massive retroperitoneal haemorrhage was found extending from the left brim of the pelvis, behind the sigmoid colon, descending colon, and splenic flexure; it was most marked in the region of the left kidney and spleen. The patient died seven hours after a classical caesarean section. Wilson (cited by Low, 1944; Kenny and Doniach, 1945; O'Connor and Bradley, 1946) described a case of post-partum retroperitoneal haemorrhage in which the patient died on the operating table. At necropsy a ruptured aneurysm of the left renal artery was found.

Halban and Seitz (1928) considered that retroperitoneal haemorrhage was nearly always perirenal in origin, and that the condition may be secondary to renal phthisis or neoplasm or may arise spontaneously in haemophilia and nephritis.

Danforth (1945) reported a case of ruptured aneurysm of the splenic artery. The patient was a 3-gravida, aged 28, who collapsed with severe upper abdominal pain at the 28th week. She showed signs of severe internal haemorrhage, and a vaginal hysterotomy was performed because the condition was considered to be due to premature detachment of the placenta. The patient died, and necropsy revealed an aneurysmal sac of the splenic artery and rupture into the lesser sac of peritoneum. No mention was made of the urinary findings or of the blood pressure before the accident.

The most recently reported case of retroperitoneal haemorrhage arising during the course of pregnancy, and incidentally the only recorded case of recovery, was that of O'Connor and Bradley (1946). Their patient was a 2-gravida, aged 38, at full term. Pregnancy had been uneventful apart from a mild hyperpiesia, and she was admitted to hospital because of moderate pain in the left side of the abdomen. On pelvic examination a tender firm mass was found filling the posterior half of the pelvis, and a provisional diagnosis of a fibroid of the lower segment of the uterus that was likely to cause dystocia was made. A lower-segment caesarean section was performed, and after delivery of the infant the pelvic mass detected before operation was found to be a large firm retroperitoneal haemorrhage filling the whole of the true pelvis and extending into the mesentery of the sigmoid colon. The patient made an uninterrupted recovery, with gradual resolution of the pelvic haematoma. The haemorrhage was thought to have originated from a ruptured haemorrhoidal vein.

It is notable that in five out of the six previously reported cases the haemorrhage started in the region of the floor of the lesser sac of peritoneum, and in these five cases there was profound shock and the patients died. In the sixth case

the haemorrhage had a pelvic origin, the shock was less profound, and the patient recovered.

My case naturally falls into the same category as the first five cases. The site of the haemorrhage is of interest because the tear in the peritoneum of the floor of the lesser sac lay directly over the course of the splenic artery, just distal to the bifurcation of the coeliac artery. The actual origin of the haemorrhage could not be determined because of the friability of the various tissues of the area, but, judging from the speed with which the patient bled to death, the vessel concerned must certainly have been of fairly large calibre, and the pressure behind the blood must have been sufficient to rupture the peritoneal floor of the lesser sac. This catastrophe's occurrence in close proximity to the coeliac plexus no doubt further aggravated the shock. The retroperitoneal haemorrhage which caused the death of the patient occurred on the fourth day after caesarean section for accidental haemorrhage, and it would be of interest to correlate, if possible, the condition of retroperitoneal haemorrhage with toxaemia of pregnancy. One of the outstanding features of the pathology of eclampsia is capillary thrombosis followed by extravasation of red blood cells, and I wonder whether or not a similar occurrence might happen in vessels of larger calibre in isolated instances. Certainly in two of the previously reported cases a condition of toxaemia of pregnancy was present.

Summary

A case of eclampsia complicated by an accidental haemorrhage is described.

Conservative management of the haemorrhage had to be abandoned in favour of classical caesarean section owing to the fact that the uterus remained obstinately tense, and a sudden increase in the retroplacental haemorrhage made immediate operative intervention imperative.

The patient made a smooth recovery until the fourth post-operative day, when she developed a massive retroperitoneal haemorrhage which seemed to originate in the region of the junction of the body and neck of the pancreas. The haemorrhage burst through the peritoneum of the lesser sac, and from 4 to 5 pints (2.27 to 2.84 litres) of blood passed through the aditus of the lesser sac into the general peritoneal cavity, causing death from internal haemorrhage.

A review of the literature to date is given, and an attempt is made to correlate a possible connexion between the toxaemias of pregnancy and retroperitoneal haemorrhage occurring during pregnancy.

My thanks are due to Dr. J. Seed, Medical Superintendent, Driffield County Hospital, East Yorks, for permission to publish the case, and to Dr. Barnard, County Pathologist to the East Riding of Yorkshire, who carried out the pathological investigations.

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The Foreign Office announces the publication and distribution of the first volumes of the *Fiat Review of German Science*, compiled by German experts under the direction of the British, American, and French Field Intelligence Agencies (Technical). The review is written in German and covers fundamental research in pure science during the years 1939–46. The first printing is a restricted edition for official distribution between the three Allies and Unesco. The British share of about 250 sets will be issued to Governmental and other bodies within the Commonwealth, to universities and medical schools, and to the libraries of certain learned and professional societies. It is hoped that the edition will be completed within the next six months.

CLINICAL VALUE OF SOME METHODS OF ESTIMATING ERYTHROCYTE SEDIMENTATION RATE

BY

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Many papers have been published on the rate of sedimentation of red corpuscles since Westergren (1921) recorded his original observations on the significance of an increased rate of fall in tuberculous male patients. Several techniques have been devised, including the use of heparin (Rourke and Ernstene, 1930) and oxalate (Wintrobe and Landsberg, 1935) as anticoagulants. Variations in the bore and length of the measuring tube have been advised (Cutler, 1926; Wintrobe, 1936), and a micromethod is used in some sanatoria (King Edward VII Sanatorium Annual Report, 1933–4). Investigation has been made into the physical and chemical factors involved, and varying importance ascribed to the size of the tube used (Ham and Curtis, 1938), to variations in temperature during recordings (Weingarten, 1945), to the presence of anaemia (Wintrobe, 1936), and to deficiency of plasma fibrinogen (Ham and Curtis, 1938). Various factors may be allowed for in "correction charts," of which the most popular allow for degrees of anaemia evidenced by variations in the volume of packed red corpuscles (Wintrobe, 1936; Whitby and Hynes, 1938).

The sedimentation rate is now generally accepted as a useful index of activity in tuberculosis and rheumatism, but it was felt that a comparison between methods from a clinical standpoint might be interesting. This paper describes the findings of such a comparison—between the clinical course of some tuberculous patients and the trend of their sedimentation rates as estimated by the methods of Westergren (1921), Wintrobe (1936), and Whitby and Hynes (1938), the last two methods involving corrections for anaemia.

Methods of Investigation

Sedimentation rates were estimated on all patients admitted to the tuberculosis wards of the London Hospital Annexe. Four ml. of blood was aspirated from an antecubital vein—2 ml. being mixed with 0.5 ml. of 3.8% sodium citrate solution and the remaining 2 ml. placed in a test-tube in which a drop of a mixture of ammonium citrate (6%) and sodium oxalate (4%) had been dried. The citrated blood was drawn up into 200-mm. Westergren tubes and the oxalated blood placed in Wintrobe tubes of 100 mm. length. The length of clear plasma in the upper part of the tubes was read at the end of one hour, and in the case of the Wintrobe tubes the volume of packed corpuscles was read after 24 hours. The investigation was carried out at laboratory temperatures varying from about 12 to 25° C. Subsequent estimations were made at intervals ranging from two to six weeks.

At the end of a year it was possible to collect the records of 61 patients who had remained continuously under observation for periods ranging from six weeks to six months (average 3.3 months) and who had had sedimentation rates estimated by both methods on from four to ten separate occasions (average 5.6).

To the readings made using 100-mm. tubes were applied two corrections: (1) Wintrobe's correction for anaemia, and (2) Whitby and Hynes's correction, which includes a classification of the rates observed into normal and doubtfully, slightly, moderately, or severely raised.

Clinical Material.—No special selection of cases was attempted. They had all been referred for hospital observa-

tion or treatment by tuberculosis officers; and sanatorium vacancies, home conditions, and suitability for active treatment determined their length of stay. The patients were all females (and therefore more liable to physiological variation in sedimentation rates), with age ranges from 14 to 46 years, two-thirds being between 18 and 30. Tubercle bacilli were demonstrated in the sputum of 53 patients, in the gastric juice of another, and, in the remaining 7, *x*-ray changes in films taken before admission showed the presence of an active lesion. The disease was bilateral in 34 cases and unilateral in 27.

Results

The range of sedimentation rates on admission and discharge is indicated in Table I. By the Westergren technique

TABLE I.—*Distribution of Patients in Various Ranges of Sedimentation Rate*

Westergren			Wintrobe			Whitby and Hynes		
Range (mm.)	On Admission	On Discharge	Range (mm.)	On Admission	On Discharge	Range (mm.)	On Admission	On Discharge
0–5	1	5	0–5	5	4	0–9 (normal)	5	9
6–15	7	16	6–10	5	4	10–13 (doubtful inc.)	13	14
			11–20	11	17	14–20 (slight inc.)	15	13
16–45	44	31	21–30	21	18	21–29 (moderate inc.)	13	11
46	9	9	Above 30	19	18	Above 30 (severe inc.)	15	14

53 patients (87%) had rates above 15 mm., 7 ranged from 6 to 15 mm. per hour, and only 1 was healthily low. The Wintrobe correction showed 40 cases (65.5%) with abnormal rates, 16 with rates suggestive of possible activity of the disease, and 5 with low rates. The correction devised by Whitby and Hynes gave a distribution of 43 cases (70%) with raised, 13 with doubtfully raised, and 5 with normal rates.

The decision of whether after a period of treatment the disease in a tuberculous patient is increasingly active, is decreasing in activity though still active, or is to be regarded as quiescent is important from the point of view of prognosis, disposal, and commencement of graduated exercise. The sedimentation rate is often adduced as evidence towards the formulation of such opinions. Table II shows the

TABLE II.—*Condition of Patients on Discharge, Classified*

		Clinical	Westergren	Wintrobe	Whitby and Hynes
Active disease	Deterioration	17	24	17	14
	No change	8	3	9	14
	Improvement	26	13	13	10
Improvement	Doubtful activity	5	16	12	14
	Quiescent	5	4	5	3
Inactive disease		0	1	5	6

numbers of patients in categories of clinical interest, their placing being based on clinical and radiological considerations, and also the trends in serial sedimentation rates during the period of observation. The Westergren figures show trends of deterioration not found clinically or by either of the other two methods, but the total numbers of patients in the "deterioration" and "no change" categories are approximately the same in all groups. Similar totals are found in the "improvement" category, but their distribution varies, for clinical opinion may regard cases as still "active" and unfit for exercise even when the sedimentation rate has fallen.

Finally, the trend of the sedimentation rate in individual cases was noted and compared with the patient's clinical course. As this part of the investigation was particularly liable to personal error, inquiries were made of the sanatoria to which 10 patients were sent, to find out their subsequent progress. Reports kindly furnished by the medical superintendents concerned seemed to confirm the validity of our estimates of clinical progress.

Table III gives observations on individual cases, and Table IV summarizes the findings of the comprehensive comparison. It will be seen that the trends of the Westergren estimations appear to conform to the clinical course in 77% of cases, against 59% in the Whitby and Hynes and 54% in the Wintrobe series. The Westergren method is in agreement with the clinical in 15 cases where the other two rates were inconsistent or contradictory, while in five cases

TABLE III.—*Rates on Admission and Discharge*

Case No.	Clinical Trend	Westergren		Wintrobe		Whitby and Hynes		Conformity with Clinical Course
		Adm.	Dis.	Adm.	Dis.	Adm.	Dis.	
1	Deterioration	60	40	41	30	30	21	0
2	No change	36	24	26	13	14	10	We
3	Deterioration	37	52	32	41	21	30	We and Wh
4	,,	46	49	22	42	21	30	Wi and Wh
5	Improvement	45	29	16	23	10	14	=
6	,,	27	14	22	15	21	10	We
7	Deterioration	8	13	6	15	1	10	=
8	,,	28	40	15	24	10	14	=
9	Improvement	17	10	19	6	14	9	=
10	Deterioration	41	54	14	28	10	30	=
11	No change	32	33	33	34	21	21	=
12	Improvement	23	31	10	22	14	14	=
13	,,	42	20	24	12	14	10	=
14	Deterioration	31	38	22	32	14	21	=
15	Improvement	25	32	23	14	14	10	0
16	,,	45	3	36	3	30	3	=
17	No change	40	50	45	49	30	30	Wi and Wh
18	,,	20	13	32	19	21	14	=
19	Deterioration	26	32	15	12	10	10	We
20	Improvement	25	13	30	8	30	7	=
21	Deterioration	20	38	33	45	21	30	=
22	,,	73	74	43	32	30	21	We
23	Improvement	30	22	46	30	30	21	=
24	,,	33	12	25	15	14	10	=
25	,,	49	20	24	30	14	21	We
26	,,	7	4	1	4	5	4	=
27	,,	65	23	38	38	30	33	We
28	,,	15	5	5	12	10	9	We and Wh
29	No change	28	21	32	21	21	14	=
30	Improvement	30	15	21	12	14	10	=
31	No change	5	10	1	1	1	1	=
32	Improvement	30	25	15	26	14	14	0
33	,,	16	12	18	14	10	10	=
34	,,	20	29	22	15	14	10	Wh
35	,,	68	31	26	26	21	21	We
36	,,	44	26	45	22	30	14	We and Wi
37	,,	76	36	36	34	30	30	We
38	Deterioration	32	13	21	12	14	10	0
39	No change	32	48	41	32	30	21	0
40	Deterioration	70	100	24	55	14	30	=
41	Improvement	11	3	8	0	10	2	=
42	,,	55	12	44	24	30	14	=
43	Deterioration	34	45	39	43	30	30	We and Wh
44	,,	22	41	31	33	21	21	We
45	Improvement	35	5	30	17	21	14	We
46	No change	20	32	21	38	10	30	0
47	Improvement	14	10	2	11	8	8	We and Wh
48	,,	11	60	14	41	10	30	0
49	,,	47	41	26	26	21	21	=
50	No change	17	13	12	6	10	7	=
51	Improvement	18	40	6	40	8	30	=
52	,,	28	28	28	42	21	30	We
53	,,	37	20	32	24	30	14	=
54	,,	32	26	14	14	10	10	We
55	,,	50	15	38	23	30	14	=
56	Deterioration	19	52	22	22	14	14	We
57	Improvement	44	16	40	8	30	10	We
58	No change	32	23	19	26	14	14	Wi and Wh
59	Deterioration	21	12	25	26	21	21	Wi and Wh
60	Improvement	12	34	17	36	10	30	0
61	,,	32	10	4	17	10	10	We

We = Westergren. Wi = Wintrobe. Wh = Whitby and Hynes.

TABLE IV.—*Agreement between Sedimentation Trends and Clinical Course*

	Agreement with Clinical Course
Westergren	47 (77%)
Wintrobe	33 (54%)
Whitby and Hynes	36 (59%)

No agreement with the clinical course by any method in 8 cases (13%)

corrected by the Whitby and Hynes method and in four cases corrected by the Wintrobe method readings were obtained agreeing better with the clinical course than those obtained by the Westergren technique.

Discussion

It has already been noted by Whitby and Hynes (1938) that the Wintrobe correction for sedimentation rates contains certain fallacies—i.e., that above certain figures the corrected rate is higher than the volume of packed cells, and that below certain volumes of packed cells sedimentation rates cannot be abnormal. Their own correction curve, like that of Wintrobe, is derived from estimations of rates in certain abnormal cases in which the blood was subsequently manipulated to conform to normal haematocrit readings, the final figures being controlled by a group of rates observed in an equivalent number of healthy students. It appears, however, from this investigation that these corrections rob the estimation of the sedimentation rate of its value. The corrected figures in the Wintrobe series often produced a series of readings which was so variable that in nearly half the cases the figures did not appear to conform to any pattern at all. The correction devised by Whitby and Hynes so levelled out the unevenness commonly found in sedimentation readings, and the estimations included so many readings in the "doubtfully" or "slightly" raised categories, that again no pattern suggesting improvement or deterioration could be detected.

Beaumont and Maycock (1935) made a plea for the increased employment of the Westergren method as being superior to two other methods then in use, and stressed the point that useful information could be obtained only by adopting the same method in serial readings. Bailey (1941) compared the Wintrobe method with the Westergren in a series of 131 cases, and reached the conclusion that the corrected rate was of little use in classifying the patient's clinical status and was misleading in a considerable proportion of cases. Davis (1946) in a general review of the clinical use of sedimentation-rate estimations advocates the Westergren technique. My findings support the opinion that the Westergren method, as generally used, gives figures for the sedimentation rate that agree better with the course of the patient's illness, estimated by prolonged clinical observation, than do the present methods that employ corrections.

Summary

A study of the erythrocyte sedimentation rates of 61 female patients suffering from pulmonary tuberculosis is reported. A comparison was made between the clinical course of the illness on the one hand and the sedimentation rates as estimated by the methods of Westergren, Wintrobe, and Whitby and Hynes on the other. The Westergren method appeared to be the most useful both in estimating the degree of activity of the disease and in indicating the direction of its progress.

My thanks are due to Dr. R. R. Bomford, Dr. K. M. A. Perry, and Dr. H. B. May for their encouragement and advice in the preparation of this article; to the medical superintendents of Pinewood, Grove Park, and the Grosvenor Sanatoria, and of Eversfield Hospital and the Royal National Hospital, Ventnor, for their reports on cases; and to Messrs. Telfer and Sait and Miss Carey for invaluable technical assistance.

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ERYTHROCYTE SEDIMENTATION RATE

THE EFFECT OF ALCOHOL AS CONTAMINANT

BY

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Schott (1928) described the effect of alcohol on the erythrocyte sedimentation rate (E.S.R.). Very small additions of alcohol in the form of drops of different dilutions in ether usually caused an increase in the one-hour sedimentation reading, while larger additions reversed the tendency and resulted finally in very reduced values. The alcohol present in venepuncture needles which had been stored in spirit was sufficient to cause large discrepancies in the results of E.S.R. determinations.

Famulari and Colacresi (1935) studied the effect of intragastrically administered alcohol on the E.S.R. They found a great diminution in the E.S.R. following the administration, but they did not examine the effects obtained by the addition to blood *in vitro* of similar proportions of alcohol to those obtained *in vivo*.

Schott's observations seem to have escaped general notice, and the purpose of this note is to draw attention to the phenomenon and its technical implications.

The Test

Sedimentation-rate determinations were performed on blood from patients with and without the addition of various proportions of industrial methylated spirit *B.P.*, hereinafter referred to as "spirit." The blood was heparinized, 5 to 6 ml. of blood being added to 0.05 ml. of heparin solution (50 international units). One-millilitre samples of the heparinized blood were taken into test-tubes and each was mixed with 0.25 ml. of 3.8% sodium citrate solution. To the mixtures were then added 0.01, 0.02, 0.03, and 0.04 ml. of spirit respectively, a control tube having no spirit added. It will be noted that this procedure does not exactly reproduce the conditions of practice, where the blood would be contaminated with spirit before the citration. One-hour sedimentation values of the mixtures were determined in Westergren pipettes, care being taken to obtain thorough mixing and to ensure that the pipettes were clean, vertical, and not exposed to direct sunlight or draughts. The determinations for each patient were started together, and always within three hours of taking the blood.

A progressive diminution in sedimentation, preceded in some cases by a slight increase, was observed in the presence of increasing amounts of spirit. The results in 30 cases are shown in the Table. With the exception of Cases 29 and 30 (investigated at 19° and 17° C. respectively), corrections of the E.S.R. for the temperatures of the determinations have been made from an empirical chart (*Laboratory Digest*, January, 1946). Slight haemolysis was observed with Cases 4, 5, and 10 in the mixtures containing the higher concentrations of spirit.

Whether the depressant effect of spirit can constitute a considerable source of unreliability in E.S.R. determinations depends on the possible degree of contamination of blood samples. The "residual contents" of Record-type syringes of various capacities, complete with needles, were estimated as follows, detaching the needles only during expulsion of liquids.

Aqueous dye solution (T 1824) was drawn into the syringe to capacity and expelled. After sucking in and expelling air one

to three times, water was drawn in to capacity and expelled, as dilute dye solution, into a measuring cylinder. The dilute dye, after making up to a measured volume, was compared

Table showing the Effect of Increasing Concentrations of Spirit on the E.S.R. (mm./1 hr.)

Case No.	Amount of Spirit in 1·25 ml. of Citrated Blood				
	0	0·01 ml.	0·02 ml.	0·03 ml.	0·04 ml.
1	1	2	1	1	1
2	4	3	3	2	2
3	5	6	5	3	1
4	6	8	5	2	1
5	9	6	2	2	1
6	10	13	11	5	2
7	13	9	4	2	2
8	15	13	11	6	3
9	17	18	13	9	4
10	18	14	12	7	2
11	23	19	13	6	3
12	25	20	14	5	2
13	26	28	24	21	11
14	26	19	6	3	1
15	29	21	6	4	3
16	30	25	18	12	7
17	32	24	14	6	3
18	34	30	22	12	5
19	36	32	25	7	4
20	42	35	14	6	3
21	54	42	18	7	2
22	64	59	40	24	14
23	64	52	22	5	4
24	67	69	62	44	13
25	74	75	70	57	38
26	78	77	53	29	12
27	86	86	78	53	26
28	94	91	74	47	26
29	120	112	102	85	42
30	128	126	126	86	43

colorimetrically with an appropriate dilution of the original dye. A simple calculation gave the residual contents of the syringe with needle. Three syringes of each size were examined, two determinations being made on each syringe, with the following results :

Size of Syringe	Range of Residual Volume
20 ml.	0.1 to 0.4 ml.
10 ml.	0.03 to 0.1 ml.
5 ml.	0.03 to 0.1 ml.

The amount of blood usually taken from a patient for an E.S.R. determination varies from 2 to 6 ml., and thus a specimen taken in a syringe which has been stored in spirit and used without adequate rinsing may well be contaminated with 2% of spirit. This degree of contamination will render the determination of E.S.R. liable to gross error.

I am indebted to the physicians to the Royal Infirmary, Sheffield, for permission to use material from their cases. My thanks are due to Professor Krebs for his advice and interest, and to Dr. Weetch for the original suggestion and for his continued interest.

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As a result of experiments aimed at increasing the efficiency of the tuberculin test applied to dairy cattle an alternative procedure to save the time and labour of both farmer and veterinary surgeon has been introduced. In recent years the test used has required two injections. From experiments carried out on nearly 10,000 cattle there has been evolved a single injection test which the Tuberculosis Committee of the Agricultural Research Council are satisfied is as effective as the double one. The Secretary of State for Scotland has therefore modified the directions given in 1929 on the manner of carrying out the tuberculin test of an animal for the purposes of the Milk (Special Designations) Orders (Scotland) 1936–44. The test may now be made either by the double intradermal method as hitherto or by the method of the single intradermal comparative test. The experiments showed a close similarity between the results yielded by the two tests. In attested and tuberculin-tested herds the single intradermal test gave the more accurate result in the few discrepant cases that occurred.

Medical Memoranda

Calciferol in Tuberculous Peritonitis with Disseminated Tuberculosis

While the value of calciferol in the treatment of lupus vulgaris is now established, reports of its use in other tuberculous conditions, with the exception of adenitis, are few. No claims can be made for a preparation after its apparently successful use in an isolated instance, but the dramatic improvement in the following case renders it worthy of record.

CASE REPORT

On July 8, 1946, a girl aged 19 was admitted to hospital with a lung infiltration of an exudative character in the right mid-zone with no expectoration. This lesion, which was not then diagnosed as being tuberculous, had not resolved when she was discharged from hospital a month later. She did not attend as an out-patient as instructed, and stayed at home until May 5, 1947, when she was admitted to hospital with acute abdominal pain and signs suggestive of tuberculous peritonitis. A subsequent laparotomy showed free fluid in the peritoneal cavity and studding of the peritoneum with numerous tubercles; the diagnosis was confirmed by microscopical section.

On July 3 she was transferred to a sanatorium, but her condition deteriorated steadily; renal and vesical tuberculosis were diagnosed. Intravenous pyelography showed changes of the renal calices consistent with tuberculosis of the kidney, and cystoscopy revealed tuberculous granulations in the bladder. Moreover, tubercle bacilli were found in the urine on repeated investigations. The laparotomy wound, which had broken down a month after operation, showed no sign of healing. On Sept. 22 she was transferred to hospital as no longer suitable for sanatorium treatment and came under our observation for the first time.

On admission she was extremely pale and wasted; the laparotomy wound was discharging freely and she suffered from severe abdominal pain and tenderness, especially in the right loin, and frequency of micturition. She had a high swinging temperature ranging from 97 to 102° F. (36.1 to 38.9° C.) and appeared to be going downhill rapidly, and the prognosis was considered to be extremely grave. This state of affairs persisted for two months. On Nov. 19, in view of the grave nature of her condition, it was felt that as a last resort treatment with high-potency "ostelin" (Glaxo) might be worthy of trial, and we decided, her blood chemistry being normal, to give her 100,000 i.u. daily. Within seven days the temperature became normal, and at the end of 14 days the abdominal pain had completely subsided and the laparotomy wound had healed. No toxic manifestations were observed. Owing to the renal condition the drug was discontinued for 14 days; then another 14-day course was given. Since then steady progress has been maintained; the patient remains apyrexial, her appetite has improved, and her weight increased from 4 st. 12 lb. to 6 st. (30.84 to 38.1 kg.). No tubercle bacilli can now be demonstrated in repeated examinations of the urine. The lung lesion, which has shown a slow but steady tendency towards resolution throughout, is now almost completely healed. It has never been associated with the expectoration of sputum.

The very marked improvement in which the appearance of the patient changed from that of a moribund case of tuberculosis to one of returning health and vitality we feel cannot be dissociated from the administration of the calciferol. It is suggested that the treatment of similar lesions under controlled conditions with this preparation is worthy of more extensive trial.

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Recent Advances in Public Health, by J. L. Burn (J. and A Churchill, 25s.), is an informative and interesting book on many aspects of public health not discussed in the ordinary textbook—for example, problem families, care of the cerebral palsied child, the care of the premature infant, municipal foot health services, road safety, human-milk bureaux. Dr. Burn does not refer to marriage guidance, which some consider to be complementary to child guidance and equally important to the mental health of the child. In other sections he considers the latest contributions to the solution of old problems, notably water purification and air-borne infections. The sections on handicapped children will be found most informative. The book should be widely read by public-health officers wishing to keep themselves up to date and can be recommended to D.P.H. students.

Reviews

TREASURY OF INHERITANCE

The Treasury of Human Inheritance. Vol. IV. Nervous Diseases and Muscular Dystrophies. Part V. Dystrophia Myotonica and Allied Diseases. By Julia Bell, M.A., F.R.C.P. With Clinical Notes by J. Purdon Martin, M.D., F.R.C.P. With pedigree plates XLV-LXI, Figs. 840-1,063. (Pp. 68. 21s.) London: Cambridge University Press. 1947.

Few research workers have contributed so much to medical genetics as has Dr. Julia Bell. Successive monographs of the *Treasury of Human Inheritance* have revealed her flair for thorough reviews of the literature, for the drawing up of clear pedigrees, for careful selection of what is important in the case notes, and for marshalling concisely the outstanding conclusions to be drawn from the data presented. The whole series is indeed a treasury for research workers. With this number Dr. Bell brings to an end the fourth volume, which deals with nervous diseases and muscular dystrophies. It is greatly to be hoped that she will now investigate other diseases, for with the appearance of each monograph one more condition falls into the small but, thanks largely to her, growing list of inherited disabilities to which we have a sure and convenient genetic guide.

The present number is especially interesting and includes valuable clinical notes by Dr. Purdon Martin. It also includes accounts of a long series of cases of dystrophia myotonica collected by Dr. Otto Maas, many of which are now published for the first time. Dr. Bell considers that Thomsen's disease and dystrophia myotonica are separate conditions. In this she differs from some authorities, notably Dr. Maas himself. In transmission Thomsen's disease behaves as a simple dominant. This is strictly true of the carefully compiled pedigree of Thomsen's own family, which has been enlarged and brought up to date by his great-nephew, Nissen. Dystrophia myotonica behaves somewhat as though it were due to an irregularly expressed dominant gene, but there are some strange anomalies. First, Maas finds incipient signs of the disease in all or most of the members of sibships containing affected persons. Secondly, apparently normal brothers and sisters of affected persons tend on the average to die at a younger age than they should. Thirdly, the correlation between members of the same family in age at onset is very low. Fourthly, there is a similar lack of association in severity. Finally, there appears to be true anticipation—that is, the disease tends to appear at an earlier age in later generations—even when appropriate statistical allowances have been made. There seems to be no known genetic mechanism which could explain these remarkable findings. Future research workers who solve the problem will be grateful to Dr. Bell for providing a fine body of data on which to test their theories.

The standard of production is as high as ever; it is of an excellence seldom encountered these days. It is wise, however, to bind the separate parts as soon as possible, for owing to the size of the pages and the heavy plates they are apt to disintegrate quickly unless this is done.

J. A. FRASER ROBERTS.

RHESUS FACTOR

Rh. Its Relation to Congenital Hemolytic Disease and to Intragroup Transfusion Reactions. By Edith L. Potter, M.D., Ph.D. (Pp. 344; illustrated. $5.50 or £1 10s. 6d.) Chicago: The Year Book Publishers Inc. London: H. K. Lewis and Co. 1947.

Dr. Potter is to be congratulated on this admirable monograph on the Rh factor. A general survey of the Rh antigens and antibodies in relation to haemolytic disease and transfusion reactions is followed by a good historical chapter on the discovery of the Rh factor. The author discusses the general properties of Rh antigens and antibodies and includes a section on the historical development of the nomenclature; she recapitulates Wiener's terminological vacillations, which caused so much confusion. In the section on the inheritance and antigenic structure of Rh–Hr she does rather less than justice to the part played by British workers in clarifying the situation, for she does not make clear that it was they who first suggested the true complexity of the Rh structure at a time when Wiener and other American writers had quite failed to understand the reciprocal relations of Rh and Hr. Thus Fisher (p. 69) did not "postulate that H′ is inherited as an allele of R′," for at that time Wiener denied that there was more than one Hr antigen and still considered it as an entirely separate antigenic system. The truth is that the unassailable logic of Fisher's analysis and synthesis has compelled American writers to accept his interpretation, and they have subsequently applied the Rh–Hr terminology to Fisher's Cc Dd Ee notation by the simple device of applying to Hr the ′ or ″ indices to indicate their allelic relationships to the Rh antigens.

Dr. Potter derives only 27 genotypes from Fisher's notation instead of 36, even the common R_1R_2 CDe–cDE being omitted. If this omission implies that it is impossible to distinguish serologically all the possible genotypes, she does not make that clear. The difference is not inherent in the notation, but perhaps Dr. Potter has overlooked the difference between linked and unlinked genes. In any case it would surely be better to include the common R_1R_2 CDe–cDE instead of the very rare R_2R_0 CDE–cDe. She fully considers the current nomenclature, and, while wisely distrusting systems based on arbitrary numbers, approves of Graydon and Simmons's slight modification of the present system. There is a useful table of the Rh-positive and Rh-negative distribution in different races, including such data as are at present available on the sub-types. She rightly condemns Wiener's biological test as dangerous, emphasizes the importance of giving only Rh-negative blood to Rh-negative women, and stresses the permanence of maternal iso-immunization. She presents an excellent review of haemolytic disease and classification of affected infants, the morbid anatomy and histology being beautifully illustrated. The sections on diagnosis and treatment could hardly be improved.

In the section on the significance of the homozygous state among the fathers of affected children Dr. Potter (p. 133) has overlooked the fact that her sample of 102 Rh-negative mothers is not a random sample but very highly selected. In relation to the occurrence of the disease in a second child the chance that the heterozygous father will produce the necessary two successive Rh-positive children is only one in four, whereas of course the homozygous father produces only Rh-positive children. There is thus inevitably a selection in favour of the homozygous state of the fathers of four in one.

In conclusion it may be said that Dr. Potter has written a monograph on the Rh factor which no one doing practical work in this subject should be without. While she does not present anything new for those who have followed the evolution of knowledge about haemolytic disease from the beginning, she provides a most useful summary of the present state of knowledge and a complete bibliography that will help everyone working in this field.

D. F. CAPPELL.

FOOD POISONING

Food Poisoning. Its Nature, History and Causation: Measures for its Prevention and Control. By Elliot B. Dewberry. Foreword by Gerald R. Leighton, M.D., D.Sc., F.R.S.Ed. In Three Parts, with Appendixes. Second edition. (Pp. 246; illustrated. 17s. 6d.) London: Leonard Hill, Ltd. 1947.

The publication of a second edition of this book within four years shows that it has had a considerable appeal. While the author is not himself an expert upon these complicated problems, he has carefully studied the literature and gives us a reliable and reasonably complete account of the various aspects of food poisoning. He has greatly improved the account of food poisoning due to staphylococci, which was very inadequately treated in the first edition, and describes it in detail in a separate chapter of 21 pages. He devotes sufficient space to discussing salmonella poisoning and infections, and perhaps more to an account of botulism than its comparative rarity demands. Other types of food poisoning considered are those caused by poisonous metals, plants, fungi, fish, and shellfish, and there is a short account of food allergy. In three appendices he describes the laboratory investigation of outbreaks, steps recommended by the Ministry of Health to investigate outbreaks, and the identification of *Salmonella* types. There are a few omissions, but the author does give a reasonably complete and accurate account of the subject. There are a number

of attractive illustrations, mostly of people prominent in the elucidation of food poisoning. In any new edition it would be helpful to give some account of precautions which should be taken in communal cookery establishments to reduce the risks of food poisoning.

WILLIAM SAVAGE.

THE EAR

Kurzes Handbuch der Ohrenheilkunde. By Prof. Hermann Marx. Second edition. (Pp. 888; 499 figures. Paper covers Rm. 46; stiff covers Rm. 48.50.) Jena: Gustav Fischer. 1947.

This book is a second and larger edition of the short handbook on diseases of the ear by Prof. Marx published in 1938. It is not a short textbook, as the title suggests, but a full and detailed work of 848 pages, profusely illustrated—a reference book, indeed, for the advanced postgraduate student and beyond the compass of an undergraduate. There is a long bibliography, mostly of German authors; references to British and American literature are scanty. The illustrations are excellent and depict a wide range of clinical conditions and pathological anatomy. The photographs of the macula and the crista with its cupula are particularly fine. The pictures of the various types of mastoid swelling and of different degrees of facial paresis are useful to the student. The photomicrographs illustrating chronic adhesive processes in the middle ear are interesting.

In the first chapter the author clearly describes and illustrates the development and comparative anatomy of the ear in relation to the visceral arches. He fully discusses the difficult physiology of balance and hearing. Marx uses the earlier Continental form of audiogram with the normal threshold line shown as a curve, which may at first confuse British and American readers. He is lukewarm in his appraisal of the fenestration operation for otosclerosis. He gives a good survey of labyrinthitis, but his account of it, as of the intracranial complications of mastoiditis, is based on work done before treatment with penicillin was started, and much of the operative work described is now almost obsolete. He fully describes open drainage of brain abscess, but this procedure is now falling into disrepute. Marx prefers surgery to radiotherapy for the treatment of carcinoma of the ear. There is an extensive section on tumours of the acoustic nerve.

STEPHEN SUGGIT.

INSTRUCTION FOR WOMEN

Womanhood. By Margaret Moore White, M.D., F.R.C.S., M.R.C.O.G. (Pp. 107. 7s. 6d.) London: Cassell and Co., Ltd. 1947.

This book is written for girls and women to enable them to understand the physiology of the various events that take place in their lives between puberty and the menopause. The author begins by describing events at puberty, including menstruation, and gives sensible advice about menstrual hygiene. In three chapters she discusses various aspects of marriage—preparation and early years, birth control, and sterility. She then considers antenatal care, labour, and the lying-in period. Advice on infant feeding and on the problems of infancy and early childhood follows. In the final chapter she discusses the menopause.

A well-balanced outlook and absence of sentimentality characterize the book. The factual information is well laid out and complete, though the author might have further stressed one or two points. These include the dangers of intrauterine appliances for contraception, and the dangers to life and health of criminally induced abortion, whether performed by the pregnant woman herself or by an unskilled accomplice. The description and illustration of the method of vaginal douching, while excellent in themselves, would appear more appropriately in a different chapter from that on pregnancy. The present arrangement might mislead a woman with little medical knowledge to associate douching with pregnancy. This book will certainly be useful to women of all ages and will appeal especially to the young. Adolescents will find it interesting, and it provides mothers with authoritative information to pass on to daughters reaching adult life. The general lay-out and production are excellent, and it is easy to read. The illustrations consist of line drawings and diagrams by Dr. Gwynne Jones and are entirely adequate for their purpose.

JOSEPHINE BARNES.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

Diabetes Mellitus in General Practice. By Arthur R. Colwell, M.D. (Pp. 336. 39s.) Chicago: The Year Book Publishers. 1947.

A practical account intended primarily for the general practitioner.

Rehabilitation of the Physically Handicapped. By Henry H. Kessler, M.D., Ph.D. (Pp. 274. 20s.) London: Geoffrey Cumberlege. 1947.

A general account of the organization and methods of rehabilitation in the U.S.A.

The Psychology of the Adolescent. By Leta S. Hollingworth, Ph.D. (Pp. 188. 10s. 6d.) London: Staples Press. 1947.

A practical account for parents and teachers.

Aids to Gynaecology. By W. R. Winterton, M.A., M.B., B.Ch., F.R.C.S., M.R.C.O.G. 10th ed. (Pp. 184. 5s.) London: Baillière, Tindall and Cox. 1947.

This booklet has been revised and new material on chemotherapy added.

Chemical and Physical Investigations on Dairy Products. By H. Eilers *et al.* (Pp. 215. 21s.) New York and Amsterdam: Elsevier Publishing Company. 1947.

A variety of papers on research into dairy products carried out in Holland.

Eskimo Doctor. By Aage Gilberg. Translated by Karin Elliott. (Pp. 150. 15s.) London: George Allen and Unwin. 1948.

A doctor's life in North Greenland.

Ernaering og Folkehelse. By Sir Robert McCarrison. (Pp. 94. No price.) Oslo: Kjemp Mot Kreft Med Kunnskap. 1947.

Norwegian translation of Sir Robert McCarrison's Cantor lectures (1936) on "Nutrition and National Health."

The Almoner. By I. F. Beck, A.M.I.A. (Pp. 66. 3s. 6d.) London: Council of the Institute of Almoners. 1948.

A short account of social service and the almoner.

A Picture-Book of Evolution. By Surgeon Rear-Admiral C. M. Beadnell, C.B., K.H.P., M.R.C.S. 4th ed. (Pp. 284. 15s.) London: Watts. 1948.

An account of evolution for the layman, with many illustrations.

Feeding Under Fives. By Nell Heaton. (Pp. 106. 5s.) London: Faber and Faber. 1948.

A practical book for the busy mother.

Remedial Exercises for Certain Diseases of the Heart and Lungs. By Hester S. Angove, M.C.S.P. (Pp. 181. 10s. 6d.) London: Faber and Faber. 1946.

A manual for students and practitioners of physiotherapy.

Principles and Practice of the Rorschach Personality Test. By W. Mons. (Pp. 164. 12s. 6d.) London: Faber and Faber. 1947.

An exposition of the test; intended for psychiatrists.

Practical Food Inspection. Vol. I. Meat Inspection. By C. R. A. Martin. 3rd ed. (Pp. 316. 18s.) London: H. K. Lewis. 1947.

A practical account intended for inspectors of food.

Why Not English? By Peter D. Ridge-Beedle. (Pp. 118. 10s. 6d.) Glasgow: The Stratford Press. 1947.

A new alphabet to simplify the spelling of English.

Wege, Ziele und Grenzen der Operativen Chirurgie. By Eduard Melchior. (Pp. 161. 6.80 Swiss francs.) Verlag, Berne: A. Francke. 1947.

An introduction to the principles of operative surgery.

The Philosophy of a Scientist. By R. G. Gordon, M.D., D.Sc., F.R.C.P.Ed. (Pp. 206. 16s.) London: Hutchinson. 1947.

The author discusses such topics as free will, deity, values, and immortal life.

Chronic Ill-Health. By Rosa Ford, M.B., D.O. (Pp. 104. 6s.) London: Henry Kimpton. 1948.

The relief of certain disorders by eradicating sepsis from the paranasal sinuses.

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PUBLIC OPINION

An American journalist recently observed that there were at the moment three great powers—the U.S.A., the U.S.S.R., and public opinion. In our smaller world of medicine the three powers are the British Medical Association, the Ministry of Health, and, again, public opinion. Since the beginning of December the public has been bemused by the controversy energetically joined on both sides by the medical profession and Mr. Aneurin Bevan. The results of the plebiscite, to judge from the reaction to it of the national and provincial press, have convinced the public that the medical profession has serious grounds for disquiet about the National Health Service Act in its present form. The overwhelming vote of disapproval by whole-time Government medical officers, whole-time medical officers of health, and the young men working whole-time in the voluntary hospitals has convinced lay opinion that the opposition is not the result of political agitation or the result only of B.M.A. propaganda. As Professor J. H. Dible so well put it in a letter to *The Times*[1]: "The medical profession has a deeply rooted tradition of freedom, and it is the experience of many of us that whole-time medical service removes this and with it many of those things, tangible and intangible, which the profession cherishes dearly." *The Times*,[2] in a leading article commenting on the plebiscite, erred in stating that "the British Medical Association had already virtually committed itself to organizing a boycott of the entire service if three main groups concerned . . . voted by a majority against entering the service. . . ." The opposition of the B.M.A., it is evidently necessary to reiterate, is not against the Service as such, but against those features of the Act and those proposals of the Minister which lead towards a whole-time salaried State medical service. Opposition is aimed at continuing and securing "a deeply rooted tradition of freedom."

The first reaction of the Ministry of Health to the plebiscite was in the form of a statement to the Press Association by a Ministry official, who said: "The Act will come into operation on July 5 in accordance with Parliament's decision." In reply to a question in the House of Commons,[3] Mr. Bevan himself observed, "I remain ready to co-operate closely with any professional spokesmen who want, with me, to make the new service a success," adding later that he "would not be entitled to go behind the back of the House and suggest that Parliament can surrender any position it has taken up." Comments by political correspondents suggest that the Government is more than perturbed by the results of the plebiscite, and some papers suggest the names of possible mediators, among them Mr. Attlee. In an article in the *Sunday Times*,[4] for example, Lord Horder writes: "The occasion merits his [Mr. Attlee's] direct intervention, for the issue is a vital one in the life of the nation" Lord Horder sees two ways in which "the present impasse may be resolved. One is for the Government to force the position on its economic basis, the other is to change the present atmosphere universally recognized as thoroughly bad and restore our confidence." He observes that the first alternative seems to determine the Government's present attitude. We consider that the last thing the medical profession will tolerate is financial coercion, and it is ironical that a Socialist Government should contemplate using such an ugly weapon. In asking the question, "How can confidence be restored?" Lord Horder gives this answer: "By doing something (not making promises) which will allay the doctor's present fear that the Act, as it now stands, enables the Government to make him a whole-time salaried servant of the State." Mr. Bevan has unfortunately made it extremely difficult—and in the eyes of some impossible—for this confidence to be restored. The *Glasgow Herald*,[5] for example, considers that "a workable health service will be forthcoming only at the cost of concessions of a more definite nature than they [the Government] have seen their way to make so far. The achievement thereby of a workable health service would be a victory for common sense. If in the eyes of Mr. Bevan such an achievement now represents only a personal defeat, then it is time for his replacement." The *Scotsman*[6] writes: "The result of the plebiscite demonstrates that the doctors are in earnest in their stand for professional freedom, and it must be hoped that the Government will . . . make further efforts to remove the causes of disagreement." The *Yorkshire Post*[7] hopes "that this impressive demonstration of feeling . . . will convince the Minister of Health of the need to seek a settlement by compromise." *The Times*[2] writes, "The Minister of Health must give due weight to this remarkable expression of doctors' feelings. . . . The results of the ballot inevitably require the B.M.A. to make the next move, and to flout an Act of Parliament sets an ugly precedent. But Mr. Bevan has an essential part to play in seeking a fair settlement." The *Daily Telegraph*[8] states, "Even at this late hour the Minister of Health should earnestly seek lines of agreement . . . the situation is a nationally unpleasant one, but should no change for the better prove possible the responsibility for the tactics, or absence of them, which have brought it about must be placed squarely upon Mr. Bevan's shoulders." The *Manchester Guardian*[9] writes, "There is one hopeful feature of the situation. Both sides are strong enough to stand firm against each other. But both are, by the same token, strong enough to meet each other. . . . The B.M.A. has had an undeniable success over its plebiscite, and that strengthens its hands in negotiations. But it would be gravely mistaken if it assumed that its success in winning the support of most doctors entitled it to dispense with negotiation." Mr. Francis

[1] *The Times*, Feb. 21, 1948.
[2] Ibid., Feb. 19, 1948.
[3] *Parliamentary Debates* (Hansard), Feb. 19, 1948. 447 .1308.
[4] The *Sunday Times*, Feb. 22, 1948.
[5] The *Glasgow Herald*, Feb. 20, 1948
[6] The *Scotsman*, Feb. 19, 1948.
[7] The *Yorkshire Post*, Feb. 19, 1948.
[8] The *Daily Telegraph*, Feb. 19, 1948.
[9] The *Manchester Guardian*, Feb. 19, 1948.
[10] The *Sunday Chronicle*, Feb. 22, 1948.
[11] The *Observer*, Feb. 22, 1948.

Williams,[10] giving the "Socialist viewpoint," says this: "In the dispute on the National Health Service the next move is with the British Medical Association. That, I think, can be taken as the Government's definite opinion." A leading article in the *Observer*[11] puts the case of the medical profession in a way no other paper has yet done. "Socialists," the leader-writer says, "have not paid enough attention to the difference between nationalizing an industry and nationalizing a profession with a long and valued tradition of independence." Discussing the approach of State Socialism towards a National Health Service, the *Observer* writes: "In dealing with medicine this may not be the right way: it tends to give planning priority over persons. Yet in a medical service, profoundly influenced by human relationships and qualities of character, success depends far more on persons than on streamlined plans." Mr. Bevan, the *Observer* points out, "has set himself to bring the whole plan into operation—on paper—this year. He wants the credit for all of it to figure—on paper—in his party's books. He accuses the doctors of 'playing politics,' but his own view of the project has always been from a window in Whitehall." The *Observer* considers that the best way out would be an agreement to proceed by stages, and concludes thus: "The Government must speak to the doctors through someone in whom they can feel confidence; Mr. Bevan should ask himself whether he is the right man."

Mr. Aneurin Bevan has said some hard things about the B.M.A., and the plebiscite has shown that all of his observations were wide of the mark. We think it would be a pity if, during the coming weeks, principles continued to degenerate into personalities. To talk in terms of "battle," "victory," "defeat," will not make it any easier to arrive at a just solution of the present problem. The important thing is to realize the existence and nature of the problem and to attempt to solve it not by scoring debating points or by denigrating opponents. The medical profession and the Minister of Health have one important end in common and that is to provide an efficient medical service for the people of this country. This common purpose is so important that it would be a tragedy if the Minister of Health failed to secure the co-operation of the medical profession by refusing to make those adjustments necessary to remove the grave doubts and fears of the 40,000 British medical men and women who have expressed disapproval of the Act in its present form.

NUTRITIONAL REHABILITATION

The provision of sufficient food for the populations of countries which have been devastated or disorganized by war, or which merely have been left behind in the economic race for existence, is one of the first steps necessary for the re-establishment of peace and prosperity throughout the world. Dr. Magnus Pyke[1] has outlined the measures he considers to be most essential for restoring adequate nutrition in Europe. The most urgent necessity is to provide more calories, more food to fill empty stomachs. Quantity rather than quality is the first consideration, and in general vegetable foodstuffs must be provided before animal foodstuffs, which yield fewer calories per acre of land cultivated. It was of course for this reason that pasture was ploughed to grow wheat in Britain during the war. Secondly, the total food supplies of a country should be planned so that the amounts of the various nutrients made available approximate as closely as possible to the calculated requirements for the whole population. Thus in Britain an effort was made during the war to increase the vitamin-A intake by growing more carrots and by conducting a publicity campaign to persuade people to eat more of them. The success of these well-meant endeavours, however, was imperilled by the public's preference for onions, generally considered to have very little nutritive value. The next step is to distribute the foods available among the various groups of the population according to their needs. Thus young children and pregnant and lactating women, who are necessary for the survival of the country's population, should be given extra milk. Manual workers, whose efforts are important for the economic survival of the country, should be given extra meals without coupons at their place of work. The measures taken to effect these improvements should be guided by trustworthy knowledge of the amounts of the various nutrients consumed by the population in question, though it is difficult to estimate correctly the supplies obtained from unofficial sources. In Austria, for example, the official figures for the amount of food eaten suggested at one time that the whole population was suffering from acute starvation. The actual state of the people, however, was much less alarming.

Somewhat different problems faced Dr. D. P. Cuthbertson[2] in recommending methods for improving nutrition in Newfoundland. The malnutrition of the 320,000 inhabitants of this bleak land cannot be attributed to the war, for it was known to exist previously. When in 1945 Cuthbertson was sent by the Medical Research Council to visit the island on behalf of the Dominions Office he was impressed mainly by the economic depression there and by the apathy of most of the people. He had time to make only a superficial examination of their nutritional state, but the incidence of frank signs of malnutrition seemed to be much lower than previous investigators had reported. There was little or no evidence of beriberi, rickets, scurvy, or gross deficiency of vitamin A. Possibly the introduction of vitaminized flour had caused some improvement since previous surveys. The general poverty of the diet was beyond dispute, but it was difficult to distinguish whether the prevailing apathy was due to malnutrition or the diet was poor because more vigorous efforts were not made to procure better food.

Though unable to answer this question Cuthbertson made many practical suggestions for bettering both nutrition and the general economy. Since the cod-fish is the main source of food in Newfoundland better methods should be adopted for preserving its flesh and extracting oil from its liver. More efficient processing of these valuable products would improve nutrition in the island and increase the value of its exports. Consumption of more cod-liver oil at home would eliminate the danger of vitamin-A deficiency. No less

[1] *J. Amer. diet. Ass.*, 1947, **23**, 90.
[2] Cuthbertson D. P., *Report on Nutrition in Newfoundland*, 1947. London: H.M.S.O.
[3] *British Medical Journal*, 1946, **2**, 885.
[4] Ibid., 1947, **2**, 288.

important is the need to increase supplies of vegetables and dairy products and to overcome the difficulties in transport caused by a rugged and indented coast-line. A publicity campaign should be launched to encourage the production of vegetables in smallholdings and gardens and to teach the conservation of food in cooking. The low-extraction flour which is now used should be replaced by flour of 78–80% extraction, fortified with calcium and iron. Other suggestions remind us of the primitive conditions prevailing in the interior of the island and of the cold winter climate. Cuthbertson recommends that in the regions unsuitable for agriculture herds of caribou should be allowed to roam protected against unauthorized slaughter. Husky dogs, between their seasons of hauling sledges, should not be allowed to run wild among grazing animals.

The application of scientific principles to the production and distribution of foodstuffs has already helped Britain and other countries to avoid the grosser effects of malnutrition. Recently further privations have threatened us, but our knowledge of the biochemistry and physiology of nutrition has increased. We now understand better the interrelations between requirements for various nutrients, the vitamin-B_2 complex, and—so far as experimental animals are concerned—the various functions of vitamin E. Mellanby's[3 4] important experiments have raised grave doubts about the wisdom of "improving" flour. The time is past when scientific advice on nutrition consisted merely in prescribing larger amounts of milk, meat, vegetables, and other protective foods. In order to exert his full influence in future either the dietitian may have to follow Cuthbertson's example and, turning agriculturist, consider how the necessary foodstuffs may be obtained, or he must emulate Pyke and indicate how health may best be sustained on such little food as is available. When it is necessary to resort to the second unhappy alternative prompt action in applying the results of recent research may well be of the utmost importance.

STREPTOMYCIN BACTERICIDAL

Streptomycin isolated by Schatz, Bugie, and Waksman[1] in 1944 from *Actinomyces griseus* has come into prominence largely because it is the only antibiotic which so far has been proved to influence tuberculous infections in man. In addition streptomycin is far superior to any other known drug in the treatment of tularaemia and of meningitis due to *Haemophilus influenzae*, and in infections due to pleuropneumonia-like organisms it appears to act specifically, being more effective and less toxic than gold salts.

In a paper that appears at p. 382 of this issue L. P. Garrod suggests that streptomycin may have a wider application, particularly in infections due to Gram-negative organisms. It is curious that up to the present there has been little evidence to prove that streptomycin is actually bactericidal, though the tendency in the U.S.A. to administer the drug only twice daily for the treatment of tuberculosis can hardly be explained solely on bacteriostasis, for one or two daily injections will not maintain a constantly bacteriostatic concentration in the blood. Garrod's important experiments show conclusively that streptomycin undoubtedly has a bactericidal action and that a single dose of the drug may produce a blood concentration which exceeds 30 μg. per ml. This may well be bactericidal *in vivo*. The finding that high concentrations of streptomycin are rapidly bactericidal *in vitro* has an extremely important application in local treatment, whether this is applied to infected surfaces, the inflamed meninges, or the infected urinary tract. It seems possible that streptomycin may prove an invaluable drug in the treatment of infections of the urinary tract, for streptomycin, like penicillin, is excreted in the urine, where it is found in high concentrations which are now shown to be quite high enough to be bactericidal. *Bact. aerogenes, Bact. coli,* and *Pyocyaneus pyocyanea* in long-established and otherwise resistant urinary tract infections have been rapidly killed. If treatment is going to succeed, a count of several hundred millions per ml. before treatment is reduced to one of a few hundreds or thousands per ml. within 24 hours or less. It seems also that a very brief period of treatment is successful, for permanent cures of long-standing infections have been obtained after six, four, or even three doses of 0.5 g. There is, however, one drawback to the use of streptomycin, and that is the rapidity with which resistant strains of bacteria develop whenever the bacterial population exposed to streptomycin is large. It would seem as if in a large population some members are almost always naturally resistant, so that when their more susceptible brothers are killed by streptomycin they can flourish.

In the treatment of long-standing urinary infections there are now two drugs which are superior to sulphathiazole or sulphadiazine—they are streptomycin and mandelamine (methenamine mandelate). The sulphonamides have the disadvantage that in acid urine they may deposit as crystals in the urinary tubules. It remains to be seen whether streptomycin or mandelamine is the more satisfactory. According to a recent report by Duca and Scudi[3] mandelamine does not readily give rise to resistant strains.

[1] Schatz, A., Bugie, E., and Waksman, S. A. (1944). *Proc. Soc. exp. Biol., N.Y.*, 55, 66.
[3] Duca, C. J., and Scudi, J. V. (1947). Ibid., 66, 123.

FREEDOM TO PUBLISH

Fears that censorship might hamper the free publication of opinion by doctors employed in the National Health Service have been allayed for the time being by Mr. Bevan, and we welcome his reply to a Parliamentary question on Feb. 12.

Col. Stoddard-Scott asked the Minister of Health whether those doctors and dentists who entered the National Health Service would have freedom to publish articles and books with regard to the organization and administration of the Health Service and freedom to publish such articles without having to seek permission of individuals or authorities. Mr. Bevan replied: "So far as I am concerned, yes, Sir."

This amplifies his reply to the question that Col. Stoddard-Scott put on Jan. 29. He then inquired whether doctors and dentists who entered the National Health Service would have complete freedom to publish articles and books without having to seek permission, and he asked for an assurance that there would be no attempt to suppress freedom of publication. Mr. Bevan replied that so far as he was concerned there would be no restriction whatsoever in the National Health Service on the publication of *scientific or clinical* writings. Mr. Bevan's saying in the debate on Feb. 9 that there was no doubt about his intentions hardly clarified the issue, and his remark that

Mr. Butler in expressing his doubts was "leaving a trail of slime behind him" showed a singular unawareness of the value that educated men attach to their freedom to express their minds on all professional matters, administrative as well as scientific.

Some of the letters that we publish at present appear over pseudonyms. In nearly every case they do so for the reason that the writer is employed by a local authority or is in the armed Forces and is therefore prevented from criticizing his employing body, either because a superior officer would refuse to allow publication, or because publication might jeopardize the writer's chances of promotion. Mr. Bevan assures us that censorship will not occur, and we accept his word. But what of future Ministers of Health? We have no assurance that they will take the same view, and they will not be bound by a predecessor's reply to a question in Parliament. In view of the restrictions prevailing at present in State medical services it is highly desirable that complete freedom to publish opinions on any professional matter be a condition incorporated in the Act. No authority should have the arbitrary power to conceal criticism of itself. A health service especially is likely to require fundamental changes if it is to provide satisfactory conditions for the practice of such a swiftly changing science as medicine; unless these can be freely proposed and discussed by critics within the service, its life will become choked in a jungle of precedents.

ANTI-Rh SERUM NOMENCLATURE

It is natural and common that when a new phenomenon has been discovered and as yet is only partly understood a system of nomenclature should be introduced which is proved by later work to be either inconsistent with the facts or inconvenient in practical use. It had been hoped by some that such a position would now be recognized in the case of the anti-Rh sera, and that the Review Board appointed by the Surgeon General of the United States Public Health Service to advise on nomenclature might have adopted without reservation the Fisher–Race system, as opposed to the earlier Wiener system, in favour of which priority is the chief argument. Reading only a little between the lines of the Review Board's report,[1] it can be assumed that its members would have liked to follow the above suggestion, but it seems they felt unable to go further for the present than to recommend the use of both systems in parallel, the Wiener nomenclature being given first on any label, and the Fisher–Race designation following in brackets. There is certainly no lack of candour in the Board's comments. In favour of the Wiener theory it is stated that it has priority and "is used by nearly all workers on the subject in the western hemisphere." Against it are "incomplete specifications, changed rapidly from year to year"; "complications, both typographical and genetic, of subscripts, superscripts, numbers, primes and other symbols"; and "the doubtful assumption of multiple antigens produced by a single gene." It is recalled also that following publication of the Fisher–Race theory and proposals for nomenclature[2] Wiener not only denied the linkage postulate on which the theory is based but stated that his own views would preclude the existence of the two additional (d and e) factors propounded by Fisher, whereas in the event anti-e serum was found by Mourant and anti-d by Diamond, "thus bearing out Fisher's predictions." In favour of the Fisher–Race nomenclature the Board recognized that "it is in wide usage in England, is gaining in usage in the western hemisphere, and hence may become the international standard." Against it only two objections are raised—its lack of priority, already mentioned, and that it "is based on a genetic hypothesis which is unproved." In the strictest sense of the words that is a correct statement of the position, though a theory which makes a correct prediction is normally regarded as having been "confirmed" to that extent. "Proof" in these matters is a relative term, and the real question confronting the Board was what degree of proof was necessary to justify the abandonment of the prior, and in the United States the most widely used, system of nomenclature. While the immediate effect of the report in the United States will be to ensure the temporary confinement within brackets of the Fisher–Race descriptions, the Board's comments must none the less have gone a long way to encouraging its wider use by United States and other workers and thus rendering the present compromise transitional.

1 *Science*, 1948, **107**, 27.
2 *Nature*, 1945 **155**, 542.

PASSAGE OF VITAMIN E TO THE HUMAN FOETUS

The discovery of vitamin E, some twenty years ago, was the outcome of observations by Evans and Burr[1] on the fertility of rats. Subsequent research has shown that this vitamin is needed for purposes other than reproduction, and particularly for the prevention of muscular degeneration.[2] Descriptions such as the "reproductive vitamin" or "anti-infertility" vitamin, however, have passed into general use, and the name "tocopherol," given to the vitamin after its isolation, indicates its connexion with childbirth. The most interesting chemical characteristic of the vitamin is its ability as an antioxidant to prevent the autooxidation of fats.[3] The results of intensive studies in this country[4] and in the U.S.A.[5] have indicated that its role in metabolism is to protect various unstable substances from untimely oxidation.

Although so much is known of the chemistry of vitamin E, and of the effects of its deficiency in various animals, evidence that it is required by human beings is still inconclusive. It has repeatedly been claimed that vitamin E is of use in the treatment of habitual abortion,[6] but sceptics have pointed out that abortions are often followed by full-term gestation even without special treatment.[7] Tocopherol, supplemented by inositol to aid its absorption, has been considered effective in the treatment of certain muscular disorders, but this observation has not yet been confirmed.[8] The report that the vitamin is beneficial in heart diseases[9] has not gained general acceptance.[10] We must, therefore, fall back on evidence of the presence and distribution of the vitamin in human blood and tissues in order to obtain some indication of its essential physiological purpose.

The first tests on human tissues were made by Evans and Burr. Using their original biological method they found that the placenta, the only organ examined, contained moderate amounts of the vitamin. More recently many workers have applied the convenient chemical method

1 *Mem. Univ. Calif.*, 1927, **8**, 1.
2 *J. Nutrit.*, 1936, **2**, 573; *Biochem. J.*, 1935, **29**, 788; *J. Hyg.*, 1939, **39**, 643.
3 *J. biol. Chem.*, 1944, **154**, 317.
4 *Biochem. J.*, 1940, **34**, 1231.
5 *Advanc. Enzymol.*, 1946, **6**, 469.
6 *Acta obstet. gynec. scand.*, 1933, **13**, 219; *Klin. Wschr.*, 1936, **15**, 1883; *British Medical Journal*, 1937, **2**, 1218.
7 *Vitamin E, a Symposium*, p. 83, 1939, Heffer's, Cambridge.
8 *Science*, 1945, **101**, 93.
9 *Nature*, 1946, **157**, 772.
10 *Lancet*, 1948, **1**, 102, 116.
11 *Rec. Trav. chim. Pays-Bas*, 1938, **57**, 1351.
12 *Proc. Soc. exp. Biol., N.Y.*, 1946, **61**, 369.
13 *Klin. Wschr.*, 1947, **23/24**, 362.
14 *Z. Geburtsh. Gynäk.*, 1946, **127**, 169.

devised by Emmerie and Engel,[11] particularly to blood plasma. By this means Straumjford and Quaife[12] have studied the transfer of vitamin from the mother to the foetus. They found in a survey of more than 50 women that the average level of tocopherol in the plasma during the first 24 weeks of pregnancy was 1.17 mg. per 100 ml., as against 1.04 mg. in normal adults. During the last 12 weeks of pregnancy a sharp rise to 1.62 mg. was observed, while at parturition the plasma from the umbilical cord contained only 0.34 mg. They remark that an increase in the tocopherol content of the plasma in the later stages of pregnancy is consistent with the well-established rise in the plasma lipoids. Similarly the lower level in the cord plasma is consistent with its lower lipoid content, and also with the action of the placenta in restricting the passage of other nutrients, including vitamin K.

More detailed investigations by Athanassiu,[13] which were, however, carried out on only 6 patients, offer an alternative explanation. He found that at the time of parturition the maternal serum contained 1.0–2.0 mg. of tocopherol per 100 ml., while the placental tissues contained 0.56–1.07 mg. He examined both venous and arterial serum from the cord, the former containing 1.25–2.0 mg. and the latter only 0.2–0.55 mg. per 100 ml. This suggests that the placenta does not obstruct the transfer of tocopherol from the maternal arterial circulation to the foetal venous circulation, but that the foetus absorbs the vitamin and so reduces its concentration in the arterial blood of the cord. It seems probable, therefore, that vitamin E is needed by the foetus, though it would be interesting to know whether the difference between the arterial and venous blood is peculiar to vitamin E or applies indiscriminately to all fatty constituents of the plasma. Athanassiu[14] found further evidence of the importance of vitamin E for human reproduction in the examination of blood serum from 90 women who had recently aborted. In 58 of these subjects values of under 0.3 mg. of tocopherol per 100 ml. were found, which suggests that hypovitaminosis E is a common feature in abortion. Confirmation of Athanassiu's observations will be awaited with interest, since they appear to add considerably to our knowledge of both the physiology and clinical importance of vitamin E.

BODY TEMPERATURE

Evidence suggesting that acetylcholine may be concerned with the mechanism which controls body temperature has lately been examined by Burn and Dutta at Oxford.[1] The apparently unrelated observation of Glauback and Pick[2] in 1931 that procaine causes a fall in body temperature acted as the starting point. Early last year Peczenik[3] reported that in mice the fall of temperature produced by procaine was greatly increased by adrenalectomy. A fall of 2.3° F. (1.25° C.), controllable with the adrenal glands working, became in the absence of adrenaline a "collapse"—with a fall in temperature averaging more than 8° F. (4.44° C.). The average survival time of these mice was about three and a half days. It thus appeared that adrenaline played some part in the maintenance of temperature, but there was a complication that Peczenik's mice had been subjected to the further operation of castration, and that an additional object of his research was to find out the part played, if any, by the various members of the steroid group of substances. He concluded that desoxycorticosterone, progesterone, and methyltestosterone all had a significant effect in reducing the fall in temperature induced by procaine.

A year earlier Dawes[4] at Oxford had noted that quinine, quinidine, and procaine counteracted the effect of acetylcholine on many types of tissue—particularly on the heart, intestine, and skeletal muscle. Later, de Elio, also at Oxford, showed that the action of acetylcholine could also be counteracted by atropine and "pethidine." This suggested, by one of those guesses which when successful are described as inspired, that it might be worth investigating whether any of these other substances also shared with procaine the property of reducing body temperature. The results of such an investigation are now reported by Burns and Dutta. It appears that atropine, "benadryl," pethidine, and quinidine all have the same effect as procaine on the body temperature of mice, and, further, that this effect is increased by adrenalectomy. These workers suggest, therefore, that since it is a common property of all these substances to depress the action of acetylcholine "it becomes probable that the maintenance of body temperature depends on a mechanism in which acetylcholine plays a part, and that the adrenal glands support such a mechanism." Tentative as it still is, this hypothesis must command respect. It should be noted, however, that the complications introduced by Peczenik's earlier work on steroid substances still remain, and also that temperature may be controlled not only by a depressant action on the one hand but also by a positive resistance to depression on the other—final adjustment being the result of a balance between the two. Such a mechanism is common in the control of other metabolic processes.

[1] *Nature*, Lond., 1948, **161**, 18.
[2] *Arch. exp. Path. Pharmakol.*, 1931, **162**, 551.
[3] *Proc. roy. Soc. B.*, 1947, **134**, 218.
[4] *Brit. J. Pharmacol.*, 1946, **1**, 90.

U.N. MEDICAL RELIEF

The International Children's Emergency Fund was set up by the United Nations in December, 1946, and it is among the most potentially beneficent organizations established since the war to combat the effects of famine and disease in the devastated areas of the world. The fund is now operating in 12 countries in Europe and also in China. It provides supplementary food—such as dried milk, oils, and vitamins—and medical supplies and assistance to children, as well as help for pregnant and lactating mothers. The medical programme envisaged includes extensive campaigns against tuberculosis by means of B.C.G. vaccination and against venereal disease, particularly in Poland, Italy, Rumania, and Hungary.

Unfortunately the British Government has been unable to contribute to the Fund the £1,000,000 requested, to which the United States Government, we are informed, is pledged to provide an additional 5¼ million dollars, which would not be made available if the British contribution came from voluntary sources. But this may not now hold good in view of the appeal for contributions to the United Nations Appeal for Children launched by the Lord Mayor of London on Feb. 23. The proceeds from this appeal will be divided between the International Children's Emergency Fund, Unesco, and certain voluntary societies working on behalf of children. The Government has agreed to allocate £100,000, part of which will go to the International Children's Emergency Fund, when £500,000 has been raised from voluntary sources in this country. Donations may be sent to the Lord Mayor, Mansion House, London.

Dr. J. F. Wilkinson, F.R.C.P., will deliver the Oliver-Sharpey Lectures before the Royal College of Physicians of London (Pall Mall East, S.W.) on Tuesday and Thursday, March 9 and 11, at 5 p.m. Subject: Concerning Megalocytic Anaemias.

ROCKEFELLER FOUNDATION

YELLOW FEVER INVESTIGATION

The latest report from the International Health Division of the Rockefeller Foundation shows that the Division is actively continuing its programme, which in the main has a threefold objective—research on certain specific diseases, with control work in the field; the building up of efficient State and local health services; and the support of public health education.

Many pages of this report are devoted to the control and investigation of yellow fever. During the past few years a study of epidemiological developments in South America has pointed strongly to the conclusion that there is a permanent jungle reservoir in that continent. All the localities in which jungle yellow fever is endemic or epidemic are situated at some headwater of the huge Orinoco–Amazon hydrographic system. Every one of the places where, at one time or another, yellow fever has occurred in half a dozen South American countries is precisely at a point of contact between the great jungle expanse and the outposts of human colonization. It seems reasonable to conclude that the Orinoco–Amazon jungle system constitutes a permanent reservoir of yellow fever; that the virus manifests itself constantly by human cases at the system's periphery; and that from several of these points epidemic waves may start, to invade non-immune or slightly immune regions where conditions still permit its transmission and propagation.

The report contains a detailed account of work done on yellow fever in Brazil and Colombia. In Africa, again, some investigations have been made on the epidemiology of yellow fever, the identification of the principal insect vectors and vertebrate hosts, and the means by which the virus is maintained between epidemic periods. Research is being carried out in six East and West African countries.

Malaria has also been the subject of study, and especially the action of anti-malarial agents. In certain parts of Peru the incidence of malaria is believed to be as high as, or higher than, anywhere else in the world. Spraying operations with D.D.T. have been carried out effectively there and elsewhere. Venezuela is a meeting place for some 32 species of anopheline fauna, including the chief malaria vectors, and presents an ideal field for research in endemic malaria. Here again D.D.T. has proved such a powerful weapon that according to the latest accounts the disease was retreating to a marked degree all through the northern parts of the country, and spraying squadrons, working full time, promised to keep malaria off the list of serious public health problems.

Much other work aided by the Division is reported concerning influenza and other respiratory diseases, rickettsial diseases, and nutrition.

Medical Care Surveys

The staff of the Division have visited health care projects in various parts of the world. Sweden was found to be the most advanced country in this respect. With regard to the National Health Service Act in Great Britain the report has this to say:

"This Act accepts the recommendation of the Goodenough Report that medical schools and their hospitals become partners in the national health service. Special importance in the teaching of medicine is laid on the prevention of disease and an appreciation of the part played by social environment in health and sickness. Because the preventive and social aspects of such training can be given only in the community, health centres are to be provided as an integral part of the system of undergraduate medical education. This increasing integration of the medical school with the health needs and medical care activities of its community was found to be the most significant trend towards raising the level of health."

In view of the possibility that the U.S. Government might take legislative action for the establishment of a programme in the field of health care, it was felt to be important that the United States Public Health Service should have complete information on this subject, and with aid from the International Health Division two senior members of the staff of the Surgeon General of the Public Health Service were sent to Western Europe for three months to observe the operation of health insurance systems in the United Kingdom, France, Switzerland, Denmark, and Holland.

A long account is given of "Group Health Insurance Incorporated," a non-profit organization in New York, providing doctors' services on a prepayment basis, and of the establishment of a health insurance plan for Greater New York. The governing body of this latter includes representatives of medicine, labour, city government, social welfare, and business. The services afforded include general medical, specialist, surgical, and obstetrical care at the home, consulting room, or hospital, diagnostic procedure, periodical health examinations, preventive measures, and various therapeutic services. All persons employed in New York City earning a basic wage of not more than 5,000 dollars are eligible for membership, which covers their dependants. Employer and employee share the cost. It is estimated that 25 full-time doctors are required for 20,000 insured persons, this making it possible for each doctor to furnish the needed service without haste in a 2,000-hour working year. The fee of 19.20 dollars per insured person is expected to yield an average net income of about 10,000 dollars a year for a full-time doctor, but the remuneration is left to the decision of each medical group. The medical group includes a balanced number of general practitioners and specialists in various fields, assisted by qualified technical personnel. When this report was issued 444 doctors, organized into 20 groups, were ready to begin service, and about 5,000 unattached doctors had expressed a desire to affiliate with the groups.

Finally, the report gives an account of 119 International Health Division Fellowships in 24 countries in the year under review.

A HUNTERIAN CELEBRATION

Austerity conditions compelled the Hunterian Society to substitute an informal evening party for the usual dinner in celebration of the birth of John Hunter. Mr. A. E. Roche, the president, who, with Mrs. Roche, received the guests, mentioned that there was some doubt about the exact date of Hunter's birth. Hunter himself gave it as St. Valentine's day, but the register of the Lanarkshire parish in which he was born gave it as Feb. 13; probably the truth is, as the late Stephen Paget suggested, that he was born on the night of Feb. 13–14, 1722. Mr. Roche permitted himself an Irishism when he said that had Hunter lived to-day he would probably not have been born at all. He was the youngest of ten children, and families of ten in these days are hard to find. Mr. Roche speculated on the likely impressions of John Hunter on attending a cocktail party in his honour 150 years after his death. Until the temperance of his later life he was accustomed to drink his bottle, and Mr. Roche suggested that his reaction to the strange concoctions apparently necessary to modern social intercourse would be expressed by one of his favourite sayings: "Don't think; try it." Another matter for speculation was how Hunter would have approached some of the medical problems of to-day. He did not mince his words, and in a letter to his brother William he spoke of some with whom he was associated as "no more fit for their office than the devil to reign in heaven." In the right spirit of a clinician he regarded the earning of a living as an unfortunate if necessary distraction from his researches. "Well," he said, "I must go and earn this damned guinea, or I shall be sure to want it to-morrow."

In honour of the occasion the Society brought forth its Hunterian treasures, which are under the jealous guardianship of Mr. C. R. Rudolf, the Society's librarian, at 60, Wimpole Street. All the objects shown were the property of the Society with two interesting exceptions, namely, a charming miniature of William Hunter, done in 1783, the year of his death, by John Boyle, miniaturist, and a shagreen case containing various small articles which belonged to and were used by John Hunter. These are the possessions of Dr. T. B. Jobson, whose son, Dr. Patrick Hunter Jobson, an honorary fellow of the Society, was present as representing the Hunter family. Dr. Patrick Jobson is a descendant, through his mother, from Matthew

Baillie, nephew of Hunter. Other articles of interest were watches, balances, a pair of spectacles with silver rims, some brass dispensing instruments, and a walking-stick (the ivory handle lost in the blitz), all of which had belonged to John Hunter. One large repeater watch was described as having been presented to Hunter by the staff of St. George's, presumably before the quarrels, and on the back of the inner case were the words: "Left to my friend Charles J. Fox, 1793." There is no contemporary record of Hunter's friendship with Fox, but Hunter was one of Fox's constituents in Westminster, and the statesman was a governor of St. George's.

Among the books and manuscripts on view were letters from William Clift, Hunter's last assistant, from William Cullen, and from Matthew Baillie. The collected works of John Hunter, in four volumes, published in 1835, were included, also the first edition of Hunter's work on venereal disease, dated 1786, notes of lectures by both John and William, and a French translation, published at Ostend in 1799, of Hunter's work on blood, inflammation, and gunshot wounds (there is no record of another copy of this work in England or America). Of hardly less interest were the volumes containing the minutes of the Society itself from its inception in 1819 to the present time. Successive secretaries have seasoned the minutes with wit and humour, and the reading of the minutes is still one of the most interesting items of a Hunterian evening. The first volume, recording the proceedings to 1827, incorporates the Society's rules, one of which lays it down that physicians, surgeons, and apothecaries actually in practice and persons of distinguished talents in other sciences connected with medicine are eligible for ordinary membership. Another tradition of the Society is to hold its ordinary meetings within the boundaries of the City of London—occasionally at the Mansion House or in the hall of one of the City companies, but most frequently from the very beginning in a tavern. But on this social occasion the Society came to the West End, to within 200 yards of St. George's Hospital, to drink to "The Immortal Memory."

Preparations and Appliances

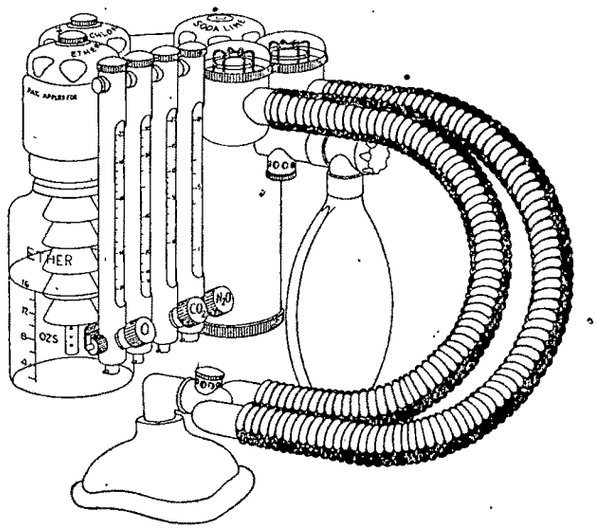
A NEW GENERAL ANAESTHETIC APPARATUS

Dr. H. REX MARRETT, visiting anaesthetist, Coventry and Warwickshire Hospital, writes: In designing this new machine I have tried to satisfy the requirements of the occasional and specialist anaesthetist, and to make it suitable for use in hospitals and private practice. This new apparatus embodies in unitary structure a soda-lime absorber, ether and chloroform vaporizers, a rebreathing reservoir, and flowmeters for the admission of basal gases. Its height is 9½ in. (24 cm.), width 8¾ in. (22 cm.), depth 8 in. (20 cm.). It weighs only 9½ lb. (4.3 kg.), and can either be supported by the extended tube from a cylinder stand or be fixed by means of a simple bracket to any existing hospital anaesthetic table. The three proportioning valves over the ether, chloroform, and soda-lime are of leak-proof design. All ports and passageways through which the patient breathes are such that resistance to respiration is minimal. The apparatus is gas-tight at a pressure of at least 12 cm. of water. A simple automatic locking device to safeguard the patient from possible decomposition of "trilene" has been designed whereby the trilene control cannot be rotated when the soda-lime is in the circuit. Similarly the soda-lime cannot be brought into the circuit if the trilene control is not in the "off" position.

The illustration shows the front view of the machine with the flowmeters, bag, and directional valves readily visible in one field of vision. The flowmeters and bag can be illuminated by a new flame-proof torch fixed to the central support for use in a darkened theatre. The bank of flowmeters can comprise any desired number of tubes as each has been made a separate unit. A very compact type of bayonet-catch non-interchangeable connexion is employed. These connexions are inserted into the base on the under surface.

A one-gallon bag is used instead of a concertina type reservoir, because I consider the former has two major advantages: First, inspiratory and expiratory movements can be more easily observed however full the bag may be; secondly, pressure variations during manipulations in controlled respiration can be more easily appreciated. The bag mount is secured to the head by a taper joint with a bayonet catch. A control is situated on the end of the bag mount, and this can be turned in one direction to close the bag gradually for insufflation, and in the other to open progressively an air-inlet aperture whilst closing the bag at the same time for partial rebreathing and the draw-over principle.

The outer canister of the absorber is fixed to the head and is provided with a thread at the lower end on to which the base is



screwed. To this base the inner canister is fixed by means of a rustless spring. This arrangement enables the anaesthetist to remove the absorber with one hand in one operation. Both the inspired and the exhaled breath pass through the soda-lime.

Rotation of the ether control to the mid-point between the "off" and "on" positions regulates only the patient's breath entering the bottle via the cone. Further rotation of the control towards the "on" position regulates the additional admission of basal gases to the vaporizer via a central perforated tube. With the closed circuit only the inspirations pass through the vaporizer, but with the semi-open circuit both inspirations and expirations contact the ether. The basal gases alone vaporize the chloroform or trilene. The control above the absorber is graduated for partial absorption.

I have had the full co-operation of the manufacturers, Airmed, Ltd., 20–24, Park Way, Camden Town, N.W.1, in arriving at the final design of this apparatus.

The first International Poliomyelitis Conference will be held at the Waldorf-Astoria Hotel, New York, on July 12 to 17, under the auspices of the National Foundation for Infantile Paralysis. Dr. Hart E. van Riper, Medical Director of the National Federation for Infantile Paralysis, will preside over the conference. Invitations have been sent to more than sixty nations for official delegates to attend the conference and present papers. We are informed that Prof. H. J. Seddon, of the Wingfield-Morris Orthopaedic Hospital, Oxford, will participate. In addition some twenty other medical and scientific authorities outside the U.S.A. will send delegates. The delegates will be divided into 3 categories: (1) official government delegates; (2) institutional delegates representing universities and societies; (3) member delegates, which category includes physicians and other duly qualified scientific and professional people. Dr. van Riper has said that the collection of local epidemiological and immunological data from all parts of the world and their correlation have never been accomplished on the necessary scale before; it is intended that the conference should serve to expedite distribution of vital knowledge on a world-wide basis. The plenary sessions will be preceded by the opening meeting, to be presided over by Prof. Irvin Abell, of Louisville University. Dr. Basil O'Connor, President of the National Foundation, will welcome delegates, and foreign delegates will be introduced by Dr. Morris Fishbein, editor of the *Journal of the American Medical Association*.

Reports of Societies

SWINE ERYSIPELAS INFECTION IN MAN AND ANIMALS

A meeting of the Section of Comparative Medicine of the Royal Society of Medicine was held on Feb. 18, when the subject for discussion was swine erysipelas infection (*Erysipelothrix rhusiopathiae*) in man and animals.

Veterinary Problems

Mr. A. W. GLEDHILL said that this disease of pigs was almost world-wide, though it varied in seriousness from country to country and even from region to region. In Britain its prevalence had been most marked in East Anglia. Susceptibility to infection was not confined to pigs and the disease occurred commonly in birds of most species. The organism was also a common cause of arthritis in lambs, and it had been described as causing endocarditis in horses. There was a good deal of evidence to indicate that it might lead a saprophytic existence. In areas where the disease appeared subclinical infections were common. Pigs between the ages of three months and one year were most susceptible. No doubt sucking-pigs received protective antibodies from the sow, and pigs over one year might have acquired sufficient immunity to resist infection. Lowered host resistance might play a dominant part in determining the conditions necessary for the onset of a severe outbreak. There were three forms of swine erysipelas: mild, acute septicaemic, and chronic. Immune serum acted by neutralizing the toxic effect of the organisms rather than by promoting their destruction. As curative agents the sulphonamides were not of value; the organism was sensitive to penicillin *in vitro*, and to a less extent to streptomycin.

Human Infections

Dr. MARY BARBER, of the British Postgraduate Medical School, gave a survey of the history and literature of infection in man. Compared with swine, she said, man was relatively immune to infection with this organism. Three types of human infection occurred, namely, cutaneous, intestinal, and generalized. The first was by far the commonest, and to this she devoted most of her remarks. A case of cutaneous infection of this nature was described in the *British Medical Journal* as long ago as 1870. It was the case of a foreman in a sheepskin bootshop on whose hands lesions developed; the recurrence of the disease was ultimately prevented by the wearing of gloves. [This patient, a man aged 28, was in the care of Dr. Tilbury Fox at University College Hospital, who described the case in our issue of Feb. 5, 1870, at page 132.] In 1873 a worker at St. Bartholomew's Hospital reported 16 cases of a similar condition, in several of which the lesion appeared to have originated in a scratch from a bone while handling meat. The disease was established as a clinical entity in the late 'eighties, and its causal relation with swine erysipelas was worked out. The condition was met with fairly frequently in a large skin clinic. Infection occurred mainly by accidental transmission among those who were brought into contact with pig infection, such as cooks, kitchen workers, and butchers, also among people who handled fish. Nearly always there was a history of injury. The period of incubation was from one to five days. The disease was confined almost exclusively to the hands, rarely spreading above the wrist, but there were a few cases in which the lesion was on the soles of the feet or on the face or neck. The patient complained of burning, itching, and pain. The lesions were of a purple-red colour, with definite margins. Glandular enlargement was very rare, and suppuration was never recorded. Fever and constitutional symptoms were slight and transitory. The lesions might disappear spontaneously without desquamation, but recurrence was not infrequent.

Serum had been the usual method of treatment, but serum sickness was very commonly produced and was more trying than the infection itself. Sulphonamides had been used with doubtful effect, though there were reports of cure. A few cases had been treated with penicillin, and she thought there was evidence that this had some effect. In one case, within two days of starting treatment with penicillin there was almost nothing to be seen on the hand.

Dr. Barber showed figures illustrating the experiences of various investigators and also described some cases of generalized infection. One of these was a case of septicaemia associated with endocarditis. The patient died a month after admission to hospital, the whole course of the disease having lasted four months. At necropsy the heart size was found to be nearly twice normal, and vegetations adhered to the anterior cusp of the mitral valve. One case was recorded in which infection was *via* the alimentary tract. In this case the patient developed malaise, anorexia, and fever, with the eruption of red spots on the trunk and limbs, later a painful swelling of the knee-joint and severe anaemia and leucopenia. He improved after the administration of immune serum but relapsed and died; no post-mortem examination was carried out.

Effectiveness of Chemotherapy

Mr. MALCOLM WOODBINE, of the Wellcome Laboratories, Beckenham, reported some observations on the effectiveness of the new chemotherapeutic agent upon *Erysipelothrix rhusiopathiae* infections in mice. The now substantial literature on the ineffectiveness of sulphonamide compounds owing to their mode of action, as in the case of sulphathiazole, sulphadiazine, sulphapyrazine, sulphanilylguanidine, phthalylsulphathiazole, and sulphetrone, had been confirmed *in vitro* and *in vivo*, but it was of interest to note that "marfanil," or benzylamine-4-sulphonamide, which owed its activity to a different mechanism, was active *in vitro*.

Results with penicillin indicated that very large doses were necessary. The optimal dose was 1,000 units twice daily per mouse (20 g.) for ten days or more, and this might be compared with the total dosage of the order of 30 units per 20-g mouse for complete protection in streptococcal, staphylococcal, and pneumococcal infections. The necessity of parenteral administration of relatively large doses appeared to preclude the use of penicillin in swine erysipelas. Recent work in the United States, in which turkeys had been used and doses of 20,000 units once daily over four days had been given, showed a reduction of mortality from 100% in controls to 10%. Pigeons had been cured with penicillin, and the use of penicillin successfully in man had been recorded not only by Dr. Barber and her colleagues (1946), but by Hodgson (1945), Jenning (1946), and Stiles (1947).

The reported activity of streptomycin *in vitro* against this organism encouraged the laboratories at Beckenham to examine this antibiotic when supplies became available. Streptomycin was active *in vitro* and *in vivo* in mice, but less active than penicillin weight for weight. There was, however, a synergic action in mouse infections when penicillin and streptomycin were administered together in equal doses, and this might be of some potential value. Aerosporin showed little activity *in vitro* and no activity at all in infections in mice. The related antibiotic polymyxin was reported to be inactive *in vitro*. It appeared that a still more effective chemotherapeutic agent, suitable for oral administration, was required, particularly in the veterinary field.

In some further discussion a veterinary surgeon said that fatal cases in man were very rare, but a case came under his notice in Colombo, in a laboratory assistant, whose illness was first described as malaria, from which he had previously suffered. But it did not respond to quinine, and he became steadily worse. The symptoms were intermittent fever, weakness, and loss of weight. Typhoid, brucellosis, and malaria were excluded. The patient died, and at necropsy nothing characteristic was found except some enlargement of the spleen, from which, however, the organism was cultured.

Dr. BARBER said that in describing man as relatively immune she meant that it was rare to see the disease in a severe form. The lesions were slight and healed up quickly, so that the cases did not come into the hands of the bacteriologist.

The PRESIDENT said that swine erysipelas had always been a serious problem in veterinary medicine. Before the war a good deal of vaccination was done, and up to a point was satisfactory. During the war, with the decline in pig population, the disease tended to die out, but with the building up of herds there might

be a recrudescence. He wondered whether the susceptibility of man to this disease might not be much higher than was commonly thought.

CLINICAL PATHOLOGY

LETTSOMIAN LECTURE

The first of three Lettsomian Lectures on "Clinical Pathology in Relation to Medical Practice" was delivered by Dr. CUTHBERT E. DUKES before the Medical Society of London on Feb. 16. The President of the Society, Mr. W. E. TANNER, was in the chair.

Dr. Dukes began by saying that one reason why clinical pathology deserved consideration at the present time was because of the intention of the Health Service Act to extend laboratory facilities to the whole of the community. Up to the present, in most districts, only hospital patients had enjoyed the benefit of a free comprehensive service. Now the door of the laboratory was to be opened to all—a prospect which the clinical pathologist might regard with some satisfaction not unmixed with apprehension. Increased facilities for clinical pathology would be welcomed by the profession, especially by general practitioners, but a service of this sort could not be started in a few weeks. Laboratories had to be built and equipped, and pathologists and technicians had to be trained.

Definition

Clinical pathology might be defined as the application of pathology and pathological method in clinical practice. Much of the diagnosis and treatment of disease had come to depend on team work, and an essential member of the team was the pathologist. The mastery of laboratory technique was neither easily nor quickly acquired, and it was in order to meet the need for co-ordination between clinical medicine and laboratory science that the clinical pathologist was evolved. The difference between academic and clinical pathology was no greater than between pure and applied chemistry or pure and applied mathematics. Academic pathology was a pure science, clinical pathology the application of science to the diagnosis and treatment of disease in the individual patient.

The development of clinical pathology in the past had gone through three phases. When hospitals first recognized the need for a pathological department it was usual for the physician with a liking for the microscope or for chemistry to be asked to "look after" pathology. The next phase of development was for the post of pathologist to be regarded as a stepping stone to the staff. The third stage, the result of the rapid extension of the subject during the last twenty or thirty years, was that in universities and medical schools the pathologists continued to specialize still further, thereby creating difficulties in the application of pathology to clinical medicine. A single pathological specimen sent to a departmentalized laboratory tended to be passed from one department to another. This piecemeal analysis, though occasionally necessary in obscure cases, was not desirable in the ordinary case. A specimen such as cerebrospinal fluid should be examined as a whole by a pathologist who understood something of the clinical side of the case.

In the smaller provincial hospitals the evolution of clinical pathology proceeded along different lines. Many curious devices were adopted by some voluntary hospitals to raise funds for laboratories. Some turned themselves into trading concerns and offered to examine all specimens sent in by general practitioners. Pathology had often been described as a science ancillary to medicine, but some pathologists came to think of themselves not as handmaids but as household drudges. Until recently very few facilities existed outside the hospitals. Diagnostic laboratories established by public health authorities, research institutions, and commercial firms catered only for certain sections. One of the defects of National Health Insurance was the lack of facilities for clinical pathology. The Act made provision for any drug, remedy, or therapeutic agent to be prescribed by the insurance practitioner, but it did not enable him to find out whether the agent prescribed was really needed. In pernicious anaemia he was allowed to prescribe liver extract, but he had no facilities for taking blood counts.

To-day and To-morrow

In the Emergency Medical Service in 1939 provision was at once made for laboratory diagnosis and clinical pathology as an integral part of wartime hospital organization. At the moment facilities for pathological services varied greatly in different parts of the country, and pathologists themselves were scattered about in a haphazard fashion. The survey recently undertaken by the Ministry of Health drew attention to the unequal distribution of facilities for pathological tests and to lack of co-ordination and failure to make use of the facilities which existed.

It was difficult to foresee how clinical pathology would develop in the future. The only certain thing about the future, as Lord Keynes said, was that it would be different from the past. Plans were in preparation for a considerable extension of hospital and public health laboratory work, but were handicapped by shortage of personnel and equipment. On the appointed day hospital pathological laboratories would come under the control of the Regional Hospital Boards. It was not yet clear how the hospital services would be co-ordinated with those at present organized separately by the public health services. The investigation and control of epidemics was obviously the task of the public health epidemiologist, but the diagnosis in the case of an individual patient might depend on tests carried out by a hospital pathologist. It was anticipated that in the future the public health service would provide free diagnostic facilities for all infectious diseases, together with central reference laboratories. It remained to be seen whether it would be best to run the two services separately or in combination.

The efficiency of the pathological services provided under the new Act would depend largely on the supply of well-trained clinical pathologists, and on the spirit in which they did their work. Up to the present clinical pathologists holding teaching appointments or attached to voluntary hospitals had enjoyed a large measure of independence. They had been answerable to committees or governing bodies, but these had very seldom interfered with arrangements made for running the laboratories. Under the new Act the pathologist might not enjoy as much freedom as in the past, but he hoped to gain other advantages in return. They would all have to be on their guard lest the new control resulted in a shifting of attention from the patient to some other objective. The art of managing and manipulating other people had now been carried to an extraordinary level of efficiency, but the more they exercised social control over their fellows the more they tended to lose sight of the real needs of the individual.

Training the Clinical Pathologist

The clinical pathologist should be well trained clinically as well as technically. It had been recommended by the Consulting Pathologists Group of the B.M.A. that future entrants should not be recognized as specialists in clinical pathology until after five years' postgraduate experience and the attainment of a higher qualification, and that no assistant should be admitted to the staff of a department of clinical pathology until he or she had done at least one year in a house appointment. The sound way of acquiring training was in a general hospital under a good all-round clinical pathologist. In universities and colleges where specialization had led to the formation of a number of separate departments there was a tendency for the budding pathologist to bud out too luxuriously in one direction to the detriment of others.

Certain personal characteristics were necessary for success in any profession. For the clinical pathologist one of the most important qualifications was the capacity for working with other people, especially medical and surgical colleagues, fellow pathologists, and laboratory technicians. Team work was essential for good clinical pathology. Next in importance was a capacity to direct the activities of others. The chief pathologist in a laboratory was not unlike the conductor of an orchestra. Ideally the conductor should be able to play every instrument; but that was too much to ask, and all that was essential was that he should know each instrument's capabilities and limitations. So with the pathologist and the various laboratory procedures.

It was often erroneously assumed that personal relationships were of less importance in pathology than in other branches of medicine. The extent to which a pathologist entered into any sort of personal relationship with patients varied greatly according to the nature of his work, but whether he met the patient personally or only a bit of the patient, the existence of the patient as a living individual must never be overlooked. Their patients were not the objects but the subjects of their skill. The public in general adopted a foolish attitude to pathologists, just as they did to all scientists. Patients either took the view that nothing of value would come from the pathologist's activities, or else they looked with childlike faith upon laboratory mysteries as their only hope.

The personal relationship of the pathologist and the laboratory technicians affected the working of the laboratory much more than an outsider might suppose. The whole atmosphere of the laboratory might easily be poisoned by one discontented assistant. Trained laboratory assistants should always be made to feel that they were in responsible positions.

Finally, with regard to the relationship of the pathologist to his professional colleagues, doctors in general differed to a remarkable degree in their attitude to pathological services and in the confidence they reposed in a pathologist's report. Some referred to the laboratory as if it were an inspired oracle; others suppressed all laboratory emanations as irrelevant or misleading. The great majority resorted to the laboratory only for an occasional Wassermann or pregnancy test. It would be a disaster, of course, if laboratory tests led to the neglect of the clinical examination. They should be regarded not as a substitute for but only as an extension of the clinical findings.

THE FILMSTRIP IN MEDICAL TEACHING

A joint meeting of the Royal Society of Medicine and the Scientific Film Association was held, under the chairmanship of Mr. ZACHARY COPE, on Feb. 12 to discuss medical filmstrips. A filmstrip is a length of cine film on which a series of pictures is printed in a desired sequence and projected on a screen, very much in the same way as a series of lantern slides. The pictures may be reproductions of printed material, such as illustrations or book text, original drawings or paintings, and, of course, photographs and radiographs.

Dr. R. M. TATTERSALL said that on seeing filmstrip for the first time a year ago he was so impressed by its possibilities in medical teaching that he set to work at the medical school at Leeds to apply it to instruction in such techniques as lumbar puncture, the taking of the blood sedimentation rate, catheterization, and other simple procedures. In making the filmstrips they endeavoured to be as elementary and detailed as possible, the first frame, perhaps, reproducing the initial request for the procedure, and the last of the thirty or more the written-up case-notes. They had no special department of medical photography at Leeds, but one of the registrars had a Leica camera, and with this the negatives had been obtained, the processing being given out to a trade house. The magazine capacity of the Leica imposed the limitation of about 34 frames in one strip. In deciding on what was to be shown it had to be borne in mind that no two people carried out, for example, lumbar puncture in exactly the same way. Therefore the filmstrips were produced on a committee basis, three or four people sitting down together, arguing out their differences, and agreeing on the points to be emphasized in the successive pictures. Title and captions were also decided, and, in addition to the photographs in sequence of the actual procedure, charts, diagrams, pictures of the instruments to be used, and illustrations from anatomical specimens might be included. One or more frames might be used to remind the student pictorially of the importance of observing absolute cleanliness. The last few frames of the strip might illustrate the labelling of the specimen bottles, the completion of the case-notes, and perhaps the medical uses of the procedure. At least five people were required for the making of the filmstrip, namely, the member of the staff who carried out the procedure on the patient, the photographer, someone to attend to the lighting arrangements, someone else to follow what in cinematograph parlance was called the script, and finally the patient himself, who must be co-operative. It was as well to have a rehearsal. In projecting the filmstrip it was first taken slowly through the lantern, then quickly to give the illusion of continuity to the photographs of the actual procedure. A group of students should first be shown the filmstrip, then see the actual procedure, and after that they should observe the filmstrip again.

Dr. BRIAN STANFORD reminded the meeting that 35-mm. film was inflammable, whereas 16-mm. substandard film was safe for projection in places not specially protected. A positive filmstrip could be made straight from the camera by reversal, but that was not to be recommended; it was better to make negatives and print from them. If diagrams only were wanted they could be drawn in white ink on black paper, photographed and developed, and projected on the screen as black on white, and this was perfectly satisfactory for many purposes but of course was applicable only to line drawings or printed matter.

Various technical points were brought out in further discussion, such as density, tone range, and screen brightness. It was stated that the average cost of a filmstrip was about 12s. 6d. At the close of the meeting a number of filmstrips illustrating medical subjects were shown.

THE LESSONS OF WAR SURGERY

At a meeting of the Manchester Medical Society on Feb. 4 Sir HENEAGE OGILVIE read a paper on "The Lessons of the War for Civil Surgery."

During the recent war much was learned about transport, organization of forward surgery, segregation of special cases, and methods of wound treatment applicable only to the forces of a victorious alliance in the concluding stages of a campaign. The outstanding problems of war surgery throughout the ages were those of shock and infection. These problems had not been solved, but their treatment had been brought to a very satisfactory level, the first by the elaboration of methods of storing blood and plasma and the organization of a resuscitation service, the second by chemotherapy. The same methods were available in civil practice, and would be applied so much the better if the simple outlook and sharp distinction between theory and practice that characterized Service units in the field were translated to the treatment of industrial accidents. The general lessons of wound treatment, excision, drainage, two-stage closure, and, later, of skin cover all had their civil applications.

In addition to progress in the treatment of these fundamental problems of trauma, the level of surgical technique advanced to a remarkable extent, aided by the development of resuscitation and chemotherapy, but above all by the parallel advances in anaesthesia. The most striking example of technical advance was the change from the conservative attitude of war surgeons towards chest wounds in 1941 to the radical thoracic surgery of 1945. The freedom of the open thorax was the outstanding new feature in post-war surgery. Whereas formerly only extrapleural approaches to the heart were considered, and little was undertaken beyond embolectomy and pericardiolysis, to-day incisions were chosen to give the most direct approach to the chamber or vessel concerned. Removal of the lung or oesophagus, daring feats before the war, was now undertaken every week. Total gastrectomy by the abdominal route was a difficult and dangerous operation; now the trans-diaphragmatic approach had made the operation reasonably straightforward. The war surgery of head injuries and vascular lesions had also left its legacy of advance to the planned surgery of peace.

In more general terms, war brought to all Service surgeons periods of rest and opportunities for discussion in which many traditional ideas were weighed and found wanting. In particular the principles of rest and rehabilitation had been radically revised for the good of surgery and the surgical patient.

The fifth dinner meeting of the 1948 session of the Chelsea Clinical Society was held on Feb. 10 at the South Kensington Hotel, with the president, Dr. Neil Maclay, in the chair. There was a large attendance of members and visitors to hear a discussion on "Some Difficulties in the Science of Crime Detection" opened by Dr. Keith Simpson. The discussion was continued by Dr. Donald Teare, Mr. A. Le Mesurier, Dr. Sundell, Mr. Ivor Back, Dr. MacManus, and Dr. Clive Shields.

Correspondence

The Commonplace Mind

SIR,—Any one of us who seeks to grasp first things first amidst the clamour of voices contending on the merits of the National Health Act, and to preserve his equanimity under the buzz of curtain lectures, prosy and splenetic, which *The Times* newspaper presumes to give us, may well feel that we are in danger of concentrating unduly upon details and of omitting a general diagnosis of the situation which confronts our profession.

Details our negotiators had perforce to attend to, but those of us who have not been thus thanklessly engaged are at leisure to take a more general view and to look beyond the apparently hostile figure of the Minister of Health, who is after all an ephemeral phenomenon, to the state of affairs of which he is symptomatic. What does this import in our disturbed society? I think the Spanish writer Ortega y Gasset sums up the situation in his well-known book *The Revolt of the Masses* with a harsh candour we shall do well to ponder. He says:

"The characteristic of the hour is that the commonplace mind, knowing itself to be commonplace, has the assurance to proclaim the rights of the commonplace and to impose them wherever it will. . . . The mass crushes beneath it everything that is different, everything that is excellent, qualified and select. Anybody who is not like everybody, who does not think like everybody, runs the risk of being eliminated. And it is clear, of course, that this 'everybody' is not 'everybody.' 'Everybody' was normally the complex unity of the mass and the divergent specialized minorities. Nowadays, 'everybody' is the mass alone. Here we have the formidable fact of our times, described without any concealment of the brutality of its features."

Where, indeed, could we look for a more manifest expression of the coarse ferocity of the power of mere numbers when challenged than in the speech of the Minister of Health in last week's Commons debate, or in the proposal to abolish the university representation in Parliament? What good, in the Greek sense of that word, can the community hope for from government carried on in such a spirit? Do men gather figs of thistles?

There are, I believe, qualities of rare excellence in our profession, though like every human institution it has its imperfections. I submit that this excellence and an unworthy envy of it are the basis of much of the odium to which we are now being subjected in the hope of bending us and our profession to the ends of a retrograde political ideology. We should be too guileless to deserve to survive as a free profession serving the State *through the community* if we supposed that the nationalization of medicine is the pure expression of a burning and altruistic desire to see a wider measure of social justice, or that the forces now mustered against us are anything but levelling and intellectually and morally destructive in their essence under whatever sophistries and platitudes they hide themselves.

It is, I believe, now given to our profession to have the place of honour and to stand in the gate against ruthless and levelling forces that will, if not resisted in time, crush yet other excellences than ours and make the word "democracy" as nauseating and as compact of cynical falsehood in Western as it is in Eastern Europe. This is the real issue before us.—I am, etc.,

London, W.1. F. M. R. WALSHE.

Cable from A.M.A.

The officers and Board of Trustees of the American Medical Association meeting in Chicago congratulate the British Medical profession, with the leadership of the officers and Council of the British Medical Association, on the overwhelming approval of its firm stand on behalf of professional integrity, medical ideals, and the right to care for the sick without political domination.—E. L. HENDERSON, M.D., Chairman, Board of Trustees, American Medical Association.

Debate on the Act

SIR,—Mr. Butler was in a difficult position in the House of Commons in putting forward an amendment to the National Health Service Act, which a Coalition Government had originally sponsored and which is, actually, very little different from the present one. In spite of this I feel that, if the Opposition could do no better than they did in Monday's debate, they will be in opposition for a very long time.

The arguments which were put forward against the Act and which are the arguments put forward by the B.M.A., although important from our point of view, mean little or nothing to Members of Parliament or to the lay public and are difficulties which could easily have been got over by any other Minister of Health. The doctors have complained that they have a bad press, and this is little to be wondered at, because the average member of the public has no idea what the trouble is between the B.M.A. and the Minister.

The real reason why I am saying "No" personally and probably why the majority of doctors are saying "No" is that the Government are about to take a large sum of money each week out of every member of the public for a service which they know, and which we know, cannot possibly be fulfilled on July 5 of this year. The public have been definitely promised a service of general practitioners and specialists working reasonable hours in well-equipped health centres and hospitals, and that every person in the country should have the services of a general practitioner and, if necessary, of specialists whenever he requires them.

We know that building has not started on a single health centre or on a single 500-bedded hospital as yet for this Service which is to start in four months' time. When the public do not get what they expect it is the doctors who will have the blame and not the Government.

It has also been said that this controversy between the B.M.A. and the Government is not financial, and Mr. Butler said that the general-practitioner terms were generous. Any doctor who has studied these terms and has any business acumen at all knows that they are far from generous for the general practitioner, and it is not possible to offer any opinion on the terms for specialists, which, we understand, are to be made known about six months after they have joined the Service.

I give below the reasons why I think most doctors are saying "No," first from a general practitioner's and secondly from a specialist's point of view:

The General Practitioner.—(1) The general practitioner is asked to sign a contract for a 24-hour day seven days a week and 365 days a year with no provision for holidays or for illness. This is not the comprehensive health service which the supporters of the Act have put before the public, where the doctor was to have plenty of leisure, time for postgraduate study, and proper holidays.

(2) No provision is made for any secretarial assistance for the doctor, but it must all be done by his wife or his domestic servant, if he has one. The terms of remuneration do not allow for the payment of a secretary, and if they did it would be necessary for the doctor to have two secretaries, as I am sure no secretary could be asked to work 24 hours a day, particularly in view of the large masses of forms and certificates which will be added to the doctor's burden. The modern domestic servant is not usually capable of taking a correct telephone message, and so it is the doctor's wife who will suffer, and I am afraid the only remedy is polygamy.

(3) The remuneration is quite inadequate. A well-qualified practitioner in a good-class area can only earn £1,000 a year gross, as it is impossible with this type of patient living in a scattered area to look after more than 1,000 patients properly. In a poor-class area a doctor may be able to earn £3,000 or even £4,000 a year, provided always that he does not examine his patients.

The Specialist.—(1) The public have been told that under the new Service they will all get attention in well-equipped hospitals. So far from any attempt to build and equip any new hospitals, the Minister has refused to allow many existing hospitals to make extensions and improvements which were held up owing to the war and which they were quite prepared to do out of their own funds.

(2) No attempt has been made to increase the number of nurses, but the training of new nurses has, on the other hand, been curtailed by the Minister's condemnation of the smaller hospitals.

(3) It is impossible to discuss the question of remuneration, as this is not known until six months after the Service starts, and this is bound to deter even the most trusting.

(4) There is no compensation for the goodwill of specialists' practices. While the goodwill of practices in the Harley Street area may not be a saleable asset, it is on the other hand a very valuable asset in the country, and many provincial specialists have paid large sums for their present practices.

I am sure if these few facts were put clearly before the public they would agree that the Minister should postpone the intro-

duction of his comprehensive Health Service until: (*a*) he has built his health centres; (*b*) he has built and equipped his new hospitals; (*c*) he has trained a sufficient number of new doctors at the expense of the State to bring the number of doctors up to the necessary amount to give this service, which means trebling the present number of doctors; (*d*) he has trained a sufficient number of nurses to equip his new hospitals, for at present there are not enough nurses to staff the hospitals already in existence.

The Minister of Health, who is also the Minister of Housing, knows better than I do how long it will take to build and equip his hospitals and health centres, but I should say it would probably take at least as long as it will take to train his new State doctors, and that is about eight years.—I am, etc.,

Camberley, Hants. LESLIE HARTLEY.

Freedom Based on Ownership

SIR,—The many references to the buying and selling of practices show much confused thinking—that the custom is not "ethical," that "patients are bought and sold" (*vide* Mr. Bevan), etc. The new Act aims at doing away with it altogether. It is essential that we medical practitioners should realize what that means. When advertisements appear of practices for sale the words used are merely sale-room jargon and are not descriptive of the transaction. What is really being sold is an annual income derived from the practice of medicine. Should a doctor's income be divorced from the work he does? In a perfect world with perfect doctors this might be true, but as things are there is no measure of a doctor's value except the amount and quality of the work he does, and it appears logical that his income should be related to that work—hence the essential rightness of the capitation fee.

When the Act comes into force it is intended that all medical practices will be bought by the State. We will then be no longer owners but renters. We become tenant doctors; we will belong to the army of the dispossessed. But there will be a big difference between a doctor tenant and a property tenant. The tenant of a property (house or farm, etc.) has three freedoms which the doctor tenant will not possess. He can leave the property with due notice; he can force a negligent owner to fulfil his promises (in the agreement of tenancy); he can acquire another property anywhere and a different owner more agreeable to himself. The doctor tenant will have lost all these: he cannot force the Minister to fulfil his promises; he cannot go where he wishes; he cannot leave his tenancy without permission, and he will have the *same owner* to deal with wherever he goes.

Freedom based on ownership is a valuable one, and to be deprived of it means serious restrictions to individual initiative and aspirations. The medical profession more than any other calling is based on individuality both in doctor–patient relationship and in medical achievement. To limit individual freedom even slightly is retrogression; to limit it so seriously as by dispossession is a disaster. Behind the dispute between Bevan and the profession, between Socialism and freedom, is the basic question, Does the State serve the individual or the individual the State? If the latter is our belief then we should join up with Bevan and accept his thirty pieces of silver.—I am, etc.,

Exeter. J. FAYLE SEALE.

Ownership of Goodwill

SIR,—The argument that the custom of selling and buying practices exists only in this country ought to be viewed in relation to the fact that the panel system also operates in this country only. The difference is very essential, and its analysis may be helpful in finding a solution out of the present deadlock. In Germany, for example—and this, I believe, applies to other countries as well—a voucher, valid for a limited period only, is issued to the insured person each time he wants to consult a doctor. The name of one doctor is entered into the voucher, which is the basis for the remuneration of the doctor. Nothing substantial and comparable to a panel could therefore be passed on from a doctor to his successor. With the panel system as basis for medical aid the smooth working of a scheme would be seriously endangered if a panel would have to be dissolved each time a doctor ceases to be professionally active. This would bring unnecessary difficulties and problems to the public and foster an undesirable competitive spirit among the doctors.

Could not, instead, a scheme be devised which regulates and controls the passing of a panel from one doctor to another and safeguards the interests of all parties concerned—the public, the doctors, and the administration? The problem of the young doctor could, within such a comprehensive scheme, be solved more satisfactorily than with an insufficient initial salary. I have observed elsewhere very undesirable forms of propaganda in efforts to secure an initial basis for professional activities.—I am, etc.,

Wrexham, Denbighshire. RUDOLF NUSSBAUM.

Young Doctors

SIR,—During all the arguments and exhortations of the last few weeks the younger doctors have had a certain amount of criticism levelled at them. Several recent statements are nonsense. The older men (and women) say we have the same chances as they had. In theory they sound convincing; in practice they overlook the difficulties in obtaining houses and cars, and do not really know how high the cost of living is. One such person was sure I ought to be able to support a wife and run a flat and a car on £300 per year "for a year or two until things pick up." They say we are pro-Bevan. Those of us who spent the best years of our lives in the Services have had enough of direction and regulations. I do not include those whose Service numbers have not yet had time to dry. Of course there seem to be some idiots who think that on the appointed day they will be presented with a house, equipment, instruments, and transport, and a list of patients. Most of the younger doctors have a fair idea of what is going on, and would rather remain as they are than be slaves. The wisest of us have either left the country or are busy packing our bags.—I am, etc.,

Billingham, Co. Durham. J. S. CLARK.

Suggested Compromise

SIR,—The Parliamentary debate has not clarified the issue for the general public and was an attempt to weaken the support of the rank and file of the profession for the B.M.A. leadership. We must improve our general publicity work in the Press. The man in the street thinks we are having a fight with Bevan about terms of service, and to him we seem to be an obstinate mercenary lot, whereas the issue at stake is "freedom." That word should be blazoned across all our headlines. Our leaders have been guilty of a misuse of words.

The buying and selling of practices is not a "principle" at stake. It is a method by which we have been free to move about the country and to save for our old age. If the State will help us with a pension for our old age, there surely need be no financial transaction when a practice changes hands? So that our leaders can safely give way on that issue (in which both Conservatives and Socialists seem to agree), as long as a less cumbersome method than at present suggested in the Act is arranged to permit freedom of movement in the profession.

To safeguard a general practitioner's freedom of work we must continue to oppose the basic salary that may lead to a full-time salaried service. But why be so insistent upon the right of appeal to the courts? If it is right to sack a bad workman why should not a bad professional man suffer the same penalty?—and he would be very bad before such a drastic step would be taken by his local committee. We have never had a right of appeal from the decisions of the G.M.C., but the B.M.A. leaders have made little effort to alter this, and it has not affected the daily lives of most of us.

If the Minister compromises by clarifying the partnership agreement clause, and removes the basic salary, we must meet him half-way, even though the present Minister has an unpleasant personality and methods, by giving way on the other two points. He must also keep his promise about implementing the Spens Committee report. If we are not willing to compromise, not only will the public misunderstand but the B.M.A. leaders will lose the support of the many waverers in the profession, who, in spite of the plebiscite result, may swing over before July 5. We must not have a repetition of the debacle that followed the passing of the Lloyd George Act.—We are, etc.,

A. S. HATCH.
London, S.E.21. F. H. HUNNARD.

Practice under N.H.S.

SIR,—We have not yet been informed what measures have been taken to ensure that patients will sign on with their chosen doctors on or before July 5. All panel practitioners know from experience that most panel patients do not present their medical cards for signing until they require treatment, and it is no unusual occurrence to find a patient who has had his card for three, four, or even five years before handing it to his doctor. We must realize at once the absolute necessity of preventing this happening in the new Service, as the sole means of livelihood of the majority of doctors will be the N.H.S. cheque, for our private patients, who since the commencement of the N.H.I. have subsidized the panel, will have all been absorbed into the N.H.S. We will have virtually to commence building up a panel again from scratch, and to build up to 3,000 or 4,000 will take several years unless some form of compulsory registration is adopted by the Ministry. The doctors cannot do this, as the G.M.C. would regard it as canvassing, and quite rightly so. We cannot accept a scheme under which there is no guarantee that our income from the commencement is going to be not less than at present, as our expenses will not be correspondingly reduced in the interim.

There is no reason why our present panel should not be transferred to our list in the new Service as from July 5, giving us a nucleus on which to build our new list and also to make sure of a small cheque on Jan. 1 to meet practice expenses, as I presume that all cards accepted between July 5 and Sept. 30 will be the basis of the fees paid on Jan. 1, 1949. During the October to December quarter we will be expected to live and run our practice on our savings, even although during the previous quarter we have been attending and have had the responsibility for the welfare of all our potential patients, including our private patients whose fees have all these years subsidized the panel. Unless more attention is given to this matter we are going to work for three months absolutely, and for some years partially, for Mr. Bevan and love. What a thrilling prospect!

Having argued about all the ethical and idealistic aspects for months let us now get down to the materialistic and bread-and-butter side of the business and get an immediate understanding on this matter, remembering that every labourer is worthy of his hire, even if he is only a general practitioner.—I am, etc.,

Wetherby, Yorks. S. T. PYBUS.

Inducement to Good Work

SIR,—The principal argument against the N.H.S. which has been advanced by the dental profession is the inevitable lowering of the standard of work by the introduction of cheap mass-production methods. The same argument applies to the general practitioners, and it is a point that has been entirely neglected by the B.M.A. The N.H.S. seeks to perpetuate the worst features of the panel system.

No inducement exists for the G.P. to take higher degrees or to interest himself in any particular branch of medicine, and no contribution is made towards the provision of efficient apparatus or surgery accommodation. Payment depends entirely upon quantity rather than quality, and the doctor whose main article of equipment is a pack of visiting cards by means of which every case presenting difficulty is referred to the local hospital is to be paid at the same rate as the doctor who is prepared to spend time, trouble, and skill in curing his patients. Are we all to be converted into drudges with vast visiting lists and overflowing surgeries, but whose examinations become more and more perfunctory and whose treatment is confined to the scribbling of prescriptions?

In this district the voluntary hospitals are staffed by G.P.s, and thanks to the facilities provided for good work and to the association with consultants and fellow practitioners the standard of medicine is very high. The provision of hospital beds acts as a continued postgraduate course, and all consultants are agreed that the G.P.s who are so fortunate as to be attached to such hospitals gain very considerably in efficiency and experience. Under the N.H.S. it appears likely that such hospitals will disappear or be put to other purposes.

Little inducement appears to exist for the G.P. to do good work, and his main function would seem to be that of a medical clerk occupied in filling in certificates. At present it is claimed with justification that we have the best medical profession in the world. What are we likely to have in the future?—I am, etc.,

Kingston-on-Thames. A. C. RILEY.

The Independence Fund

SIR,—There are three comments I would like to make. (1) The lay public do not know that if the modifications proposed by the B.M.A. were adopted they would still have "free" doctoring with everything "laid on," with the difference that their doctor would also be free to treat them as he thought best and to support them in matters of dispute. I feel that more publicity could well be given to this essential aspect. (2) The B.M.A. has been criticized for having no alternative scheme to the Act. I have understood that the B.M.A. would support the Act if it were altered in regard to the four cardinal points which mean freedom. If this is so, can we have a positive assurance on this point? (3) It is essential that we, and the younger practitioners in particular, should have a definite statement as to how the fighting fund is to be administered. If it is not sufficient I am sure that many, including myself, would gladly increase their guarantees.—I am, etc.,

Sunbury-on-Thames J. MURRAY SCOTT.

Tell the Public

SIR,—I feel confident that I shall be found to have correctly anticipated the result of the plebiscite when I say that the features which make the present Health Act generally unacceptable are by now sufficiently appreciated by the profession—and for this our thanks and congratulations are due to the Chairman and Council of the B.M.A.—but we all know, by the bemused utterances of both friends and patients, that the position is by no means so clearly understood by the general public. Nor should we expect that the finer details should ever be as clearly understood by the general number. My gross impression is that the public trusts the doctors; but if we are to gain their active support in the second stage of the campaign, as we must, there is one fact that I believe it is absolutely crucial should be forced home to them immediately, repeatedly, with the utmost vigour, and by every means of publicity available (Parliament, Press, public speaking, and private discussions—and not forgetting, I hope, if at all possible, those two best methods of all, screen and the B.B.C.)—namely, that the profession is not, and never has been, averse to a comprehensive health service; but, on the contrary, positively and wholeheartedly does want, and has wanted, a comprehensive health service just as much as, and for far longer than, the present Government has wanted it. In short, that the medical profession is determined that the public shall have available to them a comprehensive health service, and that there need be no doubt on that matter whatsoever.

I agree wholly with the correspondent, Dr. E. Cronin Lowe (Feb. 14, p. 310), who suggests an "alternative scheme which the profession could and would unanimously operate to the advantage and satisfaction of all those of the community who desire to avail themselves of such a National Health Service," and that "such an alternative scheme should be published as soon as possible, discussed, advertised, and if necessary voted upon before July"; and partly with Dr. R. A. Murray Scott (p. 310) when he considered it a great opportunity lost that we were not already presented with an alternative scheme to vote for at the time of the plebiscite. On both matters there is no time to be wasted.—I am, etc.,

London, S.W.10. P. N. WALKER-TAYLOR.

SIR,—I discussed our problems this morning with a well-known broadcaster and journalist, and he considered that we had neglected our "public relations," with the result that most people did not realize why we oppose the present Act.

He suggested that we should arrange a series of radio talks and debates; and I am sure a radio discussion in "Friday Forum," the speakers including Dr. Hill, Dr. Guy Dain, Dr. Somerville Hastings, and a member of the M.P.U., would have a very large listening audience and help us considerably in bringing our views before the public.—I am, etc.,

Woburn Beds WARREN A. BARNES.

League of Doctors' Wives

SIR,—Such is the consternation among doctor's wives who realize the large part they will have to play in the new comprehensive health service which comes in on July 5 that it has been decided to form a League of Doctors' Wives under the presidency of Mrs. Leslie Hartley. Mrs. E. J. C. Bockett, Mrs. J. O. M. Rees, Mrs. K. J. L. Scott, and Mrs. J. Wilson have agreed to form a committee. The object of the League is the protection of the doctor's wife and her home.

The comprehensive Health Service has been forced on the public because the present system is described as inadequate, and particularly so the accommodation for patients in the doctor's private house. This Service was to be run from fully equipped health centres with full nursing and secretarial services. In actual fact no health centres have been built, and the doctor's wife is to act as nurse–secretary–receptionist for her husband for 24 hours a day. Her home is to be occupied by patients at all hours. The terms offered to general practitioners will not allow for the expense of a surgery away from his private house, with the necessary clerical staff. The doctor's wife will be supported by all housewives when she states that in these days, when domestic help is practically unobtainable, she has a whole-time job in looking after her home and her husband and, most important of all, her children. The League insists that the Minister shall provide the health centres and the staff first.

All doctors' wives are invited to join the League. The subscription is 5s. and should be sent to me at the address below. Will any doctor's wife who is willing to act as hon. secretary in her district please notify me when sending her subscription?—I am, etc.,

Petherton, Park Road, Camberley, Surrey

PHYLLIS SQUIRES, Secretary, League of Doctors' Wives

The Doctor's Wife

SIR,—There is one point which Mr. Bevan has deemed so unimportant in his present scheme for State-controlled medicine that he has not even mentioned it, but in actual fact it is a vitally important point in the working of his scheme. Where exactly do the doctors' wives come in this scheme?—and with them I include all those very efficient housekeepers who look after the homes of bachelor doctors. Without our aid and willing co-operation the scheme cannot work for 24 hours.

In the past we have kept our homes cleaned each day after 40 to 50 people have walked across our floors; we have answered telephones and front-door bells until we have been ready to drop. If we have had no help we have been unable to leave our houses for five minutes while we ran to fetch the bread. We have never known the freedom and joy of banging our front doors and going for a walk with our families, or away for a day's outing with them. The same has applied to holidays. Our homes have had to be kept open, and we have had to stay behind ourselves, or make elaborate arrangements for someone to look after the messages, bells, and a locum at tremendous expense. We may only visit our friends if we leave a message as to where we are, the telephone number, and what time we expect to be back. If our friends are not on the telephone we are denied the pleasure of visiting them. All these, and many, many more points too numerous to mention here, of which the lay public know nothing, we have done willingly and cheerfully in the past because it was for our husband's good name and the goodwill of his practice. But neither his good name nor the goodwill of his practice means a thing to Mr. Bevan in his present scheme.

If our homes are to be turned into State-controlled offices, what does Mr. Bevan suggest? He cannot take away the advantages of our practices without taking away all the disadvantages too. We all know that every Government office or department has its cleaners, secretaries, and typists. Is Mr. Bevan going to provide all these free to the doctors' wives? No wife of a Civil Servant is expected to work for the Government for the same salary as her husband.

Mr. Bevan must be made to realize that with our help and co-operation (adequately paid) his present scheme might work: without us his scheme cannot.—I am, etc.,

Ashton-on-Ribble, Preston.

DOROTHY GUYER.

SIR,—Why has no meeting of doctors' wives been called to ask their opinion of the coming service? At the present time, in spite of our onerous duties of housewives and mothers, we are always ready to answer telephone calls and door bells at any time of the day and night, and to listen to the patients' troubles in the midst of our own troubles, and even to rush out at any time to try and contact our husbands on their rounds if they are wanted for urgent cases. We are up early in the morning to have the surgeries and waiting rooms clean for our husbands' patients. We cannot leave our houses unattended in case calls come.

Would we be expected to give the same cheerful and willing service to the State as we give for love of our husbands and the prestige of the practice? The reply may be that in some distant future the State hopes to provide clinics for the Service This will be long after the present generation of general practitioners' wives have passed their usefulness or are able to appreciate this fairy tale of the future. So surely our opinion should be canvassed. Even the wife of the shift-worker knows at what time of the day or even night to expect him back: we do not have this consolation, and even have put out a hot meal for our husband when he has suddenly to leave this untouched and rush out to a case. No paid servant of the State could provide as efficient a service to the general public, or would be willing to make so many sacrifices in their service This is not a State soulless service, and cannot be bought.

Why are we constantly told that the doctors will not refuse service if their conditions are not met? The present Minister has no conscience or gentlemanly feelings in his dealings with the doctors, and the best way is surely to use similar methods. Public opinion would no more be affected by this than by the Minister's misrepresentation of the medical man's case.—I am, etc.,

A DOCTOR'S WIFE.

Legal Implications of Clause 35

SIR,—It has become, in my opinion, a matter of paramount importance to general practitioners to consider the implications of Clause 35, which is now commonly designated the Penal Clause. Mr. Bevan, opening the debate on the National Health Service on Monday, Feb. 9, moved the following:

> That this House . . . is satisfied that the conditions under which all the professions concerned are invited to participate are generous and fully in accord with their traditional freedom and dignity.

Let me examine Clause 35 in the light of the above statement. The provisions of this section are both difficult to understand and very complicated. It prohibits the subsequent sale of the goodwill or any part of the goodwill of the medical practice of a doctor whose name is, on the appointed day or at any time thereafter, entered on the list of those undertaking to provide general medical services under the Act.

The serious feature of this Clause is that the buying and selling of the goodwill, which it is made unlawful to sell, constitutes a criminal offence which is punishable on conviction on indictment to a fine not exceeding: (*a*) such amount as will in the opinion of the court secure that he derives no benefit from the offence; and (*b*) the further amount of five hundred pounds; or to imprisonment for a term not exceeding three months, or to both such fine and such imprisonment.

Viscount Maugham, a former Lord Chancellor, in moving an amendment to this iniquitous clause on Oct. 28, 1946, stated that he could "well understand that some of the subsections of that clause are, to a layman, quite unintelligible. . . . But what I am left to endeavour to achieve is my desire that new crimes, whether for doctors or others, should not be invented by Acts of Parliament in this year of our Lord, unless it is perfectly plain that the person who is going to be accused of the crime knows that he is doing something wrong and is accordingly what lawyers call *mens rea*, that is, of guilty mind, which according to our law applies to nearly every conceivable crime to be found on the statute book. For some reason or other, which I do not understand, Clause 35 seems to be framed with the deliberate determination to depart from that principle" (*Hansard*, House of Lords, Vol. 143, No. 139).

Goodwill is an indefinable and intangible asset which is very often a matter of opinion in the mind of an accountant. Issues regarding the question of goodwill, law of property, law of trusts, and the law of partnership have always been decided by the Chancery Division of the High Court, presided over by judges with particular legal acumen and experience regarding the rules of equity An

individual, if aggrieved by any decision, has the right of appeal to the Court of Appeal and to the House of Lords. By Clause 35 these civil matters relating to the practice of a doctor will be transferred, after the appointed day in July, 1948, to a lower criminal court presided over by a bench of lay magistrates or by a stipendiary magistrate, who will have to decide issues which, in my opinion, they will not be competent to decide.

Although a prosecution for an offence under Section 35 can only be instituted by or with the consent of the Director of Public Prosecutions, the position is intolerable, as many innocent or unwitting transgressors may find themselves the victims of criminal proceedings. Doctors will be in jeopardy if after the appointed day they seek to honour their existing partnership agreements. A conflict may arise between a decision of a High Court judge, who may for example decree specific performance of a deed, and the decision of a criminal court in proceedings instituted at a later date under this burdensome section. Under Subsections (6) (*b*) and (8) it may well be that a son who succeeds his father may be precluded from giving any financial support to his father or mother both before and after he succeeds to the practice. Under Subsection (3) a doctor's widow or children may be involved unwittingly in criminal proceedings as the result of the sale of a house to another doctor. This encroachment by the executive on the liberty of doctors and *their personal representatives* is unjust.

The Minister has promised to set up a legal committee to inquire into the effect of the Act upon partnership agreements only. From what I have stated above the effect of the Act on partnership agreements is only a small issue, and it is obvious that unless Section 35 is deleted or amended the profession will be involved in a morass of litigation through no fault of its own.

Mr. Bevan stated in the course of the debate that "as a general rule when Parliament passes a Bill and it becomes law, it is left for the courts to construe it." The protagonists of the Act assert that it is now on the Statute Book as law and that we should loyally accept its provisions. If after the Act comes into operation it is found that the courts, *at our expense,* construe certain sections in our favour, amending legislation can then be introduced. This form of argument is nonsensical. If an Act of the legislature is unworkable in whole or in part then the obvious just action to take is to amend the unworkable sections before the Act comes into force and great injustice is done to individuals.

There are several precedents which support my argument. I quote one where an Act which was found unworkable was in fact amended twice. I refer to the Law of Property Act. A Law of Property Act was passed in 1922 to come into operation on Jan. 1, 1925. The lawyers examining it closely found that it was unworkable and that the result of its operation would be chaotic. This was followed by the Law of Property (Amendment) Act, 1924, which had as one of its objects "to correct errors and supply omissions in the Act of 1922." A further Law of Property Act was passed in 1925 to come into operation on Jan. 1, 1926. Even then further amending Acts were passed in 1926, 1929, and 1932 "in order to remove certain difficulties that arose in practice when the Statutes came into force" (*Cheshire on Real Property*).

While I appreciate that legislation is the vehicle by means of which the executive enforces policy, yet in my submission "the law should be the master of policy and not be the medium whereby the Government enforces an unjust policy infringing the two most precious things in life—justice and liberty." I quote from the Earl of Chatham's speech on the Wilkes case in the House of Lords, Jan. 9, 1770: "We all know what the Constitution is. We all know that the first principle of it is that the subject shall not be governed by the *arbitrium* of any one man or body of men (less than the whole Legislature), but by certain laws, to which he has virtually given his consent, which are open to him to examine, which are not beyond his ability to understand." The powers given to the Minister in the Act give him this *arbitrium* and therefore violate the spirit of the Constitution. It makes no difference to me whether it is 1770 or 1948; the principles of English law are the same.

I would stress another very important implication of the Penal Clause which offends the rule of law. If a doctor is convicted under this section, the General Medical Council may erase his name from the *Register* merely on proof of the conviction, and the doctor may not go behind the conviction and try to show that he should have been acquitted by the criminal court. The Council may erase without "due inquiry" in a criminal conviction. The doctor is therefore placed in peril twice for the same offence and runs the risk of two penalties for the same offence. This is an intolerable burden to place upon a general practitioner.

It would be an act of great statesmanship if Clause 35 was deleted or very materially amended. To remove the penal sanctions from this section and to substitute for them the equitable remedies of the civil courts is surely not beyond the wisdom of the law officers of the Crown. The profession will otherwise become the unwitting instrument of an attempt by the legislature to introduce a new and disturbing element into the laws of this country whereby the equitable jurisdiction of the Chancery Division of the High Court is considerably restricted and replaced in a great measure by the jurisdiction of a criminal court, and new crimes may be committed by a doctor and his personal representatives of which they need not have a *mens rea* or guilty mind.—I am, etc.,

London, W.8. J. ARTHUR GORSKY.

Freedom to Publish

SIR,—The gloomy forebodings of your editorial note to my letter on freedom of publication (Feb. 14, p. 312) are contradicted in the same issue at p. 325. Mr. Bevan, in fact, answered that "there never was any doubt whatsoever" that "a doctor would be able to write and publish in scientific journals what he liked without any prohibition whatever." This wording obviously implies that medico-political and medical administrative matters would also be a matter for free controversy in the medical press.—I am, etc.,

London, N.21. E. MONTUSCHI.

*** This topic is referred to in an annotation at p. 399 of this issue.—ED., *B.M.J.*

Advertisements for Administrative Officers

SIR,—I have been very concerned by the frequent advertisements for an Assistant Senior Medical Officer to various Regional Boards. The senior referred to is the Senior Administrative Medical Officer. By the suppression of the word administrative the inference is that the doctor appointed will assist the "Senior Medical Officer."

At the discussion with the Ministry officials the Negotiating Committee was expressly informed that no title—to use the official's own words—"suggesting that he was in any way head boy" would be used for this administrative, yet our own journal is helping to establish the undesirable inference that there is a Senior Medical Officer in the Region. If the title must be condensed I suggest that the title Assistant Administrative Medical Officer is more suitable, even if it contains eight more letters.—I am, etc.,

Hove, Sussex. H. J. MCCURRICH.

Liberty of Patient

SIR,—Amidst all the dust and fury of the present battle I have not observed that the true interests of the patient, in particular his capacity to develop as a whole person, receive much consideration. Social security and Beveridge plans and other methods for controlling and supposedly safeguarding the citizen must inevitably bring with them restrictions on his capacity to develop. If this is a political opinion it is also a medical one with an ethical aspect.

Is it not true that if you give a man something you take something away from him also? The citizen who receives his doctoring or his children's schooling through some obscure method of taxation cannot possibly feel the same pride in his responsibilities as one who pays in more obvious and direct fashion. We know that the word "free" is bandied about as part of the political humbug associated with democracy and other forms of government, but it is surprising that psychologists have paid so little attention to the cramping and thwarting of personality inherent in the massive schemes of the planners. Their activities in interfering with people's lives are loudly acclaimed, even by their potential victims. If there is no need to think, no need to develop foresight or initiative, no need to do more than be born, to breed, and to die, what scope is left for the fashioning of fully developed individuals?

Not long ago I asked three youths between the ages of 17 and 25 the yearly total for a daily outlay of 2s. Not one could tell me, despite State education and much help. They never thought beyond the week because they never had to. They were not called upon to save to pay for the term's schooling or to develop any kind of foresight. It was all done for them. One does not know whether to be angry or sorry. But there is a good deal to be said against schemes described as part of social welfare which deprive people of the necessity of thinking ahead and doing their own planning for a rainy day. What do the psychologists think?—I am, etc.,

Barnet, Herts. G. C. PETHER.

Free Choice of Doctor

SIR,—May I crave the hospitality of your columns to ventilate a point I was unable to thrash out owing to limited time at a recent meeting of the Cornwall Division? I asked Dr. D. P. Stevenson; "Has the question of the patient's right to contract out from the Service been dropped, and, if so, why? If we object, as rightly we do object, to being placed under the thumb of a dictator, are we not laying ourselves open to a charge of hypocrisy if at the same time we acquiesce in our patients' being subjected to totalitarian regimentation?" Dr. Stevenson's reply was to the effect that the question was difficult, because of the patient's contribution of some 5s. towards the State insurance only 10d. actually went to the medical service. This seems to me to amount to acquiescence in the State insurance, excusing the medical proportion of it as did the errant servant girl on the grounds that "it was only a little one."

Qui s'excuse s'accuse. Surely, Sir, the point at issue is not the question of saving the patient 10d. a week (or even 10s. as it could be made at the whim of the Minister without power of redress by the patient) but the patient's freedom of choice of doctor. The effect of the State insurance (the invention of Bismarck, who described it as a golden chain around the necks of the workers) is to compel every patient to accept and act upon (whether he approves of it or not) the advice of a State doctor subject to directives from Whitehall. Is this "free choice of doctor"?

I hold no brief for homoeopathy, nature cure, osteopathy, etc., as such, but I do most vehemently uphold the right of any patient to be free to choose a doctor practising those cults if he wishes to do so. What is the negation of this right but totalitarian regimentation?—I am, etc.,

St. Germans, Cornwall. W. H. SPOOR.

Freedom in a State Service

SIR,—Mr. Bevan asks us to enter the National Health Service and try to make it work. He even offers to alter the Act, in due course, as parts of it are found to be unworkable. These are surely "honeyed" words to entice a proportion of the profession who are wavering to accept service, and are the spearhead of the war of nerves upon which he is now embarking.

We have seen in the last few days the supreme example of what can happen to a person employed in a State service who dares to write to the Press and state a frank opinion. Air Vice-Marshal Bennett (one of our leading aviators of the day, with 20 years' experience behind him) criticizes the Minister under whom he serves, and finds himself dismissed—not because of incompetence but for an expression of opinion. Surely this is a precedent which should convince everyone that once they become servants of the State they are no longer to be allowed freedom of speech. They are not to be judged by the work they do, however efficient, but by their qualities as "Yes" men. Let this incident of Air Vice-Marshal Bennett serve as a warning to us all and harden our resolve to unite against this bad National Health Act of 1946 until the omnipotence of the Minister is curtailed.—I am, etc.,

Sheffield. R. A. TREVETHICK.

Pound Value and Compensation

SIR,—We have seen recently in France a devaluation of the franc, resulting in an immediate loss of purchasing power of 50%. If a similar devaluation of the pound should occur after our compensation for loss of goodwill had been fixed it would mean in effect an immediate loss of 50% of our compensation. If goodwill were retained, on the other hand, its value in terms of pounds would be doubled. Is this a very remote danger? I wish I could think so. I have a strong feeling that a saleable asset is of much greater value than a hypothetical future payment of a fixed sum in sterling.—I am, etc.,

Sherborne, Dorset. RICHMOND MCINTOSH.

Dismissal from Service

SIR,—I wish to protest against your publication (without comment) of the letters of Dr. J. Leigh Cox (Jan. 31, p. 221) and Dr. J. Lennel Taylor (p. 222). The former said of the Minister that "he will decide whether a doctor shall or shall not be retained in the Service," while Dr. Taylor criticized "a service from which the Minister of Health may dismiss them (the doctors) with no such right of appeal." You, Sir, must know that these statements are untrue, and I would have thought it more helpful to doctors in trying to come to a decision if you had added your own footnote or, alternatively, had refrained from publishing the letters. It is quite clear from the Act that the Minister can only intervene *in favour* of a doctor whose dismissal has already been recommended by others. May I anticipate some of your more hasty readers by saying that I am not objecting to free speech, for this should not include the monotonous repetition of untruths.—I am, etc.,

London, N.22. E. J. SAMUEL.

*** Dr. Samuel misses the point that the ultimate authority is the Minister of Health. This is what he said in his reply to the Negotiating Committee (*Suppt.*, Dec. 20, 1947, p. 154): "Parliament have accepted the view, embodied in the Act, that as the ultimate responsibility for the service is placed by Parliament on the Minister, it must be left to him to decide in the last resort whether it is possible for him to retain in the public service in any particular area, or even at all, a practitioner whose retention, in the Tribunal's view, 'would be prejudicial to the efficiency of the service' . . . It would be impossible to combine this responsibility [i.e. for the new service] with any lack of ultimate jurisdiction as to the nature and quality of the service provided."—ED., *B.M.J.*

Defiance of Dictatorship

SIR,—It is 35 years since I laid down the pen I had wielded in your columns in support of our own N.H.I. scheme, ashamed of our pusillanimous surrender to Lloyd George's threatening fist, nor have I since felt any interest in medical policy. But I have been moved to write a letter which appears in the *Scotsman* (Feb. 11) to put a little courage into the hearts of my friends, because I feel that not only is the outlook for success brighter than it was in 1912–13, but our action now is of importance far transcending that of 1912. It may prove to be the turning-point in our internal political history—the first successful defiance of a dictatorial Parliament that robs us of freedom and justice. I urge all medical men to think what is their duty not only to the art of medicine and the physical welfare of the nation but to its spiritual health, and act on principle, not on expediency or personal benefit.—I am, etc.,

Edinburgh. HARRY GREY.

The Fight for Freedom

SIR,—I called at a garage for petrol, and while they were ticking off the coupons the boss came and talked about Monday's debate in the House of Commons on the National Health Service Act. "It's up to you doctors now," he said; "if you fail now the fight for freedom in England is lost." My own thoughts had been running on much the same lines, and his remark struck a bell so loudly that it has echoed in my head all day.

It is a useful, and often sobering, mental exercise to try and project one's mind into the future, say 100 years ahead, and then look back at the happenings of to-day and try to picture them as part of the pageant of history. Some eight years ago a great Englishman told us that we were entering upon our "finest hour"; and at his words Britannia threw off the last vestiges of middle-aged somnolence and stood erect, rejuvenated. Who can doubt that the verdict of history will uphold Mr. Churchill's estimate?

But what will it say of this age? War-worn and exhausted, England has slumped into a strange phase of apathy, docility, readiness to be regimented—strange indeed, for these are the characteristics of the Germans—almost incredible (the historian will say) of the British, whose solid claim to greatness rests upon a thousand years of sturdy independence and individualism. Yet there it is, explain it who can. Years of personal self-abnegation in the national cause have led us to forget that each man is master of his own fate. Little by little we Britons are bowing our necks to the encroachments of bureaucracy, allowing our wrists and ankles to be bound with silken threads. Each thread is so thin and delicate as to be barely noticed, but you can immobilize an elephant with silk

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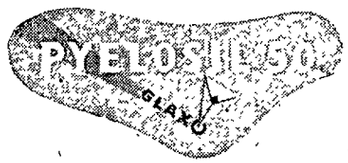

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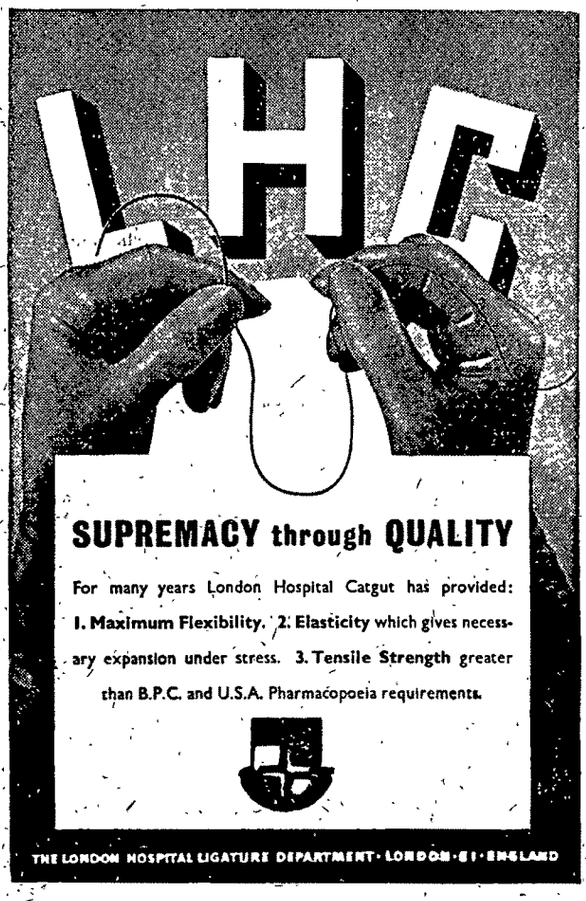

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References: Lancet, 1944, 247, pp. 175 and 176. British Medical Journal: 1946, 1, p. 50. Pharmaceutical Journal: 1945, 155, p. 245.

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Will England awake in time from her stupor? The danger is less obvious than in 1940, but it is likewise deadly, and our England that has given the world so much is rather elderly and very tired. She may slip into sleep as the aged do so easily, or she may swallow some neatly disguised narcotic, and wake to find her freedom gone. Was my friend right this morning? Is it up to the doctors to take up the challenge of those that seek to tamper with freedom? Will the historians date the reversal of Britain's unnatural trend to this year of grace when the united medical profession, impervious to abuse and misrepresentation, dared to say an absolute "No" to the threats and blandishments of politicians. Our ancient profession bears an enormous responsibility, but it is used to that. Perhaps this is its finest hour.—I am, etc.,

Orpington, Kent. A. C. E. BREACH

Northern Ireland Act

SIR,—I see very little correspondence about the Irish Health Service Act in the *Journal*, which is streets ahead of the British Act, with plenty of room for voluntary effort. The Act at first rather closely resembled the English Act, but a lot of hammering out in committee and by direct negotiation of the friendliest type and about 400 amendments have been effected. Much hard work and thought have been put into the Act, and it should work very well, for the Ulster doctors are pleased with it and will show every readiness to co-operate with the Ministry for Health and the Government, who have shown themselves to be reasonable and ready to compromise for the common good. This too could have been done in England had Mr. Bevan only been less headstrong and stubborn. He is getting nowhere except deeper and deeper into the mire, and the profession is rapidly getting out of the "slough of despond."—I am, etc.,

Bournemouth. S. ALEXANDER MONTGOMERY

Retired G.P. Comments

SIR,—May a retired G.P. express an opinion?

Surgeons should be paid a salary for hospital and operative work according to their experience, technical judgment, and ability—not easy but possible. All good surgeons hate fee-snatching and its loathsome necessity.

Physicians should treat their patients as individuals and not as robots in a State-controlled economy. This is the foundation of the doctor–patient relationship and a psychological necessity.

Midwifery is a matter for unerring skill, patience, and decision. Responsibility must lie with one doctor and with one doctor only. A long apprenticeship should be served. Apprentices should be numerous.

Gynaecologists: (1) operative—see *Surgeons*; (2) consultative—see *Physicians*.

Psychologists, if State-controlled and paid by the State, should be confined to gaol as dangerous to the patient. Their approach should be absolutely unbiased—and they know it.

Concentration on the supply of accommodation in hospitals and adequate staffing is a paramount and urgent necessity, and all connected with the medical profession know that it can be done but that political considerations are hindering and delaying progress. Payment is a minor consideration. With inflation or deflation all standards will collapse. Cut the cackle.—I am, etc.,

Oxford. A. W. D. COVENTON

Mutual Consent

SIR,—It is by the toil of the doctors that this service must be carried on. Unless care is taken confusion, frustration, and discontent are going to be created, and the doctors, however willing to give harmonious co-operation, will be the target of the people's anger, because everyone will blame them for attempting an impossible task. We must show the people by a united demonstration that we wish to produce a constructive health scheme, but this can only be done bit by bit. The time is ripe for a big expansion on the principles of the National Health Insurance Act, but definitely designed for health and not only for the treatment of disease.

Real health (physical, mental, and spiritual) can only exist where free will for all has full play, subject to the limits of social needs. Flexibility and variety of choice are essential for this. Administration may be a bit more difficult but more interesting and allow for progress, not stagnation. Some of the millions which were going to be spent should be used for hopeful experiment and to assist young men to set up in practice. Progress in healing means a deeper adjustment to the wants of human nature. To lay foundations we must all give and take. Politicians must realize that they may sometimes be mistaken. No one must make party capital out of the situation, and all political pressure such as the undemocratic demand for everyone to join on July 5 on pain of losing their claim to compensation should be withdrawn. This demand is significant of the pressure which a Government can put on, and seriously interferes with the free choice of many doctors. The ideal would be to work out a scheme by mutual consent, freely given, of both government and medical profession. Is this impossible for such a great object?—I am, etc.,

Letchworth, Herts NORMAN MACFADYEN

Pressure Points

SIR,—I gather that some medical men have already been approached by individuals on their panels inquiring whether they are opposing the Health Service Act or contemplating refusal to serve under the scheme, because if so they propose to change their doctor. It seems possible that this sort of impudence may increase a good deal during the next few months on the principle that every little bit of extra pressure helps to tilt the scale. May I suggest that the best way to deal with it is to write to the clerk of the local insurance committee forthwith asking him to remove the offender from one's list, and to inform the latter that one is doing so.—I am, etc.,

Portsmouth E. W. DEWEY

Secret Ballot

SIR,—In your issue of Feb. 14 (p. 326) you report Dr. S. Jeger's question in the House of Commons. The Minister is asked whether he knew the B.M.A. plebiscite required doctors to disclose their identity on the ballot papers and whether this violation of voting secrecy, interpreted by many doctors as an attempt at intimidation, would justify him in seeking a more accurate expression of medical opinion.

Surely Dr. Jeger realizes that when he casts his vote at a General Election he discloses his identity to the poll clerk, that the voting paper handed to him is numbered, that the number corresponds to the number on the counterfoil whereon particulars of his identity are recorded, and that precautions of this kind are necessary to protect the ballot from any sort of chicanery, impersonation, and the like. Is there any difference in principle between this and the B.M.A. plebiscite? Of all the charges levelled against the B.M.A. that of intimidation is the most ridiculous.—I am, etc.,

Keighley. H. M. HOLT

SIR,—On Feb. 5 Dr. Jeger asked the Minister of Health whether he knew that in the plebiscite of doctors held by the B.M.A. each doctor was required to disclose his identity on the ballot paper; and whether, in view of the fact that many doctors interpreted this violation of voting secrecy as an attempt to intimidate individual doctors, he would take steps to get a more accurate expression of the opinion of doctors on the question of their co-operation in the new National Health Service.

I should like to say that when I recorded my vote on the ballot paper I had not the slightest feeling that the B.M.A. or any of my medical confrères here would resort to intimidation as a result of my vote. I felt in precisely the same matter-of-fact state of mind as I feel when I fill in and sign a voting paper sent to me at election times by my university. In this plebiscite I am confident that no official of the B.M.A. knows how I voted, neither do my medical confrères in this locality. The fact that I believe our local vote was unanimous is beside the point.—I am, etc.,

Lancing, Sussex. CHARLES E. S. HARRIS

Mr. Bevan Confuted

SIR,—Two years ago, in the early spring of 1946, I attended a meeting of practitioners of the Birmingham area at the Queen Elizabeth Hospital; there were about 600 present, and Dr. Dain was in the chair. I painted a picture of the political career of Aneurin Bevan, and I put forward a resolution worded thus, "That in the opinion of this meeting negotiations with the present Minister of Health are not possible." Dr. Dain was on his feet immediately; he remonstrated with me for proposing this, and he pointed out that if this resolution was carried it would embarrass him and other members of the Negotiating Committee who were on the platform. He moved that we pass on to the next business, and this was done. I am not writing this to prove how right I was in 1946 but because I feel very strongly that Dr. Dain's action that night gives the lie to the accusations that the Minister made about the B.M.A. "clique" in the Commons on Feb. 9.—I am, etc.,

Dudley, Worcs. L. H. G. MOORE.

No Certification

SIR,—May I endorse the suggestion put forward by correspondents in your issue of Feb. 7 that in the event of a majority against entering the Service in its present form we do not wait for the appointed day but take immediate action by refusal of certification? Such action would bring matters to a head and necessitate amendment of the Act before the appointed day. This would nullify the Minister's main weapon—that of refusing compensation to doctors refusing to enter the Service.—I am, etc.,

Edinburgh. G. S. M. WILSON.

SIR,—I agree with the various correspondents who have written to the *Journal* recently expressing the opinion that action should be taken at once before the National Health scheme becomes operative in July. I suggest that the Association should organize a scheme for the non-issue of medical certificates commencing, say, in April rather than leave the matter until concerted action may be too late. I understand that many doctors are in agreement with some such policy and only require a lead from some organization such as you represent.—I am, etc.,

Dartford, Kent. F. S. D. THOMPSON.

Test of Death

SIR,—The interesting phenomenon of segmentation or "railway truck" appearance of the blood column visible in the retinal vessels occurs when the blood flow is sufficiently reduced either in death, on account of the absence of the cardiac impulse, or in obstruction of the retinal artery from various causes. In the latter type of case the condition is temporary. This segmentation was noted by Bouchut in 1874—possibly before then—and has been reported several times since (Kahn, 1913; Salisbury and Melvin, 1936), often as a new observation. Presumably the same process occurs in other parts of the body under similar conditions.—I am, etc.,

Edinburgh. H. M. TRAQUAIR.

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Bouchut, M. E. (1874). *Gaz. Hôp., Paris*, 225.
Kahn, M. H. (1913). *Med. Rec., N.Y.*, **83**, 801.
Salisbury, C. R., and Melvin, G. S. (1936). *British Medical Journal*, **1**, 1249.

SIR,—Under this title Dr. E. A. Harris (Jan. 31, p. 226) decribes a condition of segmentation of the blood column in the retinal vessels after death and says he is not aware that the sign had been described.

Probably the most complete account of this condition was given by C. H. Usher, of Aberdeen, in the *Ophthalmological Review* (1896, vol. 15, p. 339), where observations on the appearance of the retinal vessels in man, monkey, cat, and rabbit, just before, at, and just after death, are fully detailed.

A brief history of the subject is given also by E. Wolff and Francis Davies in the *Transactions of the Ophthalmological Society of the United Kingdom* (1928, vol. 48, p. 143), where the credit for first describing the condition is given to Bouchut in 1869. These writers, however, describe with illustrations a similar segmentation produced and abolished at will in the *living* animal. They conclude that segmentation in the retinal vessels is not necessarily a sign of death. "Granted that in the large majority of cases it is a sign of death," the writers add, "we would suggest there must be exceptions."—I am, etc.,

The University, Aberdeen. ROBERT RICHARDS.

SIR,—Bouchut in 1869 was the first to describe fragmentation of the blood stream and since then it has generally been looked on as a sign of death. In 1928, however, Francis Davies and I (*Trans. Ophthal. Soc. U.K.*, 1928, **48**, 143) showed that by clamping the vessels to the head and neck in the cat we could produce and, by removing the clamps, abolish this phenomenon at will. I hope this answers Dr. F. Parkes Weber's query (Feb. 14, p. 315) as to what would happen if the heart was successfully induced to contract normally again. Fragmentation of the blood stream is thus a reversible phenomenon, and though it is a presumptive sign of death cannot be regarded as an absolute one. We suggested that the fragmentation was due to an aggregation of the red corpuscles—that is, a rouleaux formation such as occurs in shed blood. This is made possible by the slowing of the blood stream.—I am, etc.,

London, W.1. EUGENE WOLFF.

Canine Hysteria and Agenized Flour

SIR,—We have recently had the opportunity for the first time of being present when Sir Edward Mellanby exhibited his film entitled "Canine Hysteria." In view of the prominence which has been given in the medical press (leading article *British Medical Journal*, 1946, **2**, 903; *Lancet*, 1948, **1**, 27) to Sir Edward's reports on the role of agenized flour and wheat products in the causation of canine hysteria (*British Medical Journal*, 1946, **2**, 885; Ibid., 1947, **2**, 288) and the widespread deductions concerning the importance of agenized flours in the aetiology of canine hysteria which have been based on these reports, we feel that as clinicians closely concerned with canine disorders in our professional duties the attention of your readers should be drawn to certain matters relating to the diagnosis.

1. In several cases shown in the film the clinical signs were not typical of the condition which we have recognized clinically as canine hysteria for many years.
2. The disorder was not similar to the form of canine hysteria that we have observed in the London area and the provinces during the war years, when it has been markedly less common than formerly.
3. In particular, certain animals appeared to exhibit neurological signs, such as severe clonic choreic movements of the jaws and head, complete loss of vision, incoordination of gait, and hyperflexion of the hind limbs, strongly suggestive of localized nervous defects which are more usually associated with the infective encephalomyelitides and are certainly not seen in natural cases of uncomplicated canine hysteria. Furthermore, in the naturally occurring disease the severe epileptiform convulsion is not a common feature.

If the film is truly representative of the syndrome that Sir Edward observed—and we can only suppose that it is so—then there would appear to be grave doubts as to the precise nature of the disorder that Sir Edward was observing, and indeed whether it was in fact a single aetiological entity.

While this possibility does not detract from the interest in the action of the agene process on wheat proteins we would suggest that the term "canine hysteria" should not be applied to this condition until the disorder has been investigated more fully. For the present, therefore, perhaps the term "agene intoxication" might be a more suitable diagnosis for the disorder produced by feeding agenized proteins to dogs.—We are, etc.,

M. HARVEY CLARK. HERBERT PARRY.
JOAN O. JOSHUA. OLGA UVAROV.
S. F. J. HODGMAN.

Newmarket, Suffolk.

Curare in Spastic Conditions

SIR,—I read with interest the article on the above subject by Drs. C. Astley Clarke and R. D. Hotston (Feb. 14, p. 289).

In May, 1947, I treated with the same oily drug a woman aged 61, suffering from paralysis agitans of over four years' duration. There was generalized muscular rigidity in flexed position, the head and neck were moving together, the face was a typical Parkinsonian

mask with wrinkled forehead, there were tremors of the hands, the right worse than the left. She was walking with short shuffling steps, holding on to furniture indoors, and with a stick and the assistance of her daughter out of doors. Pro-, retro-, and lateropulsion were marked. She suffered from insomnia, and had great difficulty in turning over in bed. Her deep reflexes were increased. She was of high intelligence and spoke with a monotonous voice.

I began with intramuscular injections of 15 mg. of *d*-tubocurarine chloride in oil (30 mg. in 1 ml.), and worked up to 45 mg. On 15 mg. she had no reaction, apart from slight weakness which lasted for a day or two. On 45 mg. she had very severe side-effects, lasting up to seven days, when she was confined to bed, unable to get up owing to weakness, with a feeling of impending death, after which her condition was exactly as before the injection. On 30 mg. there was at times no reaction, but at others it was as severe as that obtained with 45 mg. The injections were always given in the same manner and into the same muscle. When the reaction was favourable (usually on 30 mg.) the clinical picture was as follows.

Four to five hours after injection her face became relaxed, she developed a bilateral ptosis and diplopia and a feeling of drunkenness which lasted from thirty minutes to two hours. Gradually a generalized weakness developed in all her limbs, which made it difficult for her to walk about even with assistance, so that she had to be confined to bed. She was off food, very drowsy, and slept well, and felt dispirited. This usually lasted for two days. At the end of this time her strength gradually returned and her walking improved. She felt better, started eating, and on the fourth day after injection she walked without support both in the house and out of doors, much to the amazement and wonder of her neighbours, who had not seen her walk without assistance for over four years. The pro-, retro- and lateropulsion phenomena were absent. I actually pushed her in various directions while she was walking and she did not lose her balance. She could turn over in bed with ease. There was, however, no change in her tremors. She was so delighted with herself that she walked about all day just for the sake of using her legs, like a child who for the first time discovers that it can perform some action and keeps on repeating it. This improvement lasted two to seven days.

I used the drug for three months, and at the end of that time the patient, although she had derived great benefit at times, refused the treatment, owing to the occasional severe side-effects.

I also treated a woman of 40 who had a residual right hemiplegia of four years' duration. Apart from walking better on the third day after injection, there was no change. Her side-effects were not as severe as those of the woman with Parkinsonism.

In both these cases my experience did not quite coincide with the findings of Drs. Clarke and Hotston in the following respects. (1) There was no diminution of side-effects after repeated injections. (2) The side-effects usually started within four to five hours, with one exception where severe reaction occurred in the Parkinsonian case within ten minutes. She developed bilateral ptosis and collapsed, remaining in that state for over two hours. (3) Both the unpleasant reactions and the beneficial effects lasted for days rather than hours. (4) Finally, I was impressed with the apparent unstableness of the drug, and with the unevenness of the reactions in intensity and duration both in the unpleasant and the beneficial effects obtained from an identical dosage, bottle, and technique.—I am, etc.,

Sheffield. I. GOTTLIEB.

Louse-borne Relapsing Fever in Persia

SIR,—Drs. R. I. Bodman and I. S. Stewart (Feb. 14, p. 291) state that louse-borne relapsing fever has not previously been described in Persia. Actually louse-borne relapsing fever was described in Persia after the war of 1914–18 and the epidemic occurred about the same time as the then epidemic of typhus, also louse-borne. It is more than a coincidence that the first and second World Wars were followed by epidemic typhus and relapsing fever in that particularly lousy quarter of the globe. There was an epidemic of louse-borne relapsing fever in Shuster in 1942, which was diagnosed by my assistant Ali Hassan Assidi from blood films sent to Fields and later forwarded to me for confirmation.

In the case of tick-borne relapsing fever the tick—a species of *Ornithodorus*—lives in the dusty floors and cracked walls of mud dwellings and not on the person. Ticks are common enough in Abadan. The older medical missionaries—such as Dr. Shafter, of Ispahan—must have seen many cases of louse-borne relapsing fever in addition to the more common "Mianeh fever" the usual vector for which is *O. papillipes*.

Prof. Charles Oberling—author of the *Riddle of Cancer*—found cases of tick-borne relapsing fever in Tehran about 1942. Generally the infective forms are numerous in blood films from louse-borne cases and are very scanty indeed in preparations from patients with the tick-borne disease. Blood films carefully stained with Leishman or Giemsa were adequate for diagnosis. It would be interesting to try the effect of penicillin on some of these cases.—I am, etc.,

Epping, Essex. FRANK MARSH.

Injection Errors

SIR,—Mr. Harold Dodd (Feb. 14, p. 320) raises some interesting points regarding safety measures to be adopted with injection preparations. Undoubedly much can be done to avoid errors by a rational and unambiguous system of labelling, and a committee set up by the Ministry of Health has recently published recommendations for the labelling of ampoules of anaesthetic drugs.[1]

It appears to be generally agreed that it is desirable to avoid gummed labels on ampoules, and machines which will satisfactorily print directly on to glass are now available at reasonable cost. Use of this method would avoid the danger of labels becoming detached. A further advance would be made if commercial firms could be persuaded to use pharmacopoeial names in their labelling instead of coining new names for established preparations.

The suggestion of tinting a large number of injection preparations with different colours does not appear to be very practicable, since it would lead to the surgeon having to learn the colour of each preparation, and the method could not be applied to substances which have to be protected from the light by the use of amber bottles Also, since the range of colour in suitable dyes is limited, the use of different shades might lead to confusion with those whose colour-perception is not acute.

With regard to the labelling of rubber-capped multiple-dose containers I suggest that the label should be headed "Injection Solution" or "Intravenous Solution" as the case may be, followed by the B.P. name in large letters. Solutions not intended for injection should never be placed in similar bottles to injection solutions, and local anaesthetics intended for topical use should be clearly marked "Topical Solution—Not for Injection." In both the above cases the use of different coloured labels might be an additional safeguard.

I consider that the final essential in the avoidance of errors is to acquire the habit of deliberately checking the label of any drug used rather than relying on its appearance, and to discard any preparation when there is the slightest doubt about its identity.—I am, etc.,

University College Hospital, London, W.C.1. T. D. WHITTET
Chief Pharmacist

[1] *Pharm. J.*, 1948, **105**, 54.

Pulmonary Embolism

SIR,—I have read the article by Mr. Norman C. Lake on "The Aftermath of Gastrectomy" (Feb. 14, p. 285) with considerable interest, but I must join issue with him on the problem of pulmonary embolism. The author disposes of this matter in less than six short lines and he shows an extraordinary disregard for all modern knowledge of the subject. He states that embolism "remains a bugbear" and that he knows no effective method of preventing it. This, I submit, is an astonishing statement in 1948, when one would hardly have felt it necessary to commend the work of our Swedish and American colleagues to his notice.

Mr. Lake states that "thrombosis usually arises in the abdominal wall or, as in two of these cases, from extension of thrombosis of haemorrhoids possibly produced by the administration of an enema pre-operatively." These suggestions are surely preposterous, and it is not surprising that anyone believing them remains unaware of any effective method of preventing embolism. I understand that the late Lord Moynihan used to teach that emboli originated from vessels in the abdominal wall, although, so far as I am aware, he never offered any evidence in support of this view. Such hypotheses should now be condemned to the scrap-heap, where their arrival is long overdue; and to those who still favour these views I would suggest a few visits to the necropsy room, where, with the aid of a scalpel, they can soon dispel any remaining scepticism about the paramount importance of the deep veins of the lower limb as a source of post-operative embolism.

Active movements, early rising, prompt recognition of thrombosis in the calves, and abortive treatment with heparin

and dicoumarol should eradicate more than 90% of our yearly toll of deaths from embolism, besides reducing the other morbid effects of thrombosis. Although there are occasional cases where even the most expert may fail to detect deep venous thrombosis, a daily scrutiny of the temperature and pulse charts and examination of the patient's calves should be our ideal. With extension of this practice I trust that the day is not far distant when all surgeons will regard a fatal embolism as a reflection on their standard of post-operative care.

Finally, may I quote from a letter I received only a few days ago from a foreign authority with an international reputation on this subject? "In fact, I have for a long time expected that Britain should awake to conviction of the usefulness of anticoagulant therapy, but your people, which I like more than other nations, are stubborn and conservative."—I am, etc.,

Radlett, Herts. REGINALD S. MURLEY.

Tuberculosis of the Great Trochanter

SIR,—In Mr. B. McMurray's article on "Tuberculosis of the Great Trochanter" (Sept. 27, 1947, p. 492) the author suggests that "where there is radiological evidence of peripheral erosion in tuberculosis of the great trochanter the bony lesion is secondary to tuberculous infection of the trochanteric bursa, and begins only after secondary infection has taken place." Two of the reasons which he produces in support of this are: (1) the five patients in his series who showed no erosion of the bone radiologically were the only ones (except the one with the encysted form) who had not yet developed sinuses and were therefore free from secondary infection; (2) in all the radiographs of peripheral erosion there is definite evidence of sclerosis, and this is undoubtedly due to the secondary infection which is present.

As the total number of cases reported in the literature is so small the following case is of interest as it disproves Mr. McMurray's suggestion that secondary infection must be present before erosion of the base takes place. It does not of course affect his conclusion that the original site of the tuberculous lesion is the trochanteric bursa.

The case history was as follows. The patient was a stoker in the Royal Navy, aged 18, who was running after a football on Sept. 18, 1947, when he first noticed that he could not flex his right hip properly owing to a pain on the outer side of the hip-joint. He had previously noticed no trouble in the joint; there was no history of injury and no other relevant medical history.

He was admitted to the Royal Naval Hospital, Chatham, on Sept. 25 and examination revealed a cystic swelling 2-3 inches (5-7.5 cm.) in diameter situated just anteriorly and above the right greater trochanter. When he stood up the swelling disappeared behind the tensor fascia lata and iliotibial tract. *X* ray showed a fluffiness of the upper surface of the greater trochanter, but no sclerosis. There was no evidence of tuberculosis elsewhere. E.S.R. was 20 mm. in 1 hour (Wintrobe), W.B.C. 7,800 cells per c.mm., and the skin over the swelling was intact. A provisional diagnosis of tuberculous subgluteal bursa was made.

On Oct. 10, 50 ml. of viscid straw-coloured fluid was aspirated from the bursa and sent to the laboratory. It was found to contain 480 leucocytes per c.mm., of which 55% were lymphocytes and the rest polymorphs. No tubercle bacilli were found in a direct film and no organisms seen with Gram stain. Agar culture was sterile after 24 hours.

On Oct. 21, nearly five weeks after the onset of symptoms, the patient was operated upon and the bursa with all its ramifications excised. It was found to contain numerous melon-seed bodies. A caseous area of bone at the upper end of the greater trochanter was curetted out. The wound was closed without drainage and a fortnight later it had healed by first intention. The E.S.R. had fallen to 2 mm. in 1 hour, and the patient was placed in a plaster-of-Paris hip spica.—I am, etc.,

C. G. MARTIN,
The Royal Naval Hospital, Chatham Surg. Lieut., R.N.

Brachial Neuralgia

SIR,—The account of a discussion on brachial neuralgia (Nov. 29, 1947, p. 882) brings to light the weaknesses of the general belief that pain is due to pressure on nerve fibres. If pain of uncertain origin is felt in the arm we are permitted to assume that nerves are being subjected to pressure or tension. Then it remains only to discover or to invent a possible mechanism by which pressure or tension might be generated. For long the theory of the cervical rib held sway; and, when this proved inadequate, the "pseudo-cervical rib," or fibrous band that could not be revealed by *x* ray. Later, spasm of the scalene muscles was suggested, and more recently abnormal approximation of clavicle to first rib. Higher up, osteophytic outgrowths or intervertebral disks have been supposed to press on nerve roots.

When pressure on nerve trunks was found inadequate to explain the symptoms, pressure on arterial trunks or on sympathetic fibres was advanced to take its place. From France recently two new explanations of the pain have come: (1) excitation of sympathetic fibres by venous stasis in the scalene tunnel;[1] (2) spasm of the subclavius muscle.[2]

From the advent of the cervical rib theory its inadequacy has been admitted by even its strongest advocates. Thus the signs often extend beyond the field of the root or trunk that is pressed upon. To meet this Oppenheim[3] invoked a genetic deficiency; skeletal and neuropathic defects, he said, are both stigmata of degeneration and may occur in the same subject. Many authors have reported cervical ribs combined with syringomyelia or with disseminated sclerosis.

Before agreeing that pain means pressure on nerves we should ask if pain is prominent in disorders known to cause pressure on nerves. The following evidence is available.

1. Experimental. Pressure on the ulnar nerve causes numbness and tingling, but no pain, in its distribution. "The excitation of a skin nerve in its course (e.g., faradization of ulnar trunk at elbow) it was at one time taught evoked pain only, not sensations of touch. To refute the teaching, the experiment has only to be repeated The sensation obtained is usually not painful, though always strange."[4]

2. Injury. (*a*) Excluding a small number of causalgic cases, gunshot wounds involving nerve trunks are not especially painful (*b*) Paralysis of nerves by external compression often is painless—e.g., "Saturday night paralysis," tourniquet paralyses, etc.

3. Tumours. (*a*) Pain is not especially characteristic of tumours of nerves, malignant,[5-6] or benign.[7-9] (*b*) Of 47 benign tumours arising from nerve roots 25 were painless.[10] Dumb-bell tumours of the cord which grow through the intervertebral foramina and press on nerve roots are often completely painless.[11-13] (*c*) Of 53 extramedullary meningiomata pain was felt in only 22.[10] A meningioma that compressed the first dorsal and the lower cervical roots, producing a triplegia, was painless.[14] Extradural cysts that enlarge the spinal canal by erosion usually cause no pain.[15 16] (*d*) Of spinal cord tumours in general Lambert Rogers[17] wrote: "Although for many years pain has been regarded as one of the characteristic features of spinal tumour, several of our cases have run an almost painless course." Of 42 neoplasms reported by Spurling and Mayfield[18] pain was entirely absent in 11 and was an early symptom in only 21.

We shall have to look elsewhere than to pressure on nerves to explain pain in the arm.—I am, etc.,

Melbourne, Australia. MICHAEL KELLY

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Treatment of Subacute Bacterial Endocarditis

SIR,—Dr. Florence M. E. Davies (Feb. 14, p. 317) discusses the use of penicillin in this condition and states that she thinks that "penicillin merely clears off invaders for the time being," due to the fact that insufficient penicillin may have been given for the numbers of bacteria present. Were this statement in fact true, all that would be necessary to effect a complete and final cure (with the proviso that penicillin cannot restore an injured valve to normal anatomy) in all cases of subacute bacterial endocarditis due to penicillin-sensitive organisms

would be to give sufficiently large doses of the drug for a sufficiently long time.

Surely a more plausible explanation for the failure of penicillin to cure all cases of the disease can be found. With the humility proper in a medical student I suggest that it is because penicillin cannot always reach the causative organisms. In those cases where the blood culture is positive the bacteria may be found on the surface of the vegetations, and it is probably these cases which have the best chance of responding to penicillin therapy.

In those cases, however, where the blood culture is negative, the organisms are found buried beneath a mass of platelets and fibrin, and it is surely these cases that are likely to prove insusceptible to penicillin. It thus appears to be an unfortunate truth that the very defence mechanisms of the body that tend to wall off and localize an infected area also tend to render that area inaccessible to chemotherapeutic agents.

In the particular case of subacute bacterial endocarditis the causative organism is usually the *Streptococcus viridans*, and this bacterium is said to produce a fibrinolysin which is capable of dissolving fibrin. Were this not so it is probable that more cases of the disease would prove resistant to penicillin than actually do so.

Dr. Davies also suggests that the "sulpha" drugs, and perhaps even penicillin, may cause agranulocytosis. She does not support this suggestion with any evidence. While it is true that the "sulpha" drugs may damage the bone marrow and cause a sharp reduction in the number of granulocytes in the blood, I can find no evidence to show that penicillin in therapeutic doses has ever caused agranulocytosis. It therefore seems clear that penicillin, in massive dosage, has a great part to play in the treatment of subacute bacterial endocarditis.—I am, etc.,

London, W.11. B. WATERS.

Relief of Pain in Midwifery

SIR,—As a result of my experience of midwifery in general practice I would like to support Dr. H. Thistlethwaite's contention (Feb. 14, p. 318) that the intermittent use of pure nitrous oxide is more effective in relieving the pains of parturition than a gas–air mixture. However, even this method will fail unless the parturient woman is able to "anticipate" her pains. Using the Wembley gas–oxygen apparatus my patients found that their labour pains were insufficiently relieved if they started to inhale the pure nitrous oxide only when a pain was imminent.

One patient explained that, with her second baby, in the second stage of labour (having learnt the technique from the experience of her first baby) she inhaled the gas whenever she was conscious enough to do so, and in this way she managed to achieve a very satisfactory level of anaesthesia, and I have noticed other patients do the same thing.

In only one case was the slightest alarm experienced. This was in the case of a woman who was having her third baby with the aid of nitrous oxide. I was allowing her to inhale pure gas, and so avidly did she inhale it that she became markedly cyanosed and developed a mild tonic spasm, so that though satisfactorily anaesthetized she clutched the face-piece over her mouth and nose. However the face-piece was readily removed and the cyanosis rapidly disappeared.—I am, etc.,

Ilkley, Yorks. R. JOHN GOURLAY.

Extensive Resection of Small Intestine

SIR,—I was much interested in the extensive resection described by Mr. Leon Gillis and Dr. Michael Newton (Feb. 7, p. 254). Last July I removed rather more than twenty feet of small gut from a very obese patient of 41 years. She had suffered from a large hernia in the umbilical region for the previous 10 years. Two weeks prior to admission there had been a sudden onset of great swelling, tenderness, and vomiting. Such was the tension that the skin overlying the hernia had split open.

At operation, as soon as the sac was touched with the knife huge coils of imprisoned gut shot out of the opening with quite a loud report. Almost the whole of the small gut was found to be gangrenous, and much of the omentum was also strangulated, and was pale green, gangrenous, and foul. Two feet of grossly dilated jejunum remained above the strangulation, whilst distally gangrene extended to within two and a half inches of the ileocaecal junction. As a desperate bid the gangrenous gut was resected and the remaining two feet of upper jejunum was anastomosed to the stump of terminal ileum.

Post-operatively she was given continuous drip saline with "solu-thiazole" for four days, then fluids by mouth, and a more solid diet seven days after operation. Frequent bowel actions were troublesome about this time but settled down to a regular action twice daily. Faecal fat content after two months was found to be 50%. Ten weeks after the resection she was readmitted to hospital with an attack of colic, vomiting, and pyrexia, which settled in a few days. At that time there was an obvious loss of weight, which she could well afford. Since then she has remained remarkably well

One might surmise that in such an obese patient the evident reserve in her powers of assimilation from the gut may well have made for recovery where such would have been impossible in a normal type of person.—I am, etc.,

Redhill, Surrey. N. E. PITT.

Oral Intubation and the Davis Gag

SIR,—Mr. J. S. C. Monro's article on this subject (Feb. 7, p. 267) is of particular interest to me as I have in my possession a standard pattern Davis gag modified some years ago for oral intubation. The modification consists of a deep notch in the distal part of the tongue-piece. The anaesthetic tube is made of thin-walled metal tubing slightly flattened and suitably bent to lie snugly between the tongue-piece and the tongue. The end of the anaesthetic tube is held by the notch. The distal part of the tube is made of rubber.

No originality is claimed by me for this device. A similar piece of apparatus designed for use in cleft-palate operations has been described in the *Journal* by Humby.

While the advantages of intubation in cleft-palate operations are quite clear, particularly in pharyngoplasty, the necessity for the method for the dissection of tonsils in children is open to question. Many experienced surgeons and anaesthetists will agree that a capable anaesthetist should be able to provide adequate facilities for a capable surgeon for this operation, and protection for the patient, without intubation.—I am, etc.,

London, W.1. I. W. MAGILL.

Severe Reaction to Penicillin

SIR,—The following case presents some difference from those reported by Dr. D. Heffernan (Feb. 7, p. 277) and Dr. J. F. L. Walley (Jan. 24, p. 150).

The patient was a male aged about 65. Apart from some heartburn, rheumatism, and intermittent claudication due to atheroma of the leg arteries, he had no complaints. Five intramuscular injections of penicillin (calcium salt in oil-wax) were given into the right buttock for a boil in the neck. The first injection was given on the evening of Jan. 6 and consisted of 200,000 units (1.6 ml.) This was followed by 125,000 units (1 ml.) night and morning on Jan. 7 and 8.

The boil, which was surrounded by considerable induration, did well. But for the next three weeks the patient felt easily exhausted and tired, and later inquiry elicited that he had had a slight nagging discomfort in the hypogastric region and in a localized spot in the chest where the 5th left costal cartilage joined the sternum. These were not influenced by rest or food. He also mentioned that on Jan. 11 at 11.30 p.m. he had "a ghastly sensation of the head and neck swelling and appearing to extend to the height of 3 feet and returning to normal in about 10 seconds."

On Jan. 29 began a severe reaction to penicillin consisting of urticaria, chest pain, and vomiting, which prostrated him and made him feel extremely ill. Urticaria began about 5 a.m. and, gradually extending, affected the body from scalp to toes, the itching being extreme. This condition, with exacerbations, lasted for several days and then gradually improved under treatment though present to a certain extent for a further week.

Chest pain began about 3 p.m. and was situated right across both sides of the lower sternum. It increased and by 5.30 p.m. had become severe and was accompanied by a feeling as of a tight band and was followed by sickness. Severe pain lasted about 1½ hours before it passed. A second attack lasting 1 hour came on at 8.30 p.m. and a third about 8.30 a.m. the following morning Thereafter no pain occurred for five days, when there was a short return in the early hours of the morning for 2 or 3 days. Vomiting began after the first attack of chest pain and continued at intervals for two days. The patient could keep nothing down and bile-stained mucus was vomited.

In view of the patient's known atheromatous condition it was thought advisable to exclude coronary thrombosis. Dr. W. A. Bourne was called in and kindly took an electrocardiogram. This showed no signs of coronary occlusion but revealed old myocardial damage, particularly a markedly long P.R. interval.

"Antistin" injections (2 c.c.) b.d. were given for three injections until the stomach settled down, then "benadryl," 50 mg. capsules,

were given by mouth for 7 days. By this time the patient was much better though still weak. Temperature was subnormal throughout and there were no joint pains or joint involvement. The pulse was not much affected. There was no special skin reaction at the site of the injections. Trinitrin did not seem to relieve the chest pain. The bowels were not affected. No previous penicillin either by mouth or injection had been administered.

Although the chest pain strongly suggested a cardiac origin, particularly the first attack (position of pain, sense of constriction, some radiation to the neck), yet I am not at all certain that it might not be due to an allergic reaction in the upper abdomen in the region of the diaphragm. Which organ caused continuous pain in this case must, however, be a matter of conjecture. It is noteworthy that in the last 20 years the patient has had three attacks of severe epigastric pain lasting about 1-2 hours, probably allergic in origin.

This case differs from the two others recently reported in the absence of a raised temperature and of joint involvement. Also it differs in the presence of chest pain and of greater gastric disturbance. The onset of severe symptoms took place 22½ days after the first injection.—I am, etc.,

Hove, Sussex. WILLIAM CORNER.

Photosensitivity to Sunlight from Use of Sulphonamides

SIR,—In the article by Squadron-Leader Geoffrey Watkinson and Flight-Lieut. Barclay R. Hillis (Oct. 18, 1947, p. 609) the striking observation of appearance of a photosensitive skin reaction from the use of sulphonamides simultaneous with the height of reaction to vaccination was reported. The drug was being used as a prophylactic against tonsillitis—in the month of April—and the reaction to sun-exposed parts was greatest on the tenth day following vaccination. The 470 men treated were divided into four groups. In group A, 213 men were given "sulfa" from the first to the tenth day following vaccination, and in this group 50% "rashes" occurred with "an explosive outbreak," the severity of the rash being related to the severity of the pustule. There was a proportionate decrease of "rashes" in the other groups treated after the tenth day of vaccination. In group D, no "rashes" occurred in the 71 men *who were not* vaccinated (refused or non-reactive). The authors believe that the vaccination pustule may have acted as an inflammatory focus from which toxins were liberated by the sulphonamide causing photosensitivity. They therefore warn against the use of sulphonamide therapy even in small dosage in the presence of an active vaccination pustule—and its use in recently vaccinated ambulatory personnel is not advocated.

These conclusions appear justifiable and with them I am in complete accord. However, it would seem that if one could look upon these results from an entirely different viewpoint there might appear some new highlights upon the subject of vaccination and its possible dangers. Since the authors believe that "sulfa" should not be used in those recently vaccinated, conversely those who are receiving "sulfa," too, should certainly not be vaccinated.

In this opportune group of exposed human experimental animals there is luckily adequate control—group D. The sudden appearance of an "explosive" cutaneous reaction on the tenth day after vaccination is certainly mindful of experimental post-vaccinal encephalitis where an "explosive" type of reaction occurs in the *brain* on the tenth or eleventh day after vaccination. Even the use of the word "explosive" by the authors is choice. It seems that the appearance of an *explosive* type of reaction ten to eleven days after vaccination should be stressed in all organs, tissues, or specialties. In other words this incubation period is the important thing whether we are dealing with a post-vaccinal encephalitic problem, a post-vaccinal ocular, or a post-vaccinal dermatologic problem.

In the dermatologic problem confronting these authors the sensitization may have been solar or chemical or both, but this sensitization prepared certain specific cutaneous areas to reactivity when the antigen-antibody reaction of vaccinia reached its height—namely, the tenth day. This very same sensitization can be assumed to occur in other organs such as the brain and in the eye, as I have attempted to show in ophthalmologic circles. There is little awareness of this problem, for no consideration has been given to the host both as regards his past medical history and as regards medical care immediately following vaccination. Selectivity of subjects for vaccination and subsequent medical alertness to possible complications following this form of inoculation will unquestionably reveal data more valuable than that yielded in the experimental laboratories.—I am, etc.,

Newark, New Jersey, U.S.A. EMANUEL ROSEN.

POINTS FROM LETTERS

Civil Service Control

Dr. N. C. HYPHER (Slough, Bucks) writes: In Mr. Bevan's State medical service all doctors will be at the mercy of permanent Civil Servants. They will keep a tally on our prescriptions, watching for over-prescribing and high average cost. Arguments concerning individual cases of certification will be framed by these clerks with plenty of time on their hands, and the very busy doctor will be tempted to give up the wordy battle. The doctor who is unhappy in a State medical service will be well advised to use all his powers of persuasion with the lesser officials if he wants a transfer to a better area. This may involve another doctor being pushed around. . . .

Plebiscite and Foreign Doctors

Dr. I. PLAKANS (Askern, Yorks) writes: As there appears to be a divergence of opinion as to the attitude to be adopted by the foreign doctors—namely, at the meeting held at B.M.A. House on the evening of New Year's Day it was stated: "It is not to be assumed that alien practitioners would not stand in with the British profession," whereas at the meeting of doctors called by the M.P.U. in Manchester it was assumed that these aliens would prove to be "blacklegs"—may I please be allowed to state our case, as I see it? To defy the Government responsible for our being allowed to be in England, and to whom we are more than grateful, would be ridiculous: to disagree with the majority of the members of the British profession, with whom we wish to work, would be equally fatuous. I think, therefore, there remains only one course open to us—that of strict neutrality.

Make the Best of It

Dr. J. J. ROHAN (Biggin Hill, Kent) writes: Why not make the best of it and try to render the Service first class? If we all go with good intentions into this coming Health Service (which after all is for the benefit of our own people) we will be a very strong union—so strong that if the Minister of Health should ever get it into his head that he could dictate terms to us as regards work and payments we would be in a position to lay down our arms—to a man, all together.

Smallpox and Chicken-pox

Dr. A. J. AMBROSE (Beckenham, Kent) writes: Dr. C. Simpson Smith's interesting article on smallpox in Staffordshire (Jan 24, p. 139) must have been of great interest to medical men who have had difficulty in differentiating smallpox from chicken-pox. But though the pundits attach much importance to umbilication, shotty papules, etc., the most important sign in my experience has been the greater number of pocks on the head and face area as compared with the chest, trunk, and limbs. In the 1914-18 period I saw three patients in whom the rash was indistinguishable from chicken-pox, but whose pocks gave this numerical preponderance in the head and face region, and their prompt isolation prevented an epidemic of smallpox.

Relief of Pain in Midwifery

Dr. ELIZABETH A. NETTELL (Exmouth, Devon) writes: To my mind what is needed is re-education of the midwife. Even to-day many midwives seem incapable of dissociating themselves from the idea that analgesia slows down labour and makes it more difficult. Many times, having visited a patient during the first stage and left her with Minnitt's or trilene apparatus rigged up and ready for use, I have returned later to find the face-piece flung aside and a pushing, groaning patient—a roller towel her only analgesia. The midwife's triumphant, "She thinks she can push better on her own, Doctor," leads me to suspect that the patient is only doing what is suggested to her.

Until the midwife has a change of heart or unless the doctor can be present throughout labour I feel that analgesia for the whole of the second stage will never be adequate.

Dressing of Finger-tips

Dr. C. R. B. VINCENT (Walthamstow, E.) writes: Finger-tips dressed with routine firm bandaging for bleeding due to nail avulsion, "slice injury," or removal of warts often reappear several hours later with a saturated dressing and continued oozing.

The following method of treatment has been applied successfully in many cases. It is simple and rapid, and obviates the blood-stained bandage and the necessity for a sling. The wound is cleaned and a penicillin tablet or powder applied. The raw area is covered by a small square of tulle gras, and a rubber rectal finger-stall is fitted over this without displacing the dressing and is rolled down as far as the centre of the middle phalanx. A small gauze dressing encircles the finger-stall and is bandaged firmly and left for 48 hours.

A.T.S., penicillin, and analgesics are given as indicated. No sling is needed, and the smallness of the dressing allows early finger movements. The dressing is easily removed without any sticking.

Obituary

V. S. HODSON, M.V.O., D.M., F.R.C.P.

Dr. Vincent Sutherland Hodson, who died suddenly on Feb. 9 from coronary occlusion, was born in 1874. He was educated at Christ's Hospital and at Oxford, where he took his B.A. in 1895. He began his medical education at St. Thomas's Hospital and graduated B.M., B.Ch. in 1900. He acted as house-physician to Dr. Theodore Dyke Acland, thus initiating a lifelong friendship, and also held the post of resident accoucheur. In 1902 he was appointed R.M.O. at the Kasr-el-Aini Hospital in Cairo, and in 1904 he joined the Sudan Government Medical Department, which was then being constituted on a civilian basis five years after the reoccupation of the country.

Dr. Hodson obtained his M.R.C.P. in 1905 and he helped to build up the traditions of his service. As medical inspector and later as senior medical inspector he was stationed mainly at Atbara, and during these years a modern hospital was built there and public health work was established on efficient lines. In 1916 he was appointed assistant director of the service, later refusing the directorship and preferring a clinical appointment as director of Khartum Hospital, which post he held till his retirement in 1924. The Kitchener School of Medicine had not then been opened, but Hodson did much valuable preparatory work in the training of subordinate medical staff.

In 1924 he was appointed assistant physician to the Victoria Park Hospital, and in 1928 he succeeded Dr. Acland as medical representative of the Sudan Government in London. In the same year he was elected F.R.C.P., and he also became a member of the Egyptian Medical Board. He was a governor of St. Paul's School and a liveryman of the Mercers' Company, serving as master of the Company in 1932–3. For some years he was Gresham Lecturer in Physic. He retired from practice in 1938 and lived thereafter at Southwater, near Horsham.

Hodson had suffered from a chronic illness in childhood but had grown up sturdy and strong though short in stature. He lived an active life, being a keen golfer and tennis player. He was also a good bridge player. He was very quick and energetic and would make up his mind without hesitation—sometimes possibly without sufficient thought. He was apt at times to give offence by his somewhat brusque manner and sharp tongue, but he was a most loyal and considerate friend who was always ready and anxious to do all he could for those who stood in need of his help and advice. The large attendance at the memorial service in Southwater Church was a recognition of the affection and regard in which he was held by those among whom he had lived for the last nine years.

Dr. GERALD WEBB, who died recently in Colorado Springs, was born in Cheltenham in 1871. A student of Guy's Hospital, he graduated in London and in Denver, and spent some time as a postgraduate student in Vienna. He settled in America towards the end of the last century and soon became well-known for his work on tuberculosis. In 1917–18, as a colonel with the American Forces, he was adviser on tuberculosis to the American Expeditionary Force. On more than one occasion he represented the United States as an official observer at International Conferences, notably those which were held in Rome in 1912 and in Paris in 1920. Dr. Webb was also well known as a sportsman and particularly as a polo player. For his work on tuberculosis he was granted the honorary degree of D.Sc. by the University of Colorado, and in 1939 he was awarded the Trudeau Medal for research by the National Tuberculosis Association of America, of which he was at one time president. Dr. Webb married a grand-daughter of Jefferson Davis. She predeceased him, and he leaves four children and a brother in England.

Dr. JOHN TEARE died at the Royal Infirmary, Liverpool, where he was once a house-physician, on Jan. 26 at the age of 82. Dr. Teare was a student at Liverpool and graduated there in 1904, taking the D.P.H. in 1909 and proceeding M.D. in 1912. He had served as a major in the R.A.M.C. during the 1914–18 war, and he had spent many years in New Zealand. He was at one time port medical officer at Wellington and medical officer for the militia and police there; he also served as a J.P. in New Zealand before returning to this country and going into practice in the Isle of Man. At different times he worked in the Fever Hospital at Fazakerley, Liverpool, the Myrtle Street Eye Hospital, Liverpool, and the Children's Infirmary, Birkenhead. Subsequently he became interested in public health work and was assistant medical officer of health for Hampshire, tuberculosis officer for Nottinghamshire, and finally assistant medical officer of health for the West Riding of Yorkshire. He celebrated his retirement from active practice by attending the Melbourne Annual Meeting of the British Medical Association, and since then he had toured India. He was an honorary life member of the St. John Ambulance Association, a fellow of the Society of Medical Officers of Health, and a member of the Royal Sanitary Institute.

Dr. THOMAS DAVID COULTHARD ROSS died at his home in Oldham on Feb. 2 at the age of 63. Dr. Ross, who graduated at Glasgow University in 1907, came to Oldham first as assistant and subsequently as partner to the late Dr. Doble. By hard work, ability, and kindly understanding he built up one of the largest and busiest practices in the Oldham area. As is often the case with busy men, Dr. Ross found time for recreation and for serving his colleagues. He was a keen if not brilliant golfer and an enthusiastic member of a local bridge club. He was the senior member of the Local Medical and Panel Committee and a member of the Local Executive Committee of the British Medical Association. At the inception of the Local Medical War Committee in 1939 Dr. Ross was elected secretary, and no better choice could have been made. This arduous task became a real joy to him, and his work for the committee carried the hall-mark of efficiency and tact. The praise he earned from colleagues returning from the Forces for the excellent manner in which the Protection of Practices Scheme had been carried out in Oldham was to him sufficient recognition. However, a more tangible reward followed, when on the occasion of his retirement from active practice in 1946 he was presented with a handsome canteen of cutlery for the great service he had rendered to the profession locally during the war years. Unfortunately the illness which had caused him to give up his work did not respond to the rest which he so badly needed, and for two years he was a sick man. During his illness, when at all possible, he continued to show his usual interest in the welfare of his colleagues and would make a special effort to attend any meeting where he thought his advice would be helpful. He is survived by his wife and three daughters. His only son was killed while on active service with the R.A.F. during the war. His patients and his colleagues will certainly be the poorer for the passing of Tom Ross.—C. H. S.

Dr. JOHN HERBERT PORTER, who died suddenly on Feb. 10 at the early age of 50, was born in Preston, Lancashire, and at the time of his death was chief assistant medical officer of health for his native county. Educated at Preston Grammar School, he won a scholarship and an open entrance exhibition in mathematics at Downing College, Cambridge, in 1916. He secured a second class in the natural science tripos in 1918, and later won the Goldsmith Entrance Exhibition in anatomy and physiology at University College Hospital, London. During the 1914–18 war he volunteered for active service on several occasions, but was not accepted. He obtained the conjoint diploma in 1921 and took the Cambridge M.B. in 1924. After holding a number of hospital appointments he obtained a diploma in public health, and in 1925 was for a time acting deputy medical officer of health for the Metropolitan Borough of Bethnal Green. Later in the same year he was appointed assistant school medical officer to the London County Council. In 1927 he joined the staff of the Lancashire County Council as assistant county medical officer. It was in the south-eastern part of the county that Porter spent the earlier part of his career in Lancashire, working in Royton and Crompton until 1935. He was then seconded as medical superintendent to Park Hospital, Davyhulme, where his outstanding work led inevitably to his promotion to the position of chief assistant county medical officer when that post became vacant. The high promise of his early academic career was maintained in his later clinical work, and an investigation he undertook on congenital and developmental abnormalities, published in 1933, was a model of first-class research.

Quiet and unassuming in character, his judgment was sound, and despite a never very robust physique he never spared himself. The last few months of his life were marred by illness, and just when he appeared to have regained his health he was

struck down. Outside medicine, his interests were in yachting and gardening, and much of his leisure time was spent with his yacht at Lytham. Gentle and most courteous in bearing, Dr. Porter possessed great charm of manner, and, coupled with a sympathetic nature, this won for him popularity not only with his patients but also with his colleagues, professional and lay, by whom he was held in high regard and affection. Deep sympathy is extended to his widow in her great loss.—F. H.

Medical Notes in Parliament

The Minister and the Plebiscite Results

On Feb. 19 Mr. LIPSON asked the Minister of Health if he would now invite representatives of the British Medical Association to meet him so that a further attempt might be made to ensure that the National Health Act would have the co-operation and good will of the doctors when it began to operate on July 5.

Mr. BEVAN: I remain ready to co-operate closely with any professional spokesmen who want, with me, to make the new Service a success.

Mr. LIPSON: Can the Minister go a little further and invite representatives of the doctors to meet him, because, in the interests of the Health Service, all the country wants is a victory for common sense?

Mr. BEVAN: We all want a victory for common sense, but I should not be entitled to go behind the back of the House and suggest that Parliament can surrender any position it has taken up.

Sir HENRY MORRIS-JONES: Would the right hon. gentleman care to make a start towards proper negotiations again by withdrawing a statement which he made about the "raucous voiced" leaders of the British Medical Association, who have now been shown clearly as only interpreting the wishes of their constituents?

Mr. BEVAN: It remains to be seen how long they will interpret the wishes of their constituents. The answer to the hon. Member is that, as the debate last week showed, every concession has been made by the Government. It is now time that concessions were made on the other side.

Lieut.-Col. LIPTON: Will the Minister see that the loyal and gallant minority of doctors who are willing to co-operate with the Government is protected against any possible form of intimidation and victimization?

Mr. BEVAN: Certainly.

Mr. LIPSON: Is the Minister aware that I am not asking him to go behind the back of Parliament, but to follow up some of the concessions which were suggested, or some of the doors he opened, in his speech in the House, to see if it is possible to resume negotiations?

Mr. BEVAN: I am always ready to listen to any fresh representations that may be made to me. I have always been ready to meet the representatives of the medical profession, and am still ready if they have any fresh suggestions to make.

Freedom to Publish

Col. STODDART-SCOTT on Feb. 12 asked the Minister of Health whether those doctors and dentists who entered the National Health Service would have freedom to publish articles and books with regard to the organization and administration of the Health Service and freedom to publish such articles without having to seek permission of individuals or authorities.

Mr. BEVAN replied: "So far as I am concerned, yes, Sir."

Scientific Books

In the House of Lords on Feb. 18 Lord BALFOUR OF INCHYRE called attention to the present restrictions on the import of books, which reduced British intellectual and scientific contacts with other lands. Before the war there were no restrictions on the import of books into this country. During the war it was necessary to restrict importation from all countries. Immediately after the war the restriction was on the basis of 100% of the 1938–9 imports of scientific books. An open general licence allowed the import of books from the Commonwealth but not from the United States, and the quota was later raised to 200%. From January, 1947, because of the Bretton Woods agreement, no discrimination was allowed against the United States and the open general licence was extended to books from there, but the quota for the Commonwealth was reduced to 100% of the 1938–9 trade. In September, 1947, the Board of Trade stopped the open general licences and instituted a selective individual licence which was now in force. This theoretically allowed an import of scientific books up to 100% of the 1938–9 trade, but in practice few licences were granted and it took time to obtain them. The University of London reported great difficulty in obtaining American scientific books and a general delay of eight to ten weeks. In the University of Durham lecturers had to write weekly sheets for distribution to their classes because of the difficulty of getting textbooks. The *Annual Review of Biochemistry*, which was published in America, was held up in this country for many months this year through customs difficulties. The Physiological Society had also complained. It was sometimes four or five months before people could get books which were at the dockside, and he suggested the Minister should lay down a maximum time within which licence applications should be dealt with.

Lord CHERWELL said the country was now back to the conditions of the Middle Ages, and in Oxford undergraduates had to lend each other a book for twenty-four hours. An Oxford bookshop which applied for a licence in September, 1947, had not received it by the middle of February, 1948.

Lord MOYNE said the regulations made it difficult for Dublin publishers to sell their books even in Belfast.

Replying for the Government, Lord CHORLEY said that last July and August the Government had been confronted with a difficult economic situation and it would have been unreasonable to leave books untouched when it was cutting down food supplies. The President of the Board of Trade was discussing the question with learned institutions and as a result there might be some increase in the quota, but he would not hold out the hope that it would be an increase to 200%. The business of looking into the quotas had practically come to an end and in future the delays ought not to be so serious. It had been suggested that blanket licences should be issued to universities and similar institutions to enable them to import books. There existed an open licence to any individual to import a particular book. He could get currency from his bank, give an order to a bookseller in America, and import a book by parcel post. Many professors and scientists had imported books in this way, but universities were not constructed to embark on the business of importing books. If it was found that the general quota could be increased the most effective agents for dealing with the demand would probably be the regular dealers who imported books from America.

Aliens Committee

Answering Mr. BENN LEVY on Feb. 12, Mr. EDE said that, in controlling the admission of foreign doctors to take employment or set up in practice in this country, he was advised by the Aliens Committee of the Central Medical War Committee, a body widely representative of the medical profession which was set up by direction of the Committee of Imperial Defence to advise on the utilization of the medical manpower of this country. The main Committee was reappointed annually and its membership was approved by the Minister of Health. As regards foreign doctors already accepted as residents here, the Aliens Committee was asked for its views on the suitability of the proposed employment or the location of the proposed practice, as the case might be; as regards foreign doctors who had been admitted to this country for some temporary purpose and then asked permission to practise, the aspect on which the Committee advised was the value of the contribution which the practitioner in question was able to make to the medical knowledge and services of this country. The constitution of the Committee was as follows:

The Chairman of the Central Medical War Committee (*ex-officio*), Mr. H. S. Souttar; *representatives of Royal Colleges:* Sir Arthur McNalty, Sir Alfred Webb-Johnson, Mr. J. M. Wyatt; *representatives of the B.M.A.:* Drs. H. Guy Dain, L. Haden Guest, F. Gray, J. A. Brown, J. C. Matthews, T. MacCarthy, J. M. Johnstone, and Prof. Samson Wright; *representative of the Society of Medical Officers of Health:* Dr. J. A. Struthers. Representatives of the Home Office and Ministry of Health attend the meetings of the Committee as observers and for the purpose of giving the Committee any information they might desire. Mr. LEVY suggested that an eminent Italian urologist had been refused permission to work in spite of testimonials from leading British physicians.

Two-year Pensions.—Mr. BUCHANAN has decided that in future following a resurvey board the award of pension for war disablement will normally be for a period of two years.

Papworth.—After July 5 Papworth Industries, Limited, will continue under voluntary management, but the sanatorium will become part of the National Hospital Service.

Unexpired Covenants.—Unexpired deeds of covenant to hospitals which are being taken over by the Government will, like other endowments, pass, in the case of teaching hospitals, to the new

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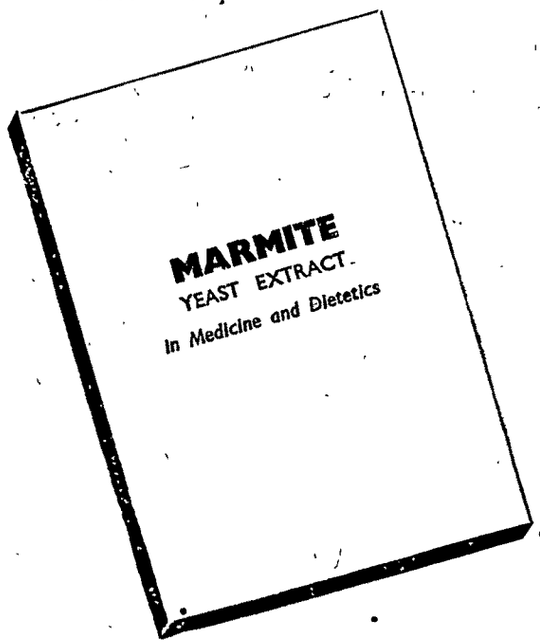

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Boards of Governors and, in the case of non-teaching hospitals, to the Hospital Endowments Fund for use at the discretion of the hospital bodies for hospital purposes or research. They will not pass to the Exchequer. This assurance was given by Mr. J. EDWARDS on Feb. 10.

N.H.S. Buildings.—Mr. BEVAN informed Sir ERNEST GRAHAM-LITTLE on Feb. 10 that no immediate substantial increase of building work under the National Health Service Act had ever been promised or regarded as feasible. Building developments in all fields of the Act would be carried on as fast as conditions allowed.

Dental Spens.—Mr. BEVAN hopes to receive during March the Spens Committee recommendations in regard to the remuneration of dental practitioners under the new Health Service.

Service Medical Histories.—Mr. A. V. ALEXANDER is considering with the Service Ministers whether the medical history of a demobilized man can at his request be made available for life assurance purposes.

Medico-Legal

ARTIFICIAL INSEMINATION AND LEGITIMACY

[FROM OUR MEDICO-LEGAL CORRESPONDENT]

American legal thought is related closely enough to our own to make our courts pay respectful attention to American decisions. Weighty opinion in this country has declared that a child born of an artificial insemination with semen not the husband's is illegitimate.[1] As the question has not yet come before one of our courts, that view is not supported by authority. Now Mr. Justice Greenberg, of the Supreme Court of New York State, has pronounced in the opposite sense.[2] A wife obtained a separation decree with principal custody of the child, a girl of 4. Desiring to prevent the husband from seeing the child, she testified that he was not the father but that she had been artificially impregnated with a donor's seed. The judge, assuming the truth of this statement, still allowed the husband his previous Sunday visits. He held that the child had been adopted or semi-adopted by the husband, who was thus entitled to the same rights as those acquired by a foster parent who has formally adopted a child, if not the same rights as those to which a natural parent would in the circumstances be entitled. Moreover, the child was not an illegitimate child. Logically and realistically the situation was not different from that of a child born out of wedlock and made legitimate on the marriage of the interested parties. He expressly declined to discuss either property rights or the propriety of artificial insemination.

Even if this decision were binding here, its authority would, of course, be limited to cases involving similar circumstances. It says no more than that husbands who have allowed their wives to be impregnated with the semen of a donor ought to be regarded for certain limited purposes as fathers. The judge's attention was primarily directed to the best interests of the child, as was shown by his remark in the course of the hearing that the court would not lend itself to making any child illegitimate. If he had been trying a case involving, for instance, succession to property, or registration, or a charge of adultery, other considerations would have arisen which might have affected his conclusion. Nevertheless, his view was based on common sense, and is bound to carry weight in all future discussion of this difficult problem.

[1] *British Medical Journal*, 1947, 1, 605.
[2] *Strnad* v. *Strnad*, 1948 (see also *News of the World*, Jan. 18).

The Services

Brigadier (local) R. A. Broderick, D.S.O., *M.C.*, M.B., Ch.B., R.A.D.C., Emergency Commission, has been appointed Honorary Dental Surgeon to the King.

The Efficiency Decoration has been conferred upon the following officers of the Territorial Army: Colonel G. D. Kersley, Lieutenant-Colonel L. P. Marshall, M.C.(T.A.R.O.), and Major H. Hall-Tomkin, R.A.M.C.

Universities and Colleges

ROYAL COLLEGE OF PHYSICIANS OF EDINBURGH

At a quarterly meeting of the College, held on Feb. 3, with the President, Dr. W. D. D. Small, in the chair, Drs. J. C. R. Greig (Kirkcaldy), I. N. Sutherland (Edinburgh), R. O. Gillhespy (Birmingham), J. G. Macleod (Edinburgh), and T. G. Brown (Hamilton) were introduced and took their seats as Fellows of the College.

Drs. E. W. Frecker (Sydney, N.S.W.), D. N. Dobbie (Bromley, Kent), and S. F. Oosthuizen (Pretoria) were elected Fellows of the College.

Drs. J. G. Dathan (Stoke-on-Trent), S. G. Nelson (Sydney, N.S.W.), F. J. Booth (Brisbane, Queensland), J. Adler (Clarkston, Renfrewshire), J. J. Tillie (Edinburgh), W. E. MacLean (Aviemore, Inverness-shire), J. Leckie (Pitcaple, Aberdeenshire), A. K. S. Ahmed (Dacca, Bengal), G. Comay (Capetown), W. R. N. Friel (Birmingham), D. E. Ross (Edinburgh), M. Beaton (Edinburgh), W. H. Galloway (Edinburgh), A. B. Hegarty (Edinburgh), T. G. Fox (London), G. M. Carstairs (Edinburgh), Elsie C. Gibbons (Wellington, N.Z.), J. S. Calnan (Eastbourne), S. B. Roy (Rangoon), J. Buch (Johannesburg), A. H. Banton (Edinburgh), R. McK. Fulton (Edinburgh), J. N. Swanson (Edinburgh), P. J. J. Barnard (Gwelo, S. Rhodesia), S. Jacobson (Johannesburg), D. H. Clark (Edinburgh), Marjory A. Keith (Edinburgh), and Hilary F. H. Hamilton (London) were elected Members of the College.

Medical News

Plymouth Hoe

In a broadcast on Saturday, Feb. 21, Mr. Hugh Dalton, M.P., stated that on Plymouth's new housing estates were a number of doctors, ex-Servicemen, who were signing on for the new Health Service. "These young doctors," he stated, "are not following the lead of the old gentlemen who run the B.M.A." Dr. George Deery informs us that on the new housing estates at Plymouth there are only three doctors, only one of whom is an ex-Serviceman.

Congratulations from Australia

As we went to press we received the following telegram from Sir Henry Newland: "Federal Council warmly congratulate profession on its action to maintain professional freedom."

Good Wishes from Belgium

The Brussels College of Medicine sends its sincere good wishes to the British Medical Association for success in its fight to maintain the liberty of the medical profession in Great Britain.—President F. Bremer, Professor of the Free University of Brussels; General Secretary, Dr. J. Lederer, University of Louvain.

Royal Melbourne Hospital Centenary

Dr. William Evans, F.R.C.P., has left London to attend by invitation the Centenary Meetings of the Royal Melbourne Hospital. He will also lecture at Adelaide and Sydney. Sir Hugh Cairns, who is representing surgery, has already arrived in Australia.

World Health Assembly

The first World Health Assembly will be held in Geneva in June. Subjects tabled for early discussion by the World Health Organization include such tropical communicable diseases as cholera, yellow fever, and malaria, and more general topics such as child health, standardization of biological products, and rural hygiene.

Personal Support for Hospitals

The British Hospitals Association has issued a memorandum on personal support for hospitals in the National Health Service. It emphasizes the need for continuing personal interest in, and voluntary service for, the hospital patient. Gifts can be made after July 5 to a particular hospital and will be retained by that hospital for its own particular use, thus preserving in the future that intimate association between hospital and supporter which is of such importance to both. These gifts need not be earmarked for a special purpose and will in no circumstances be taken away from the hospital by the State, either for redistribution or for relieving the Treasury of meeting the full costs of the ordinary maintenance of the hospitals and their services. The memorandum can be obtained from the British Hospitals Association, 52, Green Street, London, W.1.

Medical Certificates for Diabetics

The Minister of Food has decided on the advice of the Food Rationing (Special Diets) Advisory Committee of the Medical Research Council that doctors may in future certify patients suffering from diabetes mellitus for extra allowances of food on form R.G.50 instead of on the special form which required a statement of the insulin dosage. A statement of the insulin dosage need no longer be given. Form R.G. 50 will qualify the holder for extra allowances of meat, cheese, butter, and margarine until the end of the rationing year. These allowances can be renewed at the end of the rationing year without a further medical certificate. If a doctor wishes a diabetic patient to receive also a priority allowance of milk, he should state on the R.G. 50 both that the patient is suffering from diabetes mellitus and the appropriate classification for milk as set out in Med. 2. The milk allowance will be granted up to the end of the rationing year and will be renewed only against a further medical certificate.

Cost of Health Service

A Vote on Account published by the Government recently shows that the National Health Service for England, Wales, and Scotland will require £149,675,000, as compared with the present cost. £2,981,905.

Scilly Isles in N.H.S.

The Isles of Scilly (National Health Service) Order, 1948, extends to the Scilly Isles the provisions of the National Health Service Act, 1946, with certain modifications. The Council of the Isles will be the local health authority for the purposes of the Act. The Executive Council for the Isles will consist of a chairman appointed by the Minister of Health and the following: (*a*) such members of the Council of the Isles as have notified the chairman in writing of their desire to serve in the Service; (*b*) such medical and dental practitioners and registered pharmacists as, in the opinion of the Council of the Isles, are permanently resident or are practising in the Isles, and have notified the chairman of their wish to serve as members; (*c*) two members appointed by the Minister.

Order of Orange Nassau

The Queen of the Netherlands has conferred the following appointments to the Order of Orange Nassau in recognition of services to Netherlands interests during the war:

As Grand Officer: Major-General Sir Henry Letheby Tidy, K.B.E., M.D., F.R.C.P. *As Commanders:* Prof. H. P. Himsworth, M.D., F.R.C.P.; Sir Jack C. Drummond, D.Sc., F.R.S.; and Sir Francis R. Fraser, M.D., F.R.C.P. *As Officers:* Charles F. Harris, M.D., F.R.C.P.; Maurice Mitman, M.D., F.R.C.P.; and C. Bowdler Henry, M.R.C.S., L.R.C.P. *As Chevalier:* J. Nairn Dobbie, M.B., Ch.B.

Recruitment and Training of Nurses

The Nuffield Provincial Hospitals Trust has submitted to the Ministry of Health some observations on the Working Party's Report on the Recruitment and Training of Nurses. The Trust maintains that in order to obtain the necessary data a complete job-analysis of the nurse's work should be carried out. It agrees that full student status should be accorded to nurses in training; therefore the training of nurses should be entrusted to educational bodies. An interesting recommendation is that the General Nursing Council should be reconstituted as an educational organization, the disciplinary work of the Council being delegated to a statutory penal committee.

COMING EVENTS

South Wales Medical Ex-Service Association

The South Wales Medical Ex-Service Association was formed last year with the object of holding an annual reunion dinner. All medical men who have served in either great war are eligible to attend. Owing to the current food restrictions the reunion this year will take the form of a buffet supper, which will be held at the Park Hotel, Cardiff, on Saturday, March 6, at 7 p.m. Tickets, 10s. 6d. each, may be obtained from the honorary secretary, Dr. K. M. Wheeler, Anatomy Department, University College, Newport Road, Cardiff.

Centenary Service

A service will be held at the Priory Church of St. Bartholomew the Great, Smithfield, London, on March 25, 1948, at 11.30 a.m. prompt, commemorating the centenary of the birth of the late Sir Francis Champneys, Bt., M.A., D.M., F.R.C.P., Vice-Patron of the Royal College of Obstetricians and Gynaecologists, Hon. Fellow of the Royal Society of Medicine, and Chairman of the Central Midwives Board from its inception in 1902 until his death in 1930. Admission will be by ticket only. Inquiries should be addressed to the Clerk to the Governors, St. Bartholomew's Hospital, E.C.4.

Medical Society of London

The 168th anniversary dinner of the Medical Society of London will be held at Claridge's Hotel, Brook Street, London, W., on Thursday, March 11, at 7.30 for 7.45 p.m.

International Congress on Mental Health

A meeting to discuss the aims of the International Congress on Mental Health, to be held in London in August, and to receive a report of the progress made towards the success of the congress, will be held at the Royal Society of Medicine (1, Wimpole Street, London, W.) on Thursday, March 4, at 8 p.m., when Dr. J. R. Rees, president of the congress, and Prof. J. C. Flugel will speak. Admission to the meeting is free.

Kent and Canterbury Hospital

The next monthly clinical meeting at the Kent and Canterbury Hospital, Canterbury, will be held to-day (Friday, Feb. 27), at 5 p.m

SOCIETIES AND LECTURES

Monday

MEDICAL SOCIETY OF LONDON, 11, Chandos Street, Cavendish Square, W.—March 1, 9 p.m. "*Clinical Pathology in Relation to Medical Practice.*" Third Lettsomian Lecture by Dr. C. E. Dukes. (Change of date.)

WESTMINSTER HOSPITAL SCHOOL OF MEDICINE: MEYERSTEIN LECTURE THEATRE, Horseferry Road, S.W.—March 1, 5.30 p.m. Clinico-pathological demonstration. "*Treatment of Chronic Peptic Ulcers.*" Discussion.

Tuesday

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—March 2, 5 p.m. *Pathological demonstration*, by Dr. I. Muende.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—March 2, 5 p.m. "*Some Aspects of General Physiology,*" by L. E. Bayliss, Ph.D.

Wednesday

BRITISH INSTITUTE OF PHILOSOPHY.—At Eugenics Theatre, University College, Gower Street, London, W.C., March 3, 7.30 p.m "*Philosophy and Religion,*" by Dr. J. Hartland-Swann.

EDINBURGH CLINICAL CLUB.—At Edinburgh Royal Infirmary, March 3, 4 p.m. "*X-ray Therapy,*" by Dr. R. McWhirter.

ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE, 28, Portland Place, London, W.—March 3, 3.30 p.m. "*The Planning of a Modern Hospital in Relation to the Public Health*" (*Illustrated*). by Mr. S. E. T. Cusdin, A.R.I.B.A.

Thursday

FACULTY OF HOMOEOPATHY.—At London Homoeopathic Hospital, Great Ormond Street, London, W.C., March 4, 5 p.m. "*The Art of Diagnosis,*" by Dr. A. P. Cawadias.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C., March 4, 5 p.m. "*Diseases Affecting the Lips and Mucous Membranes,*" by Dr. B. Russell.

INSTITUTE OF LARYNGOLOGY AND OTOLOGY, 330, Gray's Inn Road, London, W.C. March 4, 5.30 p.m. "*The Treatment of Acute Otitis Media,*" by Mr. G. Ewart Martin.

LONDON JEWISH HOSPITAL MEDICAL SOCIETY.—At London Jewish Hospital, Stepney Green, E., March 4, 3 p.m. *Clinical meeting*

MEDICAL SOCIETY OF THE L.C.C. SERVICE.—At County Hall, Westminster Bridge, London, S.E., March 4, 4.15 p.m. Papers: "*Blood Transfusion with Special Reference to the Rhesus Factor,*" by Dr. E. N. Allott; "*Transfusion of Infants with Erythroblastosis Foetalis,*" by Dr. C. A. Holman; "*Jaundice Following Blood Transfusion,*" by Dr. A. G. Signy. A general discussion will follow.

ROYAL PHOTOGRAPHIC SOCIETY.—At 16, Prince's Gate, London, S.W., March 4, 7 p.m. Annual general meeting. "*The Application of Medical Photography to Venereal Disease.*" Lecture by Dr. C Hamilton Wilkie.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, S.W.—March 4, 4.30 p.m. *Neurological lecture-demonstration*. by Dr. A. Feiling.

Friday

ATOMIC SCIENTISTS ASSOCIATION: LONDON BRANCH.—At Royal Society of Arts, John Adam Street, Adelphi, W.C., March 5, 7 p.m. "*Medical and Biological Applications of Atomic Energy,*" by Dr. W. J. Arrol.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.—At Leeds General Infirmary, March 5, 8.30 p.m. *Clinical meeting.*

LONDON CHEST HOSPITAL, Victoria Park, E.—March 5, 5 p.m. "*Sinus Infection in Chest Diseases,*" by Mr. J. W. S. Lindahl.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—March 5, 8 p.m. *Valedictory Address* by the Senior President.

SOCIETY OF PUBLIC ANALYSTS.—At Royal Society, Burlington House, Piccadilly, London, W., March 5, 5 p.m. Annual general meeting "*The Proximate Analysis of Mixtures by Methods depending on Differential Solubility and Saturation,*" by G. M. Bennett, Ph.D., Sc.D., F.R.I.C., F.R.S.

Saturday

ROYAL SANITARY INSTITUTE.—At the Modern Secondary School, Stow Hill, Newport, March 6, 10 a.m. "*The Hospital Services of South Wales.*" Paper by Dr. A. Trevor Jones.

APPOINTMENTS

Frank F. Main, M.B., Ch.B., D.P.H., Medical Officer of Health for the City of Perth, has been appointed Senior Administrative Medical Officer to the Scottish Eastern Regional Hospital Board.

J. L. le C. Walker, M.R.C.S., L.R.C.P., has been appointed medical officer at Leeds prison in succession to Dr. F. H. Brisby.

FANNING, JAMES, M.D., D.P.H., Deputy County Medical Officer for Surrey.

JACOBY, M. G., M.B., B.S., Government Medical Officer, Newfoundland.

MIDDLESEX COUNTY COUNCIL.—The following senior appointments are announced: A. C. T. Perkins, M.D., D.P.H., to be County Medical Officer of Health; J. G. Bonnin, F.R.C.S., M.R.C.O.G., to be Surgeon to Central Middlesex County Hospital; K. S. Mullard, F.R.C.S.Ed., to be Thoracic Surgeon to Hillingdon and Harefield County Hospitals.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Eastes.—On Feb. 14, 1948, at The Bank House, Marshfield, Glos., to Dr. Zeta Eastes (*née* Matthews), wife of Dr. Henry J. Eastes, a sister for Martin and Janet—Cherry.

Edwards.—On Feb. 8, 1948, at Sutton, Surrey, to Joan (*née* Shepherd), wife of Dr. F. Hately Edwards, a son.

Hylton.—On Feb. 19, 1948, at Clevedon, to Dr. Lorna, wife of Dr. William Hylton, a third daughter.

Sime.—On Jan. 30, 1948, to Moyra, wife of Lieutenant David G Sime, R.A.M.C., Hanover, a son—Michael Jeremy.

MARRIAGES

Gilmore—Muir.—On Feb. 20, 1948, at South Woodford, Haldane Carson Gilmore, L.R.C.P.&S.I., to Margaret MacIntosh Muir (*née* Archibald), M.B., Ch.B.

Krafft—Johnston.—On Feb. 3, 1948, at St. Mary's Church, Prittlewell, Essex, Dr. Gerard Krafft and Dr. Catherine Vallance Johnston.

Stein—Rachwalsky.—On Feb. 22, 1948, Major G. E. Stein, R.A.M.C., to Miss E. L. Rachwalsky, M.B., B.S.

DEATHS

Braithwaite.—Recently, John Braithwaite, M.B.

Creasy.—On Feb. 20, 1948, at Dolphin Square, Rolf Creasy, M.R.C.S., L.R.C.P.

Dalziel.—On Feb. 21, 1948, at 63, Park Road, Chiswick, W., John McEwen Dalziel, M.D., late West African Medical Service.

Deans.—Recently, John Campbell Deans, M.B., Ch.B.Glas., of Glasgow.

Droop.—On Feb. 15, 1948 at Corra, Sandy Lane, Tilford, Surrey, Charles Edward Droop, M.B., B.Ch., formerly of Newton-on-Trent, Lincoln, aged 70.

Fairlie-Clarke.—On Feb. 16, 1948, Allan Johnston Fairlie-Clarke, F.R.C.S., of The Oaks, Graham Road, Malvern, aged 70.

France.—On Feb. 7, 1948, at 38, Darby Crescent, Sunbury-on-Thames, Middlesex, James Hassall France, M.R.C.S., L.R.C.P.

Hamilton.—On Dec. 16, 1947, at Q.A. Military Hospital, Horley, Surrey, William Bruce Hamilton, M.D., Major R.A.M.C.

Harris.—On Feb. 16, 1948, at Eden Hall, Minster, Ramsgate, Robert James Harris, M.R.C.S., L.R.C.P.

Healey.—Recently, John Edridge Healey, M.B.E., M.B., Ch.B., of Preston, Lancs.

Henderson.—At 28, Glendale Avenue, Whitley Bay, Percival Henderson, M.D., late of Seghill, Northumberland.

Henery.—On Feb. 16, 1948, at 73, Warwick Road, London, S.W., John Philip Edmund Henery, L.M.S.S.A.

King.—On Feb. 10, 1948, Ralph De Veil King, M.R.C.S., L.R.C.P., of 1, Moor Court Close, Sidmouth, Devon.

Lewis.—Recently, Frederick Charles Lewis, M.R.C.S., L.R.C.P., of Birmingham.

Lowe.—On Jan. 31, 1948, at Ranmore, The Avenue, Middlesbrough, George Harold Lowe, M.D.

McCandlish.—On Feb. 14, 1948, at the London Hospital, Whitechapel, E., Alexander Henry McCandlish, M.R.C.S., L.R.C.P.

McGowan.—On Feb. 16, 1948, collapsed and died while waiting for a bus in Glasgow, Thomas McGowan, M.B., Ch.B.Glas.

Odulate.—On Jan. 31, 1948, killed in an accident in Nigeria, Albert Olukoya Odulate, M.B., B.S., aged 29.

Orr.—On Feb. 7, 1948, at 39c, Northside, Clapham Common, S.W., Henry Scott Orr, M.B., B.Ch., aged 81.

Poole.—On Feb 7, 1948, John Copeland Poole, M.R.C.S., L.R.C.P., of Mayfield, Sussex, aged 78.

Porter.—On Feb. 10, 1948, at 1, Ansdell Road North, Ansdell, Lytham St. Annes, John Herbert Porter, M.B., B.Ch., aged 50.

Riddoch.—On Jan. 30, 1948, in air liner reported missing near Bermuda, George Keith Riddoch, F.R.C.S Ed., aged 30

Ross.—On Feb. 2, 1948, at 327, Park Road, Oldham, Thomas David Coulthard Ross, M.B., Ch.B., aged 63.

St. John.—Recently, Frederic Agar St. John, M.D., F.R.C.S.Ed., of Manchester.

Solly.—On Feb. 19, 1948, at 13, Howell Road, Exeter, Reginald Vaughan Solly, M.D., F.R.C.S., aged 83.

Swan.—At Wine Street, Sligo, Eire, Harold John Swan, M.B., B.Ch.

Teare.—On Jan. 26, 1948, at Liverpool, John Teare, M.D., aged 82.

Wales.—On Feb. 16, 1948, at The Marjorie, Billington, Blackburn, Lancs., Herbert Wales, M.B., B.Ch., aged 70.

Walker.—On Feb. 18, 1948, at Fairfield House, Bradford-on-Avon, Henry Secker Walker, M.Sc., F.R.C.S., aged 84.

Wilson.—On Feb. 9, 1948, at Kingston, Nairn, George Wilson, M.B., C.M.

Wilson-Smith.—William Arthur Wilson-Smith, M.D.Ed., of Whiteparish, near Salisbury, Wilts.

Winckworth.—On Feb. 20, 1948, at a nursing home, Wadham Bruce Winckworth, M.R.C.S., L.R.C.P., of 18, Mount Street, Taunton, Somerset, aged 79.

Winfield.—Recently, Arthur Winfield, M.R.C.S., L.R.C.P., of New Ferry, Birkenhead.

Wynn-Williams.—On Feb. 6, 1948, at "Cleveden," Middlesbrough, William Wynn-Williams, M.R.C.S., L.R.C.P.

No. 6

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Feb. 7

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	56	6	20	2	2	94	8	19	10	2
Deaths		—	—				4	1		
Diphtheria	223	19	55	7	8	233	23	68	20	7
Deaths	4	2	2	—	1	4	1	—	1	—
Dysentery	160	28	39	1	—	49	6	26	4	—
Deaths				1	—					—
Encephalitis lethargica, acute	—	—	2	—	—	1	—	—	—	—
Deaths		—					—			
Erysipelas			45	11	1			45	6	2
Deaths		—					—			
Infective enteritis or diarrhoea under 2 years				14					27	
Deaths	38	3	9	5	1	106	13	20	2	1
Measles*	5,596	511	831	121	17	17,258	583	326	66	740
Deaths†			—	2	—	20	1	—	—	2
Ophthalmia neonatorum	63	5	11	—	—	59	3	17	—	1
Deaths										
Paratyphoid fever	6	—	—	—	—	3	—	—	—	1 (B)
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal	1,012	64	14	18	7	1,683	111	13	35	12
Deaths (from influenza)‡	25	1	3	—	—	211	30	12	4	7
Pneumonia, primary			279	31				285	49	
Deaths	273	64		21	11		148			14
Polio-encephalitis, acute	6	3				1	—			
Deaths							—			
Poliomyelitis, acute	25	1	6	—	1	10	2	1	7	—
Deaths§	3	1					—			
Puerperal fever		—	7		—		1	6		—
Deaths										
Puerperal pyrexia‖	118	14	12	2	—	115	11	18	—	—
Deaths		—					—			
Relapsing fever	—	—			—	—	—			—
Deaths										
Scarlet fever	1,943	110	322	28	42	1,130	68	244	21	30
Deaths†			—	—	—	1	—	—	—	1
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	12	2	—	8	1	7	—	—	6	—
Deaths	2	—	—	—	—	—	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	2,572	172	45	36	10	1,842	161	384	66	30
Deaths	11	—	—	1	—	16	4	2	7	—
Deaths (0–1 year)	399	53	60	32	22	672	79	79	44	14
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	5,191	844	685	224	148	8,308	1515	834	408	20
Annual death rate (per 1,000 persons living)			13·8	14·0		-		17·3		
Live births	7,999	1320	954	418	280	9,547	1534	1191	361	33
Annual rate per 1,000 persons living			19·3	26·1		-		24·0		
Stillbirths	240	21	25			308	38	39		
Rate per 1,000 total births (including stillborn)			26					32		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Tuberculosis in the British Zone

Recent reports from the Control Commission for Germany suggest that the present incidence of deaths from tuberculosis is stationary. In September, 1946, the German public health authorities changed the method of notifying cases of tuberculosis (except in Hamburg, where the change was made in June, 1947) with the result that cases which were neither active nor infectious were included in the returns. This resulted in the incidence of cases being recorded as many times the death rate, and the Medical Research Council sent a team to the British Zone to investigate this disparity. Investigation confirmed that the rise in the reported incidence was almost entirely due to the different methods of notification. We reproduce in the following table some figures supplied by the Control Commission showing the apparently increased incidence of cases reported after the change in the method of notification.

	1946				1947		
	1st Quarter	2nd Quarter	3rd Quarter	Whole Year	1st Quarter	2nd Quarter	3rd Quarter
Lung and larynx:							
Cases reported ..	9,317	11,031	11,041	46,651	17,803	22,822	23,903
Deaths	3,478	3,364	2,380	11,985	3,489	3,287	2,594
Other cases:							
Cases reported ..	1,498	1,858	2,230	8,433	2,590	3,097	2,874
Deaths	410	481	386	1,688	444	574	434

Discussion of Table

In *England and Wales* increases were recorded in the notifications of measles 1,363, acute pneumonia 162, diphtheria 23, and scarlet fever 17, while a decrease was recorded in the incidence of whooping-cough 153 and of dysentery 48.

The largest rises in the notifications of measles were those of London 171, Lancashire 146, Kent 127, and Lincolnshire 111. The only variation of any size in the incidence of acute pneumonia was an increase of 41 in Lancashire. Only small fluctuations occurred in the local incidence of scarlet fever, except for a decrease of 43 in Warwickshire and an increase of 54 in Lancashire.

The chief feature of the returns of diphtheria was an increase in Lancashire of 13. The fall in the incidence of whooping-cough, which has been at the highest level since notification began, was mainly due to the experience of two counties, Yorkshire West Riding and Lincolnshire, where the notifications were 105 and 47 fewer than in the preceding week.

A fresh outbreak of dysentery involving 18 persons was reported from Bournemouth C.B., and the notifications in London rose from 15 to 28. In Lancashire the notifications of dysentery fell from 103 to 43 and in Middlesex from 21 to 5.

In *Scotland* decreases were recorded in the incidence of scarlet fever 33 and measles 54, while increases were reported for acute primary pneumonia 19, whooping-cough 13, and dysentery 10. The largest returns of dysentery were Edinburgh 18 and Aberdeen 11.

In *Eire* the notifications of measles increased by 33 while a decrease occurred in the incidence of whooping-cough 29 and scarlet fever 8. Only 14 cases of diarrhoea and enteritis were notified during the week, the lowest level for two years. The increase in the notifications of measles was mainly due to an outbreak of 38 cases in Mayo, Belmullet R.D.

In *Northern Ireland* the largest fluctuations in the trends of infectious diseases were an increase of 6 in diphtheria and a decrease of 6 in scarlet fever.

Week Ending February 14

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,925, whooping-cough 2,576, diphtheria 211, measles 6,179, acute pneumonia 871, cerebrospinal fever 54, acute poliomyelitis 28, dysentery 164, paratyphoid 2, and typhoid 7.

The Central Office of Information has issued a useful pamphlet entitled *International Economic Organizations* (H.M.S.O., 1s.). Organizations such as Unrra, W.H.O., and F.A.O. are listed and notes about their constitution, purpose, and activities appended. A useful table at the end shows how many delegates each country elects to the various organizations. Those interested in the post-war international machinery of relief will find this a useful publication.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Pathology of Lumbago

Q.—*What is the pathology of lumbago? Is it always due to dislocation of the lowest intervertebral disk? I know that sciatica is in many cases due to that cause, but it is not the only cause. I know of a case treated for sciatica which was found later to be due to osteomyelitis of the upper part of the ilium.*

A.—It is now accepted fairly widely that acute lumbago, especially if recurrent, is caused in a high proportion of cases by backward bulging or prolapse of a lumbar intervertebral disk. The disk affected is usually that between L.4 and L.5 or that between L.5 and S.1, though less commonly the disk at other levels may be responsible. When lumbago is present without sciatica it is probable that the bulging of the disk is so placed, or is of such slight degree, that the root components of the sciatic nerve escape pressure or stretching. This conception of the pathology is supported by the clinical observation that acute lumbago is very commonly followed after an interval by sciatica, with the usual signs of nerve-root irritation, and by the fact that a prolapsed disk has often been found at operation in cases of recurrent lumbago.

While the majority of cases of lumbago can probably be accounted for in this manner it is important to realize that the symptoms of lumbago and of sciatica may be due to a variety of other conditions, including spondylolisthesis, intraspinal tumour, pelvic tumour, ankylosing spondylitis, and tuberculous or pyogenic infection of the spine or sacro-iliac region. It is therefore clearly essential that a full orthopaedic examination, including skiagrams of the spine and pelvis, be undertaken before a diagnosis of prolapsed intervertebral disk is made. A useful clinical point to remember is that a history of *recurrent* attacks of pain, with intervals of relief or freedom from symptoms, is suggestive of a disk protrusion; symptoms which are continuous and of progressively increasing intensity suggest that some more serious pathological process may be present.

Choice of Sulphonamides

Q.—*In the Medical Research Council's booklet on the use of sulphonamides it is stated that these drugs have no specific action but their efficiency varies with their potency. If this is the case, surely the simplest scheme would be to use only the latest and best—i.e., sulphamezathine, a drug from the use of which anuria has never been recorded and which can be given six-hourly?*

A.—The choice of a sulphonamide for the treatment of any particular condition may be influenced by several considerations: the duration of effect of a single dose, freedom from toxicity, and liability to deposition in the urinary tract vary in relative importance from case to case. Apart from this, and despite the statement quoted, clinical experience suggests that the order of activity of different sulphonamides against individual species of bacteria is not always the same. To take the important example of gonorrhoea, it is explicitly stated in the publication quoted (M.R.C. War Memo No. 10, "The Medical Use of the Sulphonamides," 2nd ed., 1945) that sulphadimethylpyrimidine (sulphamezathine) has been found inferior to sulphathiazole or sulphadiazine in treating this disease, although, for other reasons, its use is recommended for treating urinary tract infections in general. Other observations on the superior effect of a particular drug in the treatment of a particular infection are numerous and doubtless often well founded. It is not suggested that these differences are specific—they are simply quantitative. It is a common and useful practice to test the sensitivity of the patient's own organism *in vitro* to several different sulphonamides before beginning treatment, in order to determine which is likely to be most effective.

Pessaries for Prolapse

Q.—*Can you advise me on (a) the choice of pessary in prolapse, (b) the method of estimating the size required, (c) the mode of introduction?*

A.—The choice of pessary depends to some extent on the type of prolapse which is present. Rigid vulcanite appliances, although cleaner, are satisfactory only for minor degrees of prolapse associated with a strong perineum, and the ordinary rubber-ring pessary is probably the best for general use. The size is assessed according to the length of the vagina and its width at both upper and lower ends. The pessary must be so large that it will not fall through the introitus, yet it must be small enough to fit well into the upper vagina without undue tension and not compress the urethra. With the pessary in place the distance between its lower edge and the external urethral meatus should be at least one fingerbreadth. Several sizes of pessary may need to be tried before the best fit is obtained, but with increasing experience it is usually possible to get very near to the correct size at the first attempt. After sterilizing the pessary by boiling, it is gripped between the thumb and second finger to decrease its width and is inserted with the widest diameter in the long axis of the vulva, avoiding pressure on the sensitive vestibule and urethra. The first finger is used to steady the pessary. When the ring is well within the vagina it is released, whereupon it naturally makes a right-angled turn to lie across the vagina. If necessary it is then manipulated to encircle the cervix. If the new "sorbo"-rubber pessary is used there is no difficulty in compressing it to such an extent that it enters the vagina with a minimum of discomfort. The older watchspring pessaries are more resistant, although boiling increases their suppleness. For these there is, or used to be, on the market an instrument (little used) which grips the pessary for insertion and can then be withdrawn, leaving the pessary to expand in the vagina.

If the perineum is so deficient that it will not support a pessary within the vagina some sort of stem pessary (supported by straps attached to a waistband) may be required. There are many kinds; none is completely satisfactory, and the Napier rubber cup and stem is probably as good as any. The cup, which is saucer-shaped, is, like ring pessaries, sized according to its overall diameter. Before ordering such a pessary a ring pessary can be used to estimate the size required. However, it is a good plan to choose a comparatively small cup, because it is not very dependent on its size for its stability, and if it is small the patient can easily learn to insert and remove it herself. If she can do this then she should be told to remove it each night on going to bed and to wear it only during the day.

Vitamin D in Virus Diseases

Q.—*Some years ago I found that vitamin D, 50,000 units a day in divided doses, turned off catarrh of mucous membranes in 30 minutes and was an effective remedy for colds. A small dose of 4,000 units has to be taken at first to eliminate toxic reactions. I have read of certain virus complaints being improved with adrenaline and calcium. What experiments have been done with regard to vitamin D in virus diseases such as poliomyelitis?*

A.—There have been isolated reports stating that vitamin D is of value in the treatment of colds, but they are based on clinical impressions and not on controlled observations. Vitamin A has often been given as well. So far as the writer knows, no work has been done on the use of vitamin D in poliomyelitis. In the present state of our knowledge there is no rationale for its use in virus infections.

Aseptic Inoculation Technique

Q.—*What is the most expeditious aseptic technique for inoculating large numbers of men against cholera, assuming that no facilities for sterilization are available?*

A.—It is now generally recognized that no inoculation technique is entitled to be described as aseptic unless a separate needle is used for each injection. Thus the only possible answer to the question is that there should be as many needles as men, previously sterilized by dry heat. A suitable metal container for large numbers of needles used in this way is illustrated in Medical Research Council War Memorandum No. 15 ("The Sterilization, Use, and Care of Syringes"). The only alternative is to provide the means for boiling a limited number of needles for repeated re-use; surely a sterilizer, some distilled water, and a spirit-lamp or "meta" fuel could be taken even to the most primitive and outlandish place?

Thorium X for Treatment of Baldness

Q.—*I should be grateful for details of the treatment of baldness by thorium X. What are the risks and dangers, if any?*

A.—It has been a fashion to treat alopecia with thorium X, but there is little evidence of its value except on a psychological plane. An alcoholic solution (1,500 electrostatic units per ml.) is painted on the scalp at monthly intervals. It should not be continued beyond twenty or so applications. Telangiectasis and atrophy have been observed where treatments have been continued over several years.

Heparin and Dicoumarol in Thrombosis

Q.—*(a) What is the correct treatment for a patient with severe thrombophlebitis in the leg and thigh who is treated at home? Can heparin be used in general practice with safety?*

(b) Can you suggest some scheme for the treatment of femoral thrombosis by means of heparin and dicoumarol? What is the appropriate dosage, and for how long should the treatment be continued? How is the dosage controlled by the prothrombin index?

A.—(*a*) If the phlebitis is superficial the treatment should be ambulatory, the legs being strapped from above the thrombus down to the toes after sponge-rubber or adhesive-felt strips are placed over the inflamed veins. Heparin and dicoumarol treatment is as follows: On the first two days of the illness heparin injections should be given thus: 12,500 units at 8 a.m., 10,000 at 1 p.m., 10,000 at 6 p.m., and 12,500 at 11 p.m. Dicoumarol 250 mg. should be given each day for the first three days and 200 mg. on the 10th, 11th, 12th, 20th, 21st, and 22nd days of the illness. Prothrombin times should be slightly more than doubled, and can be taken as often as possible after the fifth day. The doses mentioned are increased or diminished according to the prothrombin time. If the phlebitis is deep the patient is kept in bed for 7 to 14 days, the lumbar ganglia are blocked with "novocain" at the onset, heparin and dicoumarol therapy is given as for the superficial type, and when the patient gets up supporting bandages are used to control the oedema.

(*b*) Treatment by means of heparin and dicoumarol should be as in (*a*). Lumbar sympathetic block should never be omitted at the onset of femoral thrombosis.

Castration or Stilboestrol for Prostatic Cancer

Q.—*It is well known that oestrogens (especially stilboestrol) are effective in some cases of carcinoma of the prostate. The exact mode of action is so far unknown, but the theory is that the oestrogens inhibit secretion of anterior pituitary gonadotrophin, thus decreasing the secretion of testosterone by the interstitial cells of the testes; this disturbs the metabolism of normal prostatic tissue but also of the malignant tissue, and improvement occurs. Now castration produces marked prostatic atrophy with degeneration in the glandular cells by stopping the supply of testicular androgen. In this case the metabolism of the prostatic tissue is even more violently upset than by the administration of oestrogens. Would castration, therefore, not be a more potent weapon to attack prostatic cancer than oestrogen therapy?*

A.—Castration, or surgical castration, is effective in retarding prostatic carcinoma and has been used for many years. Oestrogen therapy, as the questioner points out, is a form of effective physiological castration which, however, does not seem to help relapses after surgical castration. Unfortunately, most patients tend to relapse after a period, whether the castration is surgical or physiological. It has been postulated that the adrenal cortex continues to secrete androgens, or secretes them in greater quantities than previously, and that this is the explanation of the relapses. Although the former supposition has proved correct, the latter does not appear to be true because such cases have had bilateral adrenalectomy performed without

arresting the progress of the prostatic carcinoma. Therefore there seem to be two factors—hormone and intrinsic neoplastic stimulus—the nature and control of which still require elucidation.

Surveillance after Treatment of Syphilis

Q.—*My queries are, first, does giving "ametox" and arsenic mixed in the one injection inactivate the arsenic? I have always thought it did, but have heard this contested. Secondly, what is the latest advice about the duration of surveillance after penicillin therapy and the advisability of any further treatment?*

A.—Ametox does not inactivate arsenic, if by "inactivate" is meant neutralize its therapeutic properties. Few syphilologists nowadays regard ametox as of any value in reducing the toxic effects of arsphenamines.

After penicillin therapy of *early* syphilis it is usual to test the patient's blood serum monthly for six months and thereafter twice at three months' and twice at six months' intervals, making a total surveillance period of two years. The cerebrospinal fluid should be examined six and 24 months after completion of treatment, and, of course, a careful clinical examination should be carried out each time the blood is tested.

Calcium by Mouth

Q.—*In what form is calcium best absorbed when given by mouth?*

A.—Calcium is best absorbed when given by mouth as calcium lactate, or as a mixture of calcium lactate and sodium lactate. This statement is based on the results recorded by Wokes (*J. Pharmacol.*, 1931, **43**, 531).

Phosphaturia and Oxaluria

Q.—*Are phosphaturia and oxaluria the same condition? What relation, if any, have they to acne rosacea, fibrositis, insomnia, cyclic insanity, or other nervous disorders? What is the treatment of frequent micturition in these conditions? Are bladder sedatives, such as ol. santali, ol. cubeba, etc., advisable in addition to standard treatment? Can you give details of diet for treatment of oxaluria? The textbooks are rather contradictory.*

A.—Phosphaturia and oxaluria are separate and unrelated conditions: in the first there is a precipitation of phosphates in the urine due to a change in reaction to the alkaline side, and often to an excessive excretion of phosphate; in the latter undue quantities of oxalate are present, and crystals of the calcium salt are deposited. There is no good reason to suppose that either of these urinary anomalies is in any way related to the conditions mentioned. Increased frequency of micturition can seldom be attributed direct to oxaluria or phosphaturia; more often both have a common cause. Phosphaturia frequently accompanies *Proteus* infections of the urinary tract. Calculus may declare itself by frequent micturition combined with either oxaluria or phosphaturia. Rational management requires consideration of all these possibilities. The indications for treatment of oxaluria are to facilitate the solution of oxalates by increasing the acidity of the urine, and to decrease the intake, and thus the excretion, of oxalate. Rhubarb, spinach, gooseberries, and carrots are rich in oxalates.

Absence of Orgasm

Q.—*A normal middle-class housewife aged 39, with one child, has been married 10 years but has hitherto failed to achieve an orgasm during sexual intercourse. The preliminary part of coition is enjoyable, but she feels frustrated at the end of the act owing to lack of success. Titillation of the clitoris produces sexual excitement, but the vagina seems to be entirely devoid of sensation. The insensitiveness of the vagina is confirmed by clinical examination. What is the cause of this lack of sensation, and what treatment do you suggest?*

A.—Whereas men obtain pleasure and satisfaction from sexual relations spontaneously, women for the most part have to learn to do so—and the teacher is usually the husband. Mainly as the result of ignorance and faulty education, a large percentage of women never experience orgasm. So far as the genital organs are concerned, the areas which are most responsive to erotic stimulation are the clitoris and the vagina, and as a rule sexual pleasure is more easily aroused and developed in the former, although it is less intense. Women vary a good deal, but it is common to find that in the early days of marriage pleasure and orgasm are dependent mostly on stimulation of the clitoris, whereas with increasing experience the more satisfying vaginal orgasm is developed. The two orgasms are said to differ in type and degree. The history of this case suggests that the woman's education in sex has never developed beyond the early stages, and it is most unlikely that there is any local organic cause for it. Sensitivity of the vagina to touch and pain is usually low. One possibility, however, which should be excluded is an overstretched and gaping vagina dating from childbirth. It may be difficult to change matters now the marriage has gone on so long, but if it is impossible to arouse a vaginal orgasm, more satisfactory stimulation of the clitoris might be achieved by varying the posture during coitus. This couple might benefit by reading *Ideal Marriage*, by Th. H. Van de Velde, 1944, London, in which these matters are discussed in detail.

NOTES AND COMMENTS

Enuresis in Young Adults.—Dr. ROBERT BAUER (Cardiff) writes: With reference to Dr. J. K. Pameijer's letter (Jan. 31, p. 238) the epidural injection of "novocain" for enuresis (nocturnal and diurnal), but in a concentration of 0.25% and dosage of 10-30 ml (and more), has been used in Vienna for several decades. One precaution seems indicated—to ascertain the absence of epilepsy. Years ago in Vienna I treated a patient of about 45 years with no other neurological signs except urinary incontinence, and observed after the third injection a fit of grand mal immediately after the injection. There was, however, no further attack though I continued to keep the patient under observation for another 12 months. No further injections were given and the incontinence was much improved.

Lower Cervical Spondylarthrosis.—Dr. J. B. BENNETT (Bath) writes: In answer to the question on osteoarthritis of the cervical spine ("Any Questions?" Feb. 14, p. 330) mention was not made of a common aetiological factor. In my experience osteoarthritis confined to the cervical vertebrae is nearly always associated with trauma. In most cases the patient has forgotten the incident, which is commonly a throw from a horse or similar accident involving the head and neck. The injury results in such a slight degree of concussion that an *x* ray was not thought essential at the time, but the patient recalls a stiff neck which persisted for some time. Simple manual extension of the neck with the patient in a sitting position, and accompanied by gentle manipulation of the neck, usually affords at least temporary relief.

Laurel Berries.—Lieut.-Col. H. S. ANDERSON, R.A.M.C.(ret.), writes from Parkstone, Dorset: The answer under the above heading ("Any Questions?" Feb. 14, p. 330) recalled a non-fatal poisoning case of long ago. About "Laurel"—viz., the spurge- or wood-laurel, *Daphne laureola*—George Nicholson, sometime curator at Kew, wrote in his *Encyclopaedia of Horticulture*: "The berry of this species is very poisonous." I suggest the safe rule of regarding the berries of *Rosaceae* as harmless and those of *Thymelaceae* as dangerous. The true laurel belongs to the latter natural order, and *Prunus laurocerasus* to the former.

Disclaimer.—Lord HORDER (London, W.1) writes: An article entitled "The Doctor," accompanied by a photograph of myself, appeared in the Feb. 8 issue of the *Leader*. I shall be grateful if you will allow me to say, through your columns, that the article appeared without my knowledge or concurrence. On being approached the Hulton Press declines to state this fact in the journal where the article was printed.

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY FEBRUARY 28 1948

British Medical Association

PROCEEDINGS OF COUNCIL

Wednesday, Feb. 18, 1948

ANNOUNCEMENT OF PLEBISCITE RESULT

A special meeting of the Council of the Association was held on Feb. 18. Dr. H. Guy Dain was in the chair. As members assembled copies of the plebiscite return were distributed among them. The figures were published in the *Journal* of Feb. 21 (p. 352).

It was pointed out that over 17,000 general practitioners had answered that they were not in favour of accepting service under the Act in its present form. This figure had to be taken in relation to the 13,000 which the Council had decided to be the minimum upon which it should act. The analysis gave some astonishing results. Some had asked whether the consultants were going to part company from the general practitioners, but in fact the consultants had voted "No" even more strongly than their general-practitioner colleagues. Of consultants not holding whole-time salaried posts only 269 had expressed approval of the Act, against 4,087 who had expressed disapproval. Of members of the whole-time public health service only 316 said "Yes" and 1,928 said "No." Even more remarkable, members of the whole-time Government service had expressed disapproval in the proportion of five to one. Even among whole-time research workers the majority disapproving was two to one. In no one of the 18 groups was there a majority for approval. Only 16% of those circularized did not reply. The poll was thus 84%—75% of the "universe" replied "No," and 9% "Yes." Of those actually voting 90% replied "No," and 10% "Yes." It was a 9 to 1 vote against approval. (Applause.)

The voting papers had been destroyed the previous afternoon by the firm which undertook the destruction of State papers.

Dr. J. A. Pridham said that the Council was indebted to the Chairman, the Secretary, the Editor and other members of the staff for the work they had done in giving expression to the Association's policy.

The Chairman said that what he himself had done was no more than had been done by several other members of the Council.

The Secretary said that the whole staff, from top to bottom, had worked extremely hard in carrying out the Association's policy. The work of the Editor in the leader columns of the *Journal* had been a tremendous help. Wherever he had gone he had heard about the inspiration of those leading articles. The Assistant Secretaries had travelled as never before. Incidentally the experience had justified the form of organization recently adopted whereby an Assistant Secretary worked a particular "parish" but was at Headquarters sufficiently to acquire an intimate knowledge of central affairs. Exceptional service had been put in by the Public Relations Officer, whose staff, with the authority of the Public Relations Committee, had been enlarged. The clerical staff had done wonders, not only in regard to the plebiscite but to the dispatching of the successive publications which had gone out to all members of the profession. The Secretary said that the official staff had done no more than their duty, adding that this was no time for bouquets—there were stern tasks ahead. But the clerical staff which had laboured mightily, deserved an expression of the Council's appreciation.

On the motion of the Chairman, a special vote of thanks was accorded to the clerical staff for the enthusiastic and untiring way in which they had worked during this period.

The Debate in Parliament

The Council proceeded to discuss the report of the debate in the House of Commons on Feb. 9, which they had before them. The Chairman said he imagined that the debate was initiated by the Minister with some idea of influencing the plebiscite. Well, the figures of the plebiscite were before them. The Minister had not said anything which had hurt them; indeed, he had been more helpful than perhaps any other individual in solidifying medical opinion against the Act.

Dr. F. Gray said that, on reading the *Hansard* report there was one conclusion, of some value for the future, which was inescapable. It was evident that the profession could not rely on any political party. The fight was their own, and they had to convince the public of their case. It had been very disturbing to him that Mr. Bevan should have almost forced them into party politics; but the Conservative Party had checked his attempt, and it was a source of strength to the profession that it should have happened so. It had made their position *vis-à-vis* the public very much better. They had no party. This was the fight of a profession.

The Chairman remarked that he had been saying for some time at the various meetings he had addressed that they were not interested in party politics.

The Special Representative Meeting

On the motion of the Chairman it was agreed that a Special Representative Meeting should be called for March 17. After discussion it was unanimously decided to put forward to that meeting the following resolution:

> That the Representative Body, reaffirming the whole-hearted desire of the medical profession for a comprehensive health service available to everyone, urges that in the public interest such changes should be made in the Acts of 1946 and 1947[1] as are necessary to maintain the integrity of medicine and to prevent doctors being turned into State servants, with harmful consequences to patient and doctor alike. The Representative Body therefore expresses the hope that the Government will make it possible for the profession to co-operate by making such changes, and states its view that it is not in the best interests of the public or of medicine for members of the profession to enter the Service until such changes are made

[1] The Act of 1947 is the Scottish Act.

The Next Step

The Chairman said that he thought the figures of the plebiscite should be left to make their impression on the public mind and on the mind of the Government. At some time or other the Government must decide whether it wanted a service on July 5 or not. On the figures of the plebiscite it was not going to get that service in its present form, and it was for the Government to say what it would do. When the opportunity was offered to them and the Government nominated someone to talk with them on its behalf, they should say that they were concerned first of all to ensure the establishment of a very big principle. The profession wanted to co-operate in a comprehensive service. Given such changes as would preserve essential freedoms, their co-operation would not be lacking.

Emergency Guarantee Fund

The Council went on to consider future steps, including the position of the Emergency Guarantee Fund. Guarantees given to this Fund some two years ago expire on March 1.

The Chairman said that the Council could advise the Trustees to call in the guarantees at once without waiting for the Special Representative Meeting. On the other hand, it could advise the Trustees not to call in the guarantees and recommend the Special Representative Meeting to authorize the immediate establishment of a new fund, inviting contributions forthwith. The Executive Committee favoured the latter course. It was clear that there was now an even greater spirit of unity and solidity inside the ranks of the profession. There was no need to rely on guarantees given some two years ago when the position was still obscure. Rather would they see the establishment of a new fund open to all, including the thousands who had given guarantees and those who had not done so. We were in a new situation with a new strength.

The Council decided to recommend the Trustees not to call in the old guarantees and to recommend the Special Representative Meeting to authorize the establishment of a new fund to be called the "Independence Fund" to provide additional sinews of war in any conflict which might lie ahead, including financial aid to practitioners who might suffer loss as the result of their loyalty to the profession as a whole. The National Insurance Defence Trust would consider its contribution the next day.

Other N.H.S. Business

It was reported that the Ministry of Health had communicated with the Negotiating Committee, asking for its views on draft general medical and pharmaceutical service regulations, on proposals for remuneration for maternity service and the constitution and functions of local obstetric committees, and on other administrative details. No comment was made on these proposals at the present time.

The Council agreed to a recommendation that the Marylebone Division be invited to set up a London Consultants Liaison Committee to maintain liaison between the consultant and specialist staffs of the London hospitals and with the B.M.A. in order to unify and consolidate consultant and specialist opinion on the National Health Service Act within the policy of the profession as a whole.

The Council endorsed the action of its Legal Actions Committee in issuing a writ for libel against the *Daily Mirror* for a statement which appeared to impugn the good faith of the Association concerning the secrecy of the voting in the plebiscite. Correspondence had also taken place between the Association's solicitors and the writers of a letter appearing in certain newspapers and containing, *inter alia*, a similar accusation. In this second case the writ had not yet been issued, and the Council authorized the solicitors to proceed unless the allegations were withdrawn.

It was announced to the Council that the *Evening Standard* had disregarded the conditions of release of the B.M.A.'s statement of the result of the plebiscite. The statement had been issued to the entire Press well in advance of the time considered proper for publication in order to afford an opportunity to the journals for considered comment—a procedure well recognized in journalism and widely adopted. The *Evening Standard*, however, had got in front of its contemporaries by breaking the embargo on the excuse that the embargo was imposed for the Association's convenience. The Council deplored this breach of journalistic manners, but felt that it was a matter for action by the journalistic profession and not by the Association.

The Medical Curriculum

Dr. R. G. Gordon introduced the report of the special Medical Curriculum Committee. This report was in the form of a volume under the title of "The Training of a Doctor," and it was expected that it would be published in the middle of May. He said that if he might speak of it objectively, although he himself was a member of the Committee, it was a very fine and important piece of work. Its production would have been quite impossible had it not been for the extreme erudition, diligence, and devotion of its chairman, Prof. Henry Cohen, to whom, he hoped, the Council would send a special letter of thanks. The Committee had worked extremely hard, and the chairman and several members had presented memoranda, a list of which would be given in the appendix. He also acknowledged the outstanding services of Dr. Agnes Kelynack as secretary of the Committee.

The Chairman said that, as a member of the Committee who had attended more or less regularly, he had been impressed by the whole atmosphere in which the problem of medical education had been discussed. The programme which Prof. Cohen laid down and the suggestions for modifications in the curriculum were dealt with in a masterly manner, and he was sure that the report was without parallel on its subject. It did not set out, as General Medical Council reports had done, the bare curriculum, but it went thoroughly into the attitude of teachers towards the subjects they taught. It would furnish the standard by which medical education would be measured in a year or two's time.

Dr. J. G. M. Hamilton, speaking as one who had had nothing to do with this monumental work, but had lived in the atmosphere of medical teaching for the past fifteen years, said that they were all aware of the present ferment in medical education, the self-criticism, and the deep analysis of problems in relation to both undergraduate and postgraduate education. The report before them, he felt satisfied, would offer a most important foundation for further improvements in the direction, and he hoped the content, of medical training. He desired to thank the Committee for a most valuable piece of work.

Dr. G. MacFeat suggested that the Public Relations Department might well make some statement on the work which the B.M.A. had done in medical education and medical services. It would correct the popular idea that they were a political body. Dr. W. V. Howells asked whether there was any hope that this would be followed by a document on postgraduate education. Dr. Gordon replied that there was a Postgraduate Committee of the Science Committee, and if the Council wished to do anything like that the initiative could be taken by that subcommittee. Dr. Gordon added that a very useful member of the Curriculum Committee had been the representative of the British Medical Students' Association, Miss Jocelyn Ransom, and her deputy, Mr. T. H. Lawson.

The report was approved for publication as the report of a Special Committee of the Association, and the Chairman was asked to send an appropriate letter to Prof. Henry Cohen.

The Working Party Report on Nursing

Dr. Mary Esslemont, chairman of the Committee on Nursing, said that her Committee had been studying the report of the Working Party on the Recruitment and Training of Nurses, and thought it desirable that certain comments on the Working Party's conclusions, as distinct from the constructive proposals of the Committee on an alternative scheme for the training of nurses, should be submitted to the Ministry with the least possible delay. She therefore brought forward a statement in which comments were made on the main conclusions of the Working Party.

The only comment to which exception was taken in the Council concerned the discipline of nurses in training. The proposed comment of the Committee was that while the hospital

might give parental advice calculated to assist the student nurse in maintaining a good state of health it should allow the utmost freedom during off-duty hours "and should not regard itself as responsible for the moral welfare of the trainee."

Dr. R. W. Cockshut and Mr. Dickson Wright took exception to this last phrase. On the other side Mr. A. S. Gough and Dr. S. Wand argued that the nurse should have the same freedom as the girl student in medicine or in any other profession. The younger generation must be trusted, and too much restraint would encourage revolt. Dr. Janet Aitken agreed, and said that the more these young women were trusted the more they would prove trustworthy. Dr. J. G. Thwaites agreed with Dr. Cockshut and Mr. Dickson Wright. To say that the hospital was responsible for the moral welfare of its student nurses did not mean their seclusion, but if a nurse was in hospital the hospital authorities were *in loco parentis*. Dr. G. MacFeat said that the modern girl would not accept an irksome discipline, but the right type of supervisor nevertheless would get the desired result.

Eventually the following amended comment was agreed to on the proposal of Mr. Lawrence Abel :

The hospital should give parental advice calculated to assist the student nurse in maintaining a good state of health, and it should allow the utmost freedom during off-duty hours compatible with the moral welfare of the trainee. It should encourage community life by providing such comforts and amenities as will make it unnecessary for the trainee to seek all her recreation outside.

With this amendment the comments were approved.

On the motion of Dr. O. C. Carter, chairman of the Journal Committee, it was agreed that the Association, provided difficulties could be overcome, should undertake the publication of the programme and the proceedings of the International Congress of Otolaryngology to be held in England in May, 1949.

The Council sent a message of good wishes to the Chairman of Representative Body, Dr. J. B. Miller, who is recovering after an operation.

ONE HUNDRED AND SIXTEENTH ANNUAL MEETING, CAMBRIDGE, JUNE 25 TO JULY 2, 1948

President-Elect : SIR LIONEL WHITBY, C.V.O., *M.C.*, M.A., M.D., F.R.C.P., Regius Professor of Physic, University of Cambridge ; Master of Downing College, Cambridge

PROVISIONAL PROGRAMME

The Annual Representative Meeting will begin at the Large Examination Hall, Bene't Street, on Friday, June 25, at 9.30 a.m., and be continued on the following three weekdays.

The statutory Annual General Meeting will be held in the Large Examination Hall at 12.30 p.m. on Tuesday, June 29 ; the adjourned Annual General Meeting and President's Address will be held in the Senate House at 8 p.m. on the same day, followed by the President's Reception in the Old Schools.

The Annual Dinner of the Association will take place on Thursday, July 1, at the Dorothy Café at 7 p.m., followed by a Dance.

The Popular Lecture will be given in the Large Examination Hall at 8 p.m. on Friday, July 2.

The Official Religious Service will be held in the Church of St. Mary the Great at 3 p.m., and Catholic Mass will be held in the Roman Catholic Church, Hills Road, on the morning of Thursday, July 1.

The Reception Room for registration, on the platform of the Large Hall in the Guildhall, will be opened on Monday, June 28, at 2 p.m. The Ladies' Club will be at the English-speaking Union, Trinity Street.

The Annual Exhibition of Surgical Appliances, Foods, Drugs, and Books will be held in the Large Hall, Guildhall. The official opening will take place on Tuesday, June 29, at 9 a.m. ; it will remain open on June 30 and July 1 and 2 from 9 a.m. to 6 p.m.

The Pathological Museum in the Department of Pathology, Tennis Court Road, will be opened on Tuesday, June 29, at 11 a.m.

It is hoped to hold a Civic Reception in the Old Schools in the evening of Wednesday, June 30.

Afternoon Garden Parties have been arranged for Wednesday, June 30, by kind invitation of Trinity College, and on Thursday, July 1, by kind invitation of the Lord-Lieutenant of Cambridgeshire.

The Fellows' Gardens of Christ's, King's, Emmanuel, and Pembroke Colleges will be open to members of the B.M.A. on certain evenings.

A concert is being arranged in the Arts Theatre on Sunday evening, June 27, for the Representatives and their wives.

It is hoped to hold the usual Golf and Chess Competitions. Other arrangements for the entertainment of visitors include visits to Ely Cathedral, Hinchingbrooke, Papworth, conducted tours of the Colleges and Museums, and river trips.

The Vice-Chancellor has kindly offered to hold a Reception in Christ's College on Tuesday, June 29, following the Official Religious Service.

There will be no Graduation Ceremony.

HOTEL, COLLEGE, AND LODGING ACCOMMODATION

Accommodation in Cambridge in June will be extremely limited ; practically none is available in any of the hotels, owing to Newmarket race meetings, school celebrations, and an abnormal influx of Ministry personnel.

Accommodation for those wishing to visit Cambridge during the Annual Meeting is, therefore, confined to Colleges and Lodgings. Thanks to the extremely generous response by the College authorities extensive accommodation has been offered, but it is confined, with the exception of Newnham and Girton, to men only. Accommodation for men and women is confined to a proportion of the Lodgings.

In order to reserve accommodation it is necessary to book it in advance. Arrangements are being made to retain any available accommodation, and full particulars will be published shortly in the *Supplement*.

It is hoped to provide private hospitality for official and overseas visitors.

SCIENTIFIC SECTIONS

The clinical and scientific work will be divided among nineteen Sections, meeting on Wednesday, Thursday, and Friday, June 30 and July 1 and 2. The Sections will be held in various University Departments and at Addenbrooke's Hospital.

Below is a list of the names of the Sections and the officers appointed to each, together with provisional programmes.

The following Sections will meet on Three Days:

MEDICINE

President: L. B. COLE, M.D., F.R.C.P. (Cambridge).

Vice-Presidents: BRANFORD MORGAN, M.D., F.R.C.P. (Norwich); WILLIAM EVANS, M.D., D.Sc., F.R.C.P. (London); Prof. JOHN MCMICHAEL, F.R.S.Ed., M.D., F.R.C.P.Ed. (London); R. BODLEY SCOTT, D.M., F.R.C.P. (London).

Hon. Secretaries: L. C. MARTIN, M.D., F.R.C.P., Campden, Trumpington Road, Cambridge; K. M. A. PERRY, M.D., M.R.C.P., London Hospital, E.1.

The following subjects for discussion have been chosen: (1) Thiouracil in the Treatment of Thyrotoxicosis. (2) The Modern Management of Macrocytic Anaemias. (3) Surgery in Hypertension (Joint Meeting with Section of Surgery). (Days and speakers not yet settled.)

SURGERY

President: VERNON C. PENNELL, F.R.C.S. (Cambridge).

Vice-Presidents: P. H. R. GHEY, M.Ch., F.R.C.S. (Cambridge); A. M. A. MOORE, F.R.C.S. (London); Prof. IAN AIRD, Ch.M., F.R.C.S. (London).

Hon. Secretaries: B. MCN. TRUSCOTT, F.R.C.S., 1, Shaftesbury Road, Brooklands Avenue, Cambridge; R. SAMPSON HANDLEY, O.B.E., F.R.C.S., 55, Harley Street, W.1.

The following subjects for discussion have been chosen:

Wednesday, June 30.—10 a.m. Tuberculous Adenitis.

Thursday, July 1 (Combined Meeting with Section of Medicine).—10 a.m., Surgery in Hypertension.

Friday, July 2.—10 a.m., Cancer of the Breast.

OBSTETRICS AND GYNAECOLOGY

President: J. R. CAMPBELL CANNEY, M.D., F.R.C.O.G. (Cambridge).

Vice-Presidents: F. R. STANSFIELD, M.D., F.R.C.S., F.R.C.O.G. (Ipswich); Prof. HILDA N. LLOYD, F.R.C.S., F.R.C.O.G. (Birmingham); DONALD MCINTYRE, M.B.E., F.R.S.Ed., M.D., F.R.C.S.Ed., F.R.F.P.S., F.R.C.O.G. (Glasgow).

Hon. Secretaries: O. LLOYD, M.D, F.R.C.S., M.R.C.O.G., 14, Lensfield Road, Cambridge; J. H. PEEL, F.R.C.S., F.R.C.O.G., 86, Harley Street, W.1.

The following programme has been arranged:

Wednesday, June 30.—10 a.m., *Discussion:* The Problem of Infertility and its Treatment. To be opened by Dr. BETHEL SOLOMONS (Dublin), Mr. ALBERT SHARMAN (Glasgow), a Legal Expert, and others.

Thursday, July 1 (Combined Meeting with Section of Anaesthetics).—10 a.m., *Discussion:* Analgesia in Midwifery. (Speakers not yet settled.) Afternoon: Demonstration of apparatus, and Film.

Friday, July 2.—10 a.m., *Discussion:* The Management of the Third Stage of Labour and its Complications. To be opened by Prof. CHASSAR MOIR (Oxford), followed by Dr. T. FLEW (London), Prof. H. L. SHEEHAN (Liverpool), and others. Afternoon: Film on Obstetrics, including Eclampsia.

The following Sections will meet on Two Days:

ANAESTHETICS

President: Z. MENNELL, M.B., D.A. (Petworth).

Vice-Presidents: C. H. BUDD, M.B., B.Ch., D.A. (Cambridge); W. ALEXANDER LOW, *M.C.*, M.B., B.S., D.A. (London); T. C. GRAY, M.B., Ch.B., D.A. (Liverpool).

Hon. Secretaries: RONALD JARMAN, D.Sc., M.R.C.S., L.R.C.P., D.A., 36, Queen Anne Street, W.1; H. R. YOUNGMAN, M.D., D.A., 1, Huntingdon Road, Cambridge.

The following programme has been arranged:

Wednesday, June 30.—10 a.m., *Discussion:* Anaesthesia for Thoracic Surgery. To be opened by Dr. JOAN MILLAR (Newcastle). 2.30 p.m., *Occasional Papers:* Abdominal Relaxation, by Dr. B. G. LEWIS (London).

Thursday, July 1 (Combined Meeting with Section of Obstetrics and Gynaecology).—10 a.m., *Discussion:* Analgesia in Midwifery. 2.30 p.m., Films.

CHILD HEALTH

President: Prof. Sir LEONARD PARSONS, M.D., F.R.C.P., F.R.C.O.G. (Birmingham).

Vice-Presidents: Prof. R. W. B. ELLIS, O.B.E., M.D., F.R.C.P. (Edinburgh); JEAN M. MACKINTOSH, M.D., D.P.H. (Birmingham); Prof. N. B. CAPON, M.D., F.R.C.P. (Liverpool).

Hon. Secretaries: JANET D. ROSCOE, M.B., B.S., D.C.H., 8, Selwyn Gardens, Cambridge; R. M. MAYON-WHITE, M.B., B.S., Department of Experimental Medicine, University of Cambridge.

The following programme has been arranged:

Thursday, July 1.—10 a.m., *Discussion:* Neonatal Mortality and Morbidity. Afternoon, *Demonstration:* The Cambridge Premature Infant Unit.

Friday, July 2 (Combined Meeting with Section of Radiology).—10 a.m., *Discussion:* Malignant Disease in Infancy and Childhood. Afternoon, *Demonstration:* Work in progress on the weights of normal neonates in the first ten days of life.

DISEASES OF THE CHEST

President: R. R. TRAIL, *M.C.*, M.D., F.R.C.P. (London).

Vice-Presidents: W. PATON PHILIP, M.B., Ch.B., D.M.R.E., D.P.H. (Cambridge); F. H. YOUNG, O.B.E., M.D., F.R.C.P (London); R. C. BROCK, M.S., F.R.C.S. (London).

Hon. Secretaries: L. B. STOTT, J.P., *M.C.*, M.B., Ch.B., D.P.H., Papworth Village Settlement, Cambridge; A. MARGARET C MACPHERSON, M.D., F.R.C.P., 41, Devonshire Street, W.1.

The following programme has been arranged:

Wednesday, June 30.—10 a.m., *Discussion:* Bronchial Carcinoma. To be opened by Mr. R. C. BROCK (London), followed by Mr. G. A. MASON (Newcastle-upon-Tyne) and Mrs. E. L. G HILTON (London). *Discussion:* The Relationship between Upper Respiratory Infection and Radiological Infection and Radiological Appearances in the Lungs. To be opened by Dr. W. PATON PHILIP (Cambridge). Afternoon: Visit to Papworth.

Thursday, July 1.—10 a.m., *Discussions:* (1) Surgery of Congenital Heart Disease. To be opened by Dr. J. M. H. CAMPBELL (London), followed by Mr. T. HOLMES SELLORS (London) and Mr. O. S. TUBBS (London); (2) The Present-day Treatment of Pneumonia. To be opened by Dr. LINDSEY W. BATTEN (London) (under title "Modern Pneumonia"). Afternoon: Demonstration of Films.

OCCUPATIONAL HEALTH

President: DONALD STEWART, M.D., F.R.C.P.Ed. (Birmingham).

Vice-Presidents: J. A. L. VAUGHAN JONES, M.B., Ch.B (Leeds); Prof. R. E. LANE, F.R.C.P. (Manchester); W. E CHIESMAN, M.D., F.R.C.P. (London).

Honorary Secretaries: C. H. HOSKYN, O.B.E., M.B., B.Chir., Health Department, Austin Motor Co., Ltd., Longbridge, Birmingham; P. PRINGLE, LL.B., M.R.C.S., L.R.C.P., Standard Telephones and Cables, Ltd., Oakleigh Road, New Southgate, N.11; MILLICENT NOURSE, M.R.C.S., L.R.C.P., 1, Grange Road, Cambridge.

The following programme has been arranged:

Thursday, July 1.—10 a.m., *Discussion:* Human Relations in Industry. To be opened by Dr. G. R. HARGREAVES (London), followed by Dr. ROGER TREDGOLD (Roffey Park) and Mr. JEROME F. SCOTT (Harvard, U.S.A.). Afternoon: Visits to Papworth Village Settlement and Pye Radio, Ltd.

Friday, July 2.—10 a.m., *Discussion:* Aviation Medicine. To be opened by Air-Marshal Sir HAROLD WHITTINGHAM (Director of Medical Services, B.O.A.C.).

OPHTHALMOLOGY

President: O. GAYER MORGAN, M.Ch., F.R.C.S. (London).

Vice-Presidents: E. G. RECORDON, M.D. (Cambridge); O. M. DUTHIE, M.D. (Manchester); J. H. DOGGART, M.D., F.R.C.S. (London).

Honorary Secretaries: G. F. WRIGHT, M.B., B.Chir., D.O.M.S., 22, Parkside, Cambridge; A. G. CROSS, M.D., F.R.C.S., 27, Harley Street, W.1.

The following programme has been arranged:

Discussions: (1) Ophthalmic Problems Associated with Gynaecological and Obstetric Conditions. To be opened by Mr. F. A. JULER (London), followed by Mr. A. B. NUTT (Sheffield) and Mr. E. C. ZORAB (Southampton); (2) The Significance and Interpretation of Refraction. To be opened by Dr. E. G. RECORDON (Cambridge). *Occasional Papers:* Contact Lenses—the Present-day Position, by Mr. A. G. CROSS (London); Optical Aids to the Other Man's Job, by Mr. J. G. DRUMMOND CURRIE (Cheltenham); The Heredity of Eye Diseases, by Dr. P. H. BEATTIE (Aberdeen); Nutritional Eye Diseases, by Dr. HUGH RYAN (London).

Thursday, July 1.—Afternoon: Clinical Meeting at Addenbrooke's Hospital Eye Department.

ORTHOPAEDICS

President: Prof. T. P. MCMURRAY, M.Ch., F.R.C.S.Ed. (Liverpool).

Vice-Presidents: N. ROSS SMITH, Ch.M., F.R.C.S. (Bournemouth); R. W. BUTLER, M.D., M.Ch., F.R.C.S. (Cambridge); H. A. BRITTAIN, O.B.E., M.Ch., F.R.C.S. (Norwich).

Honorary Secretaries: J. F. BOURDILLON, F.R.C.S., Addenbrooke's Hospital, Cambridge; H. H. LANGSTON, F.R.C.S., Gifford House, St. Giles Hill, Winchester.

The following programme has been arranged:

Discussions: (1) The Clinical Significance and Treatment of Lesions of the Intervertebral Disk. To be opened jointly by Mr. GEOFFREY JEFFERSON (Manchester) and Mr. NORMAN CAPENER (Exeter); (2) The Operative Treatment of Fractures. *Occasional Papers:* (1) The Injection Treatment of Osteoarthritis, by Mr. GRANT WAUGH (Sunderland); (2) The Treatment of Osteomyelitis.

PATHOLOGY AND BACTERIOLOGY

President: Prof. H. R. DEAN, LL.D., M.D., F.R.C.P. (Cambridge).

Vice-Presidents: Prof. DOROTHY RUSSELL, M.D., M.R.C.P. (London); R. I. N. GREAVES, M.D. (Cambridge); Prof. W. G. BARNARD, *M.C.*, F.R.C.P. (London).

Honorary Secretaries: G. P. MCCULLAGH, M.D., 282, Hills Road, Cambridge; C. J. C. BRITTON, M.D., 121, Harley Street, W.1.

The following programme has been arranged:

Wednesday, June 30.—10–11.30 a.m., *Discussion:* Recent Advances in our Knowledge of the Rhesus Factor. 11.30 a.m.–1 p.m., *Occasional Papers:* The Electrophoretic Fractionation of the Serum Proteins and its Relationship to Immunity and Treatment, by Dr. NICHOLAS MARTIN (London).

Thursday, July 1.—10–11.30 a.m., *Discussion:* Acute and Subacute Hepatitis. To be opened by Prof. H. P. HIMSWORTH (London). 11.30 a.m.–1 p.m., *Discussion:* The Prophylaxis of Virus Infections, with Special Reference to the Use of Vaccines.

PHYSIOLOGY, INCLUDING BIOCHEMISTRY

President: Prof. A. C. CHIBNALL, F.R.S. (Cambridge).

Vice-Presidents: Sir PERCIVAL HARTLEY, C.B.E., *M.C.*, F.R.S. (London); E. E. POCHIN, M.D., F.R.C.P. (London); Prof. J. N. DAVIDSON, M.D., D.Sc., F.R.S.E. (Glasgow); Prof. E. C. DODDS, M.V.O., F.R.S., F.R.C.P. (London); Prof. HENRY BARCROFT, M.D. (Belfast).

Honorary Secretaries: R. H. WINFIELD, D.F.C., M.B., Ch.B., St. John's College, Cambridge; Prof. F. DICKENS, F.R.S., Courtauld Institute of Biochemistry, Middlesex Hospital, W.1.

The following programme has been arranged:

Wednesday, June 30.—10 a.m., *Discussion:* Recent Work on Proteins and its Medical Applications," opened by Prof. A. C. CHIBNALL, Ph.D., Sc.D., F.R.S. *Invited Speakers.*—Dr. J. A. V. BUTLER, D.Sc., F.R.I.C.: Methods of Isolation and Characterization of Individual Proteins; Dr. L. COLEBROOK, F.R.C.O.G., F.R.S.: Plasma and Blood Derivatives in the Treatment of Burns; Prof. E. C. DODDS, M.V.O., D.Sc., M.D., F.R.C.P., F.R.S.: Protein Hormones; Prof. G. PICKERING, M.B., F.R.C.P.: Hypertension; Prof. N. F. MACLAGAN, M.Sc., M.D., M.R.C.P.: Diagnostic Tests Based on Changes in the Serum Proteins.

Thursday, July 1.—10 a.m., *Discussion:* The Physiological Basis of Neuromuscular Disorders. Chairman: Dr. E. E. POCHIN, M.R.C.P. Opener: Sir HENRY DALE, O.M., G.B.E., F.R.C.P., F.R.S. *Invited Speakers:* Dr. W. S. FELDBERG, F.R.S.: Formation of Acetylcholine and Neuromuscular Transmission; Dr. BERNARD KATZ, D.Sc.:. Excitation at the Myo-neural Junction; Dr. ANDREW WILSON, Ph.D.: Myasthenis Gravis and Di-*iso*-propyl Fluorophosphonate; Dr. C. A. KEELE, M.R.C.P.: Tetraethylpyrophosphate in Myasthenis Gravis; Prof. SAMSON WRIGHT, F.R.C.P.: Central Effect of Anticholinesterases; Dr. G. L. BROWN, M.Sc., F.R.S.: Recent Work on Mytonis.

Afternoons: Exhibits and/or Films.

PREVENTIVE MEDICINE

President: G. F. BUCHAN, M.D., F.R.C.P., D.P.H. (London).

Vice-Presidents: ROBERT FRENCH, M.D., D.P.H. (Cambridge); F. HALL, C.B.E., M.D., D.P.H. (St. Annes-on-Sea); H. C. MAURICE WILLIAMS, O.B.E., M.R.C.S., L.R.C.P., D.P.H. (Southampton).

Honorary Secretaries: G. HAMILTON HOGBEN, M.R.C.S., D.P.H., 19, Pine Grove, Totteridge, N.20; E. H. R. SMITHARD, M.D., D.P.H., Lewisham Town Hall, S.E.6; J. F. CAITHNESS, M.B., Ch.B., D.P.H., The Guildhall, Cambridge.

The following programme has been arranged:

Wednesday, June 30.—10 a.m., Symposium on Preventive Medicine under the National Health Service Act, 1946. *Opening Speakers:* Mr. H. J. MCCURRICH (Hove); Dr. F. GRAY (London); and Prof. R. H. PARRY (Bristol). (1) Role of the Hospital, by Dr. H. JOULES (London); (2) Role of the General Practitioner, by Dr. W. N. PICKLES (Aysgarth); (3) Role of the M.O.H., by Dr. E. D. IRVINE (Dewsbury).

Thursday, July 1.—10 a.m., *Occasional Papers:* (1) Poliomyelitis, by Dr. W. GUNN (London), with Dr. F. W. BUNTING (St. Helens) to start the discussion; (2) Ascertainment and Use of Morbidity Statistics, by Dr. P. STOCKS (London), with Dr. J. MADDISON (Twickenham) to start the discussion.

RADIOLOGY

President: S. COCHRANE SHANKS, M.D., F.R.C.P., F.F.R. (London).

Vice-Presidents: Prof. J. S. MITCHELL, M.B., B.Chir., D.M.R. (Cambridge); C. G. TEALL, M.D., F.F.R. (Birmingham); ERIC D. GRAY, M.D., D.M.R.E., F.F.R. (Manchester); F. ELLIS, M.D., D.M.R.E., F.F.R. (London).

Honorary Secretaries: F. R. BERRIDGE, M.B., B.Chir., D.M.R., 22, Parkside, Cambridge; J. A. C. FLEMING, F.R.C.S.Ed., D.R., F.F.R., *X*-ray Department, St. Thomas's Hospital, S.W.1.

The following programme has been arranged:

Thursday, July 1. DIAGNOSIS.—The Small Intestine in Nutritional Disorders. Morning: (*a*) The Radiological Aspects, by Dr. F. R. BERRIDGE (Cambridge); (*b*) Coeliac Disease, by Dr. WILFRID SHELDON (London); (*c*) Sprue, by Dr. D. A. K. BLACK (Manchester). Afternoon: (*d*) The Pancreas, by Dr. KEMP HARPER (London); (*e*) Bullous Emphysema, by Dr. C. J. C. G. HODGSON (London). Radiotherapy.—Radioactive Isotopes: Morning: The Physical Aspects, to be opened by Prof. O. R. FRISCH (Cambridge); Radioactive Isotopes as Tracers, by Dr. A. S. MCFARLANE (Hampstead); The Radiotherapeutic Aspect of Radioactive Isotopes, by Prof. J. S. MITCHELL (Cambridge).

Friday, July 2 (Combined meeting with Section of Child Health).—(1) Malignant Diseases in Children, to be opened by a Paediatrician; (2) The Radiological Diagnosis of Malignant Tumours in Children, by Dr. C. G. TEALL (Birmingham); (3) The Pathology of Malignant Disease in Children, by Dr. BARRETT (Cambridge); (4) Radiotherapy of Malignant Disease in Children, by Prof. J. S. MITCHELL (Cambridge).

Afternoon Demonstrations in the Radiotherapeutic Centre, Addenbrooke's Hospital and the University Department of Radiotherapy on both days.

The following Sections will meet on One Day:

ANATOMY AND ANTHROPOLOGY

President: Prof. H. A. HARRIS, M.D., M.R.C.P. (Cambridge).

Vice-Presidents: Prof. F. WOOD-JONES, F.R.S., F.R.C.S., F.R.A.C.S. (London); W. L. H. DUCKWORTH, M.D. (Cambridge); Prof. W. C. OSMAN HILL, M.D. (Edinburgh).

Honorary Secretaries: D. V. DAVIES, M.B., B.S., 42A, Newnham Road, Cambridge; ALBERT PEACOCK, M.B., B.S., 157, Denmark Hill, S.E.5.

The following programme has been arranged:

Friday, July 2.—Discussion: The Present Position of Primate Anatomy.

DERMATOLOGY

President: C. H. WHITTLE, M.D., F.R.C.P. (Cambridge).

Vice-Presidents: A. G. SMITH, M.D., F.R.C.S. (Norwich); R. M. B. MACKENNA, M.D., F.R.C.P. (London); G. B. MITCHELL-HEGGS, O.B.E., M.D., F.R.C.P. (London).

Honorary Secretaries: ALAN LYELL, M.B., B.Ch., 44, Tenison Road, Cambridge; ERIC C. RITTER, M.R.C.P., 34, Queensway, Lincoln.

The following programme has been arranged:

Wednesday, June 30.—10 a.m., *Discussion:* Occupational Dermatitis. To be opened by Dr. J. T. INGRAM (Leeds), followed by Dr. W. J. O'DONOVAN (London), Dr. G. A. HODGSON (Cardiff), and others. Afternoon: Cases.

NEUROLOGY AND PSYCHIATRY

President: Prof. E. D. ADRIAN, O.M., F.R.S., M.D., F.R.C.P. (Cambridge).

Vice-Presidents: Prof. AUBREY LEWIS, M.D., F.R.C.P. (London); REDVERS N. IRONSIDE, M.B., F.R.C.P. (London); F. B. PARSONS, M.D., F.R.C.P. (Cambridge).

Honorary Secretaries: R. A. NOBLE, M.B., M.R.C.P., 17, Brooklands Avenue, Cambridge; T. ROWLAND HILL, M.D., M.R.C.P., 14, Wimpole Street, W.1.

The following programme has been arranged:

Friday, July 2.—10 a.m., *Discussion:* The Investigation and Treatment of Epilepsy of Late Onset. To be opened by Sir CHARLES SYMONDS (London), followed by Mr. D. W. C. NORTHFIELD (London) and Dr. JAMES BULL (London). Afternoon, *Discussion:* The Early Recognition and Management of Senile Deterioration. To be opened by Dr. G. H. SHELDON (Wolverhampton), followed by Dr. MACDONALD CRITCHLEY (London), Dr. TREVOR H. HOWELL (Purley), and Dr. FELIX POST (Edinburgh).

NUTRITION

President: Prof. R. A. MCCANCE, M.D., F.R.C.P. (Cambridge).

Vice-Presidents: L. J. HARRIS, Sc.D., D.Sc., F.R.I.C. (Cambridge); D. P. CUTHBERTSON, M.D. (Bucksburn); H. S. STANNUS, M.D., F.R.C.P. (London).

Honorary Secretaries: THOMAS MOORE, D.Sc., Ph.D., Dunn Nutritional Research Institute, Milton Road Fields Laboratories, Cambridge; F. PRESCOTT, M.R.C.S., L.R.C.P., Wellcome Bureau of Scientific Research, 183, Euston Road, N.W.1.

The programme of this Section is not yet available. It will meet on Friday, July 2.

OTO-RHINO-LARYNGOLOGY

President: V. E. NEGUS, M.S., F.R.C.S. (London).

Vice-Presidents: A. S. H. WALFORD, F.R.C.S. (Cambridge); DONALD WATSON, F.R.C.S. (Bradford); GAVIN YOUNG, *M.C.*, M.B., F.R.F.P.S. (Glasgow).

Honorary Secretaries: GEOFFREY H. BATEMAN, F.R.C.S., 55, Harley Street, W.1; K. F. WILSDON, F.R.C.S.Ed., 9, Brunswick Walk, Cambridge.

The following programme has been arranged:

Wednesday, June 30.—10 a.m., *Discussion:* Affections of the Sphenoid Sinus and Their Treatment. To be opened by Dr. PROETZ (St. Louis, Minnesota). Afternoon, *Discussion:* Poliomyelitis and Tonsillectomy. To be opened by Dr. ALLAN MCFARLAN (Cambridge), followed by Mr. GEOFFREY H. BATEMAN (London) and others.

PHARMACOLOGY

President: Prof. E. B. VERNEY, F.R.S., F.R.C.P. (Cambridge).

Vice-Presidents: Prof. J. H. BURN, F.R.S., M.D. (Oxford); Prof. F. R. WINTON, M.D. (London); Prof. A. C. FRAZER, M.D. (Birmingham).

Honorary Secretaries: W. J. O'CONNOR, M.D., Pharmacological Laboratory, Cambridge; C. A. KEELE, M.D., M.R.C.P., Department of Pharmacology, Middlesex Hospital Medical School, W.1.

This Section will meet on Friday, July 2. The following subjects for discussion have been chosen: (1) Antihistamine Substances, to be opened by Sir Henry Dale (London); (2) Agents Determining and Influencing the Functions of the Pars Nervosa of the Pituitary, to be opened by Prof. E. B. VERNEY (Cambridge).

HEARD AT HEADQUARTERS

G.M.C. Awake

In the debate of Feb. 9 it was not only the B.M.A. which came in for criticism, for the General Medical Council was belaboured. One Government supporter said, "I have actually seen them (the G.M.C.) asleep and snoring during the trial of a case." The honourable member is more fortunate than the writer of this note, who has attended every session of the Council for over thirty years and has never had the pleasure of witnessing that remarkable spectacle. But the same member had a word of encouragement for the G.M.C.; he said that "they have improved a great deal in the last six months." Since they have held only one brief session during the last six months, lasting two or three days, the improvement must have been quite dramatic.

Non-medical Certificates

The inclusion of doctors among the persons qualified to countersign applications for the tobacco concession for old-age pensioners has been a small but none the less irritating grievance among doctors already overwhelmed with certification. To some representations on the subject a reply has been received from the Treasury to the effect that their lordships do not feel able to act upon the request made to them from the B.M.A. The letter goes on in true Civil Service style: "I am to point out that an attestor is not called upon to certify that the applicant is in fact an habitual smoker, but merely that to the best of his knowledge and belief the applicant is an habitual user of tobacco or snuff." That is rather a choice specimen of official correspondence, and, after all, are not all certificates given to the best of the certifier's knowledge and belief? This is not a medical question, any more than certification to the effect that somebody was accustomed to leave his house at nine in the morning. It was suggested that the production of the pension book should entitle the pensioner to the concession, but it was pointed out that this would not indicate whether he or she was a habitual user of tobacco or snuff. Perhaps the book might be appropriately fumigated to give the necessary evidence. The doctors should never have been bothered with this matter, and renewed representations are being made to the Treasury on their behalf.

A Question of Furniture

The furnishing of the doctor's house and the equipment of his surgery is one of the worries of practitioners at the present time—curtains, for instance. Many practitioners on taking over a new practice find themselves in an old-fashioned house with those large heavy windows which early- and mid-Victorian architects specially devised for the discomfort of housewives, and to get curtain material for them is a problem. They have no permits to purchase such materials within the utility ranges, and, although certain material is obtainable without dockets, this is mostly very inferior stuff or else very expensive fabric. Another matter is the allowance of soap. If a practitioner has an outside surgery he may have an additional allocation,

but if he practises at home it is assumed that he does not need it. Again, what little god in Whitehall has determined that coupons shall be obtainable for operating-gowns but not for white coats? All these points, along with that of utility furniture in general, have been raised with the Board of Trade, and it is hoped to have a general discussion with that department.

EX-I.M.S. OFFICERS AND THE COLONIAL SERVICE

As was reported in the *Supplement* on Dec. 27, 1947 (p. 167), the Armed Forces Committee of the Association was seeking an assurance from the Commonwealth Relations Office that ex-I.M.S. officers who are appointed to other Crown services should be given full credit for all their service in the I.M.S. It is now learned from the Commonwealth Relations Office that the following concession has been agreed to in respect of Nigeria, Gold Coast, Sierra Leone, the Gambia, Malaya, and Hong Kong:

Service since appointment to the I.M.S. will be regarded as the equivalent of service in the Colonal Medical Service for the purposes of starting salary. Officers will enter the salary scale of Medical Officer in the Colony to which they are appointed at the point they would have reached if they had been appointed to the Colony at the time of entering the I.M.S. If such service exceeds the time required to reach the maximum of the Medical Officers' scale, they will enter at the maximum.

The matter is still under consideration so far as the East African colonies are concerned.

Correspondence

N.W. Metropolitan Regional Tuberculosis Society

SIR,—Various tuberculosis societies are at present operating in what will after the appointed day form the North-west Metropolitan Region, and a meeting of representatives of these bodies has recently been held with a view to forming one regional society to be known as the North-west Metropolitan Regional Tuberculosis Society.

The objects of the Society will be:

(*a*) To promote the advancement of the tuberculosis services, not only by intercourse among the members, but by practical and theoretical study of all questions connected therewith; and with a view to carrying these objects into operation, and for the purpose of diffusing knowledge relating thereto, to hold meetings, lectures, etc.

(*b*) To promote the study of diseases of the chest in general, but with special reference to various aspects of the work of practitioners dealing with tuberculosis.

(*c*) To do all lawful acts, matters, and things incidental or conducive to the attainment of the above objects as may from time to time be considered necessary.

(*d*) To provide a council able to act as an advisory body on behalf of the society.

The annual subscription will be nominal, and membership will be open to all registered medical practitioners engaged in the tuberculosis services (whole-time) in the North-west Metropolitan Region. Associate membership will be open to medical men working in the tuberculosis services of the region who are not so engaged whole-time.

Further information can be obtained from the undersigned, together with details of a meeting of those interested which will be held at the Kensington Town Hall, Kensington High Street, W.8, on Tuesday, March 16 next, at 7 p.m.

C. P. HAY,
Tuberculosis Officer, Kensington.

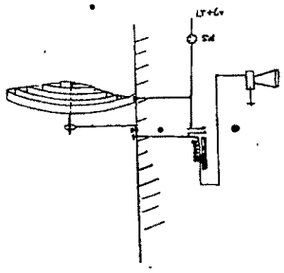
"Doctor" Sign on Cars

SIR,—The "Doctor" label on cars would seem to be no longer desirable or necessary and to have fallen into disrepute. It is now mentioned in a jocular way that anyone may put up this notice and use it for any occasion when it may deter the police from making inquiries. It was suggested to me last week that all the doctors in London seemed to have been at some football match, and it would therefore appear that misuse of the sign is taking place. Surely now, especially as the war is over, there is no need for the sign at all, indeed no more than for any other profession, trade, or calling to display to the public that the occupant of the vehicle is a tinker, tailor, or candlestick-maker.—I am, etc.,

London, S.W.1. G. T. CREGAN.

Stolen Drugs

SIR,—The problem of protecting the contents of motor-cars against "spivs" is, as you suggest in the paragraph under the above heading (Nov. 29, 1947, p. 125), a growing one. After considerable experiment I have devised several methods of preventing these individuals from smashing the door handles of my car. A simple normally closed push-button pressing against the door and connected to the horn will prevent the door being opened but not the handle being removed by force, while a capacity-operated relay needs a ground chain and cannot be switched off from outside without a good deal of apparatus.



In the enclosed drawing a small box is fixed to the door. It contains a spiral clock-spring carrying a contact which passes through a ring. When the door is shaken the trembler brushes the ring and closes a relay, blowing the horn and continuing to blow it until switched off. The switch is suitably concealed outside the car. The more sadistically minded, if they possess good memories, can recess two contacts in the door handle and connect them to a neon-condenser stimulator and a 120 V dry battery. By adjusting the trembler any monkeying with the door or the vehicle can be made to set off the booby-trap.—I am, etc.,

London, S.E.23. ALEX. COMFORT.

H.M. Forces Appointments

ROYAL NAVY

Acting Surgeon Lieutenants E. H. P. Warburton and E. MacSween to be Surgeon Lieutenants.

Temporary Surgeon Lieutenants (R.N.V.R.) G. R. Wheldon, D. G. Dalgliesh, and W. D. MacKenzie have been transferred to the R.N.

ROYAL NAVAL VOLUNTEER RESERVE

Surgeon Commanders D. M. Craig, D.S.O., V.R.D., S. C. Suggit, V.R.D., R. S. Allison, V.R.D., H. E. Hall, V.R.D., J. F. Corr, and E. A. Gerrard, V.R.D., have been placed on the Retired List.

Surgeon Lieutenant-Commanders W. H. Osborn, T. D. G. Wilson, J. D. Lendrum, V.R.D., H. G. Rees, O.B.E., W. G. Campbell, and D. R. Maitland have been placed on the Retired List.

Temporary Acting Surgeon Lieutenant-Commander F. R. Badenoch, M.B.E., has been transferred to List I of the permanent R.N.V.R., in the rank of Surgeon Lieutenant-Commander.

Temporary Acting Surgeon Lieutenant-Commander R. J. L. Macbean has been transferred to List II of the permanent R.N.V.R., in the rank of Surgeon Lieutenant-Commander.

Temporary Surgeon Lieutenant W. E. A. Buchanan has been transferred to List I of the permanent R.N.V.R.

Temporary Surgeon Lieutenant I. Miskelly, D.S.C., has been transferred to List II of the permanent R.N.V.R.

Temporary Acting Surgeon Lieutenant D. S. Cooke to be Temporary Surgeon Lieutenant.

Probationary Temporary Acting Surgeon Lieutenant W. A. Heaton-Ward to be Temporary Surgeon Lieutenant.

ROYAL ARMY MEDICAL CORPS

Lieutenant-Colonels M. Morris, O.B.E., and W. Millerick, M.C., have retired on retired pay and have been granted the honorary rank of Colonel.

Major C. B. R. Pollock to be Lieutenant-Colonel.

Major T. G. S. James has retired receiving a gratuity.

Major D. R. Cattanach, from I.M.S./I.A.M.C., to be Major.

Captains F. J. W. Hooper, W. R. Lamb, and A. S. Beare to be Majors.

Short Service Commissions.—War Substantive Captain R. S. McClelland has relinquished his commission and has been granted the honorary rank of Major. Lieutenants D. S. Cranston, P. M. Bretland, D. P. North, H. S. Gavourin, and D. R. Patchett to be Captains. Lieutenants E. E. Vella and I. R. Haire, from R.A.M.C., Emergency Commissions, to be Lieutenants.

Association Notices

SPECIAL REPRESENTATIVE MEETING

Notice is hereby given that on the requisition of the Council a Special Representative Meeting of the British Medical Association will be held in the Great Hall, B.M.A. House, London, W.C.1, on Wednesday, March 17, at 10 a.m., and on succeeding days if necessary. The business of the meeting is to consider:

(1) The result of the plebiscite.

(2) The following recommendations of the Council:

(*a*) That the Representative Body, reaffirming the whole-hearted desire of the medical profession for a comprehensive health service available to everyone, urges that in the public interest such changes should be made in the Acts of 1946 and 1947 as are necessary to maintain the integrity of medicine and to prevent doctors being turned into State servants, with harmful consequences to patient and doctor alike. The Representative Body therefore expresses the hope that the Government will make it possible for the profession to co-operate by making such changes and states its view that it is not in the best interests of the public or of medicine for members of the profession to enter the Service until such changes are made.

(*b*) That an Independence Fund be established to help to finance the profession's activities during the present dispute with the Government.

(*c*) That medical members of Regional Hospital Boards and Local Executive Councils be requested to continue their membership of these bodies for the present.

By order of the Chairman of the Representative Body,

CHARLES HILL,
Secretary.

Feb. 28, 1948.

GROUP OF OTOLARYNGOLOGISTS

A meeting of the recently formed Group of Otolaryngologists of the Association will be held at B.M.A. House, Tavistock Square, London, W.C.1, on Friday, March 5, 1948, at 4.30 p.m. The Group consists of all those members of the Association who are engaged predominantly in the practice of otolaryngology. The agenda will consist of (*a*) the election of chairman; (*b*) consideration of the size of the Group Committee; and (*c*) a general discussion on the work of the Group.

CHARLES HILL,
Secretary.

Diary of Central Meetings

MARCH

4 Thurs. Publishing Subcommittee, 11 a.m.
16 Tues. Special Conference of Local Medical and Panel Committees, 11 a.m.
17 Wed. **Special Representative Meeting,** 10 a.m.

Branch and Division Meetings to be Held

METROPOLITAN COUNTIES BRANCH.—At B.M.A. House, Tavistock Square, London, W.C., Tuesday, March 2, 5 p.m. Dr. Henry Yellowlees: The Human Approach. Address to senior students and newly qualified medical practitioners.

NUNEATON AND TAMWORTH DIVISION.—At Red Lion Hotel, Atherstone, Tuesday, March 2, 8.30 p.m. Talk by Mr. H. W. Steele Bodger: Matters of Common Interest in Human and Veterinary Medicine.

SOUTH ESSEX DIVISION.—At Dagenham Civic Centre, Friday, March 5, 9 p.m. Extraordinary general meeting. Instructions to Representatives to Special Representative Meeting on March 17.

STOCKTON DIVISION.—At Stockton and Thornaby Hospital, Bowesfield Lane, Stockton-on-Tees, Monday, March 1, 8.30 p.m. Dr. Stanley Wray: The Significance of Acid Phosphatase in Prostatic Cancer.

WESTMINSTER AND HOLBORN DIVISION.—At City Hall, Charing Cross Road, London, W.C., Thursday, March 4, 8 p.m. Instruction to Representatives to Special Representative Meeting on March 17. All medical practitioners in the area of the Division are invited.

Meetings of Branches and Divisions

DUMFRIES AND GALLOWAY DIVISION

A well-attended meeting in Dumfries on Feb. 8 listened with interest to Dr. George McFeat, Member of Council and Chairman of the Scottish Committee, and to Dr. E. R. C. Walker, the Scottish Secretary. The speakers underlined the features in the N.H.S. Act which the profession are finding unacceptable, stressing the need for the retention of freedom of action and urging the profession to stick together. It was agreed that a whole-time salaried service would leave no room for freedom of choice of doctor. Public support could best be gained by each doctor discussing the Act with his patients. Dr. Christopher Clayson proposed a vote of thanks to Dr. McFeat and Dr. Walker.

EAST YORKSHIRE BRANCH

Prof. Tunbridge, speaking on thyrotoxicosis on Jan. 14, emphasized that enlargement of the thyroid, which occurred in about 5 to 15% of people, associated with an anxiety neurosis, did not of necessity mean thyrotoxicosis. Iodine by the mouth acted by interfering with the stimulating hormone from the pituitary and lessening the formation of thyroxine. It could be given either as Lugol's iodine or potassium iodide. Radioactive iodine, although curative, was a formidable weapon because of its possible toxic effects. *X* rays did not cure and could cause bad scarring. Surgery was a highly specialized form of treatment. The chance of cure by removing about 7/8 of the gland was about 50%, but the average mortality rate was fairly high, being about 10% even in good hands. He concluded by describing treatment with thiouracil.

Dr. Guy Dain, speaking on Jan. 23, appealed to the profession to understand the present position and the events leading up to it. He said that we were looking forward to a service in which we could participate provided that there was no political element in it. The B.M.A. would never consent to the methods which the Minister proposed to use to deal with this pooled money whereby the capitation fee would vary with the number of doctors working the scheme. We must have a fixed capitation fee not subject to deductions. The B.M.A. is determined that it will not accept a salary at all, as the implication of this is loss of freedom both for the doctor and the patient.

Discussing compensation, he said that £66 million had been the agreed figure in 1938 for the value of existing practices, but now there should be a betterment factor of 50%; and that there was no provision in the compensation fund to allow for this, so that the present level of compensation was unsatisfactory. It was wrong for the doctor to have no appeal to the courts. Although it was a privilege that was not likely to be needed often there was less likelihood still of its being used if he had the power to use it. Another principle was the question of co-option of medical men on to local health committees. This should be a compulsory order in the same way as teachers were co-opted on to education committees. Dr. Guy Dain answered those people who said we should enter this service for the security offered by saying that security was our own endeavour and our own efficiency, for which the rewards were greater as individuals than in a civil service.

WESTMINSTER AND HOLBORN DIVISION

A British Medical Association Lecture was delivered on Jan. 22 by Mr. Philip Mitchiner. Dr. W. A. Milligan was in the chair.

Mr. Mitchiner took for his subject "Recent Advances in Surgery," and discussed a wide variety of topics. He emphasized the growing importance of bacteriological examination for patients treated by sulphonamides and penicillin, and agreed with Bigger's opinion that the administration of penicillin should be intermittent in order to prevent the growth of resistant organisms. Sir Crisp English proposed the vote of thanks, which was carried with acclamation.

WINCHESTER DIVISION

A meeting of the Winchester Division was held on Jan. 25, when 74 members attended. An address was given by Dr. Stevenson. The meeting adopted the following resolution with only one dissentient vote:

The Winchester Division fully endorses the solemn declaration adopted at the Special Representative Meeting of Jan. 8 (*Supplement*, Jan. 17, p. 9), and a second resolution was adopted as follows:

"That the Winchester Division requests the B.M.A. to consider the preparation of a document for signature after the plebiscite legally binding members of the profession to adhere to the majority decision."

The meeting concluded with a vote of thanks to the Winchester and Andover Group of Dentists for supporting the B.M.A. in its opposition to the N.H.S. Act in its present form.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

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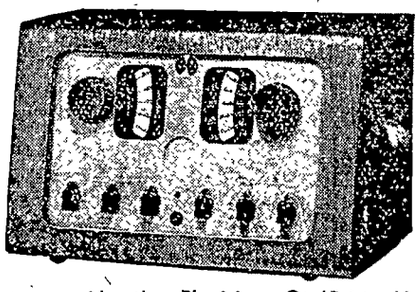

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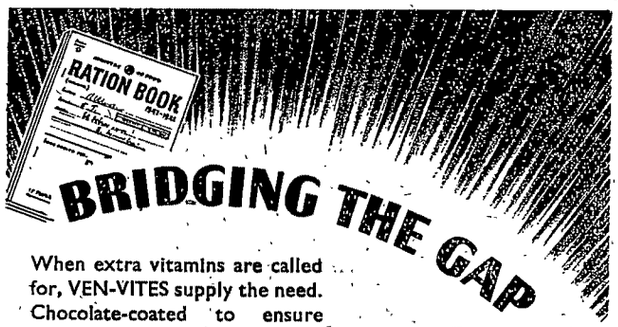

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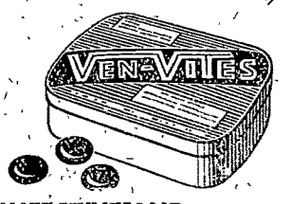

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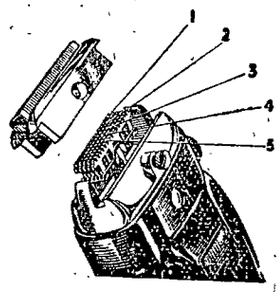

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A—Whole-time resident house appointments open to practitioners without previous experience.
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R—Male, liable to military service under the National Service Acts.
W—Women practitioners.

APPOINTMENTS

HIS MAJESTY'S COLONIAL SERVICE
COLONIAL MEDICAL SERVICE

The Colonial Medical Service offers an interesting career and provides unique opportunities for applying medical science in territories which are undergoing rapid development. There are immediate openings in many parts of the Colonial Empire and applications are invited from both men and women doctors who are British subjects and possess qualifications registrable in the United Kingdom. Medical Officers are usually appointed in the first instance for general duties. This implies all-round ability with a balanced outlook upon both preventive and curative medicine. Officers are also required for public health duties, in which case the D.P.H. or some experience of health work is necessary. Ample opportunities exist for field investigation, while officers with special aptitude are encouraged to obtain such higher qualifications as will enhance their value to the Service. Officers are from time to time seconded or appointed to medical laboratories in the larger territories. In the West African territories improved salary scales and conditions of service have recently been introduced. In most of the other territories the terms of service are being actively reviewed, and meanwhile temporary cost-of-living allowances are being paid over and above the existing salaries. At present inital *basic* salaries, i.e. irrespective of any cost-of-living allowance and of any credit that may be allowable for war service or professional experience, vary between £600 and £800 according to locality. There are, in addition, numbers of super-scale posts in the administrative and specialist grades which are normally filled by promotion within the Service. Free passages for an officer and wife are generally provided both on first appointment and when travelling on leave of absence. Where Government quarters are provided a small rent is usually payable. Good leave conditions and an adequate pension scheme are in force. The Colonial Medical Service is a unified service and members are eligible for transfer from one territory to another, either with or without promotion. Selected candidates may be required to take a course in tropical medicine either before proceeding overseas (in which case they would receive an allowance) or on first leave. Candidates for permanent service must have been born on or after January 1, 1908. Contract appointments are also available in certain territories for doctors born before this date. Further particulars may be obtained from, and applications should be addressed to, the Director of Recruitment (Colonial Service), Colonial Office, 15, Victoria Street, London, S.W.1.

HIS MAJESTY'S COLONIAL SERVICE
MEDICAL OFFICER
in the Falkland Islands

Applications are invited for the post of Medical Officer in the Falkland Islands. The appointment would be for three years with prospects if so desired of permanent and pensionable appointment to the Colonial Medical Service. Of the three-year engagement one year is normally spent at Headquarters in Stanley where there is a general hospital, and one in each of the two country districts. Riding is essential on certain duties but can be learnt in the Colony. The climate is temperate and very suitable for young children. Salary £600 by £20 to £700. War service will be taken into consideration in fixing initial salary in this scale. The present rate of income tax on £600 for a married man with one child is £21 7s. 6d. per annum. Free quarters are provided and cost-of-living is generally low. Free passages for officer, wife and two children. An excellent life for a young country-minded couple. Application forms can be obtained from the Director of Recruitment (Colonial Service), Colonial Office, 15, Victoria Street, London, S.W.1.

CITY OF YORK EDUCATION COMMITTEE
PSYCHIATRIC SOCIAL WORKER

Applications are invited for the full-time post of Psychiatric Social Worker to the Authority's Child Guidance Clinic. The team also includes a full-time Psychologist, Secretary, and Psychiatrist on a sessional basis. Applicants should hold the Mental Health Certificate and have general training and experience in social work. Salary in accordance with the scales for Psychiatric Social Workers of the Joint Negotiating Committee (Hospital Staffs), i.e., £370 by £20 to £530. Canvassing will disqualify. Forms of application may be obtained on receipt of a stamped addressed envelope and should be returned to the undersigned not later than March 15, 1948.—H. Oldman, Chief Education Officer, Education Offices, 5, St. Leonard's, York.

MINISTRY OF NATIONAL INSURANCE

The Minister of National Insurance proposes to constitute panels of doctors in current practice, for part-time duties (normally on a half-day sessional basis) in England, Scotland, and Wales, from which will be formed, as occasion requires, Medical Boards for assessing the extent of disablement by injury or disease in claims and for other related matters arising under the National Insurance (Industrial Injuries) Act, 1946.

Sessional remuneration (non Specialist), Chairman, £3 3s., Ordinary Member £2 12s. 6d.

The Boarding Centres proposed are listed below under their Regional Centre. The Regional Controllers of the Ministry of National Insurance at the Regional Centres will supply on request an application form and all particulars to doctors desiring to be appointed for centres in their regions:

Apply to Regional Controller, Ministry of National Insurance, at	*for Boarding Centres at*
NEWCASTLE-UPON-TYNE	*Carlisle*, Darlington, *Middlesbrough*, *Newcastle*, *South Shields*, *Sunderland*, Workington.
LEEDS (Darley House, West Street, 1)	Bradford, *Doncaster*, Halifax, *Huddersfield*, *Kingston-on-Hull*, *Leeds*, *Sheffield*, *York*
NOTTINGHAM (Block 3, Government Buildings, Chalfont Drive, Western Boulevard)	Derby, *Grimsby*, *Leicester*, *Lincoln*, Mansfield, *Northampton*, *Nottingham*, Peterborough
CAMBRIDGE (Old Post Office Buildings, Petty Cury)	*Cambridge*, *Chelmsford*, *Ipswich*, King's Lynn, *Luton*, *Norwich*, *Southend-on-Sea*, Watford
LONDON (105–6, New Bond Street, W.1) ..	*Great Smith Street, S.W.1*, and 25, *Gordon Street, W.C.1*, *Brighton*, *Canterbury*, *Guildford*, *Rochester*, *Tunbridge Wells*
READING (22, Southcote Road)	*Aylesbury*, *Bournemouth*, Oxford, *Portsmouth*, *Reading*, *Ryde*, Slough, *Southampton*
BRISTOL ("Avonleigh," Stoke Park Road South, 9)	*Bristol*, *Exeter*, *Gloucester*, *Plymouth*, *Salisbury*, Swindon, Taunton, *Truro*, Yeovil
CARDIFF (Cathays Park)	Aberystwyth, *Bangor*, *Cardiff*, *Carmarthen*, Haverfordwest, Llanelly, *Newport*, Pontypridd, *Swansea*, *Wrexham*
BIRMINGHAM (Civic Centre, Broad Street, 1)	*Birmingham*, Burton-on-Trent, *Coventry*, Hereford, *Shrewsbury*, Stafford, *Stoke-on-Trent*, *Wolverhampton*, *Worcester*
MANCHESTER ("Heyscroft," Palatine Road, Didsbury)	Barrow, *Blackpool*, *Bolton*, Burnley, Chester, Crewe, Lancaster, *Liverpool*, *Manchester*, *Preston*
EDINBURGH (60, Melville Street, 3)	*Aberdeen*, Dumfries, *Dundee*, *Edinburgh*, *Glasgow*, *Inverness*, Kilmarnock, Kirkcaldy, *Motherwell*, *Paisley*, Selkirk, Stirling, Stornoway, Wick

At the towns shown in italics above, boards will be held in the existing centres of the Ministry of Pensions Doctors who are on the Ministry of Pensions panels for these centres will receive an application form from that Department.

Completed application forms should be returned to the Regional Controller not later than March 31.

ARAB LEGION TRANSJORDAN
SURGEON TO THE ARAB LEGION

Applications are invited from registered medical practitioners (male) for the post of Surgeon to the Arab Legion. Successful candidates will be required to undertake full surgical responsibility, and preference will be given to candidates with the F.R.C.S. Three months leave (with passage paid) is granted every two years to the United Kingdom and passage is paid to Transjordan on first joining. Salary varies from £848 per annum, single and unaccommodated, to £1,460 married and unaccommodated. Salary is liable to local income tax only (at present 4½%). Applications, accompanied by recent testimonials, should be sent to Senior Medical Officer, Arab Legion, Transjordan, from whom further particulars may be obtained.

CAERNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor, North Wales
HONORARY ASSISTANT ORTHOPAEDIC SURGEON

The Electoral Committee invite applications for the appointment of One Honorary Assistant Orthopaedic Surgeon. Applicants must possess the customary qualifications of a Surgeon and must hold the degree of M.Ch. Orth. The successful candidate will be expected to reside in the district. Applications, accompanied by the names of three referees, should be sent to the Superintendent Secretary on or before March 6, 1948.

CAERNARVONSHIRE AND ANGLESEY INFIRMARY, Bangor, North Wales
HOUSE SURGEONS (A)

There is an immediate vacancy for One House Surgeon, and there will be vacancies on March 31 for two House Surgeons, salary £200 per annum with residence, board and laundry. All the posts are A, holding a tenure of six months. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Applications, with two testimonials, to be sent to the Superintendent-Secretary.

CITY OF SALFORD
HOPE HOSPITAL
VISITING ORTHOPAEDIC SURGEON

Applications for the post of Visiting Orthopaedic Surgeon at Hope Hospital, Salford, are invited. The appointment will be for four sessions per week and will be on a temporary basis for the time being. Remuneration will be in accordance with the agreement between the British Medical Association and the Associations of Local Authorities. Applications, with particulars of experience and names of two referees, should be forwarded to the Medical Officer of Health, 143, Regent Road, Salford, 5, not later than March 6, 1948.—H. H. Tomson, Town Clerk.

GOVERNMENT OF IRAQ

The Government of Iraq require the following staff for the Public Health Department, mainly in the principal provincial cities:

MALARIOLOGISTS. Salary Iraq dinars 1,800 a year and high cost-of-living allowance I.D.288 a year (I.D. 1=£1). Appointments will be on contract for three years in the first instance and renewable. Provident Fund. Free first-class passages and liberal leave on full salary.

For the
ROYAL HOSPITAL AND MEDICAL COLLEGE
Baghdad

PROFESSOR OF EAR, NOSE AND THROAT DISEASES (for both teaching and practical work) Salary I.D.1,800 a year and high cost-of-living allowance I.D.288 a year, with possibility of annual increments of I.D.60. Other terms as above. Private practice allowed in all cases. Candidates must be British subjects, hold specialist qualifications and have had several years' specialist experience. In the case of the Royal Hospital and Medical College Staff, they must also have had previous teaching experience.

Also required is an:—

ASSISTANT PROFESSOR OF PHYSICS AND CHEMISTRY. Salary Iraq dinars 1,200 a year, plus high cost-of-living allowance I.D.288 a year. Candidates must hold an Honours Degree and have had appropriate teaching experience, preferably in a Medical or Pharmacy School.—Other terms as above. Apply at once by letter, stating age, whether married or single, and full particulars of qualifications and experience and mentioning this *Journal* to the Crown Agents for the Colonies, 4, Millbank, London, S.W.1, quoting M/SA/922/5/3F on both letter and envelope.

BOROUGH OF BARKING
BARKING AND UPNEY (MATERNITY) HOSPITAL
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from qualified medical practitioners for the above-mentioned appointment. Previous medical appointments of this nature are desirable. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Salary scale £455 per annum rising by annual increments of £25 per annum to a maximum of £555 per annum, plus cost-of-living bonus and emoluments valued at £150 per annum. The appointment is subject to the provisions of the Local Government and Other Officers Superannuation Act, 1937, and to satisfactory medical examination. Application forms and conditions of service may be obtained from the Medical Officer of Health, Town Hall, Barking, Essex, and should be returned to the undersigned not later than March 8, 1948.—E. R. Farr, Town Clerk, Town Hall, Barking, Essex.

Have you read the notice at top of page 11 ?

ANTRIM COUNTY HEALTH COMMITTEE
FIVE DIVISIONAL MEDICAL OFFICERS

Applications are invited for the joint whole-time appointments of five Divisional Medical Officers, who will act as Assistant County Medical Officers and as Medical Officers of Health to any Borough, Urban and Rural Districts within the Divisional Areas. The salaries for the positions will be £1,035 per annum, rising by annual increments of £50 to £1,235, inclusive of bonus, plus travelling allowance on the Civil Service Scale. The posts are superannuable on a non-contributory basis, in accordance with the Superannuation Acts relating to Local Government in Northern Ireland. A Contributory Scheme is being considered for N. Ireland Public Health Officers. Preference will be given to ex-Service candidates possessing the required qualifications, provided the Health Committee is satisfied that such candidates can fill, or within a reasonable time will be able to fill, the positions efficiently. Applicants must be qualified in accordance with the Health Authorities (Qualifications and Duties of Medical Officers) Regulations (Northern Ireland), 1948. Forms of application, copies of the above regulations and particulars of the proposed Health Divisions, may be obtained from the undersigned, and applications should be returned, together with three recent testimonials, not later than Tuesday, March 9, 1948.—R. Lyttle, Secretary, County Courthouse, Crumlin Road, Belfast.

COUNTY LONDONDERRY HEALTH COMMITTEE
ASSISTANT COUNTY MEDICAL OFFICERS AND DISTRICT MEDICAL OFFICERS OF HEALTH

The County Londonderry Health Committee invite applications for appointments in the following Regions :—Region No. 1, comprises Coleraine Borough, Portstewart Urban and Coleraine Rural Districts. Region No. 2, comprises Limavady Urban, Limavady Rural and Londonderry Rural Districts. Region No. 3, comprises the Magherafelt Rural District. Applicants must be registered medical practitioners holding a Diploma in Sanitary Science, Public Health or State Medicine, and must have had experience in a whole-time Public Health appointment in accordance with the Health Authorities (Qualifications and Duties of Medical Officers) Regulations (Northern Ireland), 1948, and must be otherwise qualified in accordance with the above Order. Salaries £960 per annum rising by annual increments of £25 to £1,160, inclusive of cost-of-living bonus. Superannuation will be payable in accordance with the Northern Ireland Local Government Superannuation Acts, which is payable on a non-contributory basis. Travelling expenses will be payable according to the County Council scale. Other things being equal, preference will be given to ex-Service candidates possessing the required qualifications. Forms of application, conditions of appointment, and particulars of the Qualification Order above referred to, may be obtained from the undersigned, with whom applications must be lodged not later than March 13, 1948.—C. Henry, Secretary, County Health Office, 1, Institution Road, Coleraine, Northern Ireland.

CIVIL SERVICE COMMISSION
SENIOR PRINCIPAL SCIENTIFIC OFFICER

The Civil Service Commissioners invite applications for the post of Senior Principal Scientific Officer in the Royal Naval Scientific Service. Candidates must be British male subjects born on or before August 1, 1917. The appointment will be for duty in the first instance as Superintendent at the Royal Naval Physiological Laboratory, Gosport, Hants. The qualifications required for the appointment are wide physiological knowledge and experience in the field of physiological research, in which candidates must have made original contributions. Administrative experience and a sound knowledge of physics are desirable additional qualifications. The appointment will be permanent with benefits under the Federated Superannuation Scheme for Universities and the inclusive salary scale is £1,240 to £1,435. Exceptionally, a starting salary above the minimum may be granted according to qualifications and experience. A form of application and further particulars may be obtained from the Secretary, Civil Service Commission, Scientific Branch, 27, Grosvenor Square, London, W.1, quoting No. 2123. Completed application forms must be returned not later than April 7, 1948.

MINISTRY OF HEALTH
REGIONAL BLOOD TRANSFUSION SERVICE
Manchester
JUNIOR MEDICAL OFFICERS

The Minister of Health invites applications for the under-mentioned appointments in the Blood Transfusion Service at Manchester. Apart from routine duties there will be facilities for serological and clinical work. Part-time Medical Officers at a salary of £360 per annum. Applications stating age, qualifications with dates, nationality, present appointment, if any, and previous experience, with proofs of two recent testimonials, should be sent to the Regional Blood Transfusion Officer, Royal Infirmary, Manchester, not later than March 15, 1948.

MINISTRY OF HEALTH
INDUSTRIAL MEDICAL OFFICER

Applications are invited from medical practitioners with experience in industrial medicine for appointments to Medical Interviewing Committees which are being established in the Derbyshire Royal Infirmary, Derby ; the General Hospital, Nottingham, and the Royal Sheffield Infirmary and Hospital, Sheffield, to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable for session of 1½ to 2½ hours £2 12s. 6d. plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Senior Medical Officer, Ministry of Health Regional Offices, Block 5, Government Buildings, Chalfont Drive, Western Boulevard, Nottingham.

KENT EDUCATION COMMITTEE
Child Guidance Division of the School Health Service
SENIOR ASSISTANT COUNTY MEDICAL OFFICER

Applications are invited from suitably qualified and experienced practitioners, including those in H.M. Forces, for the above appointment on the central medical staff of the Committee. The successful candidate will be responsible to the School Medical Officer for the general conduct of the Child Guidance Service and will be required to undertake clinical duties in that Service. The salary scale is £1,100 a year rising by biennial increments of £50 to £1,210, and the commencing point will be fixed according to qualifications and experience. A cost-of-living allowance will also be paid. The appointment is superannuable and the successful candidate will be required to pass a medical examination and to provide a motor car, for which a travelling allowance will be paid on the County Council's scale. Applications, stating age, qualifications and experience, accompanied by the names and addresses of two persons to whom reference may be made as to professional ability and character, should be addressed to the undersigned not later than March 9, 1948. No forms of application are being issued.—A. Elliott, School Medical Officer, Public Health Department, County Hall, Maidstone.

SOUTH CANTERBURY HOSPITAL BOARD
Timaru, New Zealand
Practice in Radiology
PART-TIME RADIOLOGIST

Applications by airmail closing with the undersigned on March 31, 1948, are invited for the position of part time Radiologist to the Timaru Public Hospital with the right of private practice. Competent full time Radiographer employed. Salary at the rate of £800 N.Z. per annum with four weeks annual leave. In addition successful applicant will have option of operating a private Hospital Radiology practice on the following basis: A guaranteed fee of £200 per annum plus half the net profits which last year were £360. There are good prospects in this practice. In any case the Hospital Board guarantees a total annual income of not less than £1,200 N.Z. per annum. Applicants to state age, married or single, qualifications, previous experience and to enclose not more than three copies only of recent testimonials. Also approximate date could take up duties. New 5 roomed house, modern conveniences, available for appointee at moderate rental. Further particulars may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London.—H. G. Naylor, Secretary to Board, P.O. Box 88, Timaru, New Zealand.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
HOUSE PHYSICIAN (A) or (B2)

Applications are invited from registered medical practitioners for the appointment of House Physician (A) or (B2) now vacant at the above Hospital. Applicants for the A appointment may include practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months ; otherwise it will be for a period not exceeding one year. Applicants for the B2 position may include R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months ; otherwise it will be for a period of one year. The salary payable will be in the case of an A appointment, £120 per annum and for a B2 appointment at £200 per annum, together with full residential emoluments. The hospital has a Thoracic Surgery Unit (70 beds), accommodates acute medical and surgical service and civilian patients and has an Orthopaedic Centre (300 beds). Total beds 1,000. Applications, with full particulars, should be forwarded forthwith to the Medical Superintendent, Pinderfields Hospital, Wakefield.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

ASTLEY AINSLIE HOSPITAL, Edinburgh
ASSISTANT MEDICAL SUPERINTENDENT

The Governors of the above hospital invite applications from fully qualified medical practitioners (male or female) for the whole time post of Assistant Medical Superintendent. The hospital deals with medical and surgical cases in the early stages of convalescence. Salary at the rate of £550, or more according to experience, together with board and residence. Applications should reach the Medical Superintendent not later than March 15, 1948.

LINCOLNSHIRE JOINT BOARD FOR THE MENTALLY DEFECTIVE
Harmston Hall Colony, near Lincoln
DEPUTY MEDICAL SUPERINTENDENT

Applications invited for post of Deputy Medical Superintendent of the Colony and Ancillary Branches providing accommodation for 945 mental defectives of all grades. Salary £750, rising to £800 by two annual increments of £25, with emoluments valued at £100. Residential accommodation for a single person is available. Asylums and Certified Institutions (Officers' Pensions) Act applies. Travelling allowances will be paid in accordance with the Board's scale. Applications, giving full particulars of training, with copies of two recent testimonials should be received by the undersigned not later than March 6, 1948.—H. Copland, Clerk to the Joint Board, County Offices, Lincoln.

BOROUGH OF ACCRINGTON
MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners for the appointment of Medical Officer of Health to the Borough of Accrington in accordance with the provisions of the Sanitary Officers (Outside London) Regulations, 1935. The person appointed will be required to carry out the usual duties pertaining to the office of Medical Officer of Health and will be in charge of the Corporation's Maternity and Child Welfare Service. It is expected that he will also be appointed Divisional School Medical Officer of Health to the No. 11 Divisional Executive of the Lancashire County Education Authority. The inclusive salary has been fixed in accordance with the Modification of the Interim Revision of the Askwith Memorandum and will be at the rate of £1,100 per annum (including cost-of-living bonus). The post is subject to the Local Government Superannuation Act, 1937. It is anticipated that for the purposes of the National Health Service Act, 1946, the person appointed will also become an Officer of the Lancashire County Council as from July 5, 1948. Forms of application and full particulars of the duties and conditions of appointment may be obtained from the undernamed, to whom the completed form of application should be returned not later than Tuesday, March 23, 1948. —P. D. Wadsworth, Town Clerk, Town Hall, Accrington.

BEDFORDSHIRE COUNTY COUNCIL
ST. PETER'S HOSPITAL, Bedford
Assistant RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, including R practitioners who now hold A posts, for the appointment of Assistant Resident Medical Officer (B2). Salary will be at the rate of £250 per annum together with cost-of-living bonus at present £59 16s. If non-resident, an allowance of £100 per annum will be made in lieu of board and lodging. If held by an R practitioner the appointment will be limited to six months. In the event of a demobilised medical officer being appointed, application will be made for upgrading under the scheme. Applications should be addressed to the County Medical Officer, Shire Hall, Bedford, from whom further particulars may be obtained, in order to reach him not later than March 13, 1948.—J. B. Graham, Clerk of the County Council, Shire Hall, Bedford.

CITY OF NOTTINGHAM
PAEDIATRICIAN

Applications are invited for the appointment of Paediatrician. The appointment will be a joint one between the City of Nottingham Health and Education Departments (including Paediatric Wards at the City Hospital), the Nottingham Children's Hospital, and the Hospital for Women and the General Hospital, Nottingham, and the applicant appointed may be called into consultation at other hospitals or departments in the City. Applicants should be physicians with wide experience of Paediatrics, should hold higher qualifications, and be prepared to engage solely in the practice of the speciality. Salary at the rate of £1,500 per annum will be offered in the first instance and there will be limited opportunity for private consultative practice. The terms and conditions of the appointment will be reviewed at the commencement of the National Health Service. Applications, together with copies of not more than three testimonials and the names of two referees, to be sent to the undersigned on or before March 20, 1948.—J. E. Richards, Town Clerk, The Guildhall, Nottingham.

CITY OF STOKE-ON-TRENT
CITY MATERNITY HOSPITAL
MEDICAL OFFICER

Applications are invited from registered medical practitioners (male or female), with obstetrical experience and preferably a higher diploma in obstetrics, for the position of Resident Medical Officer at the City Maternity Hospital, Hartshill (46 beds, Part II Training School, C.M.B.). The commencing salary will be £500 per annum, rising by annual increments of £25 to £700 per annum plus emoluments valued at £150 per annum and bonus. The person appointed will be attached to the staff of the City General Hospital, Stoke-on-Trent, under the Consultant Obstetrician and Medical Superintendent. The duties include attendance at certain Ante-Natal and Infant Welfare Clinics in the City. Further particulars may be obtained from Dr. C. Gordon Lewis, Medical Superintendent of the City General and City Maternity Hospitals, Stoke-on-Trent. Applications should be forwarded as soon as possible to the undersigned.—Harry Taylor, Town Clerk.

CITY OF LIVERPOOL
Passenger Transport Department
FULL-TIME MEDICAL OFFICER

The Corporation invite applications from male persons for the appointment of Medical Officer to the Passenger Transport Undertaking at a salary of £1,000 per annum, subject to periodic review, plus cost-of-living bonus which is at present £59 19s. 3d. per annum. Candidates should have had a recognized training and possess appropriate qualifications. Experience in industrial medicine is desirable but not essential. Duties will include examination of new entrants, follow-up of employees resuming after sick leave, and generally provide a suitable health service. The person appointed will be required to reside within the City, and to hand over to the City Treasurer any fees or other amounts received in connection with the appointment as provided for by the Standing Orders of the City Council, and to devote the whole of his time to the duties of the office. He will be required to pass a medical examination. The appointment will be subject to the Local Government Superannuation Act, 1937, and the Standing Orders of the City Council, and will be determinable by three calendar months' notice on either side. Applications endorsed "Full-time Medical Officer" must be addressed to the undersigned and received on or before March 5, 1948. Candidates serving in H.M. Forces should state the number of their release group and probable date of release. Canvassing of members of the City Council, either directly or indirectly will be a disqualification.—Thomas Alker, Town Clerk, Muncipal Buildings, Liverpool, 2.

CITY OF LIVERPOOL
WALTON HOSPITAL, Rice Lane, Liverpool, 9
Resident ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male and female) for the above appointment, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be for a period of twelve months. The duties attached to the post will be in connexion with the Maternity Ward. The salary will be at the rate of £200 per annum together with full residential emoluments and cost-of-living bonus. All fees received in connexion with the appointment to be handed over to the City Council. The appointment will be subject to the Standing Orders of the City Council, and will be determinable by one month's notice on either side Applications, stating whether R practitioner, should be endorsed "Resident Assistant Medical Officer," and sent to the undersigned not later than Wednesday, March 10, 1948.—Thomas Alker, Town Clerk, Municipal Building, Dale Street, Liverpool.

CITY OF PLYMOUTH
MOUNT GOLD ORTHOPAEDIC HOSPITAL
(120 beds)
Assistant RESIDENT SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B2), including suitably qualified R practitioners now holding A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be renewable for a further period of six months, terminable by one month's notice on either side at any time. Salary is at the rate of £250 per annum, plus war bonus and with full residential emoluments. All other fees received by the Officer must be refunded to the City Council. Married quarters are not provided. Preference will be given to applicants who have had some experience of orthopaedic and fracture work. Applications with copies of two testimonials should be sent to the undersigned as soon as possible.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF PLYMOUTH
CITY GENERAL HOSPITAL (450 beds)
RECEIVING ROOM OFFICER (A)

Applications are invited from duly qualified and registered medical practitioners (male and female), including practitioners within three months of qualifying, for the appointment of Receiving Room Officer (A) at the City General Hospital, Plymouth. The appointment will be for a period of six months and terminable by one month's notice on either side at any time. Salary will be at the rate of £250 per annum, plus full residential emoluments and war bonus. All fees other than this received by the Officer must be refunded to the Council. Further information may be obtained from the Medical Superintendent. Applications should be sent to the undersigned as soon as possible.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL
(Municipal General Hospital with 1,050 beds)
HOUSE SURGEON (A)
Gynaecological and Obstetrical Department

Applications are invited from registered medical practitioners (male or female) for appointment as House Surgeon (A) in the Gynaecological and Obstetrical Department at the above hospital. The vacancy will occur in the middle of March. The salary is at the rate of £250 per annum, plus residential emoluments. This is approved as a resident post required for the D.R.C.O.G. Practitioners within three months of qualification and liable under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Applications should be sent to the Medical Superintendent, Dudley Road Hospital, Birmingham, 18, as soon as possible.

CITY OF BIRMINGHAM
DUDLEY ROAD HOSPITAL
(Municipal General Hospital with 1,050 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female) for appointment as House Surgeon (A), at the above hospital. The vacancy will occur in the middle of March. The salary is at the rate of £250 per annum plus residential emoluments. This is approved as a resident post required for the final F.R.C.S.(Eng.). Practitioners within three months of qualification and liable under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Applications should be sent to the Medical Superintendent, Dudley Road Hospital, Birmingham, 18, as soon as possible.

CITY OF PERTH
MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of Medical Officer of Health of the City of Perth. Candidates must possess the necessary Public Health qualifications (D.P.H. or equivalent). The salary will be in accordance with the scale £1,040 to £1,170 with bonus of £60 in addition with placing on the scale in accordance with qualifications and experience. The successful applicant must devote his whole time to his duties, which will include the supervision of and responsibility for all medical services controlled by the Town Council. Applications to be lodged with the Subscriber not later than fourteen days from the appearance of this advertisement.—Robt. Adam, Town Clerk, City Chambers, Perth.

CITY OF BIRMINGHAM PUBLIC HEALTH DEPARTMENT
WOMAN MEDICAL OFFICERS
HOLIDAY LOCUMS

Applications are invited for the temporary appointment of three whole-time medical officers to take holiday duty during the summer months, one commencing on April 19, 1948, and the others commencing on May 16, 1948. The appointments are non-resident, and the salary offered is at the rate of £13 10s. per week. The successful applicants will be expected to remain, if required, for a period of six months. Application forms may be obtained from the Medical Officer of Health, Council House, Birmingham, 3, and completed forms should be returned to him, together with copies of three testimonials, not later than March 13, 1948.

CITY OF LONDON MATERNITY HOSPITAL
102, City Road, E.C.1
RESIDENT MEDICAL OFFICER (B1)

Applications are invited for the post of Resident Medical Officer (B1), including R practitioners holding B2 appointments, at the London Unit of the above hospital. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary at the rate of £200 per annum with board, residence, etc. The appointment is for a period of six months commencing April 1, 1948. Applications to be sent not later than March 5 to G. G. Panter, Secretary.

CITY OF LONDON MATERNITY HOSPITAL
102, City Road, E.C.1
TWO ASSISTANT OBSTETRIC SURGEONS

Vacancies occur at the above hospital for two Assistant Obstetric Surgeons. Candidates must be members of the Royal College of Obstetricians and Gynaecologists. Applications to be sent not later than March 5, to Gilbert G. Panter, Secretary.

COUNTY OF BRECON
DISTRICT MEDICAL OFFICER OF HEALTH
for the Southern Combined District of Breconshire

Applications are invited from duly qualified medical practitioners for the appointment of District Medical Officer of Health for the Southern Combined District of Breconshire, comprising the Urban District of Brynmawr, and the Rural Districts of Crickhowell, Vaynor and Penderyn and Ystradgynlais. (Acreage: 109,065. Population: 29,235 approximately). Applicants must be registered in the *Medical Register* as the holder of a Diploma in Sanitary Science, Public Health, or State Medicine, and must not be over 45 years of age at the date of application. The person appointed will be required to perform all the duties prescribed for a Medical Officer of Health in Regulation 17 of the Sanitary Officers (Outside London) Regulations, 1935, and to devote the whole of his time to the duties of his office and must not engage in private practice as a medical practitioner. The person appointed will be required to reside in the Southern Combined Area of Breconshire. Salary £1,040 per annum, plus cost-of-living bonus at present amounting to £60 per annum, together with an allowance of £100 per annum for travelling, subsistence, and provisions of office accommodation. Clerical assistance will be provided by the Local Authorities concerned. The appointment is subject to the approval of the Minister of Health, is governed as regards tenure by Section 110 of the Local Government Act, 1933, and is pensionable under the provisions of the Local Government Superannuation Act, 1937. The person appointed will be required to give at least one month's notice before resigning his appointment. Applications, giving age, medical qualifications, and previous experience (if any) together with copies of three recent testimonials, must be received by the undersigned not later than March 13, 1948.—C. M. S. Wells, Clerk of the Breconshire County Council, County Hall, Brecon.

COUNTY BOROUGH OF WALSALL
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners (male or female) for the above appointment. The commencing salary will be £675 per annum, rising by annual increments of £25 to a maximum of £875 per annum, plus existing war bonus. The duties are principally associated with the School Medical Service, but include such other duties as the Medical Officer of Health may direct The possession of the Diploma in Public Health or its equivalent will be considered an advantage. The person appointed will be required to devote the whole of his/her time to the duties of the office. The appointment is subject to three months' notice on either side, to the passing of a medical examination and to the provisions of the Local Government Superannuation Act, 1937. Applications, on a form to be obtained from the undersigned, stating age, qualifications and experience, together with copies of three recent testimonials, should be sent to me not later than March 13, 1948.—James A. M. Clark, Medical Officer of Health, Health Department, Council House, Walsall.

COUNTY BOROUGH OF SUNDERLAND
CHERRY KNOWLE (E.M.S.) HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1) at the above-named hospital. Suitably qualified R practitioners holding B2 appointments may apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary will be at the rate of £455 per annum, rising by annual increments of £25 to £555 per annum, with full residential emoluments valued at £100 per annum, and cost-of-living bonus, at present £29 19s. 7d. per annum. The selected candidate will be required to pass a medical examination and to commence duty in early March. The appointment will be determinable by one month's notice given in writing at any time by either party to the other of them. Applications must be addressed to the undersigned, endorsed on cover "Resident Surgical Officer (B1), Cherry Knowle (E.M.S.) Hospital," and delivered at my office not later than March 6.—G. S. McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY BOROUGH OF WEST HAM
FOREST GATE HOSPITAL
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for appointment as Resident Assistant Medical Officer (B1) at the Council's Forest Gate Hospital. Suitably qualified R practitioners holding B2 appointments may apply. R practitioners holding B1 appointments cannot apply unless they have been rejected by the R.A.M.C. Duties principally in connexion with maternity unit and Council's ante-natal and post-natal clinics. Previous experience of midwifery essential. Preference given to candidates who have held resident hospital appointment, and experience in administration of anaesthetics an advantage Appointment for period of one year in first instance but may be extended. Salary scale £455 to £555 per annum and emoluments, plus temporary cost-of-living bonus. Further particulars and application forms from Medical Officer of Health, 225, Romford Road, West Ham, E.7, to be returned to him not later than March 10, 1948.—E. E King, Town Clerk, West Ham Town Hall, Stratford, E.15.

COUNTY BOROUGH OF WEST HAM
WHIPPS CROSS HOSPITAL (1,200 beds)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) for the post of Assistant Medical Officer (B1) at Whipps Cross Hospital, Leytonstone E.11. Suitably qualified R practitioners holding B2 appointments may apply. R practitioners holding B1 appointments cannot apply unless they have been rejected by the R.A.M.C. Salary for post £455 per annum rising by annual increments of £25 to a maximum of £555 per annum, plus a temporary cost-of-living bonus, with full emoluments. Duties mainly in medical wards. Further particulars and forms of application from Medical Officer of Health, 225, Romford Road, West Ham, London, E.7, to be returned to him not later than March 10, 1948.—E. E. King, Town Clerk, West Ham Town Hall, Stratford, London, E.15.

COUNTY BOROUGH OF ROTHERHAM
MUNICIPAL GENERAL HOSPITAL
Resident ASSISTANT MEDICAL OFFICER (A)

Applications are invited from fully registered medical practitioners (including practitioners within three months of qualification and who are liable for service under the National Service Acts), for the above appointment. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, together with full residential emoluments and a temporary cost-of-living bonus in accordance with the Council's scale. Forms of application may be obtained from the Medical Superintendent, Municipal General Hospital, Moorgate, Rotherham, and must be returned to the undersigned, endorsed "Resident Assistant Medical Officer," as soon as possible.—John S. Wall, Town Clerk, Municipal Offices, Rotherham.

Have you read the notice at top of page 11 ?

Have you read the notice at top of page 11 ?

COUNTY BOROUGH OF MIDDLESBROUGH
MIDDLESBROUGH GENERAL HOSPITAL
(355 beds).
MEDICAL STAFF

Applications are invited for the following appointments at the above Hospital which is an Acute General Hospital:—

HOUSE PHYSICIAN (A)
HOUSE SURGEON (A)

Salary in both cases is at the rate of £200 per annum, together with full residential emoluments. The successful candidates will be required to pass a medical examination. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be limited to a period of six months, otherwise the appointment will be for twelve months. Applications should be sent not later than Wednesday, March 3, 1948, to the Medical Officer of Health, Municipal Buildings, Middlesborough, from whom further information may be obtained.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough

COUNTY BOROUGH OF BLACKBURN
QUEEN'S PARK HOSPITAL, Blackburn
ASSISTANT MEDICAL OFFICER (B1)
for the Obstetrical Unit

Applications are invited for the post of Assistant Medical Officer (B1) for the Obstetrical Unit, Queen's Park Hospital, Blackburn, which deals with all the abnormal midwifery of the area. The Unit is under the clinical direction of a Consultant Obstetrician. Salary £455 per annum (plus cost-of-living bonus) increasing by annual increments of £25 to £555 per annum, together with residential emoluments. The appointment will in the first instance be for a period of two years, or, in the case of an R practitioner, one year. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Further particulars may be obtained from the Public Assistance Officer, Cardwell Place, Blackburn, to whom applications accompanied by copies of two recent testimonials, must be sent.—Chas. S. Robinson, Town Clerk.

COUNTY BOROUGH OF BLACKBURN
Public Assistance Department
QUEEN'S PARK HOSPITAL
AND INSTITUTION, Blackburn
Resident Junior Assistant MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the post of Resident Junior Assistant Medical Officer (A) at Queen's Park Hospital and Institution, Blackburn, at a salary of £325 per annum, plus cost-of-living bonus, together with board, apartments and attendance. Practitioners within three months of qualification who are liable for Service under the National Service Acts may apply, when appointment will be for a period of six months, otherwise the appointment will be limited to a term not exceeding one year. Further particulars may be obtained from the Public Assistance Officer, Cardwell Place, Blackburn, to whom applications must be sent.—Chas. S. Robinson, Town Clerk.

COUNTY BOROUGH OF BLACKBURN
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered women medical practitioners for the appointment of Assistant Medical Officer of Health (Female). The duties will be mainly connected with Maternity and Child Welfare. A Diploma in Public Health, though not essential, will be considered an additional qualification for the position. The salary will be £650 rising by annual increments of £25 to a maximum of £850 per annum plus war bonus (at present £48 2s. per annum). The commencing salary may be fixed at a rate higher than £650 plus bonus in the case of a candidate who has had previous experience as an Assistant Medical Officer of Health. Forms of application may be obtained from the Medical Officer of Health, Victoria Street, Blackburn, and should be returned to him as soon as possible and in no case later than Monday, March 8, 1948.—C. S. Robinson, Town Clerk.

CHESHIRE COUNTY COUNCIL
THE BARONY HOSPITAL, Nantwich
FULL-TIME RESIDENT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of full-time Resident Medical Officer at the Barony Hospital, Nantwich, which is a hospital for the treatment of chronic sick cases (396 beds). At present the duties of the office are as prescribed by Article 170 of the Public Assistance Order, 1930, and the person appointed will be required to enter into a Contract of Service. Remuneration will be in accordance with the modified Interim Askwith Scale for Resident Medical Officers, commencing at £472 10s. per annum and rising, subject to satisfactory service, by £25 annually to £572 10s. per annum, together with board, lodging, etc. The appointment will be subject to the County Council's Standing Orders and regulations affecting their staffs. Salary and emoluments will be subect to the deductions provided for by the Local Government Superannuation Act, 1937. Application forms, particulars of duties and conditions of appointment may be obtained from the undersigned, to whom completed applications should be returned not later than March 8, 1948.—William H. Owen, County Public Assistance Officer, 50, Hough Green, Chester.

COUNTY BOROUGH OF BIRKENHEAD
Department of the Medical Officer of Health
BIRKENHEAD MUNICIPAL HOSPITAL
PATHOLOGIST (Non-Resident)

Applications are invited from specialists, who have served in H.M. Forces, for the above appointment to this hospital containing 560 beds. The appointment, which is full-time, will be made in accordance with Circular 202/46 of the Ministry of Health, and will be limited to the interim period pending the establishment of the National Health Service. The salary will be £1,000 per annum, plus non-residential emoluments valued at £100. Applications, giving full particulars of experience in Pathology, should be sent to the undersigned as soon as possible. Any further particulars concerning the appointment may be obtained from the Medical Superintendent of the Hospital.—Dr. F. G. Foster, M.D., D.P.H., Medical Officer of Health, 9, Hamilton Square, Birkenhead.

COUNTY BOROUGH OF NEWPORT
ST. CADOC'S HOSPITAL
(for Mental and Nervous Diseases)
Caerleon, Newport, Mon.
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the appointment of Assistant Medical Officer (B1), commencing salary £505 per annum, rising by annual increments of £25 to £555, plus cost-of-living bonus (£59 16s. per annum), together with emoluments valued for the purpose of the Asylum Officers' Superannuation Act, 1909, at £150 per annum. A further £50 per annum is payable to holders of the D.P.M. Registered practitioners holding B2 appointments and those holding B1 posts and ineligible for H.M. Forces may apply. Applications to be sent to the Medical Superintendent, St. Cadoc's Hospital, Caerleon, Newport, Mon.

COUNTY BOROUGH OF SWANSEA
MORRISTON HOSPITAL (450 beds)
TWO HOUSE SURGEONS (A)

Applications are invited for the above mentioned posts from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointments carry salaries at the rate of £150 per annum, in addition medical quarters are provided, emoluments being valued at £100 per annum. Applications should be addressed to the Medical Superintendent, Morriston Hospital, Swansea, as early as possible.—T. B. Bowen, Town Clerk, The Guildhall, Swansea.

CUMBERLAND COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER

The County Council invite applications for the post of Assistant County Medical Officer, salary within the range £700 by £50 to £850 according to qualifications and experience, plus cost-of-living bonus (£60). Travelling and subsistence allowances on the County scale for the time being in force. Applicants must be registered medical practitioners holding the Diploma in Public Health, or corresponding qualification. Experience in the School Health Service, Maternity and Child Welfare and Tuberculosis will be a recommendation. Further particulars and forms of application may be obtained from the County Medical Officer, 11, Portland Square, Carlisle, to whom applications should be submitted before March 25, 1948.—G. N. C. Swift Clerk of the County Council.

DURHAM COUNTY COUNCIL
DRYBURN EMERGENCY HOSPITAL, Durham
TEMPORARY RESIDENT ASSISTANT
MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male and female) for the post of Temporary Assistant Medical Officer, now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period of twelve months. Salary is at the rate of £120 per annum, plus full residential emoluments valued at £100 per annum together with cost-of-living bonus equal to £59 19s. 3d. per annum (cash £29 19s. 8d., emoluments £29 19s. 7d.). The appointment is subject to the regulations for the time being of the County Council relative to the payment of salary in case of sickness, and the successful applicant will be required to pass the County Council's medical examination. The appointment is terminable by one calendar month's notice on either side. Applications stating age, liability for military service, medical fitness, position as regards deferment, etc. should be sent to the County Medical Officer of Health, Shire Hall, Durham.—J. K. Hope, Clerk of the County Council, Shire Hall, Durham.

ESSEX COUNTY COUNCIL
ST. MARGARET'S HOSPITAL, Epping
HOUSE SURGEON (B2)

The Essex County Council invite applications from registered medical practitioners (male and female), including those now serving in H.M. Forces and R practitioners holding A appointments, for the post of House Surgeon (B2) at St. Margaret's Hospital, Epping. If held by an R practitioner, the appointment will be limited to six months. Salary £260 per annum, plus residential emoluments and such bonus as may be decided by the County Council from time to time. Applications indicating age, whether married, qualifications, experience and position in relation to military service, accompanied by copies of not more than three recent testimonials, to be sent to The County Medical Officer, County Hall, Chelmsford, within ten days from the appearance of this advertisement.

ESSEX COUNTY COUNCIL HOSPITAL
Wanstead, London, E.11
TEMPORARY OBSTETRICIAN AND
GYNAECOLOGIST

Applications are invited for the above temporary post which will be limited to approximately six months. Applicants should have higher qualifications in Obstetrics and should in addition have wide experience in both Obstetrics and Gynaecology, including operating. Salary will be at the rate of seventeen guineas per week subject to deductions for residential emoluments. Applications stating position in regard to National Service should be forwarded to the Medical Superintendent as soon as possible.

EAST SUSSEX COUNTY COUNCIL
SOUTHLANDS HOSPITAL, Shoreham-by-Sea
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Candidates should have had experience in operative surgery and be capable of dealing with routine emergency work. Salary £500 to £600 per annum according to experience. Cost-of-living bonus will be payable in addition to salary, in accordance with the scale approved by the County Council from time to time, the present rate being in the case of resident staff, 11s. 6d. per week. Full residential emoluments will be provided. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate to be successful must pass a medical examination. The appointment will be full-time and subject to (*a*) one month's notice on either side and (*b*) such conditions of service as may from time to time be approved on behalf of the County Council. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Application forms should be obtained from and returned as soon as possible to the Medical Superintendent, Southlands Hospital, Shoreham-by-Sea.—H. S. Martin, Clerk of the County Council, County Hall, Lewes.

KINGSTON UPON HULL CORPORATION
Health Department
BEVERLEY ROAD HOSPITAL (432 beds)

Applications are invited for the undermentioned appointments from registered medical practitioners of either sex, including those now serving in H.M. Forces :—

SENIOR HOUSE OFFICER (SURGICAL) (B1), tenable for three years, salary £455 per annum, plus cost-of-living bonus, rising to £555 per annum by annual increments of £25, plus full residential emoluments. If non-resident, the salary is plus £200 per annum in lieu of residential emoluments. Applications from R practitioners holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C.

JUNIOR HOUSE OFFICER (SURGICAL) (A), tenable for one year; salary £250 per annum, plus cost-of-living bonus and plus full residential emoluments. If non-resident, the salary is plus £150 per annum in lieu of residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months.

Forms of application, conditions of appointment, etc., may be obtained from, and the form should be returned duly completed to, the Medical Officer of Health, Guildhall, Kingston upon Hull, as soon as possible.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL, Whiston, Prescot
near Liverpool
HOUSE SURGEON (B2) (E.N.T.)

Applications are invited for the above appointment from registered medical practitioners (male and female), including R practitioners who now hold A posts. The Hospital is approved for the D.L.O. If held by an R practitioner, the appointment will be limited to a period of six months. Otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary is at the rate of £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday March 8, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL, Ashton-under-Lyne
near Manchester
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the above appointment, including R practitioners who now hold A posts. If the successful applicant is an R practitioner, the appointment will be limited to six months, otherwise it may be renewed for a further period of six months. Salary is at the rate of £250 per annum, together with a cost-of-living bonus and full residential emoluments. The appointment is subject to medical examination and is superannuable. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom all applications must be forwarded not later than Monday, March 8, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LIVERPOOL COUNTY BOROUGH
Local Education Authority
CHILD GUIDANCE CLINIC
PSYCHIATRIST

Applications are invited from suitably qualified practitioners for the whole-time post of Psychiatrist in the School Health Service. The salary offered is £1,000 per annum. The officer appointed will be required to reside within the City and devote whole-time service to the Local Education Authority under the direction of the School Medical Officer, and will not be allowed to undertake any private practice. The appointment will be subject to the Standing Orders of the City Council and to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Application forms may be obtained from the School Medical Officer, Municipal Annex, Dale Street, Liverpool, 2, and should be returned together with copies of three recent testimonials not later than March 22, 1948, and endorsed "Child Guidance Clinic," to the Town Clerk, Municipal Buildings, Liverpool, 2. Candidates serving in H.M. Forces overseas need not complete the official form of application, but may submit direct applications giving particulars of age, qualifications and experience, the number of their Release Group, and the names of not more than three persons to whom the Local Education Authority may refer. The canvassing of members of the Education Committee or the City Council is strictly prohibited, and will be considered a disqualificaton.—Thomas Alker, Town Clerk, and Clerk to the Local Education Authority.

LANCASHIRE COUNTY COUNCIL
COUNTY HOSPITAL
Ashton-under-Lyne (300 beds)
ASSISTANT PHYSICIAN (B1) (Non-resident)

Applications are invited for the above appointment. Candidates should possess a higher medical qualification and be experienced in general medicine. The appointment will be whole-time and the successful candidate will be required to reside within reasonable distance of the hospital. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The appointment is rendered vacant by the calling of the present Assistant Physician to service in H.M. Forces. It is intended that it should be held by the successful candidate during the period of absence on service. Salary £1,000 per annum, rising by annual increments of £50 to a maximum of £1,200 per annum, plus cost-of-living bonus. Form of application and terms of appointment may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom applications must be forwarded by Monday, March 8, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
CHIEF ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited for the above appointment. Applicants, who must possess a Degree or Diploma in State Medicine or Public Health, should have a sound knowledge of clinical medicine and practical experience in public health adminstration. The range of the salary is £1,300 per annum, rising by annual increments of £50 to £1,400 per annum, plus cost-of-living bonus. When making the appointment, the Committee may take into consideration the candidate's present salary. The appointment is subject to medical examination and is superannuable. Application forms may be obtained from the County Medical Officer of Health, County Offices, Preston, to whom applications should be returned not later than Monday, March 22, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LONDON COUNTY COUNCIL
FULHAM HOSPITAL
WHOLE-TIME SENIOR PHYSICIAN

Medical practitioner required for the whole-time position of Senior Physician at Fulham Hospital, St. Dunstan's Road, Hammersmith, W.6. The salary is £1,500 a year, rising by annual increments of £100 to £1,800. No emoluments are payable. The officer selected for appointment will be subject to the administrative direction and control of the medical superintendent, but will have full clinical responsibility for the work of his department at the hospital. Applications should be made on the prescribed form obtainable on written application from the Medical Officer of Health (S.D.2), The County Hall, Westminster Bridge, S.E.1. (Stamped foolscap envelope necessary.) The completed form should be returned by March 8, 1948. Canvassing disqualifies. (405)

MIDDLESEX COUNTY COUNCIL
NORTH MIDDLESEX COUNTY HOSPITAL
Edmonton, N.18
CASUALTY OFFICER (B1)

Casualty Officer (B1) required at North Middlesex County Hospital, Edmonton, N.18, for casualties and hospital admissions, etc. Good all-round experience. R practitioners holding B2 posts eligible; those holding B1 posts ineligible unless rejected for H.M. Forces. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash). Board, lodging and laundry. Six months' appointment. Vacant April 1. Duty hours 10 a.m. to 6 p.m. daily, Saturday afternoon and Sunday free. Application to Medical Director of Hospital by March 10 (quoting D.688, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
HILLINGDON COUNTY HOSPITAL
near Uxbridge, Middlesex

(a) **CASUALTY OFFICER (B2) (male)** required. Registered medical practitioners who have held house appointments, and had good all-round experience (including R practitioners holding A posts). Salary £350 per annum. Whole-time duties under Medical Director include casualties and admissions to hospital and such other duties as may be required. Vacant, April 1.

(b) **SENIOR HOUSE OFFICER (B2) (Resident, male)** for obstetric duties. Previous obstetric experience desirable but not essential. Vacant end of March.

(c) **SENIOR HOUSE OFFICER (B2) (Anaesthetist. Resident, male).** Whole-time duties such as Council may require, mainly in Anaesthetics under supervision of Medical Director. Previous experience in Anaesthetics essential. Post vacant middle of March. (b) and (c) registered medical practitioners who now hold A posts. Salary £250 per annum.

All salaries plus any temporary bonus (now £30 per annum cash). Board, lodging, laundry. Six to twelve months' appointment (except for R practitioners), subject to medical examination. Applications (no forms) to Medical Director of Hospital by March 15, 1948 (quoting D.690, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL,
Isleworth
CASUALTY OFFICER (B1)

Casualty Officer (B1) required at West Middlesex County Hospital, Isleworth for admissions in Casualty Department. Must have held medical and surgical house posts. R practitioners holding B2 posts may apply; those holding B1 posts ineligible unless rejected for H.M. Forces. Salary £350 per annum, plus £100 per annum, non-resident allowance and any temporary bonus (now £30 per annum cash). Whole-time, six to twelve months' appointment. Vacant now. Medical examination. Application to Medical Director of Hospital by March 6 (quoting D.689. B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth
SURGEON (for Orthopaedic and Traumatic Unit)

Higher surgical qualification. General scope of duties arranged by Medical Director, may include teaching. Inclusive salary £1,200 (plus any temporary bonus, now £60 per annum) by £100 to £1,800 per annum, on proof of outstanding achievement increments of £50 up to £2,200 may be granted. Any fees received to be paid to County Council. Whole-time, non-resident, established, pensionable, subject to medical examination. Required to live near hospital and undertake to act as Deputy Medical Director for a period if called upon. Further details from Medical Director. Applications (no forms) to undersigned by March 13, with copies of up to two recent testimonials and referees (quoting D.686, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
ASSISTANT MEDICAL OFFICER
in Yiewsley and West Drayton

Assistant Medical Officer required in Yiewsley and West Drayton. Whole-time appointment for maternity and child welfare and school health work and such other duties as Council may require. Established, pensionable, subject to medical examination. Salary scale £780 rising after two years by £30 per annum to £930 per annum, plus any temporary bonus (now £60 per annum). Applications (no forms) to the undersigned by March 18 (quoting D.683; B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
PART-TIME PSYCHIATRIST
for Edmonton Borough

Part-time Psychiatrist required, four sessions a week, for Edmonton Borough. Registered medical practitioners of consultant status with special experience in child psychiatry. £4 4s. per session plus mileage allowance. Applications (no forms) to Medical Officer of Health, Town Hall, Edmonton, N.9, by March 15 (quoting D.663, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MANCHESTER CORPORATION
CRUMPSALL HOSPITAL (1,400 beds)
HOUSE OFFICER (A) for the Surgical Wards

Applications are invited from registered medical practitioners (male or female) for the above-mentioned appointment, including those within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months; otherwise it will be for a period of twelve months. The duties of the post are mainly surgical. The basic salary is £230 per annum with board, residence and laundry in addition, subject to the Manchester Corporation conditions of service. Applications stating the full name, age (giving date of birth), nationality, professional qualifications (with dates), particulars of present appointment and past hospital appointments are to be addressed to the Medical Superintendent, Crumpsall Hospital, Crumpsall, Manchester, 8, as soon as possible. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

NORTHUMBERLAND COUNTY COUNCIL
Health Department
ASSISTANT TUBERCULOSIS OFFICER
(Whole-time)

Applications are invited from registered medical practitioners for the appointment of Assistant Tuberculosis Officer. Candidates should possess special knowledge and have experience of the modern methods of diagnosis and treatment of tuberculosis, including the ability to interpret chest x-ray films and also be able to undertake A.P. refills. The successful candidate will work under the general administrative control of the County Medical Officer and the clinical control of the Senior Tuberculosis Officer. The salary will be in accordance with the recommendations of interim revision of the Askwith memorandum for Medical Officers employed in Departments—namely £650 per annum rising by annual increments of £25 to a maximum of £850 per annum, plus cost-of-living bonus. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The appointment is terminable by three months' notice on either side. Applications, giving liability for military service, should reach the County Medical Officer, County Hall, Newcastle-upon-Tyne, 1, not later than March 12, 1948.—J. B. Tilley, County Medical Officer.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM GENERAL HOSPITAL
(Regional Orthopaedic Centre—440 beds)
TWO RESIDENT MEDICAL OFFICERS (B2)
including ANAESTHETIST

Applications are invited from registered medical practitioners (male or female) for the appointment of two Resident Medical Officers (B2), the duties of one of whom will include those of Anaesthetist. R practitioners who now hold A posts may apply, when appointment will be limited to six months; otherwise it will be for a period of one year. The salary is at the rate of £200 per annum, with full residential emoluments. In addition to the orthopaedic work, a large amount of general surgery is carried out. Applications should be sent to the undersigned, not later than March 6, 1948.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

OXFORDSHIRE COUNTY COUNCIL
Health Department
DEPUTY COUNTY MEDICAL OFFICER

Applications for the above post are invited from registered medical practitioners, holding the D.P.H. The duties are mainly administrative and the officer appointed will work under the direction of the County Medical Officer, and will be required to take charge of the Health Department during the absence of the County Medical Officer. The salary is £810 per annum, rising by two annual increments of £50 and £40 to £900 per annum, plus cost-of-living bonus, and the commencing salary will be according to experience and within this range. The officer appointed should possess and be able to drive a car and will be paid travelling expenses on the Council's scale. The appointment is subject to the Local Government Superannuation Act, 1937, or the National Health Service (Superannuation) Regulations, 1947, and will be terminable by three months' notice in writing on either side. The successful candidate will be required to pass a medical examination and to take up his duties as soon after April 1, 1948, as possible. Forms of application may be obtained from the County Medical Officer of Health, 1, Becket Street, Oxford, and when completed should be returned to him, together with copies of three recent testimonials, within three weeks of the date of this advertisement.—F. G. Scott, Clerk of the Council, County Hall, Oxford.

SURREY COUNTY COUNCIL
KINGSTON COUNTY HOSPITAL
Wolverton Avenue, Kingston-on-Thames (450 beds)
ASSISTANT MEDICAL OFFICER (B1)
in Paediatric Department

Applications are invited from suitably qualified medical practitioners, including those serving in H.M. Forces, for the above appointment. Candidates must have experience in house appointments and preferably some experience in the treatment of children's diseases. Salary £350, £400 or £450 per annum according to qualifications and experience plus bonus and full residential emoluments. Appointment is for six months from April 1, 1948, renewable for a second period of six months. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from practitioners now holding B1 appointments cannot be considered unless they have already completed a period of service with H.M. Forces or have been rejected for such service. Applications by letter should reach the Medical Superintendent of the Hospital by March 6, 1948.

ELIZABETH GARRETT ANDERSON HOSPITAL
Euston Road, N.W.1
ASSISTANT ANAESTHETIST

Applications are invited from registered medical women for the post of Assistant Anaesthetist. Remuneration at the rate of 2½ to 4 guineas per session. Applicants must hold Diploma in Anaesthetics. Duties to commence mid-April. Applications should be sent to the Secretary by March 16.

Have you read the notice at top of page 11 ?

Have you read the notice at top of page 11 ?

WORCESTERSHIRE COUNTY COUNCIL
Mental Health Services
Senior ADMINISTRATIVE MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners, holding a Diploma in Psychological Medicine, who have had extensive experience of mental illness, particularly in children, for the above mentioned appointment. The holding of a certificate of recognized training in Child Psychiatry is desirable. The officer appointed will act under the general direction of the County Medical Officer (who is also School Medical Officer) and will be required to undertake certain clinical duties and to advise the appropriate sub-Committees, on the Mental Health Services, and to give medical direction to the team of workers employed on these duties. The appointment will be terminable by three months' notice by either party. The salary will be at the rate of £1,200 per annum with cost-of-living bonus. The appointment will be superannuable and will be subject to a satisfactory medical examination. The successful applicant will be required to reside in or near Worcester and should be in possession of and be able to drive a car, for which a travelling allowance in accordance with the Council's scale will be paid. Applications on forms to be obtained from the County Medical Officer, County Buildings, Worcester, should be submitted with not more than three recent references not later than March 24, 1948.—W. R. Scurfield, Clerk of the Council, Shirehall, Worcester. (Q75).

WORCESTERSHIRE COUNTY COUNCIL
Senior ADMINISTRATIVE MEDICAL OFFICER
for Maternity and Child Welfare

Applications are invited from duly qualified medical women, holding the Diploma in Public Health, for the above-mentioned new appointment. The appointed officer will act under the general direction of the County Medical Officer and will be engaged in the main on administrative duties although some clinical work will be included. The appointment will be terminable by three months' notice by either party. The salary will be at the rate of £975, rising by £50 biennially to £1,162 10s. per annum, with cost-of-living bonus. The appointment will be superannuable and will be subject to a satisfactory medical examination. The successful applicant will be required to reside in or near Worcester and should be in possession of and be able to drive a car, for which a travelling allowance in accordance with the Council's scale will be paid. Applications on forms to be obtained from the County Medical Officer, County Buildings, Worcester, should be submitted with not more than three recent references not later than March 24, 1948.—W. R. Scurfield, Clerk of the Council, Shirehall, Worcester. (Q76)

ALTRINCHAM GENERAL HOSPITAL
PATHOLOGIST

Applications are invited for post of Pathologist. Appointment is intended to be full-time, but daily attendance amounting to not less than six half-day sessions weekly would be considered. Applicants must be exclusively engaged in the practice of pathology, and experience in all branches of pathology desirable. Post non-resident with a salary of £750 to £1,000 per annum. Successful candidate will be encouraged to engage in private practice, for which there is considerable scope, and this will not be limited to patients in the private wards. He will be expected to undertake such work in the hospital laboratory, a proportion of the private fees being retained by the hospital. Applications, giving the names of two referees, should be sent by March 13, 1948, to the General Superintendent and Secretary.

ACTON HOSPITAL
Gunnersbury Lane, Acton, W.3
CASUALTY OFFICER (A) AND
RESIDENT MEDICAL OFFICER

Applications are invited from registered medical practitioners, male or female (including practitioners within three months of qualification who are liable to service under the National Service Acts), for the appointment of Casualty Officer (A) immediately for three months, and Resident Medical Officer for a further three months. Salary at the rate of £150 per annum, with full residential emoluments. Applications, with copies of two testimonials, to be sent to the undersigned as soon as possible.—Donald C. D. Sword, House Governor.

BURY INFIRMARY, Lancashire (159 beds)
HOUSE SURGEON (A) (Gynaecology and Obstetrics) and HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (Gynaecology and Obstetrics) (A) and House Physician (A), which posts will become vacant early in March, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by practitioners who are liable under the National Service Acts the appointments will be for six months, otherwise renewable. Salary at the rate of £200 per annum in each instance, with full residential emoluments. Applications to the undersigned as soon as possible.—H. Wilkinson, Superintendent.

ADDENBROOKE'S HOSPITAL, Cambridge
HOUSE SURGEON (B2) to the Special Depts., Gynaecology, Obstetrics and Ophthalmology

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (B2) to the Special Departments, gynaecology, obstetrics and ophthalmology, vacant on April 11, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, which is the normal period of appointment. The salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned not later than Wednesday, March 10, 1948.—J. A. Beardsall, Secretary-Superintendent.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
WHOLE-TIME REGISTRAR (B1) (Non-resident)
to the Casualty Department at the General Hospital

Applications are invited for the post of whole-time Registrar to the Casualty Department at the General Hospital (non-resident) B1. Candidates must be registered medical practitioners and preference will be given to those holding a higher qualification. Salary £500 per annum. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications should be sent to the undersigned (from whom all further information may be obtained) not later than March 24.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM ACCIDENT HOSPITAL
Bath Row, Birmingham, 15
HOUSE SURGEON (B2)
for the Medical Research Council Burns Unit

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2) now vacant, including R practitioners who now hold A posts. The appointment will be for six months. The salary for newly qualified practitioners is at the rate of £200 per annum, with full residential emoluments. The salary for practitioners who have already held hospital appointments is at the rate of £300 per annum with full residential emoluments.—W. George Spencer, Secretary.

BIRMINGHAM ACCIDENT HOSPITAL AND REHABILITATION CENTRE
Bath Row, Birmingham, 15
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A) to become vacant in March, including practitioners within three months of qualification who are liable to service under the National Service Acts. Appointment will be for six months. Salary is at the rate of £200 per annum, with full residential emoluments.—W. George Spencer, Secretary.

BIRMINGHAM AND MIDLAND EAR AND THROAT HOSPITAL
Edmund Street, Birmingham, 3 (76 beds)
HOUSE SURGEON (A)

Applications are invited for the appointment of a House Surgeon (A). Practitioners within three months of qualification who are liable for service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts appointment will be for a period of six months. Duties to commence March 15, 1948. Salary at the rate of £250 per annum with full residential emoluments. Applications should be forwarded to the undersigned immediately.—W. H. Lomas, House Governor.

BROCKHALL CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Langho, near Blackburn, Lancs
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female), including R practitioners holding B2 and (if ineligible for H.M. Forces) those holding B1 appointments, for the post of Assistant Medical Officer (B1). Salary £465 rising by annual increment of £30 to £555 per annum, with full residential emoluments valued at £200 per annum. An additional £50 per annum is payable to holders of the D.P.M. or recognized equivalent together with the current cost-of-living bonus. There is no accommodation at present for a married man. The appointment will be pensionable and the successful applicant will be required to pass a medical examination. The Institution is modern, fully equipped and accommodates 1,996 patients, affording extensive experience in mental deficiency practice. Applications giving the usual particulars should be sent to the Medical Superintendent as soon as possible.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners F.R.C.S. (male) for the post of Resident Surgical Officer (B1) vacant immediately, including R practitioners who now hold B2 posts. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £500 per annum with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BRADFORD CITY SANATORIUM, Grassington
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B1) at Grassington Sanatorium. Salary scale in accordance with the Askwith Memorandum, plus full residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. This appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Form of application may be obtained from the Medical Officer of Health, Town Hall, Bradford, and should be returned to him as soon as possible.—W. H. Leathem, Town Clerk, Town Hall, Bradford.

BRISTOL MENTAL HOSPITALS
BARROW HOSPITAL
SENIOR PSYCHIATRIC PHYSICIAN and/or DEPUTY MEDICAL SUPERINTENDENT

Applications are invited for the post of Senior Psychiatric Physician to the Barrow Hospital (Barrow Gurney) unit of Bristol Mental Hospital. A candidate might be nominated for the post of Deputy Medical Superintendent, now vacant, if of sufficient experience. Salary scale, according to qualifications and experience will be within the range of £1,150 to £1,500 (which includes £50 for D.P.M.), plus cost-of-living bonus and house, coal, light and laundry, valued for superannuation purposes at £250 per annum. Applicants must possess the D.P.M. and should have a higher qualification as well. The post offers considerable opportunities in all branches of general psychiatry, research, and clinical teaching. The hospital has departments of electro-encephalography and psychology with clinical research laboratories now being extended; the main research unit at present is at the old hospital at Fishponds. Applications should be sent as soon as possible to the Medical Superintendent, Bristol Mental Hospital, Fishponds, Bristol.

BRADFORD ROYAL INFIRMARY
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male, single) for the post of Resident Medical Officer (B1), vacant April 1, 1948. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces Twelve months' appointment. Salary £450 per annum with full residential emoluments. There are 372 beds and 13 resident officers. Applications should be sent not later than March 8, 1948, to Hy. Trusson, House Governor and Secretary.

BELGRAVE HOSPITAL FOR CHILDREN
1, Clapham Road, S.W.9
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (B2), including R practitioners who hold A posts. Appointment for six months, commencing March 24, 1948. Salary £150 per annum with full residential emoluments. Demobilised medical officers may apply for the higher rate of salary under the Government Scheme for Postgraduate Education. Applications should reach the undersigned by March 8, 1948.—A. L. Fell, Secretary.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £225 per annum, plus full residential emoluments. Applications should be forwarded as soon as possible to C. E. Lowndes, Secretary.

BRISTOL EYE HOSPITAL
RESIDENT JUNIOR OPHTHALMIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for the post of Resident Junior Ophthalmic House Surgeon (B2), vacant May 1, 1948, including R practitioners who now hold A posts If held by an R practitioner, the appointment will be limited to six months. The salary is at the rate of £150 to £175 per annum, according to experience of applicant, with full residential emoluments. Applications should be sent to the undersigned by March 27.—D. M. Baber, Secretary and House Governor.

BRIDGWATER AND DISTRICT GENERAL HOSPITAL
HONORARY PHYSICIAN

Applications are invited for the post of Honorary Physician, on the staff of the above hospital. Applicants must be full time consultants and be members of the Royal College of Physicians, London, or Graduates in Medicine of a University of which the Degree is recognized by the General Medical Council. They must be residents within the district. Applications to be sent to the Chairman of the Management Committee of the Bridgwater and District General Hospital, Bridgwater, Somerset, within the next fourteen days.

CITY OF YORK GENERAL HOSPITAL
Haxby Road, York
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Assistant Medical Officer (B1). Salary at present £455 per annum, rising to £555 per annum plus cost-of-living bonus and full residential emoluments. The appointment to be for six months in the first place and if satisfactory thereafter on one month's notice on either side, and subject to the Local Government Superannuation Act and the passing of a medical examination. The duties of the person appointed will be mainly medical and preference will be given to applicants interested in Pathology and Bacteriology. Suitably qualified R practitioners holding B2 appointments and also R practitioners holding B1 appointments who have been rejected by the Services may apply. Applications as soon as possible to the Medical Superintendent.

CITY OF YORK GENERAL HOSPITAL
Haxby Road, York

Applications from registered medical practitioners are invited for the following posts:—

HOUSE PHYSICIAN (A) (including children's beds). This post becomes vacant on April 14, 1948.

HOUSE SURGEON (A). This post becomes vacant on April 24, 1948. The salaries of the above posts are £270 per annum respectively, plus cost-of-living bonus and full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply. Applications should be sent to the Medical Superintendent as soon as possible.

CANADIAN RED CROSS MEMORIAL HOSPITAL, Taplow, Maidenhead, Berks
RESEARCH BACTERIOLOGISTS
(whole-time non-resident)

Applications are invited for the post of whole-time non-resident Research Bacteriologist in the special unit of the hospital. The hospital will ultimately have over 400 beds (at present 235). Approximately half of these are devoted to the special unit for the study and treatment of juvenile rheumatism. Salary to be at a point according to experience on the scale £900, rising by annual increments of £50 to £1,100 a year with membership of the Federated Superannuation Scheme. Applications in writing, stating nationality, age, qualifications and experience with the names of three persons to whom reference may be made, should reach the undersigned within seven days of this advertisement.—John R. Griffith, House Governor.

CANADIAN RED CROSS MEMORIAL HOSPITAL, Taplow, Maidenhead, Berks
RADIOLOGIST

Applications are invited from registered medical practitioners holding a Diploma in Radiology for the post of whole-time Resident Radiologist in the X-ray Diagnostic Department. The hospital will ultimately have a bed complement of over 400 (at present 235) approximately half of which are in the Special Unit devoted to the study and treatment of juvenile rheumatism and the remainder to acute sick and maternity cases. Salary at rate of £1,200 to £1,500 per annum according to experience with membership of the Federated Superannuation Scheme. The appointment is subject to three months' notice on either side. Applications should reach the House Governor by March 31, 1948.

CITY LODGE HOSPITAL
Cowbridge Road, Cardiff
ASSISTANT MEDICAL OFFICER (B2)
Maternity Department

Applications are invited from registered practitioners, including R practitioners holding A posts for the appointment of Assistant Medical Officer (B2), Maternity Department, City Lodge Hospital. Salary £250 per annum, plus proportionate cost-of-living bonus and full residential emoluments. To R practitioners the appointment is limited to six months. Applications, stating age, qualifications, etc., with copies of two recent testimonials and the names of two referees, to be sent immediately to the Medical Officer of Health, City Hall, Cardiff.

CITY GENERAL HOSPITAL, Sheffield
(Recognized for F.R.C.S., England)
ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male) for the appointment of Assistant Medical Officer (B2). The post now vacant is a surgical one, and the Medical Officer will act as Casualty Officer and House Surgeon to the Orthopaedic Surgeon. R practitioners who now hold A posts may apply, when appointment will be limited to six months, otherwise it will be for a period of twelve months. The salary is at the rate of £300 per annum, plus bonus, with full residential emoluments. Applications should be sent to the Medical Superintendent, City General Hospital, Sheffield, 5, as soon as possible.

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital—200 beds)
RESIDENT ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic Officer (B2), including R practitioners who hold A posts. Salary £250 per annum, with full residential emoluments. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

CONNAUGHT HOSPITAL, Walthamstow, E.17

Applications are invited from registered medical practitioners (male) for the following two positions each tenable for six months from March 15, 1948.

CASUALTY OFFICER (B2)
RESIDENT ANAESTHETIST (B2)

R practitioners who now hold A posts may apply. If held by an R practitioner the appointment will be limited to six months. Salary, for each post, at the rate of £200 per annum, with full residential emoluments.

The hospital is recognized by the Royal College of Surgeons for the Diploma in Anaesthetics. Applications should be sent to R. Halton Harrison, General Secretary.

CONNAUGHT HOSPITAL, Walthamstow, E.17
CLINICAL ASSISTANT
Ear, Nose and Throat Department

Applications are invited from registered medical practitioners for the appointment of Clinical Assistant for the Ear, Nose and Throat Department to attend one Out-Patient session per week (Thursday 2 p.m.). Sessional fee of £2 12s. 6d. attaches to the appointment. Preference will be given to candidates who hold the Fellowship of one of the Royal Colleges of Surgeons or the D.L.O. Applications, with names and addresses of two referees to be sent to the undersigned not later than March 5, 1948.—R. Halton Harrison, General Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL

Applications are invited for the following positions (male or female):—

HOUSE SURGEON (B2) to the Gynaecological and Obstetric Dept., vacant April 30, 1948.

HOUSE SURGEON (B2) to the General Surgical Depts., vacant April 30, 1948.

HOUSE SURGEON (B2) to the Fracture and Orthopaedic Dept., vacant April 23, 1948.

HOUSE SURGEON (B2) combining Ear, Nose and Throat duties, vacant April 13, 1948.

HOUSE PHYSICIAN (B2), vacant April 1, 1948.

R practitioners who hold A posts are invited to apply. Each appointment is for six months. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth, Cornwall
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Physician (A), vacant April 1, 1948. Salary at the rate of £200 per annum, with the usual residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications should be addressed to J. C. Field, Secretary-Superintendent.

CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE, Manchester, 20
TWO HONORARY ASSISTANT SURGEONS

The Board of Management propose to appoint two Honorary Assistant Surgeons and invite applications from registered medical practitioners holding a higher surgical qualification. Applications (20 copies) stating age, qualifications and details of experience together with the names of three referees should be sent not later than March 20, 1948, to the undersigned from whom further particulars may be obtained.—A. H. Keates, Superintendent.

COUNTY MENTAL HOSPITAL
Lancaster (3,000 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the post of House Physician (B2). Salary £300 per annum, with full residential emoluments. The appointment will be limited to six months but may be extended to twelve months unless held by an R practitioner. Previous general hospital experience desirable. The persons appointed will work under the direction of Senior Psychiatrists. Apply Medical Superintendent.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL (215 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A). R practitioners within three months of qualification and liable for service under the National Service Acts may apply, in which case the appointment will be for six months, otherwise renewable. Salary £175 per annum with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

DONCASTER ROYAL INFIRMARY (330 beds)
(Recognized under the Regulations for the D.O.)
EYE AND EAR, NOSE AND THROAT HOUSE SURGEON (A) (male)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification and liable under the National Service Acts, for an Eye and Ear, Nose and Throat House Surgeon (A) (male). The appointment will be limited to six months. Salary £225 per annum, with full residential emoluments. This large industrial area offers excellent opportunities for gaining experience. Applications should be sent immediately to A. Jones, Secretary-Superintendent.

DONCASTER ROYAL INFIRMARY (330 beds)
HOUSE SURGEON (A) (male)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A) (male), including R practitioners within three months of qualification. If held by an R practitioner, appointment will be for a period of six months. Salary is at the rate of £225 per annum, with full residential emoluments. Applications should be sent immediately, addressed to the Secretary-Superintendent.

CHESTER ROYAL INFIRMARY (225 beds)
HOUSE SURGEON (B2)
for the Gynaecological and Ear, Nose and Throat Departments

House Surgeon (B2) required for the Gynaecological and Ear, Nose and Throat Departments. To commence duties on April 14. R practitioners who hold A posts may apply when post will be limited to six months. Salary £200 per annum with full residential emoluments. Applications to be sent to the General Superintendent and Secretary.

CHESTER ROYAL INFIRMARY
RESIDENT ANAESTHETIST (B2)

Resident Anaesthetist (B2) required. To commence as soon as possible. R practitioners holding A posts are invited when post will be limited to six months. Salary £300 per annum with full residential emoluments. Applications to be sent to the General Superintendent and Secretary.

DERBYSHIRE ROYAL INFIRMARY, Derby

Applications are invited from registered medical practitioners for the following posts:—

ORTHOPAEDIC AND ACCIDENT SERVICE.

HOUSE SURGEON (B2), vacant March 9, 1948.

CASUALTY OFFICER (A), vacant immediately.

The two posts form part of the Surgical team and duties may be alternated to allow both officers to gain experience of primary and final treatment in the wards. Salary in each case £200 per annum with full residential emoluments. Six months' appointments. For the A post practitioners within three months of qualification may apply and for the B2 post R practitioners who hold A posts may apply. Applications to be sent to the undersigned as early as possible.—Arthur Taylor, Superintendent and Secretary.

DURHAM COUNTY HOSPITAL
North Road, Durham City (12 beds)
RESIDENT HOUSE SURGEON (B2) (Male)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the appointment of a Resident House Surgeon (B2) (male). The appointment is for six months, duties to commence on or about April 20, 1948. Salary at the rate of £250 per annum, with full residential emoluments. Applications to be sent immediately to the Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification, who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the above appointment, vacant March 28, or earlier by arrangement if necessary. Suitably qualified R practitioners may apply. Salary at the rate of £150 per annum, including full residential emoluments. The appointment will be for a period of six months.—G. W. Beckwith, Secretary-Superintendent.

DAVID LEWIS COLONY
Warford, Alderley Edge, near Manchester
RESIDENT MEDICAL OFFICER

Applications are invited for the post of Resident Medical Officer (male or female) at the above Epileptic Colony. Salary £325 per annum with full residential emoluments. The appointment should be combined with research or other postgraduate work. Applications should be sent to the Medical Director.

GENERAL INFIRMARY AT LEEDS
HONORARY ASSISTANT SURGEON
to the Thoracic Surgical Department

Applications are invited from Fellows of the Royal College of Surgeons of England, with special experience in Thoracic Surgery, for the post of Honorary Assistant Surgeon to the Thoracic Surgical Department. Information relating to the post will be supplied on reference to the House Governor. Suitably qualified practitioners serving with His Majesty's Forces are eligible to apply. Thirty-five copies of application, with a similar number of copies of three recent testimonials, should reach the undersigned not later than March 31. Neither applications nor testimonials need be printed.—S. Clayton Fryers, House Governor and Secretary

Have you read the notice at top of page 11 ?

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GENERAL INFIRMARY AT LEEDS
HONORARY ASSISTANT PHYSICIAN

Applications are invited for the post of Honorary Assistant Physician to the General Infirmary at Leeds. Candidates must hold a degree in Medicine of a British University and be Fellows or Members of the Royal College of Physicians of London. Information relating to the post will be supplied on reference to the House Governor. Suitably qualified practitioners serving with His Majesty's Forces are eligible to apply. Thirty-five copies of applications, with a similar number of copies of three recent testimonials, should reach the undersigned not later than March 31. Neither applications nor testimonials need be printed.—S. Clayton Fryers, House Governor and Secretary.

GENERAL INFIRMARY AT LEEDS
HONORARY AURAL SURGEON

Applications are invited from Fellows of the Royal College of Surgeons of England for the post of Honorary Aural Surgeon to the General Infirmary at Leeds. Information relating to the post will be supplied on reference to the House Governor. Suitably qualified practitioners serving with His Majesty's Forces are eligible to apply. Thirty-five copies of applications, with a similar number of copies of three recent testimonials, should reach the undersigned not later than March 31.—S. Clayton Fryers, House Governor and Secretary.

DREADNOUGHT SEAMEN'S HOSPITAL
Greenwich, S.E.10
ANAESTHETIST

Applications are invited for the appointment of Anaesthetist, now vacant, for attendance on Monday afternoons and not less than one additional attendance each week. Honorarium based on £250 per annum for one attendance weekly. Applications, supported by the names of three referees, to be sent on or before March 13, 1948, to the undersigned.—F. A. Lyon, Administrator and Secretary.

GRANTHAM AND KESTEVEN GENERAL HOSPITAL, Manthorpe Road, Grantham, Lincs. (125 beds—Medical, Surgical and Maternity; busy Out-Patient Departments)
SENIOR RESIDENT HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident House Surgeon (B1), becoming vacant on May 1, 1948. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Fellowship of one of the Royal Colleges, or who are reading for a Fellowship. Suitably qualified R practitioners holding B2 appointments or B1 appointments if rejected for H.M. Forces are invited to apply. Salary will be at the rate of £450 per annum, plus furnished apartments, board and laundry at the hospital. Applications should be sent to the undersigned.—John E. Ray, House Governor and Secretary.

GREAT YARMOUTH AND GORLESTON HOSPITALS
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) (male), now vacant, including practitioners within three months of qualification, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £250 per annum, with full residential emoluments. Applications should be sent to John S. Egerton, Secretary-Superintendent, immediately.

GENERAL HOSPITAL, Nottingham
(589 beds, including "The Cedars" Branch Hospital)
RESIDENT ORTHOPAEDIC AND FRACTURE OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic and Fracture Officer (B1). Applicants should have had previous experience in Fracture and Orthopaedic work. The Orthopaedic Department serves a large industrial district and the post offers exceptional experience in traumatic surgery. The appointment will be for a period of one year in the first instance. Duties to commence on April 18. Salary at the rate of £400 per annum with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and rejected by the R.A.M.C., may apply. Applications to be forwarded as soon as possible to Henry M. Stanley, House Governor and Secretary.

GRAYLINGWELL HOSPITAL, Chichester
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (ladies or gentlemen), including R practitioners holding A posts, for the appointment of House Physician (B2). The post provides special facilities in the hospital for organized tuition and practice of modern psychiatry. The salary is at the rate of £350 per annum, with full residential emoluments. The appointment will be limited to a period of six months but, unless held by an R practitioner, may be extended to twelve months. Applications to be sent to the Medical Superintendent as soon as possible.

HULL ROYAL INFIRMARY

Applications are invited for the following posts (male):—

FIRST HOUSE SURGEON (B2), vacant now.
HOUSE PHYSICIAN (B2) at Sutton Branch.
HOUSE SURGEON (B2), Sutton Branch.

Both posts vacant April. Suitably qualified R practitioners who now hold A posts may apply.

CASUALTY OFFICER (A), vacant April. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.

Salary for each of the above posts £200 per annum, with full residential emoluments. The appointments will be for six months in the first instance (limited to six months if R practitioners are appointed), but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts:—

RESIDENT JUNIOR HOUSE SURGEON (A). In charge of Casualty, Ear, Nose and Throat, and Fracture Department. Salary £200 per annum.

HOUSE PHYSICIAN (A). Salary £200 per annum.

Practitioners within three months of qualification and liable to service under the National Service Acts are invited to apply.

The appointments are for six months. Applications should be sent to T. W. Upton, Secretary.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)
RESIDENT SURGICAL OFFICER (B1)

Immediate applications are invited from medical practitioners (male) for the post of Resident Surgical Officer (B1). Applicants should have held house appointments and have had surgical experience. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £250 per annum, with full residential emoluments. The appointment is for twelve months, and applications should be sent to the undersigned.—T. W. Upton, Secretary.

HARROGATE AND DISTRICT GENERAL HOSPITAL (272 beds)
(Recognized by the R.C.S. for final F.R.C.S. examination requirements)

Applications are invited from registered medical practitioners for the following appointment:—

RESIDENT ANAESTHETIST AND CASUALTY OFFICER (A), vacant April 14, 1948.

Practitioners within three months of qualification may apply. If held by an R practitioner the appointment will be for six months. Salary at the rate of £150 per annum with full residential emoluments. Applications immediately to the House Governor.

HARROGATE AND DISTRICT GENERAL HOSPITAL (272 beds)

Applications are invited from registered medical practitioners for the following appointments:—

HOUSE PHYSICIAN (A), vacant April 1, 1948. Salary £150 p.a., with full residential emoluments.

HOUSE PHYSICIAN/RESIDENT PATHOLOGIST (B2), vacant April 1, 1948.

Salary £200 p.a., with full residential emoluments.

Practitioners within three months of qualification, who are liable for service under the National Service Acts, may apply for the A appointment and R practitioners who hold A appointments may apply for the B2 appointment. The appointments are for a period of six months. Applications to the House Governor as soon as possible.

HOSPITAL OF ST. JOHN AND ST. ELIZABETH
60, Grove End Road, N.W.8
SURGEON-IN-CHARGE
of the Department for Diseases of the Ear, Nose and Throat

Applications are invited for the post of Surgeon in charge of the Department for Diseases of the Ear, Nose and Throat. Candidates must be Fellows of one of the Royal Colleges of Surgeons. Twenty-five copies of the application should be sent to the undersigned on or before March 23, 1948. Testimonials are not required but the names of three persons willing to act as referees should be furnished.—F. Dudley Hobbs, M.A., Secretary.

KIDDERMINSTER AND DISTRICT GENERAL HOSPITAL
CASUALTY HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of Casualty House Surgeon (A), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months. Applications should be sent immediately to C. M. Smith, House Governor and Secretary.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty on April 1, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150 with full residential emoluments.

HOUSE SURGEON (A) required to commence duty on March 18, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton, S.W.3
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female), including suitably qualified R practitioners who now hold B2 posts, for the appointment of Resident Surgical Officer (B1). Applicants must have held a resident hospital appointment, and R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. The appointment is for six months, commencing April 1, 1948. Salary at the rate of £300 per annum, with board and residence, and an additional £50 per annum for services in connexion with paying patients. Applications accompanied by copies of one or more recent testimonials should reach the undersigned not later than Saturday, March 13, 1948.—F. G. Rouvray, House Governor.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)

Applications are invited from registered medical practitioners for the following posts:—

RESIDENT MEDICAL OFFICER (B2) vacant March 1, 1948. This appointment is for six months at a salary of £225 per annum with full residential emoluments. R practitioners holding A posts may apply.

HOUSE SURGEON (A) vacant March 1, 1948. Salary £175 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications to E. Barber, Secretary.

HOUNSLOW HOSPITAL, Middlesex
PAEDIATRIC PHYSICIAN

The Board of Management invites applications for the post of Paediatric Physician to the Hospital. Applications together with the names of three referees should be sent on or before March 20, 1948, to the Secretary-Superintendent, from whom further particulars may be obtained.

INGHAM INFIRMARY, South Shields
HOUSE SURGEON (A)
CASUALTY OFFICER AND "SPECIALS" HOUSE SURGEON (A)

Applications are invited from medical practitioners, including those within three months of qualification and liable under the National Service Acts, for the posts of (1) House Surgeon (A), and (2) Casualty Officer and "Specials" House Surgeon (A) now vacant. The appointments are for a period of six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned.—R. Hood Coulthard, Jr., House Governor and Secretary.

KENT AND CANTERBURY HOSPITAL
Canterbury (221 beds—5 Resident Medical Officers)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by practitioners who are liable under these Acts, appointment will be for a period of six months. The salary is £200 per annum, with full residential emoluments. Duties include work for the Ophthalmic and Ear, Nose and Throat Specialists, and Casualty Department. This appointment commences early in April, 1948. Applications should be sent to the Superintendent and Secretary immediately.

KING EDWARD MEMORIAL HOSPITAL, Ealing
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant on April 1, 1948, and applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding Diploma of F.R.C.S. Salary at the rate of £450 per annum with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also R practitioners holding B1 appointments and rejected by the R.A.M.C., may apply. Applications together with copies of two recent testimonials should be sent to the undersigned by March 13, 1948.—R. A. Mickelwright, House Governor.

KING EDWARD VII HOSPITAL
Windsor (200 beds)
CASUALTY OFFICER

Applications are invited from registered medical practitioners (male or female) for the appointment of Casualty Officer, to become vacant on April 13, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £150 per annum with full residential emoluments. The duties include assistant to the Resident Accident Service Officer, also House Surgeon to Eye and Dental Departments. Applications should be sent to the Secretary as soon as possible.

KING EDWARD MEMORIAL HOSPITAL, Ealing
HOUSE SURGEON (A)
to the Orthopaedic and Fracture Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A) to the Orthopaedic and Fracture Department, vacant now Six months' appointment. Salary at the rate of £175 per annum with full residential emoluments. Applications together with copies of two recent testimonials should be sent to the undersigned immediately.—R. A. Mickelwright, House Governor.

KING EDWARD MEMORIAL HOSPITAL, Ealing
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Anaesthetist (B2) to become vacant on March 11, 1948, including R practitioners who now hold A posts. Salary at the rate of £250 per annum with full residential emoluments. Appointment recognised for Diploma of Anaesthetics. Applications together with copies of two recent testimonials should be sent to the undersigned immediately.—R. A. Mickelwright, House Governor.

LEICESTER ROYAL INFIRMARY
(650 beds, 18 Residents)

Invites candidates for the following vacancies on April 1, 1948

	Salary p.a.
3 RESIDENT HOUSE SURGEONS (A) ..	£150
1 ORTHOPAEDIC HOUSE SURGEON (B2)	£200
1 EAR, NOSE AND THROAT HOUSE SURGEON (A)	£150
1 GYNAECOLOGICAL HOUSE SURGEON (A)	£150
1 OBSTETRIC HOUSE SURGEON (A) (Maternity Hospital, Causeway Lane, Leicester)	£150
1 RESIDENT HOUSE PHYSICIAN (A) ..	£175
1 JUNIOR CASUALTY OFFICER (A) ..	£150
1 RESIDENT ANAESTHETIST (B2) ..	£200

Six months' appointments, all with full residential emoluments. For the A appointments practitioners within three months of qualification and liable under the National Service Acts may apply. For the B2 appointments R practitioners holding A posts may apply. Applications should be forwarded to the House Governor or Secretary on or before March 1.

LOWESTOFT AND NORTH SUFFOLK HOSPITAL (108 beds)
TWO HOUSE SURGEONS (A)
(one Senior and the other Junior)

Applications are invited immediately from registered medical practitioners (male or female) for the appointment of two House Surgeons (A)—one Senior and the other Junior—to fill vacancies on April 1 and May 1 next respectively. Salary for the Senior post at the rate of £250 per annum, and for the Junior post at the rate of £200 per annum, and in each case with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications to be sent to the Honorary Medical Superintendent.

LUTON AND DUNSTABLE HOSPITAL
Luton (214 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners for the above post to become vacant on March 13, including R practitioners who hold A posts. If held by an R practitioner the appointment will be limited to six months. This post is recognized for the D.A. Salary £250 per annum with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—R. E. Lingard, Secretary.

LLANDUDNO AND DISTRICT HOSPITAL
Llandudno (70 beds)
HOUSE SURGEON (A) (Male or Female)

House Surgeon (A) (male or female), now vacant. Salary £200 per annum, full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. To R practitioners appointment for six months. Applications to Secretary.

LINCOLN COUNTY HOSPITAL
PHYSICIAN
in charge of a Cardiological Department

The Board of Management invite applications for the post of Physician in charge of a Cardiological Department. The successful candidate will be expected to confine himself to consulting practice. Canvassing will disqualify. Applications, stating age, qualifications and experience, together with copies of three testimonials, should be sent not later than March 6, 1948, to Ronald W. Howick, Secretary-Superintendent.

LINCOLN COUNTY HOSPITAL
RESIDENT ANAESTHETIST (B2)

Applications are invited for the post of Resident Anaesthetist (B2), including R practitioners who hold A posts. If held by an R practitioner the post will be limited to six months. The successful candidate will be called upon to undertake some duties as a Casualty Officer. The hospital is recognized as a qualifying hospital for the Diploma of Anaesthetics. Salary at the rate of £250 per annum plus residential emoluments. Applications should be sent immediately to the Secretary-Superintendent.

LINCOLN COUNTY HOSPITAL
HONORARY ASSISTANT PHYSICIAN

The Board of Management invite applications for the post of Honorary Assistant Physician. A special interest in neurology would be an advantage. The successful candidate will be expected to confine himself to consulting practice. Canvassing will disqualify. Applications should be sent not later than March 6, 1948, to the Secretary-Superintendent.

LINCOLN COUNTY HOSPITAL
HONORARY ASSISTANT SURGEON

The Board of Management invite applications for the post of Honorary Assistant Surgeon. The successful candidate will be expected to confine himself to consulting practice. Canvassing will disqualify. Applications should be sent not later than March 6, 1948, to the Secretary-Superintendent.

LINCOLN COUNTY HOSPITAL
HONORARY CONSULTING PSYCHIATRIST

The Board of Management invite applications for the post of Honorary Consulting Psychiatrist. Canvassing will disqualify. Applications should be sent not later than March 6 to the Secretary-Superintendent.

MAIDA VALE HOSPITAL FOR NERVOUS DISEASES, London, W.9
ASSISTANT NEUROLOGICAL SURGEON

Applicants must be Fellows of the Royal College of Surgeons of England and have adequate training in and experience of Neuro-Surgery. Pending resumption of Surgical work at the Hospital, the Surgeon appointed may be given opportunity for study abroad. Applications, with the names of two referees, should be addressed to the Secretary not later than March 20, from whom further particulars may be obtained.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required as soon as possible for busy department. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

NUNEATON GENERAL HOSPITAL (130 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited immediately for the post of Resident Surgical Officer (B1). Candidates should have held house appointments and have had surgical experience. Suitably qualified R practitioner holding B2 or A appointments or medical practitioners recently discharged from H.M. Forces may apply. Applications from R practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for one year at a salary of £450, with full residential emoluments. Applications to H. W. Williams, House Governor and Secretary

NUNEATON GENERAL HOSPITAL
(130 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon to the Casualty, E.N.T. and Ophthalmic Departments, vacant immediately. The appointment is for six months at a salary of £250 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.—H. W. Williams, House Governor and Secretary.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B1). Salary is at the rate of £350 per annum, with board, residence, etc. Some previous residential experience essential. The appointment is for a period of six months dating as from April 1, 1948. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces, may apply. Applications must reach Secretary and House Governor by March 3, 1948.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
PART-TIME MEDICAL REGISTRAR

The Board of Management invite applications for the post of part-time Medical Registrar, at a salary of £300 per annum. Applications, giving details of previous experience, should be submitted to the Secretary and House Governor not later than March 3, 1948.

OLDHAM ROYAL INFIRMARY
FIRST ASSISTANT TO THE ORTHOPAEDIC AND ACCIDENT SERVICE
(Whole-time non-resident)

Applications are invited for the post of First Assistant to the Orthopaedic and Accident Service. Applicants must have specialized in Orthopaedics and Fracture work and hold the qualification of F.R.C.S.(England) or a special qualification in Orthopaedics. The person appointed will be expected to devote the whole of his time to the duties of the office. The commencing salary will be at the rate of £750 to £1,000 per annum according to experience. Applications, which should contain full particulars of experience, and be accompanied by copies of three testimonials, should be forwarded to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OXFORD EYE HOSPITAL
(in association with the Royal Berkshire Hospital, Reading)
OPHTHALMIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, with some previous experience, for the appointment of Ophthalmic House Surgeon (B2), vacant April 1. The appointment is for six months at the Oxford Eye Hospital, followed by six months at the Royal Berkshire Hospital, and the successful candidate will then be eligible for appointment as Senior Resident Officer (B1) at the Oxford Eye Hospital for six months. Salary commences at £200 per annum with full residential emoluments. Applications should be sent forthwith to C. F. Share, Secretary.

PARK PREWETT MENTAL HOSPITAL
Basingstoke, Hants
DEPUTY MEDICAL SUPERINTENDENT

Applications are invited for the above appointment. Candidates must have considerable experience in Psychiatry, including both in-patient and out-patient work. The salary will be £1,100 per annum plus emoluments valued at £109 19s. 4d. consisting of house, rates, water, fuel and light. The salary may be reviewed following the Report of the Committee now considering the salaries of Medical Officers. Bonus in addition at present £49 16s. 8d. Applications should be made on a form to be obtained from the Medical Superintendent, Park Prewett Mental Hospital, Basingstoke, and returned not later than March 15, 1948.

PRINCE OF WALES'S HOSPITAL, Plymouth
CASUALTY OFFICER (A)
(Ear, Nose and Throat)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (A), with Ear, Nose and Throat, vacant March 17, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

POPLAR HOSPITAL, E.14
HOUSE PHYSICIAN (B2)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointments of House Physician (B2) and House Surgeon and Casualty Officer (A) for a period of six months at a salary at the rate of £200 and £150 per annum respectively, with full residential emoluments. Practitioners within three months of qualification and R practitioners who hold A posts are invited to apply. Applications should be sent to the undersigned as soon as possible.—D. H. Lindsay, House Governor and Secretary.

PORT TALBOT AND DISTRICT GENERAL HOSPITAL (85 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male and female), including R practitioners who now hold A posts, for the post of Resident Medical Officer (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £400 per annum with full residential emoluments. Applications should be forwarded as soon as possible to Hon. Secretary, Medical Committee, Port Talbot and District General Hospital, Port Talbot, Glam.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL INFIRMARY, Sheffield
BLOOD TRANSFUSION OFFICER

Applications are invited for the post of Blood Transfusion Officer. Salary £650 per annum non-resident. This is a full-time post and the appointment will be for twelve months in the first instance. Candidates must have had some experience in blood transfusion work, or in connexion with blood bank organization. The selected candidate will be required to serve part time in the haematological and serological section of the Department of Pathology, and part time in the Sheffield Region organization of the National Blood Transfusion Service. Applications to be forwarded immediately to the General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

Have you read the notice at top of page 11 ?

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PONTYPOOL AND DISTRICT HOSPITAL
Pontypool, Mon.
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Resident Medical Officer (A), medical and surgical beds. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be limited to six months. Salary £200 per annum and full residential emoluments. Apply Secretary-Superintendent.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, E.15
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), including R practitioners within three months of qualification. Salary will be at the rate of £200 per annum, with residential emoluments, lodging being provided temporarily outside the hospital pending the extension of residential accommodation. The appointment will be for a period of six months. Candidates should send their applications to the undersigned as soon as possible.—M. J. Huntley, House Governor and Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, E.15
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Physician (B2), including R practitioners who now hold A posts. The appointment will be for a period of six months, salary at the rate of £200 per annum, with full residential emoluments. Candidates should send applications to the undersigned not later than March 10, 1948.—M. J. Huntley, House Governor and Secretary

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, E.2
PART-TIME PSYCHOTHERAPIST

Applications are invited for appointment as part-time Psychotherapist in the psychiatric department. Applicants must have experience in child psychiatry. Remuneration £2 12s 6d. per session. More than one appointment will be made. Applications, giving two references, should be submitted to the undersigned within fourteen days of the publication of this advertisement.—Charles H. Bessell, General Secretary.

POOLE GENERAL HOSPITAL
(Cornelia and East Dorset Hospital) (188 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2), becoming vacant on March 16, 1948, including R practitioners who hold A posts. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £300 per annum, with full residential emoluments. The hospital is recognized by the Royal College of Surgeons.—T. S. Jackson, Secretary.

ROYAL VICTORIA INFIRMARY
Newcastle-upon-Tyne
FIRST ASSISTANT

Applications are invited from registered medical practitioners for the appointment of First Assistant to the firm of the Visiting Surgeon within the Professorial Surgical Unit at the Royal Victoria Infirmary. The post is a whole-time one and the successful candidate will be responsible for carrying out those duties, clinical and teaching, allocated to him by the Senior Honorary Surgeon of the clinic. There will be ample opportunity for clinical experience in out-patient and in-patient work, with responsibility for clinical emergency duty. Applicants should possess a higher surgical qualification. The appointment is for one year in the first instance, and may be renewed to a maximum of three years. The inclusive salary is at the rate of £1,000 per annum, non-resident. Applications, with the names and addresses of three referees, should be sent to the undersigned within two weeks of the date of appearance of this advertisement.—A. W. Sanderson, House Governor.

ROYAL VICTORIA INFIRMARY
Newcastle-upon-Tyne
SURGICAL REGISTRAR (B1)
to the Orthopaedic Department

Applications are invited from registered medical practitioners for the appointment of Surgical Registrar to the Orthopaedic Department of the Royal Victoria Infirmary. The successful candidate will receive clinical experience in in-patient and out-patient work and will be required to carry out such duties as may be allocated to him by the Head of the Department. The Infirmary is the Teaching Hospital of the University of Durham and the post offers scope to prepare for higher surgical degrees Applicants should have house appointments. The appointment is for one year in the first instance and may be renewed to a maximum of three years. The inclusive salary is at the rate of £400 per annum, non-resident. Applications with the names and addresses of three referees, should be sent to the undersigned within two weeks of the date of appearance of this advertisement.—A. W. Sanderson, House Governor.

ROYAL VICTORIA INFIRMARY
Newcastle-upon-Tyne
FIRST ASSISTANTS
to Orthopaedic Department

Applications are invited from registered medical practitioners for the appointment of two First Assistants to the Orthopaedic Department of the Royal Victoria Infirmary. The posts are whole-time and the successful candidates will be responsible for carrying out those duties, clinical and teaching, allocated to them by the Head of the Department. There will be ample opportunity for clinical experience in out-patient and in-patient work, with responsibility for clinical emergency duty. Applicants should possess a higher surgical qualification. The appointments are for one year in the first instance and may be renewed to a maximum of three years. The inclusive salary is at the rate of £1,000 per annum, non-resident. Applications, with the names and addresses of three referees, should be sent to the undersigned within two weeks of the date of appearance of this advertisement.—A. W. Sanderson, House Governor.

ROYAL VICTORIA INFIRMARY
Newcastle-upon-Tyne and
KING'S COLLEGE, University of Durham
SURGICAL REGISTRARS (B1)

Applications are invited from registered medical practitioners for the appointment of two Surgical Registrars to the Professorial Surgical Unit at the Royal Victoria Infirmary. The appointment will be made jointly by the Infirmary and the University of Durham, and the posts offer scope to prepare for higher surgical degrees. Applicants should have held house appointments. The appointments are for one year in the first instance and may be renewed to a maximum of three years. The inclusive salary is at the rate of £400 per annum, non-resident. Applications, with names and addresses of three referees, should be sent to the undersigned within two weeks of the date of appearance of this advertisement.—A. W. Sanderson, House Governor.

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road, London, S.W.3
PART-TIME SURGICAL REGISTRAR

Applications are invited for the post of Part-time Surgical Registrar. Candidates must be duly qualified and registered under the Medical Act and engaged in consulting practice only. Preference will be given to those holding the Diploma F.R.C.S. (Eng.). The appointment will be for one year, subject to re-election for a maximum of three years. Remuneration will be at the rate of £500 per annum, and the successful candidate will be required to attend a minimum of five half-days per week. A copy of the rules and further information may be obtained from the Secretary. Applications to be made on a form which will be supplied by the Secretary, accompanied by copies of not more than three recent testimonials to be sent to the Secretary not later than the first post on Wednesday, March 10, 1948.—Victor H. Pinkham, Secretary.

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road, London, S.W.3
JUNIOR ASSISTANT RADIOTHERAPIST

Applications are invited for the post of Junior Assistant Radiotherapist. Salary £700 per annum. The appointment will be for a period of twelve months. Applicants must be registered medical practitioners who hold a Diploma in Medical Radiology. Applications, to be made on a form which will be supplied by the Secretary, together with copies of three recent testimonials, should be sent to the undersigned by the first post on Thursday, March 11, 1948.—Victor H. Pinkham, Secretary.

ROYAL BERKSHIRE HOSPITAL, Reading

Applications are invited from registered medical practitioners, male, for the following posts:

TWO CASUALTY OFFICERS (A). Salary is at the rate of £150 per annum, with full residential emoluments. Duties will involve alternating with each other in the Casualty Department, Fracture Clinic and Accident Wards, and assisting in the treatment of all cases of traumatic origin. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ASSISTANT PATHOLOGIST (A)

Applications are invited from registered medical practitioners (male) for the appointment of Resident Assistant Pathologist (A). Salary at the rate of £150 per annum with full residential emoluments. Previous experience in Pathology not necessary Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications, stating present post, should be sent immediately to H. E. Ryan, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A) as from March 6, 1948 Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor

ROYAL BERKSHIRE HOSPITAL, Reading
HONORARY ASSISTANT PHYSICIAN

The Board of Management invites applications for the appointment of Honorary Assistant Physician Candidates must be Fellows or Members of the Royal College of Physicians, London, or Medical Graduates of one of the Universities of the British Empire and their names entered on the *Medical Register*. Canvassing on the part of a candidate or on his behalf will disqualify him. Candidates are required to provide six copies of their applications and testimonials addressed to the House Governor and reach him not later than Saturday, March 27, 1948. No testimonials will be required from candidates who are members of the existing medical staff. The present Medical Registrar is a candidate for the post.—H. E. Ryan, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Anaesthetist (B2), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. R practitioners who now hold A posts may apply when the appointment will be limited to six months. Applications, stating present post, immediately to H. E. Ryan, House Governor.

ROYAL EAST SUSSEX HOSPITAL, Hastings
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant March 30, 1948. This is the Senior Resident appointment of the Hospital and applications are invited from persons who possess a higher degree or are working to obtain one and from practitioners at present holding a B2 post and those holding a B1 post and ineligible for service with H.M. Forces. Salary is at the rate of £400 per annum with full residential emoluments. Applications, to be received not later than March 6, to Wilfred G. Kemsley, Sec. and House Governor.

ROYAL EAST SUSSEX HOSPITAL, Hastings
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), vacant March 30, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications to W. G. Kemsley, Sec. and House Governor.

AMENDED ADVERTISEMENT

ROYAL SUSSEX COUNTY HOSPITAL,
Brighton, 7 (310 beds, 9 Resident Medical Officers)

Applications are invited from registered medical practitioners for the posts of:

CASUALTY HOUSE SURGEON (B1), vacant immediately, including R practitioners who hold B2 appointments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £250 per annum with full residential emoluments

E.N.T. HOUSE SURGEON (B2), now vacant, including R practitioners who hold A posts. The appointment will be limited to six months to R practitioners Salary at the rate of £200 per annum with full residential emoluments. In the case of the Casualty House Surgeon, the successful candidate will, if desired, be favourably considered for one of the appointments of House Surgeon on the termination of appointment as Casualty House Surgeon. Applications should be sent to the Secretary-Superintendent immediately.

ROYAL SUSSEX COUNTY HOSPITAL, Brighton
DIRECTOR OF THE X-RAY DIAGNOSTIC DEPARTMENT

Applications are invited for the new post of Director of X-Ray Diagnostic Department, which will be full-time and carry a salary at the rate of £2,250 per annum. Full information concerning the vacancy may be obtained from the Secretary-Superintendent at the hospital, to whom detailed applications, supported by copies of three recent testimonials, should be sent to reach him not later than March 8, 1948.

ROYAL GWENT HOSPITAL
Newport, Mon. (255 beds)
HOUSE SURGEON (A)
Fracture and Orthopaedic Department

Applications are invited from registered medical practitioners (male or female), including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of House Surgeon (A) to the Fracture and Orthopaedic Department, vacant now. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £175 per annum with residential emoluments. Applications to T. A. Jones, Secretary-Superintendent.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ROYAL INFIRMARY, Sheffield
FIRST ASSISTANT (B1) to the Orthopaedic Dept.

Applications are invited from registered medical practitioners for the post of First Assistant (B1) to the Orthopaedic Department, at a salary of £650 per annum, non-resident. Recently demobilized members of H.M. Forces or R practitioners holding B1 appointments (if ineligible for H.M Forces) may apply. Previous experience in Orthopaedics is desirable and preference will be given to applicants who are Fellows of one of the Royal Colleges of Surgeons. Applications to be forwarded to the General Superintendent, Royal Infirmary, Sheffield

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
ANAESTHETISTS

The Court of Management will shortly proceed to appoint a limited number of Anaesthetists to take effect on or after March 27, 1948. Applications are now invited. Candidates must possess the Diploma in Anaesthetics of the Royal College of Physicians and Surgeons and must not engage in General Practice. Private practice in the speciality wil be allowed. Remuneration will be on a sessional basis, and the fee recommended by the B.M.A. is under consideration. It is anticipated that the number of sessions will normally not be less than two per week Further particulars may be obtained from the undernamed. Applications, together with names of three referees, to be forwarded to General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL, Southampton (290 beds)
PHYSICIAN-IN-CHARGE
of the Physical Medicine Department

Applications are invited for the post of Physician-in-Charge of the Physical Medicine Department. Applicants should hold the Diploma in Physical Medicine. Previous experience in the treatment of industrial injury will be an advantage. The post will be full-time, non-resident. The commencing salary will be £1,500 per annum with participation in the Superannuation Scheme. Applications, together with the names of three referees, should be addressed to the undersigned from whom further information can be obtained.—Frank Jennings, House Governor and Secretary.

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL, Southampton
ASSISTANT PATHOLOGIST

Applications are invited for the post of Assistant Pathologist. The post is whole-time and applicants should have had considerable experience in clinical pathology. The salary will be within the range of £1,300 to £1,500 per annum (non-resident), according to experience, and the post will carry superannuation benefits. Applications, and names of three referees, should be addressed to the undersigned, from whom further particulars may be obtained.—Frank Jennings, House Governor and Secretary.

ROYAL SOUTH HANTS AND SOUTHAMPTON HOSPITAL, Southampton (290 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (B2) including R practitioners who now hold A posts. The appointment will be for a period of six months. The salary is £175 per annum, with full residential emoluments. Applications stating qualifications with dates should be sent to the undersigned immediately.—Frank Jennings, House Governor and Secretary.

ROYAL NATIONAL THROAT, NOSE AND EAR HOSPITAL,
Gray's Inn Road, W.C.1, and Golden Square, W.1
NEURO-SURGEON

Applications are invited for the newly-created post of Neuro-Surgeon on the honorary medical staff of the hospital. Attendances will be arranged as the necessity arises. It is a rule that all members of the Surgical Staff must be Fellows of the Royal College of Surgeons of England. Further information regarding the post may be obtained from the undersigned, to whom applications should be sent not later than March 5, 1948.—John H. Young, House Governor.

ROYAL NATIONAL THROAT, NOSE AND EAR HOSPITAL.
Gray's Inn Road, W.C.1, and Golden Square, W.1
PLASTIC SURGEON

Applications are invited for the newly created post of Plastic Surgeon on the honorary medical staff of the hospital. Attendances will be arranged as the necessity arises. It is a rule that all members of the Surgical Staff must be Fellows of the Royal College of Surgeons of England. Further information regarding the post may be obtained from the undersigned, to whom applications should be sent not later than March 5, 1948.—John H. Young, House Governor.

ROCHDALE INFIRMARY
PATHOLOGIST

The Board of Management invites applications for the appointment of Pathologist. Salary is at the rate of £900 per annum, plus private fees, guaranteed up to £100 by the Committee. Applications for the appointment should be made immediately to the undersigned, from whom further information regarding the appointment may be obtained.—W. Wynn, Infirmary Office.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA; CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM
(Whole-time Temporary Assistant Medical Officer of Health (male).)

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
February 24, 1948. Secretary.

ROYAL NATIONAL THROAT, NOSE AND EAR HOSPITAL
Gray's Inn Road, W.C.1, and Golden Square, W.1
ASSISTANTS IN THE OUT-PATIENT DEPT.

There are vacancies for attendance at both Gray's Inn Road and Golden Square Hospitals on several morning and afternoon clinics. The appointments afford good opportunities for acquiring clinical experience in the speciality, as the duties consist of seeing the old patients under the supervision of the Surgeons. An honorarium of £2 2s. per session is paid. Applications which may be for periods of six or twelve months and for one or more sessions weekly, should be sent to the undersigned without delay, stating for which clinic the application is made.—John H. Young, House Governor.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter)
(500 beds—General Hospital Branch 310 beds)
SENIOR RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident Anaesthetist (B1), vacant now. The Royal Hospital is an associated hospital of the University of Birmingham. The salary is at the rate of £400 per annum with full residential emoluments, or according to experience and qualifications. The appointment will be for a period of six months.—W. Cockburn, House Governor.

ROTHERHAM HOSPITAL
Doncaster Gate, Rotherham
General Voluntary Hospital (150 beds)
SECOND CASUALTY OFFICER (A)

Salary £225 per annum, with full residential emoluments. Applications are invited from registered medical practitioners, male or female, for the above appointment which will become vacant immediately. Practitioners within three months of qualification and liable to service under the National Service Acts may also apply, when the appointment will be for six months. Applications should be sent at once to the Secretary-Superintendent.

ROYAL LANCASTER INFIRMARY
Lancaster (226 beds)
SENIOR HOUSE SURGEON

This post is recognised by the Royal College of Surgeons of England. Applications are invited from male registered medical practitioners for the post of Senior House Surgeon (B1), vacant April 1, 1948. Salary £325 per annum with full residential emoluments. Suitably qualified R practitioners who now hold B2 posts may apply. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M Forces. Applications should be sent to the undersigned.—F. A. Milnes, Superintendent-Secretary.

ROYAL LANCASTER INFIRMARY
HONORARY PAEDIATRICIAN

Applications are invited for the appointment of Honorary Paediatrician with the status of Assistant Physician. Frequent attendance at the Infirmary will be necessary. Applications stating qualifications and experience to be addressed to the undersigned not later than March 1, 1948. The Committee has under consideration the question of payment of visiting medical staff and the candidate appointed will be eligible for such payment as may eventually be decided.—Frank A. Milnes, Superintendent-Secretary.

ROYAL LANCASTER INFIRMARY
Lancaster (226 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male and female) for the post of House Physician (A). Salary £225 per annum with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply. The appointment will be limited to six months. Vacant April 1, 1948. Applications should be sent to the undersigned.—F. A. Milnes, Superintendent-Secretary.

ROYAL VICTORIA AND WEST HANTS HOSPITAL, Bournemouth (374 beds)
HOUSE SURGEON (A)

Applications are invited immediately from registered medical practitioners for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable to service under the National Service Acts may apply. Duties will include work in Specialist Departments. The appointment will be for a period of six months, salary £175 per annum with full residential emoluments. Applications, stating whether single or married, should be sent within seven days of this advertisement to Gordon M. Saul, Secretary.

ROYAL INFIRMARY AND CHILDREN'S HOSPITAL, Sunderland (382 beds)
DIRECTOR OF PATHOLOGICAL DEPT.

Applications are invited from medical practitioners. Wide practical experience of Pathology desirable. Salary £1,750, rising by annual increments of £50 to £2,000 per annum. The holder will be required to devote his whole time and attention to the department, but limited private practice will be allowed. Applications, with names of three referees, should be forwarded as soon as possible to F. Dagnall, House Governor and Secretary, Royal Infirmary, Sunderland.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), now vacant. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months; otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A Stanley Brunt, General Superintendent and Secretary.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
Myrtle Street, Liverpool, 7
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the above appointment, vacant April 1, 1948, for a period of six months. Salary £200 per annum, with full residential emoluments. R practitioners within three months of qualification who are liable to service under the National Service Acts may apply. Applications should be sent to the Secretary immediately.

(Continued on page 27)

Have you read the notice at top of page 11 ?

Established 1885

THE Medical Defence Union

MUSeum 1337

Annual Subscription £1 MEMBERSHIP EXCEEDS 31,500 *Assets exceed £170,000*

Protection is essential for every practitioner engaged in any form of practice

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Square, London, W.C.1

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

DO PLEASE WRITE ADVERTISEMENTS CLEARLY. NAME AND ADDRESS SHOULD BE IN BLOCK LETTERS.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To all other advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d., or 30 words 22s.; and 3s. 6d. for each six words *or less* thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO is used the charges are: 18 words, 25s. (minimum) or 24 words, 31s.; or 30 words, 37s; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To **ALL** advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.
Telephone: Euston 2111.
Telegrams: Brimedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 11

PERSONAL

COMPANION REQUIRED TO LIVE IN HOTEL with elderly lady at Malvern. Not bed-ridden. No mental abnormalities. Duties light, but cheerful companionship essential. Please give full details. References absolutely essential. Interviews in London.—Box 8752, B.M.J.

DAIMLER 17, 1938 MODEL, 16,000 miles, as new, for sale. Any examination welcomed by appointment.—Lucas Kinross, High Road, Laindon. Tel. 3306.

ONE THOUSAND POUNDS for a Short Story. Full details in the Sunday Dispatch.

FOR AN ENJOYABLE SWISS HOLIDAY join one of the following proposed parties: May 6 to 20, Lugano and Lucerne; June 16 to 30, Pontresina in Engadine; June 30 to July 14, Zermatt; Aug. 5 to 19, Lauterbrunnen (for Murren, Wengen and Jungfrau Joch) and Kiental; Aug. 17 to 31, Kiental and Saas-Fee; Sept. 1 to 15, Oberhofen (on Thun Lake) and Wengen; Sept. 1 to 11, Bernese Oberland Walking Party; Dec. to Jan., Winter Sports at Saas-Fee. Also **DEVONSHIRE OVER EASTER**: Torquay Party, March 24 to 31. Good Hotel. Write C.T.U. (Estd. 1913, Dr. C. F. Fothergill), Chorley Wood, Herts (Phone Chorley Wood 24.)

MICROSCOPE, "SWIFT" PORTABLE. Nearly new condition, in mahogany case. Mechanical stage Abbé condenser, 3 Zeiss objectives—N.A. 1.25 O.I.—D.D.—A.A., Zeiss dovetailed objective changers. £60.—Box 8794, B.M.J.

REFINED HOME WITH TRAINED NURSE for one or two aged gentle people in need of care and attention. Lovely garden, sitting-rooms. Doctors' references given and expected. Near Southport. Terms from 6 guineas.—Box 8779, B.M.J.

SOUTH KENSINGTON. WELL APPOINTED FURNISHED FLAT, suitable semi-invalid. Nursing assistance available.—Box 8780, B.M.J.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

EX-I.M.S. OFFICERS, CANADIAN.—Retired Canadian officers of the Indian Medical Service, in or passing through the U.K., are advised to contact the Senior Canadian Air Force Liaison Officer, 11, Hill Street, London, W.1, regarding employment in Canada with the Royal Canadian Air Force.

PERCALL, THE PERSONAL 24-HOUR TELEPHONE service exclusive to doctors, growing with your support, £5 5s. p.a., G.P.O. licensed.—BAL 3331. 387, London Road, Mitcham.

THERAPEUTIC USES OF INFRA-RED RAYS—Annandale Troup M.C., M.D., Ch.B. (St. And.). 4th edition now ready 15s. Short-Wave Therapy. Dr. Schliephake, 21s. Obtainable from Charlesworth & Wiles, 555, Lea Bridge Road, E.10.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

APPLICATIONS ARE INVITED for the post of LECTURER IN CLINICAL TROPICAL MEDICINE AT THE LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE. The duties of the post will include participation in teaching and in research on tropical diseases. Applicants should hold a higher qualification in medicine and should have special experience in the diagnosis, treatment and investigation of tropical diseases. The salary of the post is £1,000 per annum. There is an additional grant of £250 per annum from a Research Fund. Applications, together with three copies of recent testimonials, should be sent by April 30, 1948, to: The Assistant Dean, London School of Hygiene and Tropical Medicine, Keppel Street (Gower Street), London, W.C.1.

EXAMINING SURGEONS: FACTORIES ACT, 1937.—The following appointment as Examining Surgeon under the Factories Act, 1937, is vacant: Walthamstow, in the County of Essex. Applications, which should be received not later than March 13, 1948, should be sent to the Chief Inspector of Factories, 8, St. James's Square, London, S.W.1.

GUY'S HOSPITAL DENTAL SCHOOL, LONDON UNIVERSITY.—Applications are invited for the post of **DENTAL RESEARCH FELLOW.** Appointment will be for three years in the first instance. Salary not less than £750 per annum, plus superannuation and family allowance. Candidates, who should have experience of research in biochemistry, bacteriology, or a relevant branch of science, should apply to the Dean, Medical School, Guy's Hospital, London, S.E.1, before May 31, 1948, and give the names of two referees.

UNIVERSITY OF LONDON.—Applications are invited for **RESEARCH FELLOWSHIPS** founded by Imperial Chemical Industries Ltd. and tenable in the University of London and normally of the value of £600 per annum. The Fellowships will be awarded for original research in Biochemistry, Chemistry, Chemotherapy, Engineering, Metallurgy, Pharmacology, Physics and allied subjects. A Fellow will be required to take a limited part in the teaching in the Department in which he works. Fellowships will be tenable from October, 1948. Detailed Regulations and application forms can be obtained from the Academic Registrar, University of London, at the Senate House, London, W.C.1, and applications must be received at that address not later than April 30, 1948.

UNIVERSITY OF LONDON.—The Senate invite applications for the **READERSHIP IN ENTOMOLOGY** tenable at the London School of Hygiene and Tropical Medicine (salary £800 to £1,200, according to experience and qualifications. Applications must be received not later than May 3, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **READERSHIP IN CLINICAL PATHOLOGY** tenable at Guy's Hospital Medical School (salary not less than £900). Applicants must have a special interest in Clinical Chemistry. Applications must be received not later than April 1, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **READERSHIP IN THERAPEUTICS** tenable at St. Thomas's Hospital Medical School (salary £900 to £1,300). Applications must be received not later than April 5, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **CHAIR OF PHYSIOLOGY,** tenable at London Hospital Medical College (salary not less than £1,500). Applications must be received not later than April 21, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—Applications are invited for a **RESEARCH FELLOWSHIP** founded by Turner & Newall Limited, tenable in the University and normally of the value of £600 per annum. The Fellowship will be awarded for scientific research in Engineering, Inorganic Chemistry of Physics, or in any allied science. A Fellow will be required to take a limited part in the teaching in the Department in which he works. The Fellowship will be tenable from October, 1948. Detailed Regulations and application forms can be obtained from the Academic Registrar, University of London, at the Senate House, London, W.C.1, and applications must be received at that address not later than April 30, 1948.

UNIVERSITY OF LONDON. POSTGRADUATE MEDICAL SCHOOL OF LONDON. DEPARTMENT OF MEDICINE, TUBERCULOSIS SECTION.—There is a vacancy for a **CHEST PHYSICIAN** to take charge of the Tuberculosis Dispensary. The appointee will be responsible for the Tuberculosis Services in the Borough of Hammersmith (population approximately 120,000). The appointment carries with it the status of Lecturer or Assistant Lecturer in Tuberculosis in the Department of Medicine in the Postgraduate School. The salary range will be from £1,200 to £1,500 per annum. Applications, with the names of three referees, to be sent to the Dean, Postgraduate Medical School of London, Ducane Road, W.12, before March 13, 1948.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN CHILD HEALTH.—The University Court will shortly proceed to the appointment of a full-time Lecturer in Child Health at a salary of £500 to £600, or £600 to £750, or £750 to £900, placing according to qualifications and experience, with F.S.S.U. and children's allowance. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than March 27, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

UNIVERSITY OF LIVERPOOL.—Applications are invited for the post of **ASSISTANT LECTURER (Grade III)** in the Department of Biochemistry, at a salary scale of £425 by £25 to £475 per annum. Applications, stating age, academic qualifications, and experience, together with the names of three referees, should be received not later than May 1, 1948, by the undersigned, from whom further particulars of the conditions of appointment may be obtained.—Stanley Dumbell, Registrar.

CHARING CROSS HOSPITAL MEDICAL SCHOOL, 62, Chandos Place, London, W.C.2.—Applications are invited immediately for the post of **LECTURER IN ORGANIC CHEMISTRY.** Scale of salary £550 to £850 per annum. Further details and forms of application may be obtained from the Secretary.

ROYAL FREE HOSPITAL AND ROYAL FREE HOSPITAL SCHOOL OF MEDICINE, Gray's Inn Road, W.C.1. JUNIOR LECTURER IN THE DEPARTMENT OF PATHOLOGY.—Applications are invited from registered medical practitioners for the above appointment now vacant. Experience in **Chemical Pathology** is essential. Salary £500 by £25 to £700 with superannuation. Seven copies of the application, stating qualifications, age and experience, together with seven copies of three recent testimonials, should be sent to the House Governor not later than March 15, 1948.

ROYAL FREE HOSPITAL AND ROYAL FREE HOSPITAL SCHOOL OF MEDICINE, Gray's Inn Road, W.C.1.—JUNIOR LECTURER in the Department of Pathology. Applications are invited from registered medical practitioners for the above appointment vacant. Experience in **Bacteriology** is essential. Salary £500 by £25 to £700 with Superannuation. Seven copies of the application stating qualifications, age and experience together with seven copies of three recent testimonials should be sent to the House Governor not later than March 15, 1948.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh

A FULL-TIME POSTGRADUATE COURSE IN SURGERY will commence at the Royal College of Surgeons in Ireland on April 12, 1948. The number of students is limited to thirty. The fee is twenty guineas and reservations should be made at once. The subjects to be treated are:—First week, Surgery of Trauma: Fractures. Second week, Surgery of Malignant Disease. Third week, Thoracic Surgery. Fourth week, Surgery of the Abdomen. Fifth week, Urology. Sixth week, Orthopaedic Surgery. Seventh week, General Surgery. Eighth week, Neurology.—Norman Rae, Registrar.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment. 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE. DEPARTMENT OF MEDICAL STATISTICS.—A short course in **MEDICAL STATISTICS AND STATISTICAL METHODS,** comprising lectures, demonstrations and practical work from 10 a.m. to 4 p.m. on two days a week (Mondays and Thursdays) will be given from April 12 to July 8 inclusive. Fee 12 guineas. Forms of application for admission to the course can be obtained from the Registration Office and should be submitted not later than Monday, March 22. Persons without a medical qualification can be accepted but in all only a limited number of students can be accommodated. Further particulars of the course can be supplied on request by the Assistant Dean, London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1.

MEDICAL CORRESPONDENCE COLLEGE, 19, Welbeck Street, London, W.1, provides COACHING for all Medical Examinations, D.A., D.P.M., D.O.M.S., D.L.O., D.C.H., D.M.R.D. and D.M.R.T., M.R.C.P., F.R.C.S., M.D. thesis, and all qualifying exams. by a staff of highly qualified Tutors, Honoursmen, and Gold Medallists. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested.

NORTH LONDON POSTGRADUATE MEDICAL INSTITUTE.—Bearsted Memorial Hospital, N.16; Chase Farm Hospital, Enfield; North Eastern Hospital, Tottenham, N.15; North Middlesex Country Hospital, Edmonton, N.18; The Prince of Wales's General Hospital, Tottenham, N.15. **A COURSE IN ADVANCED MEDICINE** will be held from April 26, 1948, to June 18, 1948, including lectures, clinical and pathological demonstrations and tutorials. Fee 25 guineas. Kindly send applications and details of qualifications and experience to the Dean, The Prince of Wales's General Hospital, N.15.

UNIVERSITY OF LONDON

BRITISH POSTGRADUATE MEDICAL FEDERATION

INSTITUTE OF ORTHOPAEDICS, ROYAL NATIONAL ORTHOPAEDIC HOSPITAL
234, GREAT PORTLAND STREET, LONDON, W.1

Course in Advanced Clinical Orthopaedics to be held from April 5–10, and repeated April 19–24, 1948.

MONDAY—GREAT PORTLAND STREET—		
10 a.m.	Club Foot	MR. A. ROCYN JONES
11.15 „	Volkmann's Contracture and Torticollis	MR. R. C. BAIRD
12.30 p.m.	Lunch	
1.30 „	Ward Cases	MR. R. C. BAIRD
4.15 „	Tea	
4.30 „	Shoulder and Brachial Plexus	MR. P. H. NEWMAN
TUESDAY—GREAT PORTLAND STREET—		
10 a.m.	Orthopaedic Principles in Arthritis	MR. D. TREVOR
11.15 „	Scoliosis	MR. A. T. FRIPP
12.30 „	Lunch	
1.30 p.m.	Ward Cases	MR. P. H. NEWMAN
4.15 „	Tea	
4.30 „	Some Bone Dystrophies	MR. H. J. BURROWS
WEDNESDAY—COUNTRY BRANCH, STANMORE—		
10 a.m.	Clinical Demonstration	MR. K. I. NISSEN
12 noon	Surgery of Infantile Paralysis	MR. K. I. NISSEN
1 p.m.	Lunch	
2.30 „	Clinical Demonstration	MR. V. H. ELLIS
4.15 „	Tea	
4.50 „	Bone Tumours	MR. V. H. ELLIS
THURSDAY—GREAT PORTLAND STREET—		
10 a.m.	Congenital Dislocation of the Hip	MR. A. ROCYN JONES
11.15 „	Tendons	MR. R. C. BAIRD
12.30 p.m.	Lunch	
1.30 „	Ward Cases	MR. A. T. FRIPP
4.15 „	Tea	
4.30 „	The Foot (not Club Foot)	MR. R. Y. PATON
FRIDAY—COUNTRY BRANCH, STANMORE—		
10 a.m.	Clinical Demonstration	MR. E. P. BROCKMAN
11.15 „	Kyphosis	MR. E. P. BROCKMAN
12.30 „	Lunch	
1.30 p.m.	Clinical Demonstration	MR. J. A. CHOLMELEY
4.15 „	Tea	
4.30 „	Principles in Treatment of Tuberculosis	MR. J. A. CHOLMELEY
SATURDAY—GREAT PORTLAND STREET—		
10 a.m.	Coxa Vara and Coxa Plana	MR. D. TREVOR
11 „	Intervertebral Disks	MR. H. J. BURROWS
12 noon	General Discussion	CLASS AND STAFF

The fee for the course is six guineas.

Early application, stating the date preferred, should be made to the Dean at the above address.

THE BEDFORD PHYSICAL TRAINING COLLEGE, 37, Lansdown Road, Bedford. Principal Miss C. M. Read. Vice-Principals, Miss D. M. Wilkie, Miss M. V. Lace. Students are trained to become teachers of all branches of physical education. The training extends over three years, and includes educational and remedial gymnastics, games, dancing, swimming, and allied theoretical subjects. Three scholarships of £50 each are offered annually. Application forms should be obtained from the Secretary and returned to the College between April 1 and May 31 of the year previous to entry.

OXFORD POSTGRADUATE CENTRE.—A TWO-WEEKS' REFRESHER COURSE for General Practitioners and ex-Service Medical Officers (Class II) will be held at the following hospitals:—

ROYAL BUCKINGHAMSHIRE HOSPITAL, Aylesbury, May 10 to May 22, 1948, inclusive.

ROYAL HAMPSHIRE COUNTY HOSPITAL, Winchester, June 7 to June 19, 1948, inclusive.

The fee for the Course will be 10 guineas. Schemes for financial assistance are available under which the cost of both the fee and travelling and subsistence allowances will, subject to certain conditions, be repaid to: (a) demobilized general practitioners within one year of release from the Forces; and (b) doctors engaged in practice under the National Health Insurance Acts. Applications for places in the Course and for particulars of the financial assistance available, should be made to the Chairman, University of Oxford Postgraduate Medical Education Committee, 91, Banbury Road, Oxford, and not to the Hospital.

POSTAL COACHING for all Medical Examinations. Examination Successes, 1901-47; M.D.Lond., 454; M.B., B.S.Lond., Final, 436; F.R.C.S.Eng., Primary, 411; F.R.C.S.Eng., Final, 308; M.R.C.P. Lond., 427; M.R.C.S., L.R.C.P., Final, 891; D.A. (1936-47), 143; F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary,—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

UNIVERSITY OF LONDON. ACADEMIC DIPLOMA IN MEDICAL RADIOLOGY.—The **NEXT COURSE** for the D.M.R. (London) will commence in October, 1948. The course is suitable for candidates for the D.M.R.D. or the D.M.R.T. of the Conjoint Board. The fee will be 75 guineas for the D.M.R. course and 60 guineas for the D.M.R.D. or D.M.R.T. course. The number of vacancies is limited, and early application is advised. The closing date for applications from candidates who are not members of a Medical School of London University is May 1, 1948. Prospective candidates are informed that the regulations for the D.M.R. are now being revised and new regulations may come into force in October 1948. Further information and application forms may be obtained from the British Postgraduate Medical Federation, Central Office, 2, Gordon Square, W.C.1, to whom should be sent all communications about the course.

SOUTH EASTERN HOSPITAL FOR CHILDREN, London, S.E.26.—POSTGRADUATE TEACHING will recommence on May 1. Details of the Summer Course and application forms can be obtained from the Director of Postgraduate Studies, South Eastern Hospital, Sydenham, S.E.26.

UNIVERSITY OF GLASGOW. POSTGRADUATE MEDICAL EDUCATION COMMITTEE. REFRESHER COURSES FOR GENERAL PRACTITIONERS.—The tenth Course for General Practitioners will be held from May 17 to May 29, 1948. The Course will comprise ten lectures and approximately sixty hours devoted to clinical demonstrations and ward visits. The fee for the Course will be 10 guineas. Schemes for financial assistance are available under which the cost of both the fee and of travelling and subsistence allowances will, subject to certain conditions, be repaid to: (a) demobilized general practitioners within one year of release from the Forces, and (b) doctors engaged in practice under the National Health Insurance Acts. Since the numbers will be restricted, both Service and civilian practitioners wishing to attend should make early application to the Director of Postgraduate Medical Education, The University, Glasgow, W.2, from whom further information may be obtained.

UNIVERSITY OF BRISTOL. POSTGRADUATE COURSE IN CHILD HEALTH.—The University has under consideration the organization of a whole-time **COURSE IN CHILD HEALTH** covering a period of three months and commencing in October, 1948. The Course would be under the direction of Professor Neale of the Department of Child Health in co-operation with the Departments of Preventive Medicine, Medicine, Surgery, Pathology, etc. It would include lectures, demonstrations, ward rounds and visits to clinics and ancillary institutions. The course would be limited to a maximum of twelve students. The fee for the course would be 20 guineas. Applications should be made to, and further details may be obtained from, the Director of Medical Postgraduate Studies, University of Bristol.

UNIVERSITY OF BRISTOL.—A Course for the DIPLOMA IN PHYSICAL MEDICINE (Part I) of the R.C.P. and S.Eng. will commence in September, 1948, at Bristol University. The Course will extend over a period of five months. It will consist of set lectures and practical work in Physics, arranged to comply with requirements for the diploma, and also a short course of revisionary lectures in Anatomy and Physiology, together with advice on literature to be read. Access to the dissecting rooms and laboratories will be provided. In addition, arrangements are being made for attendance at clinics and in the wards and physiotherapy departments of hospitals both at Bath and Bristol for those wishing at the same time to study for Part II of the Diploma. The fee for the Course will be £25. Applications should be made to, and further details obtained from, the Director of Medical Postgraduate Studies, University of Bristol.

LECTURES

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES—MARCH, 1948

The following Lectures will be delivered at the College in Lincoln's Inn Fields, W.C.2.

		ERASMUS WILSON DEMONSTRATIONS	
Mon. 1	5 p.m.	MR. R. J. MCNEILL LOVE ..	The Biliary Apparatus
Wed. 3	5 p.m.	MR P. H. MITCHINER ..	Enlargement of the Testis and Epididymis
		IMPERIAL CANCER RESEARCH FUND LECTURE	
Thurs. 4	3.45 p.m.	PROF. M. GREENWOOD ..	Simple Statistics of Cancer
		ERASMUS WILSON DEMONSTRATIONS	
Fri. 5	5 p.m.	DR. L. W. PROGER	Giant Cells
Mon. 8	5 p.m.	DR. L. W. PROGER	Giant Cells
Wed. 10	5 p.m.	MR. R. W. RAVEN	The Surgical Manifestations of Boeck's Sarcoid
Thurs. 11	5 p.m.	MR. V. ZACHARY COPE ..	Varieties of Intestinal Obstruction
		ARRIS AND GALE LECTURES	
Fri. 12	5 p.m.	MR. LEON GILLIS	Recent Advances in the Treatment of Arm Amputations, Cineplastic Surgery, and Arm Prostheses
Mon. 15	5 p.m	DR. E. M. DARMADY	Acute Uraemia: its Aetiology and Basis for Treatment
		ARNOTT DEMONSTRATIONS	
Tues. 23	3.45 p.m.	MR. R. J. LAST	The Kidneys
Wed. 24	3.45 p.m.	MR. R. J. LAST	The Pectoral Girdle
Thurs. 25	3.45 p.m.	MR. R. J. LAST	The Knee Joint

The Lectures are open to those attending Courses in the College and also to all other Medical Practitioners, Dental Surgeons, and advanced students

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

EMPIRE RHEUMATISM COUNCIL

The Spring Week-end Course will be held at THE APOTHECARIES' HALL, BLACKFRIARS LANE, QUEEN VICTORIA STREET, E.C.4 (Blackfriars Tube Station), on Friday, Saturday, and Sunday, March 12, 13, and 14, 1948.

LECTURES

	FRIDAY, MARCH 12	
4.30–5.30 p.m. ..	Introductory Lecture	PROFESSOR L. S. P. DAVIDSON, F.R.C.P., F.R.S.E.
5.30–6.30 p.m. ..	Gout	G. D. KERSLEY, ESQ., F.R.C.P.
	SATURDAY, MARCH 13	
10–11 a.m.	Osteoarthritis	ERNEST FLETCHER, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Spondylitis	W. S. TEGNER, ESQ., M.R.C.P.
2–3 p.m.	Juvenile Rheumatism and Still's Disease	R. E. BONHAM-CARTER, ESQ., M.R.C.P.
3–4 p.m.	Non-Articular Rheumatism and Sciatica	W. S. C. COPEMAN, ESQ., O.B.E., F.R.C.P.
4 p.m.	Tea	
4.30–5.30 p.m. ..	Rheumatoid Arthritis	OSWALD SAVAGE, ESQ., O.B.E., M.R.C.P.
	SUNDAY, MARCH 14	
10–11 a.m.	Physical Treatment in the Rheumatic Diseases	H. A. BURT, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Orthopaedic Aspects of the Rheumatic Diseases	W. D. COLTART, ESQ., F.R.C.S.

The fee for the course will be One Guinea, limited to 100 entries, to be received with remittance, at least one week before, by the General Secretary, Empire Rheumatism Council, Tavistock House (N), Tavistock Square, W.C.1.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES IN SURGERY. MARCH–APRIL, 1948

The following Lectures in Surgery will be delivered at the College in Lincoln's Inn Fields, London, W.C.2, at 5 p.m. on each day:

Tues. 16 ..	MR. A. J. GARDHAM	Surgery of Malignant Disease of the Pharynx
Wed. 17 ..	PROFESSOR LAMBERT ROGERS ..	Surgery of the Spinal Cord
Thurs. 18 ..	MR. RODNEY MAINGOT	Surgery of Peptic Ulcer
Fri. 19 ..	MR. A. DICKSON WRIGHT ..	Varicose Veins and Ulcers
Mon. 22 ..	SIR REGINALD WATSON-JONES ..	Fractures of the Spine
Tues. 23 ..	MR. M. F. NICHOLLS	Surgery of the Urethra and Bladder
Wed. 24 ..	MR. A. HEDLEY WHYTE	Surgery of the Rectum
Thurs. 25 ..	MR. T. TWISTINGTON HIGGINS ..	Urinary Obstruction in Childhood
Tues. 30 ..	MR. R. M. HANDFIELD-JONES ..	Some less usual examples of acute Intestinal Obstruction
Wed. 31 ..	PROFESSOR G. GREY TURNER ..	Surgery of the Spleen
Thurs. 1 ..	SIR HENEAGE OGILVIE	Scrotal Swellings
Fri. 2 ..	MR. R. SCOTT MASON	Surgery of the Duodenum

The fee for the whole Course is £5 5s., or 10s. for one Lecture.

Fellows and Members, and Fellows and Licentiates in Dental Surgery, of the College will be admitted to the whole course on payment of a fee of £3 3s., or to one Lecture on the payment of 7s. 6d.

Applications, accompanied by a cheque for £5.5s. or £3 3s., should be sent to the Secretary, Postgraduate Education Committee, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

Closing date not later than Friday, March 12, 1948.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

EDUCATIONAL

UNIVERSITY OF BRISTOL.—A Course for Part I of the University **DIPLOMA IN PSYCHOLOGICAL MEDICINE (D.P.M.),** provided sufficient applications are received, will commence in September, 1948, and will cover a period of 10 weeks. It will embody lectures and demonstrations in special Anatomy and Physiology, Electro-Encephalography and Psychology. The fee for the course will be 15 guineas. Further details can be obtained from, and applications should be sent to, the Director of Medical Postgraduate Studies, University of Bristol.

UNIVERSITY OF BRISTOL.—Courses of instruction for the **DIPLOMAS IN MEDICAL DIAGNOSTIC RADIOLOGY (D.M.R.D.)** and **THERAPEUTIC RADIOLOGY (D.M.R.T.)** of the University will commence in October, 1948. The Diagnostic Course will cover a period of 18 months and the Therapeutic Course a period of two years of whole-time study. The fee for either course is 50 guineas and the Diploma examination fee is 10 guineas. Copies of the Diploma Regulations and further details may be obtained from, and applications should be sent to, the Director of Medical Postgraduate Studies, University of Bristol.

UNIVERSITY OF BRISTOL.—A Course for the DIPLOMA IN PUBLIC HEALTH of the University will commence in October, 1948. The Course is divided into two parts. The Preliminary Course for the Certificate (C.P.H.) occupies the first term of ten weeks, the Final Course for the Diploma (D.P.H.) occupies the Spring and Summer terms. The syllabus complies with the rules of the General Medical Council. The Course includes lectures, tutorial classes, laboratory demonstrations and practical classes. Special visits to representative institutions and factories are arranged as part of the course. Instruction is under the direction of a Medical Officer of Health and attendance in the practice of a hospital for infectious diseases can be arranged. The following members of the University staff take part in the instruction: Dr. K. E. Cooper in Bacteriology, Professor J. E. Harris in Zoology, Medical Entomology and Parasitology, Dr. W. Hobson in Preventive Medicine, Professor R. H. Parry, Medical Officer of Health for Bristol, in Public Health Administration and Law, and Professor W. Hamilton Whyte in Social Economics and Statistics. The fee for the Course is: Part I (C.P.H.), £21; Part II (D.P.H.), £31 10s. Further details may be obtained from, and applications should be sent to, the Director of Medical Postgraduate Studies, University of Bristol.

UNIVERSITY OF MANCHESTER. DIPLOMA IN BACTERIOLOGY.—The Course for the Diploma in Bacteriology will commence in October, 1948. This is a full-time postgraduate course extending over one academic session and is intended for those who desire training for Bacteriological work in connexion with medicine or other branches of science. Enquiries should be addressed to Professor H. B. Maitland, Department of Bacteriology, York Place, Manchester, 13.

LECTURES

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—J. F. Wilkinson, Esq., M.D., F.R.C.P., will deliver the **OLIVER-SHARPEY LECTURES** on Tuesday, March 9, 1948, and Thursday, March 11, 1948, at 5 p.m. at the College, Pall Mall East, S.W.1. Subject: **"Concerning Megalocytic Anaemias."** Any member of the Medical Profession admitted on presentation of card. By order of the President.—H. E. A. Boldero, Registrar.

UNIVERSITY OF LONDON.—A COURSE of TWO LECTURES on **"The Surgery of Large Arteries"** will be given by Professor J. H. Learmonth, C.B.E. (Edinburgh University) at 5.30 p.m. on March 3 and 4 at Westminster Hospital Medical School (Meyerstein Lecture Theatre), Horseferry Road, S.W.1. At the first lecture the chair will be taken by Sir Ernest Rock Carling. Admission free, without ticket.—James Henderson, Academic Registrar.

ASSISTANTSHIPS

VACANT

Wanted, Protestant Male Assistant, View to half share Partnership for small mixed general practice, residential area Liverpool, little midwifery or night work. Indoors if single. Car available. Salary by arrangement.—Box 8736, B.M.J.

Wanted, several years qualified Man and Wife for rural and industrial practice in North Worcestershire. Early succession to large, lucrative practice to suitable pair.—Box 8782, B.M.J.

Wanted, Outdoor Assistant with early View to Partnership, Rural district in N.W. England. Car essential. Salary £800. Furnished accommodation with attendance available. References.—Box 8754, B.M.J.

Wanted. A Lady Assistant required to help firm of doctors for summer months commencing April 1. Pleasant country town. Own car essential. Car allowance provided.—Box 8755, B.M.J

Wanted, Assistant in mining and agricultural area (West Riding), compact, quiet practice, some midwifery, £600, live in. Good prospects.—Box 8703, B.M.J.

Wanted immediately, Indoor Assistant with View, S.W.11 mixed practice, well established, Scot, English, Irish, willing to work scheme. Salary according to experience. Car available.—Box 8702, B.M.J.

Wanted by woman doctor Male Assistant, young British, definite View, urban district, Hampshire, mixed practice, ample scope, March 15. Indoor at first. Car provided. Salary by arrangement.—Box 8705, B.M.J.

Wanted immediately, Indoor or Outdoor Assistant, Yorkshire Town. Car essential. Partnership prospects for suitable man. Good salary and car allowance.—Box 8458, B.M.J.

Wanted, Assistant, male, single, Outdoor, able to drive car. Midlands rural. Salary by arrangement.—Box 8409, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Assistant wanted, mixed practice in W. Mid-lands, either sex. Car desirable. State full particulars.—Box 8708, B.M.J.

Assistant required with View in sound, well-established practice in Midlands. Excellent scope and prospects. References essential.—Box 8737, B.M.J.

Assistant, with early View Partnership, industrial practice Tyneside area. Unfurnished house probably available. Salary £800.—Box 8753, B.M.J.

Assistant, with or without View to early Partnership (third share), required for large country practice on Norfolk-Cambs border. Own car required. Unfurnished flat. Salary and allowances by arrangement.—Box 8735, B.M.J.

Assistant wanted, male, Outdoor, Midland City mixed practice. Good salary and prospects for keen suitable man. Own car essential.—Box 8425, B.M.J.

Indian doctor wants Assistant, Central London, educational facilities. Very light work.—Box 8756, B.M.J.

Medical Assistant wanted for general practice in Perth. Outdoor. Male or female. With (or without) early View to Partnership. Furnished house available if required.—Dr. Ritchie, 4, Atholl Crescent, Perth.

Male, Christian Doctor wanted soon, as Assistant with View, in four-handed industrial general practice, South London riverside borough. Good opportunities for work amongst youth. Accommodation available.—Box 8738, B.M.J.

Urgently required, married Assistant, car owner, with or without View. Must be experienced G.P. and anaesthetics. Unfurnished house to rent. Permanency and good salary to suitable man. Rural and country town practice north of Oxford. —Box 8704, B.M.J.

Married Assistant, Midland city. Furnished accommodation. Own car essential. Good salary. Good prospects to suitable man. R.C. preferred. Testimonials and full details to Box 8748, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

WANTED

Wanted, Assistantship by Glasgow M.B., Ch.B., aged 26, married one child. One year hospital, 2½ years R.A.M.C., furnished accommodation essential, driver, long engagement preferred.—Box 8758, B.M.J.

Wanted by experienced Irish doctor, reading for higher degree, Part-time Assistantship, London or suburbs.—Box 8711, B.M.J.

Wanted, Assistantship, with or without View, by experienced G.P. (panel and private), ex-R.A.M.C., married (wife M.R.C.O.G.). Own car and furniture. Capital available.—Box 8701, B.M.J.

Wanted, Assistantship by experienced man. No car. Can drive. No objection obstetrics or dispensing, aged 50. South preferred.—Box 8478, B.M.J.

Assistantship, long term or with View, by London M.B., B.S., aged 25, available in May. Accommodation, preferably furnished, required in August. Own car. House appointments one year. R.A.F.V.R. two years. Midlands or Home Counties preferred.—Box 8707, B.M.J.

Assistantship wanted, View permanency, by experienced Scottish woman graduate, interested antenatal, midwifery. Scotland preferred.—Box 8709, B.M.J.

Assistantship wanted, with or without View. Irish M.B., D.P.H., aged 30, single, own car. Midlands preferred. Hospital and G.P. experience. Free March 1.—Box 8759, B.M.J.

Assistantship required with View, by ex-R.N.V.R. doctor, aged 27 years, single, possessing own car. Country practice in Suffolk, E. Anglia or Home Counties preferred.—Box 8760, B.M.J.

Assistantship Part-time, Central London, commencing October-November, required by ex-Major R.A.M.C., 34, M.D., experienced surgery, now in Far East, whilst studying for D.M.R.(T.).—Box 8761, B.M.J.

Assistantship wanted in or near Nottingham, part-time, by young married woman doctor with hospital and G.P. experience.—Box 8757, B.M.J.

Assistantship with View wanted by M.B., Ch.B., ex-R.N.V.R., aged 27, married. Hospital and G.P. experience. Own car.—Box 8166, B.M.J.

Doctor, 34, experienced panel practice, available for Surgeries, other Part-time or Occasional Work at short notice. London area.—Box 8706, B.M.J.

Part-time Duties required by experienced G.P. Chatham, Gillingham or Sittingbourne areas, commencing June.—Box 8710, B.M.J.

Young ex-R.N.V.R., M.B., B.Chir., with primary F.R.C.S. wants Part-time Assistantship in London from March 1 for 6 to 8 weeks, with board and lodging. Single.—Box 8778, B.M.J.

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VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars. —British Medical Bureau, 33, Cross Street, Manchester, 2.

Locum, British, Male, required for busy mixed practice, West Midlands. Mid-May to mid-June. Usual salary and all found. Some G.P. experience desirable.—Box 8713, B.M.J.

St. Andrew's Hospital, Thorpe, Norwich. Resident Locum Tenens for one month in May, with possibility of extension. Mental hospital experience desirable. Salary twelve to fifteen guineas weekly, plus the usual emoluments.—Apply to Medical Superintendent

AVAILABLE

Wanted, Locum Work by medical woman. Much experience. Car.—Box 8714, B.M.J.

Experienced M.D. graduate requires Locum Work in Cornwall or Devon for two weeks in summer, preferably June. Car available.—Box 8763, B.M.J.

Male G.P., 33, English, 8 years qualified, available Part-time Work, Locums, London area, preferably North. Car available.—Box 8762, B.M.J.

Male G.P., 20 years' experience, requires Locums now until November 30, S.W. area preferred, not essential. Own car.—Box 8715, B.M.J.

Oxford Graduate, 36, hospital service, G.P. experience. Own car. Available Locums during March. Also desires accommodation London in exchange week-end duties after March.—Box 8739, B.M.J.

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WANTED

Wanted, April, Partnership, England, producing £2,000, by M.B., Ch.B. Aberdeen, 27, married, two years hospital, two years G.P. experience. House to rent. Own car.—Box P8741, B.M.J.

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Partnership wanted by experienced G.P., married, aged 32, ex-R.A.M.C., St. George's Hospital. Share, £1,500 upwards. Reply in strict confidence to Box P8769, B.M.J.

Retired regular Lt.-Col. I.M.S., ex-civil surgeon early 40's, Irish M.B., Ch.B., requires Partnership country town with cottage hospital. Facilities general surgery, schools. Capable surgeon. Religion R.C., married, two children. Suitable house to buy, rent. Furnished or unfurnished.—Box P8719, B.M.J.

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Nursing Home run like first-class private house. Resident medical man and wife. Certificated nurses. Rest cures, neurasthenics and convalescents (not certified, malignant nor tubercular). Guests also received. Lounge hall, large dining room, lovely drawing room. Own poultry. Very private garden. Beautiful country. Shops 4 minutes. London 40 minutes. Very comfortable. Quiet. Good catering and cooking. Consultants and other medicals can visit their own patients.—C. F. Fothergill, M.B., B.Ch., "Hensol," Chorley Wood, Herts. (Phone: Chorley Wood 24).

South Coast, 48 miles London. Small Private Maternity Home recently opened has vacancies. Fee 8 guineas weekly, reduced pending, confidential if desired.—Box 8777, B.M.J.

Vacancies exist in Medical and Convalescent Nursing Home. Proportion of chronic cases received.—Carlton Nursing Home, 1, Carlton Road, Ealing, W.5. Perivale 2819.

Vacancy for Maternity, Medical, Convalescent or Chronic Patient in small Nursing Home. Large garden, close sea. Particulars, Matron, Little Belan, West End Way, Lancing, Sussex. 'Phone: Lancing 2601.

APPOINTMENTS

(Continued from page 21)

Have you read the notice at top of page 11?

ROYAL CORNWALL INFIRMARY, Truro
JUNIOR HOUSE PHYSICIAN (A)

Applications are invited from registered practitioners (male and female) for this appointment, vacant on March 23, 1948, for six months, combining duties as House Surgeon to the Ear, Nose and Throat Departments, including practitioners within three months of qualification who are liable to service under the National Service Acts. Salary at the rate of £200 per annum with residential emoluments. Applications to the Secretary-Superintendent.

ROYAL CORNWALL INFIRMARY, Truro
ORTHOPAEDIC AND CASUALTY HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for this appointment, vacant April 1 next, including R practitioners now holding A posts. If an R practitioner the appointment will be limited to six months. Salary at the rate of £200 per annum with residential emoluments. Applications with copies of testimonials to the Secretary-Superintendent.

ST. PETER'S HOSPITAL FOR STONE
Henrietta Street, Covent Garden, W.C.2
HOUSE SURGEON (B1)

The office of House Surgeon (B1) will fall vacant on April 1, 1948, and applications are invited from male candidates on the British Register with previous experience in a similar office at a general hospital. The salary is at the rate of £150 per annum, with board, lodging and laundry. At the expiration of six months' term of office, and subject to the recommendation of the Medical Committee, the House Surgeon may be appointed Resident Surgical Officer (B1) for a further similar period. Candidates should therefore be prepared, if successful, to remain at the hospital for twelve months in all. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Twelve copies of application, accompanied by copies of three testimonials, should be forwarded to reach the Hospital Secretary not later than the first post on Monday, March 15, 1948.

SOUTHPORT GENERAL INFIRMARY (156 beds)
ORTHOPAEDIC HOUSE SURGEON AND CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Orthopaedic House Surgeon and Casualty Officer (B1), to commence immediately for six months. Applicants should have held House appointments and have had Orthopaedic experience. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary at the rate of £225 per annum with full residential emoluments. Applications stating age, qualifications, with dates and nationality and accompanied by copies of recent testimonials should be sent to the Superintendent and Secretary.

SOUTHAMPTON CHILDREN'S HOSPITAL
(63 beds)
SECOND RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Second Resident Medical Officer (B2) for the post becoming vacant early in March. Salary is at the rate of £150 per annum with full residential emoluments. R practitioners holding A posts may apply when appointment will be limited to six months. Special preference will be given to those intending to specialize in Paediatrics. The Hospital is recognised by the Conjoint Board for the Diploma in Child Health. Applications should be sent to the undersigned immediately.—Ella K. Matthews, Secretary.

ST. THOMAS'S HOSPITAL, S.E.1
Temporary ASSISTANT MEDICAL OFFICER in the Venereal Diseases Department

Applications are invited for the post of Temporary Assistant Medical Officer in the Venereal Diseases Department, for a period of one year. Salary £500 to £650 per annum according to experience, for a 25 hour week. Applications, stating age, qualifications with dates, details of experience, and names and addresses of three referees, should be sent by March 4 to the Clerk of the Governors.

ST. MARY'S HOSPITAL, London, W.2
WHOLE-TIME PATHOLOGIST

Applications are invited for the appointment of a Pathologist (whole-time) to St. Mary's Hospital and Paddington Green Children's Hospital. Salary £1,000 per annum. The appointment is for a period of twelve months. Applications stating nationality, age, qualifications and experience, together with names of three referees, should reach the undersigned by March 3, 1948.—W. Parkes, House Governor, St. Mary's Hospital, W.2.

ST. MARY'S HOSPITAL, London, W.2
ASSISTANT ORTHOPAEDIC SURGEON

Applications are invited for the post of Assistant Orthopaedic Surgeon. Candidates must be Fellows of the Royal College of Surgeons of England. The appointment is for a period of five years, at the expiration of which time the holder will be eligible for re-election. Applications (four copies), stating the names of three referees, should reach the undersigned by March 20, 1948.—W. Parkes, House Governor.

SALISBURY GENERAL INFIRMARY
(270 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, including R practitioners who now hold A posts, for the appointment of Resident Anaesthetist (B2), vacant March 15. The appointment will be for a period of six months. The salary is at the rate of £200 per annum with full residential emoluments. Applications should be sent to the Superintendent and Secretary immediately.

SOUTHEND-ON-SEA GENERAL HOSPITAL
GYNAECOLOGICAL HOUSE SURGEON (B2)

Applications are invited for the post of Gynaecological House Surgeon (B2), vacant March 1. Salary will be at the rate of £200 per annum with full residential emoluments. R practitioners holding A posts may apply when the appointment will be limited to six months. Applications to reach the undersigned immediately.—John Williams, House Governor and Secretary.

TIVERTON AND DISTRICT HOSPITAL
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A), vacant now, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments. Apply Secretary.

VICTORIA HOSPITAL, Deal
RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the post of Resident Medical Officer (B2) at the above hospital, including R practitioners who hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary £300 per annum with emoluments, and is open to unmarried male applicants. —F. C. Yates, Secretary.

VICTORIA HOSPITAL FOR SICK CHILDREN
Park Street, Hull
ASSISTANT PHYSIOTHERAPIST (Non-resident)

Assistant Physiotherapist required. Non-resident. Salary as per J.N.C. and F.S.S.N. and H.O. Scheme in force. Apply with full particulars to Matron.

SUTTON AND CHEAM GENERAL HOSPITAL
Sutton, Surrey
HONORARY OBSTETRICAL SURGEON

Applications are invited for the post of Honorary Obstetrical Surgeon to be in charge of the new Maternity Unit, of approximately 26 beds, shortly to be opened in Cedar Road, Sutton. The Obstetrical Surgeon will also be required to be in charge of the Ante-Natal Clinic to be opened in connection with the above Unit. Further particulars can be obtained by application to the Secretary. Applications stating age, place of birth, special qualifications and accompanied by three recent testimonials should be sent to the Secretary by Saturday, March 13, 1948.

SUTTON AND CHEAM GENERAL HOSPITAL
Sutton, Surrey
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male), including those within three months of qualification and liable under the National Service Acts, for the appointment of Junior Resident Medical Officer (A), vacant April 1, 1948. The appointment is for a period of six months. Salary is at the rate of £150 per annum with full residential emoluments. Applications should be sent to the Secretary not later than March 13, 1948.

SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common, S.W.4
HOUSE SURGEON (A)

Applications are invited from registered women medical practitioners for the appointment of House Surgeon (A), now vacant. The appointment will be for a period of six months. Salary is at the rate of £150 per annum, with full residential emoluments. Applications should reach the Secretary at the Hospital as soon as possible.

SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common, S.W.4
PART-TIME MEDICAL REGISTRAR to the Out-Patient Department

Applications are invited from medical women for appointment as part-time Medical Registrar to the Out-Patient Department. Salary according to experience and time available but not less than £300 per annum for 3½ days per week. Applications should be sent to the Secretary by March 6.

VICTORIA HOSPITAL, Worksop, Notts (150 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those in H.M. Forces, for the appointment of Resident Surgical Officer (B1) to become vacant on March 16, 1948. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £350 per annum with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and ineligible for H.M. Forces, may apply. Applications should be sent as early as possible to the Secretary-Superintendent.

VICTORIA CENTRAL HOSPITAL, Wallasey
HOUSE PHYSICIAN (A)

Applications for the above post are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointment will commence on April 1, 1948, and will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned as early as possible.—J. B. Daniels, Acting Secretary-Superintendent.

WESTON-SUPER-MARE GENERAL HOSPITAL
(100 beds)
HOUSE SURGEON (A) and HOUSE PHYSICIAN (A)

Applications are invited from medical practitioners for the appointments of House Surgeon (A) and House Physician (A). Duties to commence immediately. Salary for both posts at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications should be addressed to Leslie J. Fursland, Secretary.

WALSALL GENERAL HOSPITAL (181 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant April 1. Salary £300 per annum plus full residential emoluments. Applicants should have held house appointments and had surgical experience. Suitably qualified R practitioners holding B2 appointments and those holding B1 and ineligible for H.M. Forces may apply. Applications should be forwarded to the House Governor and Secretary.

WEST CORNWALL HOSPITAL, Penzance
ASSISTANT PATHOLOGIST

Applications are invited from ex-Service Specialists for the above appointment approved by the Ministry of Health under Circular 202/46. The post is a full-time one and private practice is not permitted. Salary is at the rate of £1,000 per annum. The Assistant Pathologist will work under the general direction of the Honorary Pathologist to the Hospital and will be an Assistant Member of the Area Laboratory Staff when this is established. Applications must reach the undersigned not later than March 15, 1948.—K. I. Newell, Secretary-Superintendent.

WEST LONDON HOSPITAL
Hammersmith, W.6 (240 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited for the above appointment to become vacant on April 14, from registered medical practitioners, including R practitioners who now hold A posts. The appointment will be for a period of six months and may be terminated by one month's notice on either side. Salary at the rate of £150 per annum, with the usual residential emoluments. Applications, with particulars of medical school, must reach the undersigned by first post Tuesday, March 9. Please state telephone number (if any).—C. R. Lockhart, Secretary.

Have you read the notice at top of page 11 ?

WEST CORNWALL HOSPITAL
Penzance (116 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) vacant now. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent to K. I. Newell, Secretary-Superintendent.

WORKINGTON INFIRMARY (capacity 60 beds)
HOUSE SURGEON (B2) (male)

Applications are invited for the appointment of House Surgeon (B2) (male), vacant now, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications should be sent immediately to Dr. T. T. Graham, Honorary Medical Secretary.

WEST SUFFOLK GENERAL HOSPITAL
Bury St. Edmunds

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following appointment:—

HOUSE SURGEON (A) with responsibility for E.N.T. and general surgery. Vacant March 1, 1948. Salary £200 per annum. Appointment normally for six months. Applications should be addressed to the Secretary, E. E. Hardwicke, F.H.A.

WORTHING HOSPITAL (200 beds)
HOUSE PHYSICIAN (A) (April)
HOUSE SURGEON (A) (March)

Applications are invited from registered medical practitioners for the above appointments. Salary at the rate of £175 per annum. Residential emoluments are payable. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointments will be limited to six months. Applications should be sent immediately to A. V. Oakton, House Governor.

YORK COUNTY HOSPITAL (222 beds)
HOUSE SURGEON (B2)
mainly Eye, Ear, Nose and Throat Department

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) whose main duties are in the Eye, Ear Nose and Throat Department (37 beds, with busy Out-patient Clinics), but who will share in the general work of the hospital and in casualty duty, including R practitioners who now hold A posts. If held by an R practitioner appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments. This post is recognized for D.O.M.S. and D.L.O. examinations and becomes vacant on April 1, 1948. Applications to be sent to the undersigned by March 15, 1948.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ORTHOPAEDIC HOUSE SURGEON AND CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic House Surgeon and Casualty Officer (B1), vacant now. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £350 per annum, with full residential emoluments. Applications should be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Physician (B2), vacant on March 9, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
PART-TIME V.D. OFFICER
for the County Hospital and the City of York

Applications are invited for the post of part-time V.D. Officer for the County Hospital and the City of York, vacant April 1. Salary £700 per annum (based on the agreed scale of fees for part-time consultants employed by Public Health Authorities). Private work is permitted. Applicants should produce evidence of special experience in V.D. work. Applications should be made by March 15, to the undersigned.—J. R. Mackrill, Secretary.

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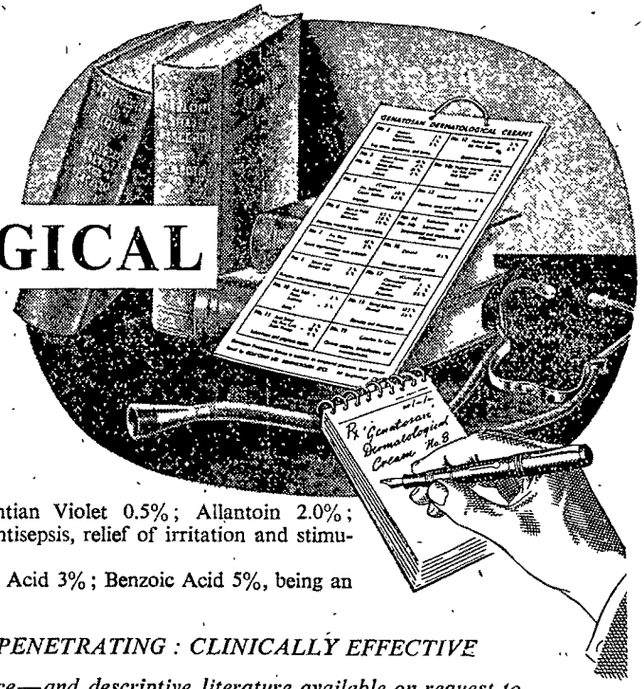

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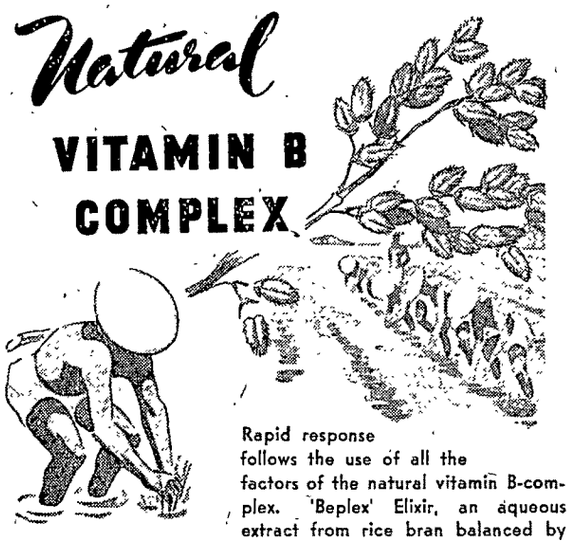

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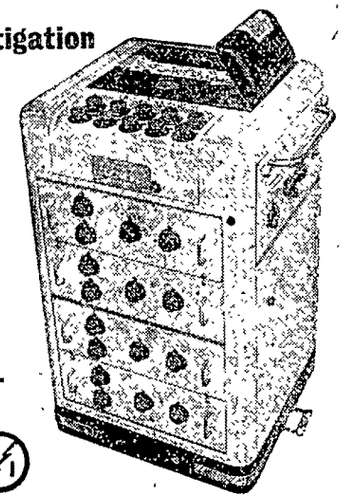

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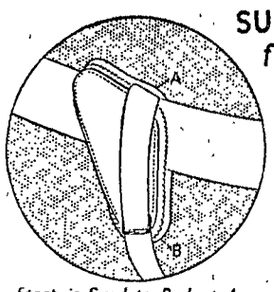

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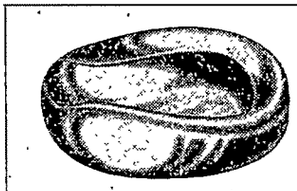

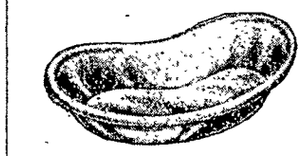

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY MARCH 6 1948

CHONDROMALACIA PATELLAE*

BY

CHARLES GRAY, F.R.C.S.

Honorary Orthopaedic Surgeon, Royal Free Hospital

[WITH PHOTOGRAVURE PLATE]

Degenerative changes in the knee-joint are common and often begin at an early age. The degeneration affects first and mainly the articular cartilage of the patella, and in young people is an important and common cause of disability.

Incidence

In an admirable thesis Öwre (1936) describes post-mortem examinations of many knee-joints taken from individuals who had died from causes unconnected with the knee-joint. Degenerative changes in the articular cartilage of the patella were very common even in the younger age groups. Thus of 18 cases in the age group under 20 years, 7 (39%) were found to have a degenerative change in the articular cartilage of the patella; of 32 cases in the age group 20–30, 27 (84%), of 26 cases in the age group 30–40, 25 (96%), and every case in the age group over 40, showed a degenerative change.

It appears from these observations that degeneration of the articular cartilage of the patella often begins before growth has ceased and is present in three or four of every five individuals aged between 20 and 30 and in almost every individual over the age of 30.

Öwre's youngest (post-mortem) case was 14 years. Silfverskiöld (1938) at necropsy found mild changes in the articular cartilage of the patella in 25% of subjects between the ages of 15 and 20, and he quotes a case in which chondromalacia patellae was found clinically in a boy aged 13. Bennett, Waine, and Bauer (1942) reported a series of post-mortem examinations which fully confirm Öwre's observations. Clinical experience of chondromalacia patellae has been described by many surgeons.

Clinical References

Büdinger (1906) reported 15 cases. He considered it to be of traumatic origin, and mentions the occurrence in some cases of "mirror" lesions in the femoral articular cartilage. He obtained crepitus on moving the patella passively against the femur, and believed this to be an important diagnostic sign. His treatment was excision of the degenerate cartilage.

Ludloff (1910) reported a case of a girl aged 15 with pain in the knee-joint, wasting of the quadriceps, and patello-femoral crepitus. He scraped the oedematous cartilage away, and the girl was cured.

Läwen (1925) reported 13 cases, which he treated by excision of the cartilage. He thought the lesion was probably traumatic. He also performed 44 post-mortem examinations, and found degeneration of the patellar cartilage in 26.

Fründ (1926) reported seven cases. Clinically he noted swelling of the knee-joint, painful limitation of movement, transient locking of the joint, and pain on striking the patella with the knee-joint flexed to 90 degrees but not when the knee was extended.

Aleman (1927–8) examined the articular cartilage of the patella in the course of 220 operations on the knee-joint performed for various purposes. In about one-third of these he found a degenerative lesion of the patellar cartilage, and in 20 cases it appeared to be the cause of the disability. He mentions crepitus and pain on kneeling as the main diagnostic signs.

Slowick (1935) reported two cases. The diagnosis was confirmed by operation in one case (the other patient refused operation). There was a history of injury in both cases, and in each of them *x*-ray examination revealed an erosion of the articular surfaces of the patella. In the case operated upon Slowick shaved off the degenerate cartilage. Six months later the patient had 70 degrees flexion and no pain.

Kulowski (1933) described the condition as a circumscribed primary degeneration of the articular cartilage of the patella, with fibrillation, fissuring, and erosion of the articular surface. Cartilaginous loose bodies sometimes became detached from the patella. He noted the occasional association with other lesions—e.g., tears of the semilunar cartilages. Pain, intermittent synovitis, tenderness over the patella in acute flexion, and crepitations under the patella were mentioned as the clinical features, the radiograph usually being normal. Kulowski treated his cases by curettage or complete excision of the patellar cartilage. He believed that trauma is the immediate cause of the lesion in chondromalacia of the patella, but that there is an underlying constitutional tendency to degeneration of this cartilage.

Karlson (1939) has similar views about the aetiology. Clinically he noted a feeling of stiffness in the knee, pain, especially on kneeling, "jamming" of the knee-joint, irregular jerky movement ("ratchet" movement), and crepitus from the patello-femoral joint. He operated on 36 cases, excising the degenerate areas of cartilage. Of these, 23 recovered subjectively (but their knee-joints would not tolerate strenuous exertion), 10 improved, and 3 were no better.

*Submitted for publication on Sept. 29, 1947.

Hinricsson (1939) believes that endocrine disturbance or toxaemia may cause the condition. Murstad (1927), Stören (1929), Oberneidermayr (1930), and Heizmach (1937) also refer to the condition.

I have found the condition at operation on 10 occasions, and have often diagnosed it in cases where operation was unnecessary or inadvisable. My youngest patient (operated upon) was 11 years old.

This frequent occurrence of degeneration at an early age is a remarkable phenomenon which cannot be completely explained. Cartilage in all situations is particularly susceptible to injury because, being avascular, it is incapable of repair. The patellar cartilage is especially vulnerable because of its thickness, and it is constantly subjected to trauma by movements of the knee-joint, most of all during active extension, when the quadriceps holds the patella tightly against the femur. Because of its shape the inner façet is, of the two, the more likely to be affected (Wiberg, 1941). It has a slightly convex surface opposed to the convex surface of the internal condyle of the femur. The outer facet fits more accurately, having a concave surface which receives the convex femoral surface.

Morbid Anatomy

The degeneration is progressive. The early changes are oedema, alteration of colour, and striation of the cartilage. The oedema is circumscribed and causes a nodular bumpy appearance of the articular surface (Plate, Fig. 1). It affects only a part of the surface, occurring more often on the inner facet than on the outer. If both facets are affected the changes are usually more pronounced on the inner side. The oedematous area feels soft to the touch, in contrast with the firm consistency of normal articular cartilage. The affected cartilage loses its bluish sheen and becomes lacklustre and faintly yellow. In the oedematous area and also above and below it fine vertical striations occur in cartilage which is otherwise apparently normal.

Ulceration of the cartilage is the next stage. A part of the oedematous area is superficially eroded (Figs. 2, 3, and 4). The floor of the ulcerated zone has a velvety appearance. In time the ulcer becomes deeper, and eventually the entire thickness of the cartilage is destroyed, exposing the subchondral bone.

Proliferation of cartilage may occur either alone or in association with ulceration. Tufts and twigs of degenerate cartilage project above the general level of the articular surface (Figs. 5 and 6).

In some instances a part of the articular cartilage is broken into flat laminae which overlap one another like the tiles on a roof (Fig. 7).

Occasionally a single pedunculated lamina is elevated as a flap from the articular surface (Fig. 8). This had occurred in one of my cases, and at operation the flap could be seen to fold back during extension of the joint from the flexed position. It had obviously been responsible for the momentary locking of the joint which had been described by the patient.

"Mirror" lesions occur on the femoral condyles. As they are produced by friction against the patellar lesions they are more frequent on the internal condyle of the femur. The "mirror" lesions consist of striation and superficial ulceration of the femoral cartilage in a circumscribed area. Frequently the synovial membrane near the edges of the patella is thickened and injected, and the infrapatellar pad of fat is slightly hypertrophied. At first strictly localized, the condition in later life becomes part of a generalized degeneration of the joint—osteoarthritis.

Radiological Examination: Histology

The *x*-ray film in many cases (perhaps in the majority) shows no abnormality. This is not surprising, as the bone is involved at a very late stage and then only very superficially. However, a close scrutiny of first-class films may show a characteristic abnormality of the articular surface. The film should be taken in such a way as to bring out the soft shadow of the cartilage. The following abnormalities occur: (*a*) erosion and indentation of the articular margin (Fig. 10); (*b*) a localized prominence on the articular surface (Fig. 11); and (*c*) the appearance of a pedunculated flap of cartilage (Fig. 12).

In normal patellar articular cartilage the superficial cells are arranged parallel to the surface; in the central zone they are arranged in a curved and criss-cross manner; in the deeper layers they lie in rows perpendicular to the line of calcification which separates the cartilage from the subjacent bone. In the intercellular substance fibrils are not seen.

At an early stage of the degeneration, when oedema occurs, the cells appear to be further apart, and in the intercellular substance the fibrils become obvious (Fig. 9). Fissures appear in the intercellular substance, and in some areas extensive splitting occurs. Cells may become clumped together, and individual cells appear swollen and vacuolated.

When the bone is exposed by ulceration of the cartilage absorption of the superficial layers leaves marrow spaces open to the surface, and they fill with fibrous tissue. At the margins of the ulcerated area the deeper layers of the cartilage are invaded by blood vessels, which pierce the line of calcification. Proliferating cartilage cells are grouped around these vessels. Cavities and scattered foci of ossification appear in the cartilage.

Clinical Features

It might be expected that these extensive lesions, proved at necropsy to occur so frequently, would be an important cause of disability during life; in fact, if the condition is known and looked for it is often found. It is a fairly common cause of derangement of the knee-joint.

The degeneration frequently produces no symptoms until gross destruction of the cartilage has occurred, or until imperfect recovery from an injury brings it to light. Öwre (1936) has shown that many individuals who suppose their knee-joints to be normal have some clinical signs of chondromalacia patellae and can recall, when questioned in detail, attacks of pain and effusion and momentary locking. When the condition passes from the latent to the active phase it presents itself clinically as a derangement of the knee-joint. The abnormal patella may cause pain, intermittent effusion, tenderness, derangement of motion, and crepitus. Not all these signs are present in every case.

The *pain* is the presenting feature as a rule, and is felt in or under the knee-cap. It is produced by movements which grind the patella against the femur—i.e., by active extension of the joint as in going up stairs and in rising from the sitting position. The *effusion* is usually slight. *Tenderness* is felt mainly at the edges of the patella and at the lower pole, corresponding to the inflamed synovial membrane and hypertrophied fat pads which are noted at operation and in post-mortem specimens. Tenderness of the patella in kneeling may occur. Occasionally tenderness may be elicited by tapping the patella against the lower end of the femur while the knee-joint is semi-flexed.

Flaps or tags of articular cartilage may project sufficiently to impede the smooth motion of the joint. The case illustrated in Fig. 8 is an example. This man

complained that his knee often became "stuck" during the movement of extension. This semi-locking was painful and momentary. At operation it was seen that the flap of articular cartilage sometimes became folded back upon itself during the movement of extension and subsequently unfolded during flexion. Difficulty in disengaging the fold no doubt accounted for the intermittent stiffness of the joint. A "ratchet" type of motion has been described, but this has not occurred in any of my cases.

The *crepitus* occurs particularly during the movement of extension. It may be produced also by rubbing the patella against the femur while the knee-joint is lying relaxed in the extended position. This friction usually causes a pain of the same quality as that of which the patient complains.

Treatment

For the latent case treatment is unnecessary. When disability is produced physiotherapy or a period of immobilization in plaster may alleviate it but surgical treatment is necessary for many cases. Some writers, as mentioned above, advise paring down the abnormal articular cartilage to produce a smooth surface. I prefer total excision of the patella, because it is so obviously impossible to restore properly the smoothness of the articular surface. By shaving off the degenerate cartilage it is possible in some cases to get a surface which is not grossly irregular, but it must be remembered that anything short of perfection in an articular surface subjected to compression is certain to provoke a mechanical arthritis without much delay.

At operation the patella is inspected through a short internal parapatellar incision and removed if the expected lesion is found. The incision may be extended downwards if necessary for exploration of the knee-joint proper. The result of excision of the patella should theoretically be almost perfect. In practice the cases in which I have removed the patella because of chondromalacia have all eventually had very good knee-joints, but in several instances recovery has been long delayed because of persistent weakness of the quadriceps. The weakness amounted practically to paralysis, seemed to be functional, without any organic basis, lasted several weeks, and eventually disappeared very rapidly.

Case Records

Case 1.—A nurse aged 20 complained of pain under the right knee-cap. There was no history of injury, though she remembered having a transient effusion in the knee-joint many years previously. She was a healthy girl in good general condition. There was slight wasting of the right quadriceps, tenderness over the patella, pain on rubbing the patella against the femur, and fine retropatellar crepitus. *X*-ray films were negative. The pain continued in spite of prolonged physiotherapy. When the knee-joint was explored an extensive oedema of the articular cartilage of the patella, with a central area of ulceration, was discovered. From the small central ulcer a wart-like button of degenerate cartilage projected and a shallow fissure ran upwards and outwards from the ulcerated area (Fig. 5). The articular cartilage of the femur was normal. The patella was excised, and she made a complete recovery.

At a routine follow-up three years later she stated that her left knee had begun to trouble her, and that she had pain under the knee-cap and in the calf. On examination of the left knee the only physical signs were crepitus and pain produced by rubbing the patella passively against the femur. *X*-ray films were negative. After three months of physiotherapy and rest had been tried unsuccessfully, the patella was excised. It was strikingly similar to that removed from the right knee-joint. The articular cartilage of the femur was normal. She made a rapid and complete recovery, and the function of both knees is now perfect.

Case 2.—A girl aged 23 complained that for several weeks her right knee had been painful on the inner side. For several years she had noticed crepitus under the knee-cap. She had injured this knee seven years previously, when the joint had locked and had to be straightened under anaesthesia. There had been six or seven attacks of momentary locking after this, the last time being about a year before I saw her. These incidents were always accompanied by pain on the inner side of the joint and followed by swelling. She was a healthy girl in good general condition. There was slight wasting of the right quadriceps, but no effusion. Tenderness was present over the centre of the internal lateral ligament, and pain and crepitus were produced by rubbing the patella against the femur. *X*-ray films were negative.

The clinical picture suggested a tear of the internal cartilage, but at operation that cartilage appeared to be normal. A very extensive lesion, however, could be seen in the patella, so the incision was enlarged upwards and the patella removed. There was extensive oedema of the articular cartilage of the patella. In the upper part of this oedematous area fine superficial vertical fissures were observed. At the centre of the articular surface the cartilage was broken up by deep fissures into overlapping laminae, and in the lower part of the articular surface there was an intricate exfoliation of tufts of degenerate cartilage (Fig. 7). On the outer condyle of the femur there was a small "mirror" lesion, with ulceration of the articular cartilage and a few protuberant tufts of cartilage, which were pared off. This patient made a complete recovery.

Case 3.—This patient was a girl aged 19. Five years previously her left knee had given way while she was doing a backward bend during physical training. She was away from school on this account for two weeks, and wore "elastoplast" strapping on the knee for several months. Three months after this injury she fell off her bicycle and bruised the knee. Since these injuries it had been almost constantly painful, and there was occasionally a little swelling after exercise. Physiotherapy and bandaging had produced no improvement. She was a healthy girl in good general condition. There was slight wasting of the left quadriceps, slight painful limitation of flexion and extension of the knee-joint, and pain and crepitus on rubbing the patella against the femur. On *x*-ray examination there appeared in the lateral view a faint shadow indicating an irregularity of the articular cartilage of the patella.

At operation an extensive lesion of the articular cartilage of the patella was discovered. In the lower part of the medial facet there was a shallow quadrilateral ulcer with a soft velvety floor. The lateral facet was oedematous, and its surface scored by superficial fissures irregularly disposed. At the lower edge of the patella the articular cartilage was heaped up to form an irregular rim. The patella was exised. Her pain was completely relieved, but a feeling of insecurity in the knee persisted for nearly a year. The muscles recovered perfectly, but she was unable to run because she felt that the knee would let her down. This neurosis disappeared eventually. When seen five years after the operation she had made a complete recovery and the knee-joint was perfectly satisfactory.

Case 4.—A soldier aged 31 complained of chronic pain "behind the right knee-cap." The pain had been present for four years. There was no history of injury, no locking, and no instability. The right quadriceps was slightly deficient. There was tenderness over the patella. No other clinical signs were present, but in the lateral *x*-ray film a slight irregularity suggested an erosion of the articular surface of the patella (Fig. 10).

At operation a gross lesion of the articular surface of the patella was discovered. Running transversely across the lateral facet there was a shallow ulcer 6 mm. wide, with a rough floor, and in the lower part of the articular surface there were two similar but smaller ulcers (Fig. 4). The remainder of the articular surface was uneverly oedematous, and on the upper part there were numerous fine vertical superficial fissures. The patella was excised, and he made a complete recovery.

Case 5.—This patient was a soldier aged 28. Two weeks previously his right knee, formerly apparently normal, had become painful and swollen. The swelling persisted. There was no history of injury. The right quadriceps was slightly deficient. There was a moderate effusion but no tenderness. The range of movement was from 5 to 90 degrees. *X*-ray films showed a localized irregularity of the articular surface of the patella with some subchondral rarefaction.

At operation an extensive lesion of the articular cartilage of the patella was disclosed. The whole of the articular surface, except a narrow strip along the lower border, was oedematous and covered with fine superficial fissures. The oedema was most pronounced over the medial facet. On the ridge between the middle and lateral facets a deep fissure had undercut a flap of cartilage about 1 cm. square. This flap was pedunculated, being attached by its outer margin. Underneath it the bone was exposed. The synovial membrane around the patella was congested. There was a "mirror" lesion in the intercondylar surface of the femur, with softening of the cartilage and fine vertical fissuring. The patella was excised. The patient made a complete recovery.

Case 6.—A woman aged 20 had pain in her right knee-joint for six months. The pain was "under the knee-cap." The joint swelled at times. There was retropatellar crepitus, and rubbing the patella against the femur caused pain. *X*-ray films showed no abnormality. Prolonged physiotherapy had given no relief. The patella was removed. There was extensive shallow ulceration of the articular cartilage on the external facet, with fine vertical striations caused by superficial fissures. On the ridge between the facets there was a deep cleft in the cartilage, from which some rod-like pieces of degenerate cartilage projected above the level of the articular surface (Fig. 6). After operation the quadriceps muscle recovered only slowly. It was six months before she had regained the full power of extension. One year later the knee-joint was painless and entirely satisfactory.

Case 7.—A woman aged 22 had for 15 months had pain under the left knee-cap, especially on going up or down stairs and on getting up after sitting for some hours—e.g., in the cinema. The knee swelled occasionally. Passive movements of the patella across the femur caused pain and elicited a fine crepitus. *X*-ray films were negative. At operation fairly advanced changes were found in the articular cartilage of the patella. There was oedema of both facets, with many superficial fissures in the articular cartilage. On the lower part of the internal facet a small ulcer extended through the whole thickness of the cartilage, exposing the subchondral bone. On the central ridge there were several small rounded excrescences caused by localized proliferation of the cartilage (Fig. 3). The patella was removed. After operation she had great difficulty in regaining control over her quadriceps. For several weeks the muscle appeared to be completely inhibited. It gradually recovered, but the knee became very stiff and was eventually mobilized by repeated manipulations. One year after operation she had a full range of movement, normal power of extension, and no pain.

Case 8.—A woman aged 31 complained of persistent pain on the inner side of the knee and under the knee-cap after an operation for removal of the internal semilunar cartilage, which was said to have been badly torn. There was retropatellar crepitus and pain on passive movements of the patella. An exploratory operation was performed. The internal semilunar cartilage was absent—no regeneration had occurred. The patella showed an early stage of degeneration of the articular cartilage. Over most of the articular surface there was a slight oedema associated with a change in the colour from the normal bluish sheen to a lacklustre yellowish white. Superficial fissures produced fine vertical striations. In places very superficial erosion had occurred, and here the texture of the surface was like that of velvet. The patella was removed. This is a recent case. The patient is making a satisfactory recovery.

Case 9.—A boy aged 11 injured his right knee. The patellar ligament was avulsed from the patella, pulling off a small flake of bone from the lower pole. At operation for repair of this injury an early chondromalacia of the articular cartilage of the patella was observed, with oedema, change of colour, and vertical striations. The patella was left *in situ* as there was no evidence that it had previously caused any disability. He will be kept under observation.

Summary

Degenerative changes in the articular cartilage of the patella often occur and are a common cause of derangement of the knee-joint in young persons.

The patellar lesion is a degeneration of articular cartilage in a circumscribed area, where oedema, fibrillation, and ulceration occur.

The condition may be latent or may cause pain, effusion, derangement of motion, and crepitus. The differential diagnosis from lesions of the semilunar cartilages may be difficult.

X-ray changes are absent or very slight.

Excision of the patella may be necessary.

A small number of cases are described.

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VITAMIN D IN TREATMENT OF CUTANEOUS TUBERCULOSIS*

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[WITH PHOTOGRAVURE PLATE]

In England experience in the use of heavy doses of calciferol—vitamin D_2—in the treatment of lupus began in August, 1943, with the observation of Dowling on a severe case in which general light treatment combined with Finsen therapy for a number of years had failed. Within three months this patient had improved dramatically. Thereafter Dowling and Prosser Thomas, working in the same department, applied the remedy to every case of lupus that could be mustered. The number was not large, but the results after 2½ years appeared to be striking enough to carry conviction. Accordingly 11 of these cases were presented at meetings of the Section of Dermatology of the Royal Society of Medicine in November and December, 1945. From French literature which became available shortly afterwards it was learned that calciferol had been used on a considerable scale in France following the publication in December, 1943, of M. J. Charpy's original observations which were begun in 1940. Indeed, compared with the mass of observations published in that country, ours amounted to no more than a drop in the ocean.

Dowling and Prosser Thomas's cases were treated almost entirely with calciferol in the form of dry tablets, each

*A paper read at the Section of Dermatology of the International Conference of Physicians on Sept. 9, 1947.

containing 50,000 international units, in dosage varying from 150,000 to 100,000 i.u. daily—according to tolerance and progress. Eight of these cases showed toxic effects, which, however, came to an end quickly when the drug was stopped or the dosage reduced. Of 39 cases treated up to the end of 1945, 32 were considered suitable for assessment —18 appeared to be free from lupus (i.e., only scars or scars and pigmentation remained), with or without the help of local treatment; nine were greatly improved but not cured; and five had shown but little improvement. In these cases only the effect of calciferol on the disease and the incidence of clinical toxicity were noted.

Present Investigation

To this series we add 44 cases of lupus—34 adults and 10 children, under the care of Macrae at the Marland clinics and of Suzette Gauvain at the Treloar Hospital at Alton—upon whom treatment was begun in 1946, and 70 other cases of tuberculosis; to the latter group a brief reference will be made in due course. These were all institutional cases and were under close daily observation. Among the adult cases of lupus were some of the most severe in the country. Their average age was 38.5 years and the average duration of the disease 18.9 years. To the whole of this group it was decided to apply the following routine pathological investigations before and during the course of treatment: (1) the Mantoux reaction; (2) serum calcium estimations; (3) blood counts; (4) blood sedimentation rates; (5) when possible, histological examination of the disease process at regular intervals; and (6) *x*-ray examinations of the chest and abdomen. In addition, regular records were kept of weights, blood pressure, and urine.

Clinical Results.—Of the 34 adult cases of lupus at Alton each responded, though unequally: 30 have been discharged free from clinical evidence of lupus, and in the remaining four treatment is being continued. Of the 30 cases which have been discharged, eight at some time showed signs of relapse after previous apparent cure. These relapses have responded well to further treatment, though usually better if the process has been allowed to develop for a while than when the patients have been retreated at the earliest possible moment. The results are shown in Table I.

TABLE I.—*Results in 34 Adult Cases of Lupus*

Calciferol Given for	No. Cleared	Average Age in Years	Average Duration of Disease in Years	No. Showing Toxicity	No. Recurring but Responded to Further Treatment	No. not Cleared
0– 2 months ..	2	60	4	1	0	—
2– 4 " ..	12	36	16	4	1	—
4– 6 " ..	6	34	21	1	2	—
6– 8 " ..	5	49	33	3	4	2
8–10 " ..	2	30	16	2	0	1
10–12 " ..	2	36	14	0	1	—
12 " ..	1	18	12	1	0	1
Totals ..	30	38·5	18·9	12	8	4

Early Herxheimer-like Reaction.—During the early weeks of treatment many of the adult cases appeared to be worse, with increase in redness and swelling and occasionally spontaneous ulceration. This was followed by gradual subsidence, pallor, and shrinkage of inflammatory swelling. This Herxheimer-like reaction has occurred also in a patient with Bazin's disease, who developed a haemoptysis during treatment and died, and in a patient with lupus who developed symptoms of pulmonary tuberculosis though radiologically no evidence of that disease had been found before treatment was started. Increase in activity of the tuberculous process early in treatment was also seen last year in a case of lupus presented at the clinical meeting of the British Association of Dermatology and Syphilis. The case developed a striking and extensive lichenoid tuberculide shortly after treatment with calciferol had been instituted. Similar experiences were related by S. Lomholt and M. Grzybowski during the meeting at which the paper here presented was read.

Importance of Local Treatment.—In the great majority of cases it was found that the addition of local treatment greatly accelerated progress, either when the disease had been brought under control by calciferol or, in fungating lupus, near the onset of treatment. It was also observed, particularly in patients with extensive disease, that patches previously treated by local methods were the first to respond to calciferol therapy. The local measures employed were those inherited from long experience in association with Sir Henry Gauvain. They consisted mainly of Finsen therapy, Kromayer-lamp treatment combined with the application of selective caustics, particularly picric brass paste and liquid acid nitrate of mercury; curettage in the case of fungating lesions followed by the application of pure lysol. Finally, operations for the correction of such deformities as extreme narrowing of the oral and nasal orifices, ectropion, and elephantiasis of the upper lip have been performed earlier than would have been possible without treatment by vitamin D. The importance of local treatment must be emphasized, as there may be a tendency to think that treatment with calciferol may have eliminated the need for it. On the contrary, the need for skilled local intervention in a fully equipped institution has hardly been diminished.

Methods of Administration.—In the adult cases calciferol was administered chiefly by mouth in the form of dry tablets, oily capsules, or an emulsion of the oily solution, the daily dosage being 150,000 to 100,000 i.u. A few cases were treated by the injection of 600,000 i.u. (15 mg.) in oily solution twice a week. Response to treatment by injection was notably slower than by mouth, but, on the other hand, no toxic effects were encountered in this small group. The dosage required varied from 9,500,000 to 62,500,000 i.u. Of 10 children with lupus treated with calciferol by mouth, chiefly in the form of dry tablets, clinical evidence of the disease has come to an end in seven, while three remain under treatment. The usual dosage was 100,000 i.u. daily. The period of treatment has varied from 63 to 226 days, the average being 139 days; the average dosage about 18,000,000 units, varying from 4,750,000 to 33,500,000 i.u. An initial flare-up was observed in only a few cases (Table II).

TABLE II.—*Results in 10 Cases of Lupus in Children*

Calciferol Given for	No. Cleared	Average Age in Years	Average Duration of Disease in Years	No. Showing Toxicity	No. Recurring but Responded to Further Treatment	No. not Cleared
0– 2 months ..	2	9·0	2·6	2	1	—
2– 4 " ..	1	9·0	7·0	1	—	1
4– 6 " ..	1	13·0	3·3	—	—	1
6– 8 " ..	2	10·6	2·0	1	—	1
8–10 " ..	—	—	—	—	—	—
10–12 " ..	1	13 0	1·0	—	—	—
Totals ..	7	11·4	2·10	4	1	3

Non-cutaneous Tuberculosis

Calciferol was given in 31 adult cases of non-cutaneous tuberculosis. Most of them have been tuberculous adenitis of the neck, but in addition tuberculous tenosynovitis, peritonitis, bladder disease, dactylitis, and disease of various joints have been treated. The results on the whole have been extremely good, particularly with the glands, in which calciferol produced in a few some early reaction, followed in all by shrinkage and calcification. Subsequent excision has been made easy, as the glands have been small, discrete, and mobile, and consisted in greater part of calcium salts. Two cases of tuberculous peritonitis have responded in a spectacular manner, and disease in small bones has done well. In the larger joints the results have been rather disappointing. In one case of bladder disease frequency was greatly reduced, though bacilluria persisted.

Among the children there have been 16 cases of tuberculous glands. The results compared very closely with those obtained in the adult group. The average dose received was 7,400,000 units, with a maximum of 18,000,000 and a minimum of 1,800,000 units. Rapid healing of sinuses was one of the features observed among these children. Within recent months 21 cases of tuberculous bones and joints in children have been treated. It is too early to speak of results, but it can be said that they appear to be making good clinical progress, and that

radiologically some cases have so far shown a greater degree of recalcification than normally would have been expected with routine conservative treatment.

Results of Investigations

During the first two weeks of treatment the diameter of the erythema of the Mantoux reaction increased in almost every case from an initial average of 16.4 mm. to 19.8 mm., and thereafter gradually subsided to the original or slightly less than the original diameter. At the same time the sedimentation rate in the first hour rose from an initial average of 14.3 mm. to 28 mm. at the end of a month, and then fell to 22.9 mm. at the end of two months, and 19 mm. at the end of three months, thereafter falling to normal except in patients showing toxic effects, in whom a second sharp rise was met with.

Relation of Serum Calcium Readings to Clinical Results.—So far it has not appeared possible to correlate clinical results with quantitative increase in the serum calcium. This does not necessarily imply that calcium plays no part in the process of cure. It remains to be seen whether the diseased tissue gains in calcium during the course of treatment or not. Histological examination of material stained by the ordinary methods has revealed no sign of deposition of calcium, but some work by Tomlinson and Tonks at Coventry on a small amount of material seems to show that in fact there may be quite a substantial gain. Blood counts have revealed a slight degree of anaemia in most patients under prolonged treatment with calciferol, and most of the adults have lost some weight while under treatment.

Histological Changes during Treatment.—At Alton a considerable quantity of histological material has been collected. In one very extensive case weekly biopsies were made during seven months up to the time of writing. The changes in this case were similar to those found in other cases and to those described in 1945 by Vachon and Feroldi. They consisted essentially in the development of a quantity of young connective tissue about the lupus nodules unaccompanied by elastic fibres. This delicate-looking fibrillary tissue seemed to be invading the process, breaking it up into fragments, and ultimately appearing to replace it almost completely. For a time the histological picture closely resembled that of sarcoid. The changes in this case are shown in the Photogravure Plate; they are described by Dr. J. Bamforth as follows:

"Section just before the beginning of treatment (Feb. 15, 1947) shows in the dermis a tuberculous focus comprising several giant-cell systems, consisting of typical aggregations of endothelial cells and lymphocytes, and in two of which giant cells are seen. There is slight caseous change and no reactive fibrosis. (Plate, Figs. 1 and 2.)

"Two months after the beginning of treatment (April 16) an early change is noted in the histological picture. The giant-cell systems are invaded by histiocytes—elongated cells, straight or slightly curved, with deeply staining nuclei and little cytoplasm. These cells are seen between the endothelial cells. (Fig. 3.)

"Two weeks later (April 30) it is found that the invasion of the giant-cell system by histiocytes has increased, and that, disposed in circular fashion around the lesions, zones of early fibrous tissue formation have appeared. These zones isolate one giant-cell system from another. (Fig. 4.)

"One month later still (May 21) examination shows that the disintegration of the giant-cell system is well advanced. The individual cells are isolated, and at one part the curious picture is shown of several giant cells separated from each other by this newly formed connective tissue. Both endothelial cells and giant cells are beginning to disappear, and in many of the lesions only one or two endothelial cells remain. Finally, all that is left is an area of fibrosis associated with lymphocytic infiltration." (Figs. 5 and 6.)

Few cases have failed to show traces of granulomatous material even after prolonged treatment, but to what extent these residual traces of tubercles should be regarded as a threat of future relapse remains to be seen. One case, however—that of a young adult—appeared to be completely cured in five months by calciferol after many years of failure by heliotherapy at Leysin and general light and Finsen and other local treatment at Alton. A plastic operation was thereafter performed on the upper lip. In this case no trace of the tuberculous process was found histologically in the tissue removed by operation.

Toxic Effects

Of 39 cases treated between 1943 and 1945 by Dowling and Prosser Thomas eight developed toxic symptoms, none of them severe. In the Alton series 17 of the 34 adult cases showed clinical toxicity, and it has been observed that during the toxic phase clinical improvement in the disease has often been most pronounced. In two of these cases complete and remarkable disappearance of the disease has taken place when the patient's general health had given rise to real concern. The symptoms and signs of toxicity have been chiefly marked pallor, thirst and polyuria, constipation, headache, tiredness, loss of appetite, and sickness. The average dose at which toxicity developed was about 16,000,000 i.u., varying from under 2,000,000 to 63,500,000 i.u. Among the adults the blood sedimentation rate has proved to be a reliable index of the onset of toxicity, and no case has been met with in which a significant rise was not found when the time came to call a halt to treatment. In children, approaching toxicity is signalled by a rise in the blood urea.

Clinical toxicity was met with in only two of the 10 children with lupus. One of them developed symptoms similar to those of early tuberculous meningitis, with anorexia, vomiting, photophobia, and neck rigidity. He felt quite well 14 days after treatment was stopped, though he continued to look rather ill for a little while longer. The disease process disappeared almost completely during this illness. Toxicity has occurred more often in children suffering from other forms of tuberculosis, and in these constipation has almost invariably been the initial symptom, while occasionally acute abdominal pain suggesting appendicitis has been an early symptom. Altogether 24 out of 50 children have developed toxic symptoms at some time.

Toxic symptoms, both in the Alton series and in patients treated as out-patients at St. Thomas's Hospital, have not appeared to be closely related to serum calcium levels. The reading of 15 mg. per 100 ml. has been found on several occasions without toxic symptoms, while relatively unimportant rises have been associated with marked toxicity. In general the cases treated with calciferol by mouth have shown some rise in serum calcium above the normal, while seven adults treated by injection showed no rise in serum calcium and no clinical toxicity. Thirst and polyuria are likely to be the result of an attempt on the part of the organism to dilute the blood enough to keep the excess of calcium in solution. The relative anaemia generally observed in cases under prolonged treatment might also be due to a rise in blood volume. *X*-ray examinations have so far failed to reveal any evidence of deposition of calcium in normal tissues or organs.

A valuable contribution to the study of toxicity was given by J. Dawson last July at Leeds. The material consisted of 186 cases (158 lupus, 28 other cases): of these, 34.7% showed a biochemical disturbance without clinical toxicity—that is, a rise in serum calcium to over 12 mg. per 100 ml. or a diffusible calcium rise to over 7 mg. Of the 186 cases 30 (16.2%) developed clinical toxicity, the onset of symptoms taking place at the mean dose of 16,400,000 i.u. Among the clinically toxic cases the blood urea nitrogen was raised above 25 mg. in all except four cases, and in these there was a rise from previous levels.

Urea-clearance tests were carried out in 11 cases in the clinically toxic group at periods ranging from immediately after the cessation of treatment to 34 weeks, and in four, with blood changes without symptoms. Ten out of these 15 cases showed marked renal impairment.

Dawson also found that while diffusible calcium increased in toxic cases the ionic fraction did not necessarily go up. Part of the increase seemed to be due to the formation of a new substance for which the term "calcium steroid complex" was suggested; it was known that the steroid part was, however, not calciferol itself. A rise in serum protein was also found during clinical toxicity. The last finding suggests a possible reason for the sudden rise in the blood sedimentation rate observed among the adult group at Alton at the onset of clinical toxicity. This

brief reference to Dawson's work is quoted from notes supplied at the annual meeting of the British Association of Dermatology and Syphilis at Leeds or taken during the reading of his paper, the publication of which is awaited with interest.

Following Dawson's observations, tests for renal efficiency have been performed so far on 27 adults and 22 children at Alton, the greater number of whom either were under treatment or had been until recently. The results of this investigation up to the present time are shown in Tables III and IV. The record is far from complete and does not include a number of the cases of lupus which have been discharged during the past year. A full account will be published in due course.

At St. Thomas's Hospital urea-clearance tests have been performed on 15 cases of uncomplicated lupus, of which four are under treatment, while 11 have received no treatment for three months to two years. The results are seen in Table V. It is difficult to summarize these tables, but it can be said that: (1) they bear out Dawson's observation that patients under treatment with heavy doses of vitamin D often show impairment of renal function; (2) the degree of impairment seems to be greater in adults than in children; and (3) the rate of recovery of renal efficiency after impairment varies—it appears to be more rapid in children than in adults.

The picture can be completed only by investigation of a series of cases before, during, and at intervals after the completion of treatment.

TABLE III.—*Adults*

Case	Age	Disease	Treatment Stopped	Dose (million i.u.)	Highest Blood Ca. (mg./100 ml.)	Clinical Toxicity	Blood Urea (mg./100 ml.)	Urea Clearance‡
A. A.	64	Lupus	Still on	80	12·2	Nil	40	107·0%
F. C.	18	,,	,,	67·35	14·4	Mild	43	96·7%
E. M.	34	,,	,,	41·2	12·1	,,	34	68·4%
M. T.	33	,,	,,	15·3	14·4	Mod.	48	34·2%
A. W.	45	,,	,,	81·15	13·6	Nil	35	62·5%
A. B.	20	,,	4 mths. ago	37·8	11·0	Mild	20	124·3%
M. B.	50	,,	8½ ,, ,,	42	11·8	Nil	42	67·0%
W. C.*	32	,,	6 ,, ,,	29·1	14·7	Mod.	38	59·6%
L. F.	50	Lupus, spinal caries, and dactylitis	6 ,, ,,	12·3	16·2	Mild	33	34·0%
W. G.	41	Lupus	2 ,, ,,	13·65	15·0	,,	34	78·8%
I. L.	41	,,	4 ,, ,,	41·1	11·1	,,	29	66·0%
R. M.	30	,,	7 ,, ,,	30·6	15·3	Mod.	25	75·4%
A. R.	22	,,	2½ ,, ,,	28·2	12·4	Nil	29	91·0%
H. S.	31	,,	1 mth. ,,	44·5	11·6	,,	30	191·6%
R. D.	23	,,	11 mths. ,,	26	11·7	,,	31	193·0%
G. D.	19	Tb. hip	Still on	36·3	11·8	,,	32	76·2%
J. R.	23	Tb. adenitis	,,	27	11·9	,,	25	131·9%
M. S.	39	,,	,,	10·8	11·0	,,	35	51·0%
F. G.	30	,,	2 mths. ago	17·85	13·3	Mod.	33	38·5%
D. L.	21	Bazin's	12 ,, ,,	12	10·8	,,	27	71·0%
A. M.	20	Tb. adenitis	½ mth. ,,	46	11·6	Nil	33	95·8%
M. R.	50	Tb. wrists	3½ mths. ,,	36·3	16·1	Mild	33	62·9%
M. S.	46	Tb. peritonitis	½ mth. ,,	16	10·9	Nil	40	57·2%
J.S.†	38	Tb. adenitis	—	None	—	—	28	150·0%
		—	½ mth. ago	2	16·7	Mod.	35	51·0%
		—	2 mths. ,,	—	—	—	56	53·2%
		Controls before Treatment						
Y. B.	17	Tb. adenitis	—	None	—	—	31	139·0%
G. B.	47	Tb. peritonitis	—	,,	—	—	39	105·6%
J. S.	38	Tb. adenitis	—	,,	—	—	20	150·0%

* This patient has had one kidney removed and has tuberculosis in the other.
† Treated with vitamin D_3.
‡ Normal = 70% upwards.

TABLE IV.—*Children*

Case	Age	Treatment Stopped	Highest Ser. Ca.	Clinical Toxicity	Total Dosage Vit. D (million i.u.)	Blood Urea (mg./100 ml.)	Urea Clearance (Normal, 70%)
		Lupus Cases					
C. B. ..	8	9 months ago	13·5	Severe	5·85	31	79·0%
F. M. ..	13	Still on	11·3	Nil	16·5	24	98·3%
J. W. ..	10	Still on	13·5	,,	8·4	40	63·6%
		6 weeks after	13·5	,,	8·4	24	85·5%
		Tuberculous Glands					
D. B. ..	10	8 months ago	14·2	Mild	5·4	36	89·6%
D. C. ..	11	2 ,, ,,	13·7	Nil	15·8	50	121.0%
E. J. ..	8	5 ,, ,,	16·5	Mild	15·9	40	55·0%
T. S. ..	8	4 ,, ,,	11·2	,,	3·8	35	112·5%
M. L. ..	7	3 ,, ,,	16·5	V. mild	13·5	31	113·5%
N. C. ..	9	Still on	11·3	Nil	7·8	28	105·7%
M. H. ..	8	5 weeks ago	13·6	,,	8·4	34	92·6%
J. S. ..	7	Still on	12·4	,,	10	35	90·3%
M. V. ..	6	,,	13·0	Mild	9·9	32	106·5%
B. M.* ..	15	(Before treat.)	9·8	—	—	21	119·0%
		Still on	13·1	Nil	4·1	36	62·3%
A. W.* ..	13	(Before treat.)	11·8	—	—	24	157·5%
		Still on	11·1	Nil	4·1	35	79·9%
G. G. ..	10	Still on	11·7	,,	7·2	41	56·9%
		2 weeks after	11·7	,,	7·2	37	71·3%
A. H. ..	6	3 months after; then on 3 weeks' post-op. course	13·2	Mild	12·6	29	130.0%
			15·2	,,	14·1	44	90.0%
		Group of Tuberculous Cases Untreated by Calciferol					
John C. ..	9	—	11·3	—	—	31	123·0%
T. D. ..	5	—	10·4	—	—	33	91·5%
C. D. ..	11	—	11·8	—	—	24	108·5%
K. W. ..	7	—	11·0	—	—	28	72·5%
A. F. ..	8	—	11·8	—	—	31	99·2%
Joyce C. ..	11	—	9·6	—	—	24	135.0%

All children were given extra fluids.
* On D_3 both complained particularly of thirst and polyuria, though they showed no toxic symptoms; many adults also complained of great thirst. These symptoms are not included in the tables under clinical toxicity.

TABLE V.—*Lupus Vulgaris*

Case	Age	Stopped Treatment	Highest Ser. Ca.	Toxicity	Dosage (million i.u.)	Urea (mg./100 ml.)	Urea Clearance	Activity
F. S.	55	0	13·3	Mild	58	20	73%	Slight
M. M.	62	0 (Vit. D 3)	15·4	Mod. severe	24·25	58	41%	Active
L. M.	32	0 (prophylactic)	14·0	Moderate	18·9	25	70%	Nil
W. B.	50	0	14·4	Nil	43·1	29	86%	,,
C. P.	35	3 months	12·2	,,	39·4	38	101%	,,
G. E.	9	4 ,,	Never done	,,	8·15	41	57%	,,
C. G.	39	10 ,,	,,	Moderate	72·6	30	77%	,,
H. B.	76	14 ,,	10·0	,,	13·65	45	66%	,,
C. S.	32	18 ,,	10·8	Nil	20·25	26	91%	,,
W. S.	36	22 ,,	Never done	,,	47·2	25	111%	,,
S. B.	32	24 ,,	,,	,,	49·8	27	103%	,,
E. H.	32	6 ,,	,,	,,	12·6	30	63%	Slight
G. P.	39	12 ,,	Never done	Minimal	18	18	115%	Nil
E. M.	17	4 ,,	,,	Slight	24	17	93%	,,
E. T.	50	3 ,,	14	Minimal	71·2	20	92%	Slight

Discussion

From our experience alone it can be said that calciferol has a marked curative effect on lupus vulgaris. For example, Fig. A shows an early stage of treatment and Fig. B the same patient 18 months later; Figs. C and D show the change in another patient treated by a combination of calciferol and local measures. In any case, the great volume of observations published in France, Belgium, and other countries since Charpy introduced the method is too well known to require any emphasis on that point. Published results have certainly varied widely, and it is hard to account for the discrepancies, but it is clear from the weight of evidence that the first observation of the kind—that of Emery in France nearly 100 years ago, on the effect of enormous doses of cod-liver oil in lupus—was one of great interest and importance.

Accepting this simple observation as a starting-point, three questions must occur to everyone: (1) How does calciferol act? (2) How can it be used most effectively? and (3) Can it be made safe or relatively safe?—for perfectly safe remedies are almost non-existent.

So far as effectiveness and safety are concerned Charpy has stated repeatedly that he has found calciferol in solution in alcohol more effective and less toxic than in oil when given by mouth. He has developed a kind of standard course for otherwise healthy adults consisting of a large boosting dose of 1,200,000 i.u. in the first 4 weeks, and 600,000 i.u. in succeeding months. While about 100,000 i.u. daily for an adult appears to be effective, it is probable that no absolute standardization of the remedy is likely to be achieved: the threshold of tolerance is far too variable. One patient, for example, became very toxic on less than 2,000,000 units, with a serum calcium reading of over 15

and marked renal impairment. In this case the tuberculous lesions—widely scattered adenitis—improved rapidly during the toxic period. Rapid involution of the tuberculous process has been seen so often during toxicity that it is difficult to escape from the impression that the most effective dose is somewhat near the limit of tolerance and may occasionally be beyond it.

The first question—How does calciferol act?—is obviously the most important, but it is unlikely that it will be answered by purely clinical and pathological observation.

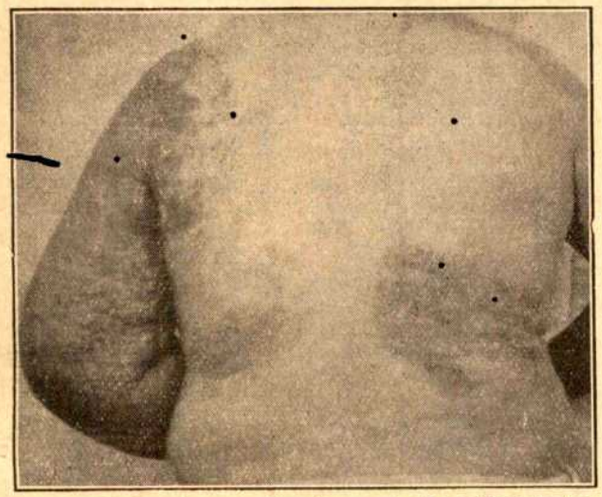

FIG. A.—Patient three months after onset of calciferol therapy, showing extensive active disease but with improvement starting in areas previously treated with local therapy—i.e., back of the shoulder and lumbar regions. Disease still very active on left arm.

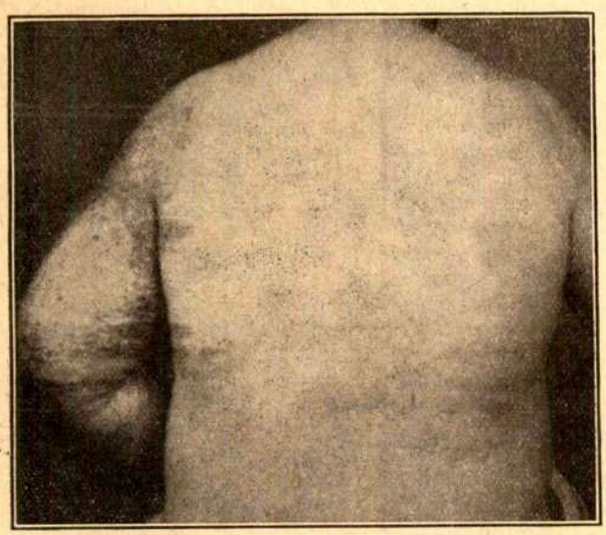

FIG. B.—Same patient as Fig. A 18 months after onset of treatment, with clinically no evidence of disease in the lumbar regions and mostly pigment in left arm.

At the same time such observations may point to where the ultimate solution is to be sought. It is established, for example, that the effect of calciferol is not confined to the skin, and that it is apparently not concerned with the fact that vitamin D is produced in the skin. Then it is evident that the vitamin is particularly effective in certain indolent forms of tuberculosis such as lupus, adenitis, tuberculous peritonitis, sinuses, and similar lesions—the same kind of tuberculosis in which heliotherapy and carbon-arc-light baths have been found effective.

It must next be decided whether or not calciferol has any direct effect on the tubercle bacillus or on its virulence. Steenken and Baldwin, in 1937, failed to produce any effect either on the growth of the bacillus by the addition of calciferol to culture media or on its virulence in guinea-pigs after such treatment. Wetherley-Mein, working under Bamforth's direction at St. Thomas's Hospital, has been carrying out a similar investigation, impregnating Dorset's egg medium with quantities of calciferol varying from 1,000 to 100,000 i.u. per ml. of the medium. So far calciferol in quantities up to 10,000 i.u. per ml. of the medium has not appeared to interfere with the growth of the cultures.

Dickinson (1947) treated guinea-pigs infected one month previously with tubercle bacilli with 2,000 i.u. daily for 10 weeks without any effect on the development of tuberculosis as compared with controls.

The well-known observation of Levaditi and Po in 1930 on experimental tuberculosis of *gradual evolution* in rabbits and guinea-pigs is more relevant. It was found that the administration of massive doses of calciferol greatly accen-

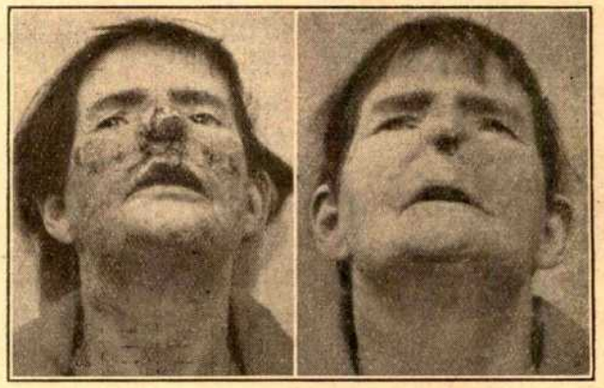

FIG. C.—Condition of another patient on admission.

FIG. D.—Same patient as Fig. C two months later, after a combination of calciferol and local measures, such as scraping.

tuated the calcification and cure of the experimental lesions. This, however, was regarded by the authors as a tissue response.

The evidence, therefore, so far would appear to be that calciferol as such has no effect on the growth of tubercle bacilli or on their virulence.

Does calciferol act as a non-specific stimulus to the defence process? If this is so might it not be expected to have a similar effect in other infective granulomas? On a few cases of tertiary syphilis it has been shown to have no effect. As regards sarcoid, three cases presented at the Royal Society of Medicine in 1946 appeared to have responded well, though slowly. Three other cases of sarcoid, presented at Leeds by Ingram last July, had also improved under the treatment, while one had shown no definite sign of improvement. But so far it has not been proved that sarcoid is not a phase of tuberculosis.

At present, therefore, it is possible to say that, although calciferol appears to have no direct action on the tubercle bacillus, it seems to be most effective in granulomatous lesions caused by the tubercle bacillus, and perhaps in them only. It has an effect similar to that of older remedies—the Gerson-Herrmannsdorfer diet, cod-liver oil, heliotherapy, and artificial-light baths—in all of which the common factor is a relative abundance of vitamin D, but it produces this effect far more rapidly and as a rule more completely than the older methods. Perhaps the most significant pointer to what is happening is to be found in the

histological material. The abundant young connective tissue—its invasion of the process breaking it into fragments, sometimes disposing of it altogether—seems to be the principal agent of cure.

Why does this tissue receive so powerful a stimulus? Is it because the tubercle bacillus itself is damaged through some indirect effect of the remedy, thereby allowing such an intense defence reaction to take place? Some by-product of the disturbance of calcium and phosphorus metabolism to which the drug gives rise might be supposed to have such an effect, and the Herxheimer-like action sometimes observed faintly suggests some such possibility. Or, on the other hand, may the reticular tissue itself be made to function with extreme intensity and efficiency by calciferol or by some product of its activity? It has been noted in more than one case at Alton that, while biopsy wounds in lupus generally heal with difficulty, healing under calciferol takes place almost by first intention. In the patient who had 30 biopsies the wounds gaped at first but healed quickly while treatment was in full swing. This patient developed toxic symptoms, and treatment was stopped after 3½ months. From that time his biopsy wounds again healed with difficulty, although improvement had been well maintained.

Much work which lies outside the scope of clinical and clinical-laboratory observation will have to be done on this subject, probably in the field of biochemical research. It is a fascinating problem which, if solved, might throw light on the character of the natural defence mechanism of the organism against tuberculosis. For it would appear that calciferol is not a chemotherapeutic agent in the ordinary sense, but that it may be a catalyst or an accelerator of a normal process.

In the meanwhile those of us who are satisfied that the advantages of the drug outweigh its dangers ought to use it with all the care which observers in the clinical, pathological, and biochemical fields have shown to be necessary.

Finally, it should not be forgotten that the local manifestations of tuberculosis are part of a general disease, and that the patient as a whole requires good food, fresh air, and adequate rest. Lupus requires, in addition, local measures which demand considerable experience and skill. All these can best be given in an institution specially equipped for the purpose.

We acknowledge with gratitude our indebtedness to Dr. E. M. Martland, of the Pathological Department of the Salisbury General Infirmary, who has undertaken all the pathological investigations on the Alton cases, and to Mr. L. E. Davey for pathological work in connexion with cases at St. Thomas's Hospital.

The microphotographs reproduced on the photogravure plate were taken by Mr. A. E. Clark, technician to the Department of Pathology at St. Thomas's Hospital. The other photographs were taken by Dr. Macrae.

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One further number of *Soil and Health*, which was edited by the late Sir Albert Howard, will be issued as a memorial number. Those interested should write to Miss E. B. Kirkham, The Rise, Milnthorpe, Westmorland.

HYPERTENSION—AETIOLOGY AND SURGICAL TREATMENT

BY

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[WITH PHOTOGRAVURE PLATE]

A large number of patients suffering from hypertension have now been treated surgically in various clinics. A good review of the results up to date is given by James L. Poppen and Charles Lemon (1947) on the surgical side, and by Robert Sterling Palmer (1947) on the medical side. The present communication is founded upon a small number of cases, but certain of the observations made in it, when considered in relation to the recent work of Trueta and his co-workers at Oxford, provided a stimulus for regarding the subject anew from the point of view of aetiology.

Hitherto the cause of hypertension has remained obscure, and the approach to the problem of treatment has been largely empirical. There has indeed been an absence of any comprehensive explanation of why the blood pressure is raised in these cases throughout their whole course, although the work of Goldblatt (1937–8, 1938, 1946, 1947) has added greatly to our knowledge of the subject, particularly when definite renal disease is demonstrable. Renal ischaemia has been shown to produce a pressor substance—renin—which by its action on the plain muscle of the middle arterial coat produces general vasoconstriction in the arterial system, thus raising the blood pressure. There have also been a small number of human cases with renal disease present in only one kidney, the removal of which lowered a previous persistently raised blood pressure. But this sequence—*organic* renal disease, renin, and hypertension—cannot be adduced to explain why the majority of cases should show a raised blood pressure throughout the earlier and greater part of their course. Biopsy of a large number of kidneys in such cases does not reveal any renal abnormality (Castleman and Smithwick, 1943).

The recent work of Trueta and his fellow workers (1947) has thrown some light on this gap in our knowledge of hypertension. By experimental work on animals they have proved that an extreme degree of cortical renal ischaemia can be temporarily produced by vascular spasm. Furthermore, during this stage of cortical spasm the blood is by-passed through the juxta-medullary glomeruli back into the vasa recta and so into the renal vein. The cortical ischaemia is fairly persistent and is produced by various nervous stimuli, but it also can be brought about by a humoral agency such as a posterior pituitary extract. A short quotation from their conclusions runs as follows: "If when the pressor substance is formed in cells situated in the renal cortex, and if anoxia is an essential condition for its production, it follows that the pressor substance will be formed when the cortex becomes ischaemic. It seems possible, therefore, that excessive diversion of the intrarenal blood-flow from the cortex through the medullary by-pass may be an initiating factor in the production of the pressor substance, and thus in the development of human essential hypertension." A further point which provides a parallel with cases of human hypertension is the fact that these workers found considerable individual variation in their animals.

The remarks concerning aetiology which follow constitute an attempt to apply to the problem of hypertension these recent additions to our knowledge of renal function, and must be regarded in that light and not as a proved and accepted series of facts.

Fig. A is an attempt to show the clinical course of an average severe case of hypertension from start to finish. During adolescence the blood pressure is normal, but is subject to considerable transitory increase, chiefly from emotional causes. There is some evidence that hypertension is commoner in later years in these apparently normal young people, who on examination for the Services or for some routine purpose are found to have temporarily an unexpectedly high blood pressure. During rest, and in the absence of emotion, their blood pressure remains normal.

After the age of 20 or 30, the blood pressure starts to increase slightly, but the effect of rest or of sedation is still to bring it down to the normal figure. Emotion during this period will of course also produce a further considerable transitory increase. As years go by the blood pressure increases, the first stage of true disease lasting for a varying period of time into the late thirties and the forties, and, rarely, possibly up to 50 years of age. This first stage of hypertension is not associated with any discoverable change

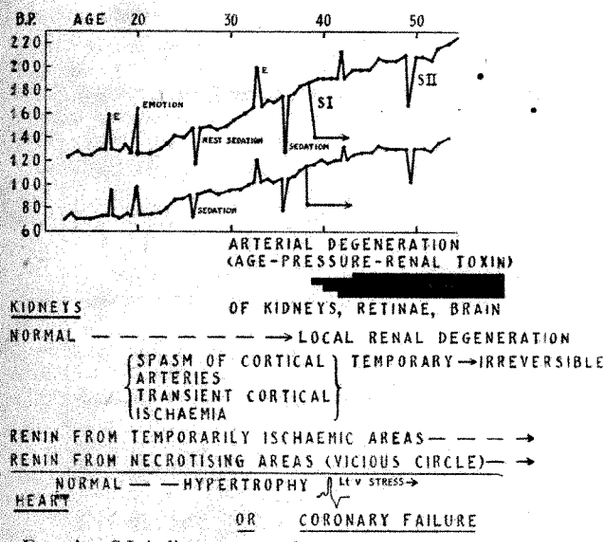


FIG. A.—S.I indicates sympathectomy done before the onset of permanent renal damage. S.II indicates sympathectomy after renal damage has occurred.

in the kidneys, but at the end of this phase arterial degeneration begins. The arterial degeneration is a hyaline medial change, and would seem to be a natural result of senescence, accentuated and rendered premature possibly by the persistently raised blood pressure. Individuals whose arterial structure is of poor quality suffer the degeneration early, whereas those with high-quality arterial tissue suffer the change late, if at all. Moreover, it would seem that nephritis produces a similar softening or degeneration of the arterial middle coat analogous to that produced by advancing years, but of far more rapid development and at almost any age. The arterial change affects the kidneys more than any other part of the body, but also attacks the vessels in the retina, pancreas, small intestine, testis, and suprarenal bodies.

Two Stages

The success of sympathectomy for hypertension (S.I and S.II, Fig. A) is likely to vary greatly according to the stage of the disease and the underlying pathological state, which must therefore be considered separately. During the first stage the increasing blood pressure may well be caused solely by spasm of the renal cortex, at first transitory, but later continuously involving varying areas of the renal cortex for most of the 24 hours. During the second stage permanent organic renal disease will result from arterial degeneration, and will constitute a permanent source of renal cortical anoxaemia. Thus in each of these two stages the hypertension can be explained on the renin theory; in both stages the renin comes presumably from transitory cortical spasm, and during the second stage it also comes from permanent cortical ischaemia from arteriosclerosis. It is worthy of note that the hyaline degeneration of the media is scattered in a patchy manner throughout the body, for it is not seen in the muscles or in the skin vessels. This freedom from arterial degeneration over such a big area is a sufficient proof that the raised blood pressure must at all times and in both stages be due to vascular spasm and not to organic vascular obstruction resulting from permanent arterial narrowing.

Stage I.—An example of this stage is provided by the case of a man who at the ages of 15 and 17 was found to have a high blood pressure. At 22 the figures were 240/160, at 32 they were 180/140, and at 37 they were 194/124. During the whole of this period he has lived a normal life, playing rugby football as a young man and being busily engaged in business during his later years. In addition he was an active fire-watcher during the war. For the whole period of time, 22 years in all, he has been free from symptoms. This type of case is commonly met with, and the symptoms in such cases often seem to be due more to the anxiety aroused by medical advice, or by apprehension, than by the disease itself. Certain definite deductions would appear to be legitimate from these cases. The long-sustained increase of the arterial pressure as such would seem to have no deleterious effect either on the arteries or on the heart. It is true that hypertrophy of the arterial media occurs, but the lumen of the vessels remains normal. It is also true that hypertrophy of the left ventricle occurs, but there is no evidence of any cardiac disability or failure. During these earlier years of life no degenerative effect intervenes.

Stage II.—The first essential cause of the medial degeneration seems to be a change in the vessel wall produced either by the natural degenerative tendency of advancing years or, in a few young individuals, by nephritis. The second is the trauma produced by the continued high arterial pressure. It would seem, arguing from the type of case described above, that this second factor of trauma is alone not enough to produce the degeneration. It is noteworthy, particularly from the clinical point of view, that the changes produced in the arteries are identical in the retina and in the kidney, but pathological and post-mortem investigations prove that the renal arterial changes are more advanced than are those of the retinal vessels. Although pressure seems to rank second to degeneration it is very important, for the results of sympathectomy show that release of the pressure allows a rapid regression of the retinal changes. And it is therefore legitimate to assume that a similar regression can occur to some extent in the renal arteries.

Hypertension in Nephritis

Two cases are described at this point because, although not cases of primary hypertension, they shed some light upon the effect of sympathectomy on the lesions found in essential hypertension.

These patients were both young men, aged 23 and 21, and in each case the speed of onset of the hypertension was rapid and the renal function poor. They had previously been accepted as fit for the R.A.F. and Army respectively, in which they had served as healthy men. In each at the time of medical investigation retinitis was present of the grade-IV degree—that is, with haemorrhages and exudate and papilloedema. In the first case the length of history of symptoms was 12 months and in the second case three months. They were both treated by sympathectomy: bilateral removal of the sympathetic chain D6 to L1, and excision of the greater and lesser splanchnic nerves. Sympathectomy was done in the first case because it was difficult to decide whether it was one of malignant hypertension or of chronic nephritis, and it was felt that since the outlook was hopeless it was right to give him the benefit of the doubt by operation. Subsequent review makes it probable

that the case was in fact one of chronic nephritis and not of primary malignant hypertension. The second case was definitely one of chronic nephritis with a similar clinical picture.

Fig. B shows the effect of sympathectomy in the first case. The blood pressure has been lowered and remains lower six months from the date of the second operation. The renal

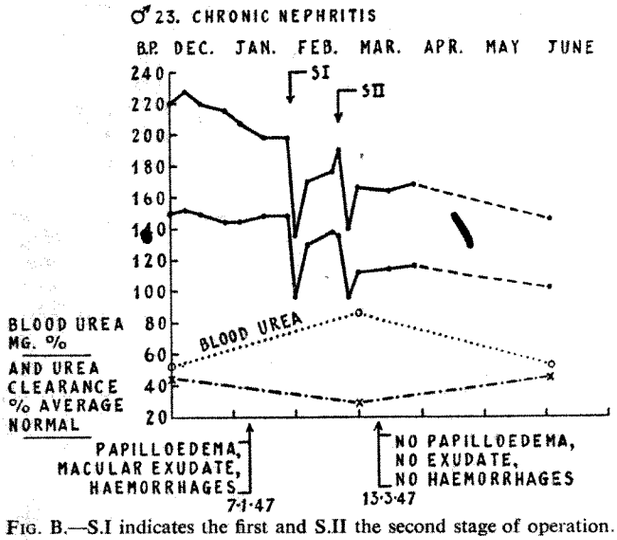


FIG. B.—S.I indicates the first and S.II the second stage of operation.

function has not been diminished, proving that there was no quantitative relationship between the height of the blood pressure and the renal function. The retinitis disappeared to a great extent in three weeks as a result of the lowered blood pressure. This retinal change is most significant, for, as already mentioned, the vascular changes in the kidneys are analogous to those in the retina. Moreover, the clinical improvement after operation suggests that a corresponding improvement has also occurred in the renal arterial system. It is noteworthy that Trueta and his colleagues found that splanchnic sympathectomy caused cortical flushing in their experimental animals and prevented to a great extent the cortical spasm induced by their various experimental measures. Fig. C shows the effect of

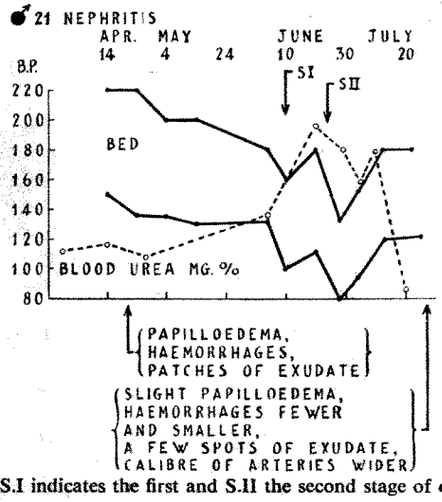


FIG. C.—S.I indicates the first and S.II the second stage of operation.

operation in the second case, the blood urea being lower after operation than it was before. Here too there has been a great improvement in the state of the retinae.

The Heart

The term "hypertensive heart disease" has come into general use, but it would seem as though the label is not quite correct, however useful it is. In the first stage of hypertension the raised blood pressure as such seems to have no effect upon an otherwise normal heart except by producing hypertrophy. Medial coronary hypertrophy is the only abnormality, the lumen of the coronary vessels remaining normal. Patients with hypertension in this stage who have died from some other cause have been carefully examined, and there is an absence of any hyaline degeneration in the coronary system (personal communication of Prof. W. G. Barnard). The amazing persistent health of the heart after working for years against a much-raised peripheral resistance may perhaps be explained to some extent by the following considerations. First, the coronary flow is diastolic, so that the trauma from the full impact of the hypertensive pulse wave does not directly affect the coronary vessels Secondly, the effect of adrenaline on the peripheral arteries is to constrict, and on the coronary arteries is to produce dilatation; it is a reasonable hypothesis that this paradoxical mechanism may also occur with other biochemical pressor substances, such as the renin in

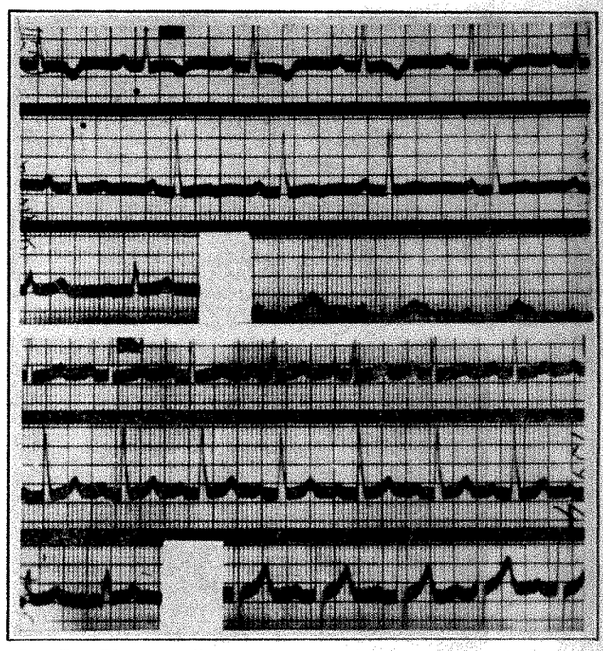


FIG. D.—Electrocardiogram in man with hypertension before and after lumbar sympathectomy, showing disappearance of signs of left ventricular stress. First operation, Jan. 31, 1947; second operation, Feb. 21. Electrocardiograms taken on Jan. 14 and March 3.

hypertension. The electrocardiogram at a later stage of the disease begins to show the typical picture of left ventricular stress (Fig. D).

In those cases investigated at St. Bartholomew's Hospital which showed this change there was a return to the normal picture very quickly after sympathectomy. The time taken for this change back to normal was from ten to fourteen days after sympathectomy. The picture of left ventricular stress would appear to be due to some general functional change of the muscle as a whole rather than to local structural coronary abnormality, for the abnormal cardiogram is often present in the absence of dyspnoea or of undue enlargement, and the pattern of the change is very constant, in contradistinction to the varying appearance produced as a result of local coronary infarction. One case of cardiac disease in a hypertensive patient is worthy of particular mention.

A woman aged 44 had been suffering from increasing shortness of breath and headache for one year. The blood pressure was 198/114, and the electrocardiogram showed a left bundle-branch lesion (Fig. E). The retinae and renal function were both normal. Five months after sympathectomy the blood

pressure was 138/90, the dyspnoea had subsided, and in her own words "she could now do anything." The electrocardiogram was relatively unchanged. The bundle-branch lesion was not a result of coronary infarction, for there was no history of any such illness or any complaint of anginal pain. The latter two coronary conditions seem, in the experience of other observers, to contraindicate sympathectomy in hypertensive cases.

A second case of particular interest, kindly referred to me by Dr. Graham Hayward, was that of a man aged 24. He was

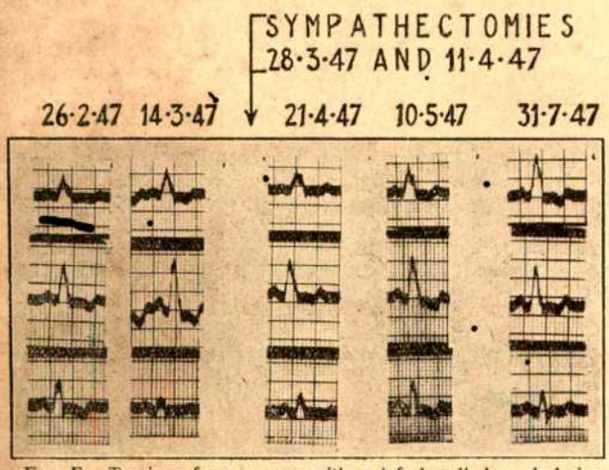


FIG. E.—Tracings from a case with a left bundle-branch lesion. The first two curves are before sympathectomy and the last three after sympathectomy. The T-waves in leads I and II have become upright or diphasic after sympathectomy. The bundle-branch defect itself remains unaffected.

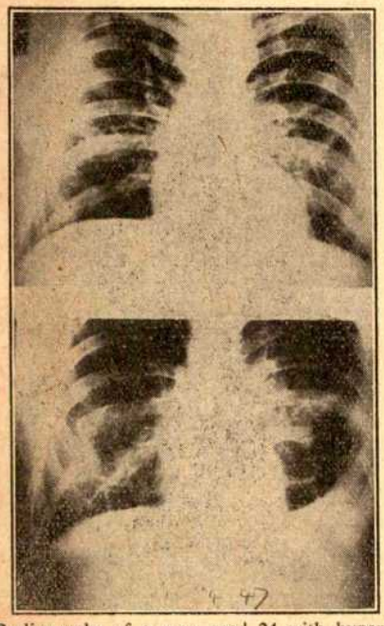


FIG. F.—Radiographs of a man aged 24 with hypertension, previous and subsequent to sympathectomy. First operation, Dec. 5, 1946; second operation, Dec. 27. Radiographs taken on Nov. 5, 1946, and April 15, 1947.

unduly adipose, weighing 235 lb. (105.6 kg.). His chief complaints were shortness of breath and headaches. He was fully investigated, but no other evidence of pituitary disease was found. There was no sign of myxoedema. His blood pressure was 180/120, and it fell to normal after sympathectomy, and remained so, the latest figures after seven months being 134/74. Fig. F shows his cardiac outline before and after sympathectomy. The reduction in heart size is striking. This at first sight would seem to be a case in which the heart had been enlarged in stage I by the hypertension alone, returning to normal after the lowering of the blood pressure. But his adiposity was certainly pathological, and probably some additional undiscovered factor or factors were involved in the considerable hypertensive cardiac enlargement.

Sympathectomy

The effect of sympathectomy upon hypertension appears to vary considerably from case to case. The general experience hitherto seems to be that the operation is most successful in younger patients, particularly those below 40 and those in whom the diastolic blood-pressure figure is considerably raised, so that there is a comparatively small pulse pressure. On the whole patients over 50 respond to the operation only for a short period and not to a great degree, as judged by the lowering of the blood pressure. The operation is usually unhelpful in patients with advanced cardiovascular or renal disease, but even here exceptions occur, especially in the younger age groups. Previous to operation various tests have been applied with a view to trying to determine the extent of lowering of blood pressure likely to be achieved by sympathectomy. The sodium-amytal test, 3 gr. (0.2 g.) for three doses at intervals of an hour, often causes the blood pressure to fall considerably to a level which seems to be to some extent comparable with that likely to be achieved by sympathectomy.

In addition to these tests the following investigations are always done. Retinoscopy by a skilled ophthalmologist, complete examination of the urine, the urea-clearance test,

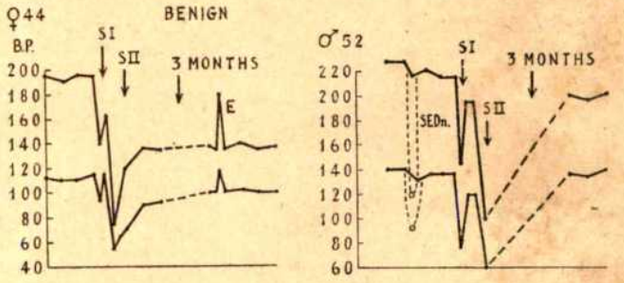


FIG. G.—Blood-pressure chart of a woman aged 44, showing successful result after sympathectomy.

FIG. H.—Blood-pressure chart of a man aged 52 whose response to sympathectomy was only temporary.

the urine-concentration test, an electrocardiogram, radioscopy of the heart, and sometimes an intravenous pyelography. The family history is of the greatest importance, and the patient's age is a valuable general guide. The clinical picture must be correlated and carefully considered as a whole. A further indication for sympathectomy is a definite change for the worse in a closely observed case in which the blood-pressure condition has previously remained stationary. The cardiac indication is a deterioration in the cardiac function in an otherwise suitable case, as measured by increasing dyspnoea, a changing electrocardiographic picture, and an increase in the size of the heart by careful measurement. But coronary disease is a contraindication to sympathectomy for hypertension.

Many observers seem to agree that the presence of malignant hypertension with rapidly advancing retinal changes constitutes a definite emergency indication for the operation, not only with the idea of saving vision but because, especially in young people, good results have been recorded. The effect of sympathectomy is shown in a satisfactory case (Figs. G and H), and in a patient in whom the blood pressure rose again nearly to its pre-operative level within three months (Fig. H). In the first patient sympathectomy presumably released the cortical spasm and thus prevented a further excessive production of renin. There was here no permanent renal lesion from which such a production of renin could subsequently occur. But it is noteworthy that

FIG. 1.—Widespread oedema of articular cartilage producing nodular appearance. Small central ulcer with protuberant degenerate cartilage.

FIG. 2.—Widespread oedema, extensive ulceration, and some projecting tags of degenerate cartilage.

FIG. 3.—Oedema, striation, and some projecting nodules. Shallow ulcer in lower part of external facet.

FIG. 4.—Extensive shallow ulceration.

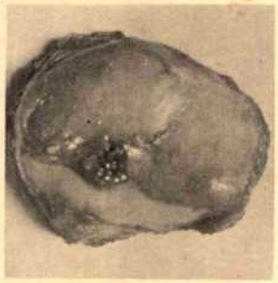


FIG. 5.—Widespread oedema, change of colour, central ulcer, cartilage tags.

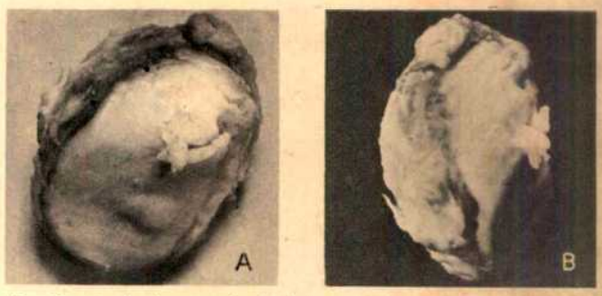


FIG. 6.—A. Oedema and striation; prominent tags of degenerate cartilage. B. Deep cleft in articular cartilage of internal facet.

FIG. 7.—Widespread ulceration, numerous deep clefts splitting the cartilage into overlapping laminae.

FIG. 8.—Striation and superficial ulceration. A pedunculated lamina of cartilage elevated in the form of a flap.

FIG. 9.—Section showing oedema and fibrillation of articular cartilage.

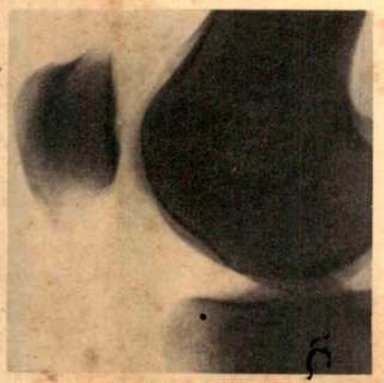


FIG. 10.—Erosion and indentation of articular cartilage.

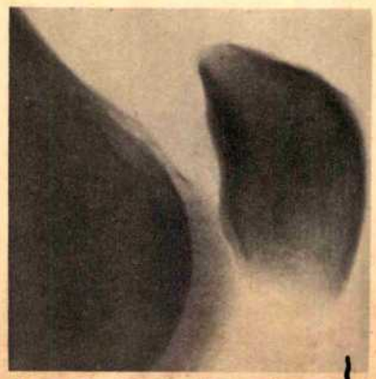


FIG. 11.—Localized prominence of articular cartilage.

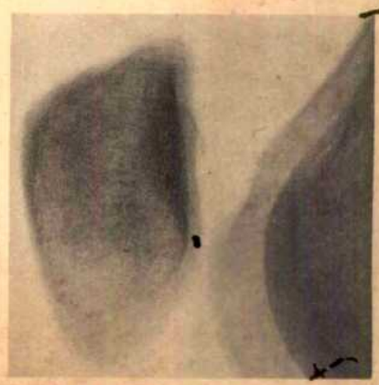


FIG. 12.—Showing an elevated flap of articular cartilage.

VITAMIN D IN THE TREATMENT OF CUTANEOUS TUBERCULOSIS: G. B. DOWLING ET AL.

FIG. 1.—Biopsy, Feb. 15, 1947, before starting treatment. A tuberculous focus (× 90).

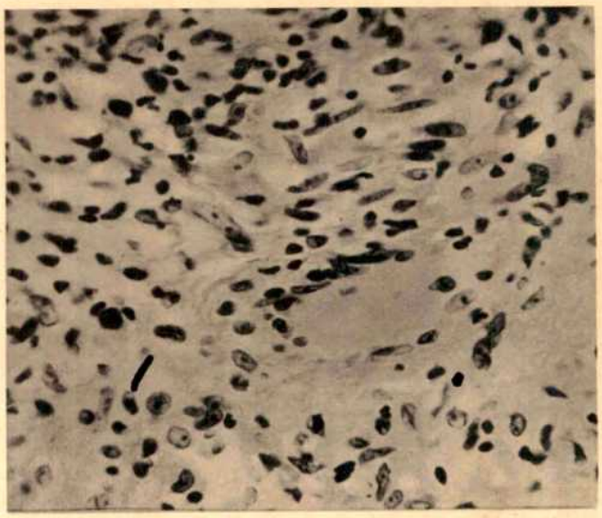


FIG. 2.—Also Feb. 15. Part of the giant-cell system (× 420).

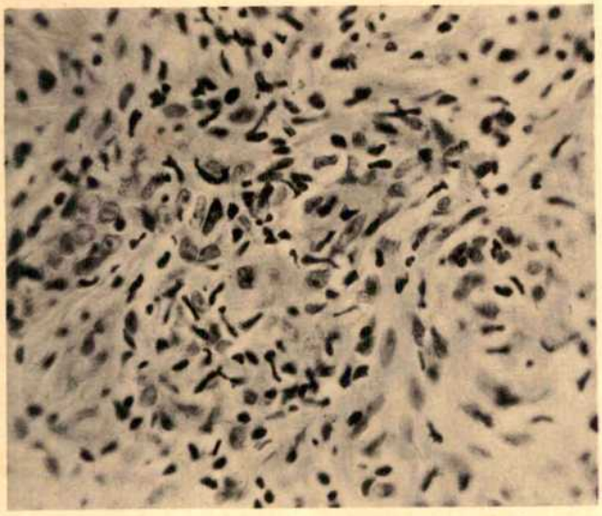


FIG. 3.—April 16. Invasion of the giant-cell system by histiocytes (× 420).

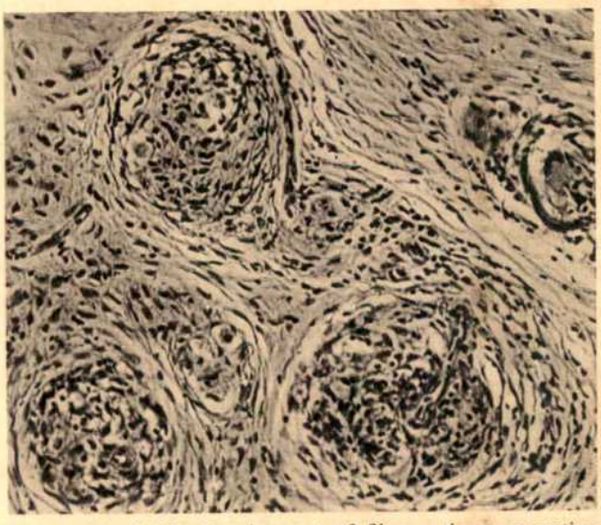


FIG. 4.—April 30. Development of fibrous tissue separating the giant-cell systems one from another (× 250).

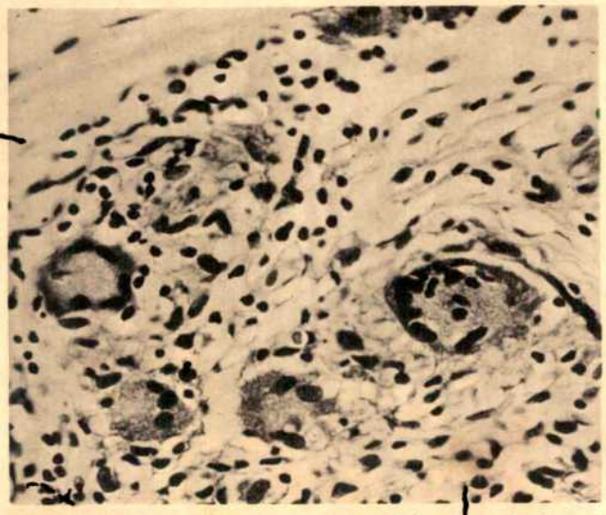


FIG. 5.—May 21. Separation of giant cells by the newly formed connective tissue (× 420).

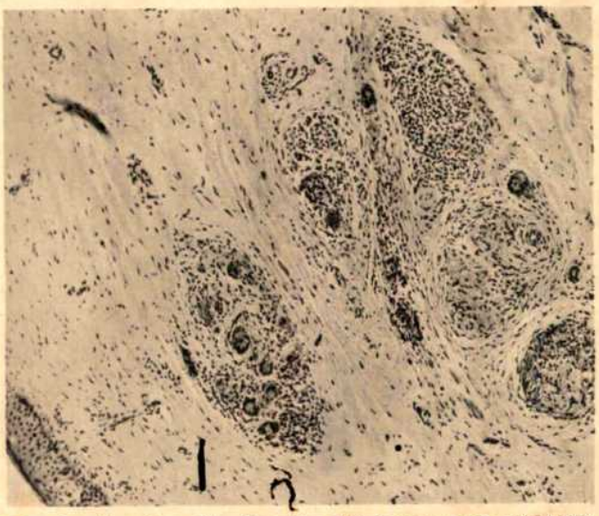


FIG. 6.—Also May 21. Showing disappearance of endothelial cells and giant cells from the tuberculous lesions (× 90).

HYPERTENSION—AETIOLOGY AND SURGICAL TREATMENT : GEOFFREY BOURNE

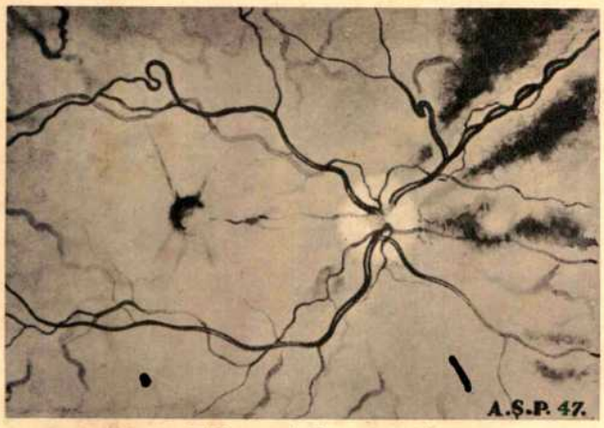


FIG. 1.—Right eye before sympathectomy.

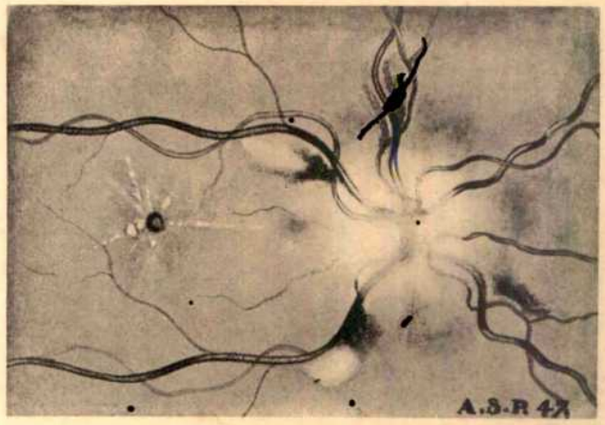


FIG. 3.—Renal retinopathy pre-sympathectomy.

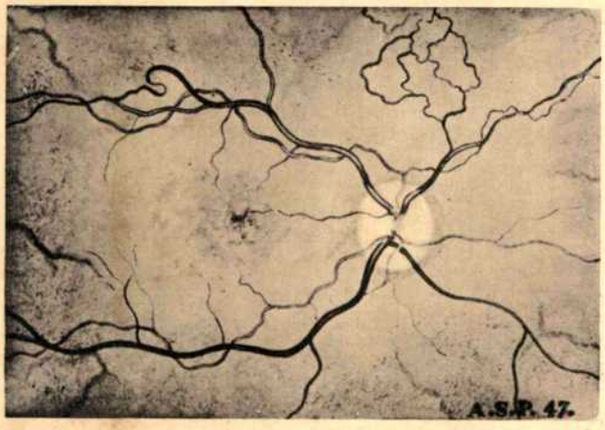


FIG. 2.—Same eye after sympathectomy.

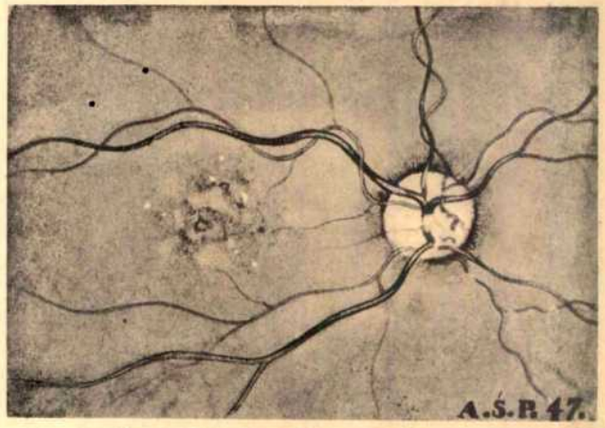


FIG. 4.—Same eye after sympathectomy.

ROLE OF SYMPATHETIC NERVE IN CANCEROUS PAIN : MARCEL DARGENT

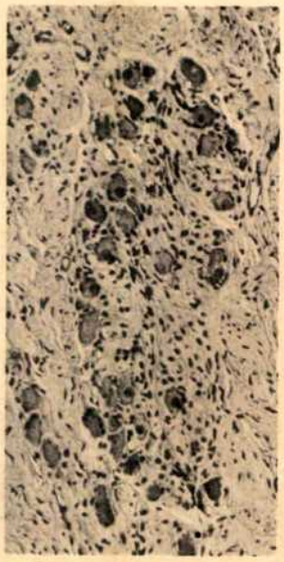


FIG. 1.—Cluster of lymphocytes around sympathetic ganglion cells.

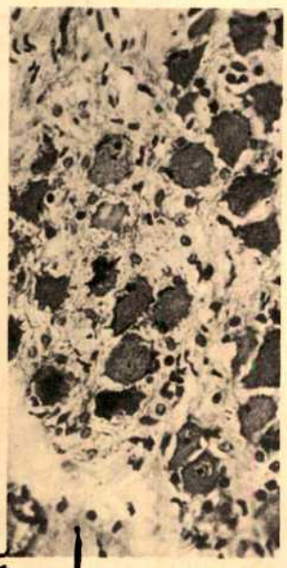


FIG. 2.—Alterations of protoplasm in ganglion cells. Pyknosis of nuclei.

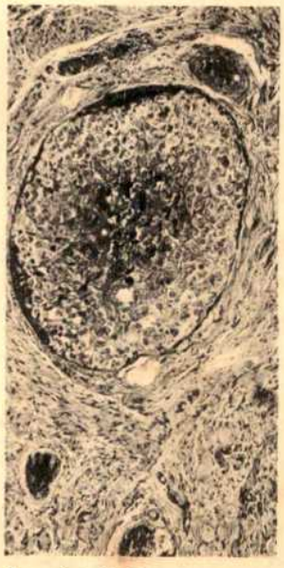


FIG. 3.—Carcinoma tongue. Metastatic node in sympathetic ganglion.

FIG. 4.—Relation between the metastatic node and arteriolar wall.

"TEMPORAL ARTERITIS." SOME ASPECTS OF SUBACUTE ARTERITIS IN LATER LIFE: G. H. JENNINGS

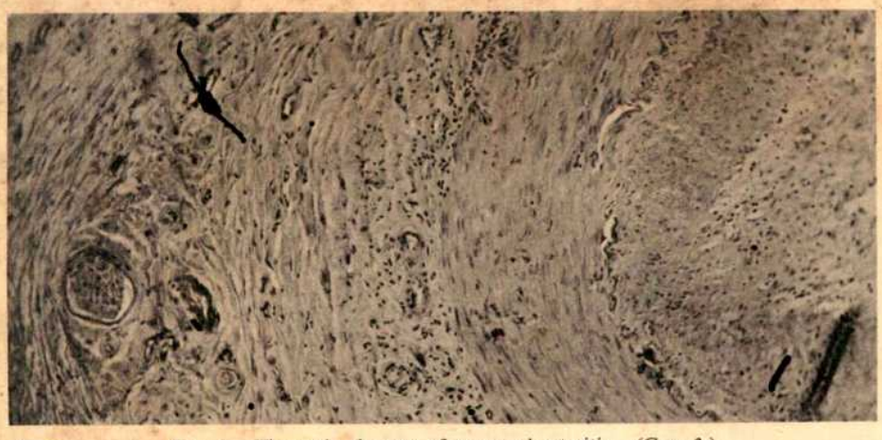


FIG. 1.—The early changes of temporal arteritis. (Case 3.)

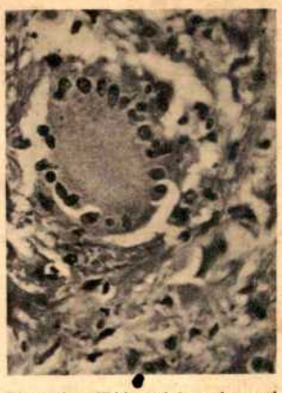


FIG. 2.—Fibroblastic and giant-cell reaction in media. (Case 4.)

ASEPTIC NECROSIS OF PANCREAS: WALTER PAGEL AND A. L. WOOLF

FIG. 1.—Pancreas. Central area between arrows shows confluent anaemic infarction.

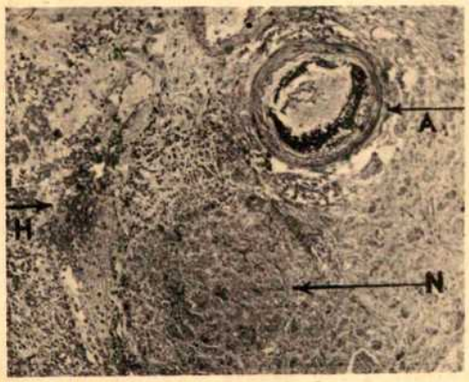
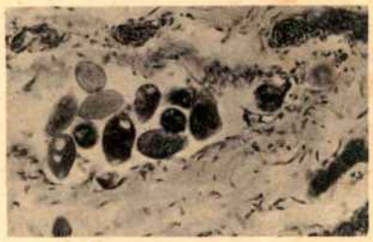


FIG. 2.—Necrotic area (N). Thrombosed artery (A). Zone of haemorrhagic and leucocytic demarcation (H) (× 50).

BALANTIDIAL DYSENTERY: A. A. MILLER AND C. R. PECK



Balantidia in submucosal space (× 150).

INTRAUTERINE RUPTURE OF CORD: G. BANCROFT-LIVINGSTON

Gross deficiency of anterior abdominal wall with exteriorization of abdominal contents and a short umbilical cord. (Case 2.)

SYNOVIOMA: V. C. J. HARRIS

FIG. 1.—Tumour of calf muscles after amputation. (Case 2.)

FIG. 2.—Tumour of thigh after amputation. (Case 3.)

Illustrations printed in Collogravure by HARRISON & SONS, LTD., Printers to His Majesty the King, London, Hayes (Middx.) and High Wycombe.

even in such a case emotion can send up the blood pressure for the time being, possibly through that part of the sympathetic nervous system which still remains untouched. In this patient a low blood pressure after operation was not merely a result of vascular laking of blood in the splanchnic area, for at the end of three months there was no residual orthostatic hypotension.

Temporary Lowering of Blood Pressure

Fig. H shows a lowering of the blood pressure immediately after operation, partially due to the release of cortical renal spasm, but also to the laking of blood in the abdominal area. The reappearance of hypertension in this case was no doubt due to a resumption of renin formation by the permanently diseased renal tissue. Trueta and his colleagues have found in such patients histological evidence of the permanently established by-pass mechanism already described by which some blood is permanently diverted from the renal cortex; thus a chronic cortical ischaemia may persist to some extent as a purely mechanical effect whether spasm be released or not.

In this second class of case it is still not easy to explain why there should be even a temporary improvement, for first sight there should be no diminution of renin formation in the permanently damaged kidney. Fig. J is an

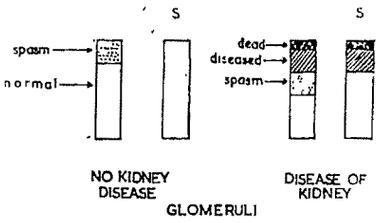


FIG. J.

t to offer an explanation for this. The first two gles suggest what happens in the satisfactory class as a result of sympathectomy (stage 1 of hypertens The cortical spasm which has produced the renin is re ed by the renal sympathectomy. Splanchnic laking of ood also occurs. The blood pressure is therefore lowered permanently. The other two rectangles diagrammatically show the state of affairs when chronic renal disease is present (stage II of hypertension). Neither the dead nor the normal renal tissues are concerned in the hypertensive process. In this case as well as in the previous one glomerular spasm is present and is beneficially affected by sympathectomy. It is the presence of diseased renal tissue, shown by the oblique lines, that distinguishes this type of case from that in which sympathectomy produces a satisfactory result. Sympathectomy will in both cases lower the blood pressure temporarily and greatly by producing a laking of blood in the splanchnic area, an effect which is additional to the effect on the renal cortex. Such lowering of the blood pressure can cause regression and temporary healing of the diseased blood vessels as shown in the retina.

This improvement may also to some extent benefit the renal arteries, and thus may temporarily reduce the area of active advancing renal disease to a degree sufficient to reduce the output of renin to an inconsiderable amount. But within a period of weeks or months the permanently diseased but not dead cortical tissue is enough to produce once more an increasing output of renin, which will cause a return of the hypertension with renewed renal spasm. This renewed renal spasm will in its turn manufacture more renin, with a return of the blood pressure to its former high level. The permanent by-pass mechanism of Trueta is also likely to be a factor in the resumption of cortical ischaemia in chronic renal arterial disease.

Figs 1 and 2 on the Photogravure Plate show water-colour drawings, by Mr. A. Seymour Philps, of the right eye of a man aged 50 before and after sympathectomy. Mr. Philps reports as follows: "There are very great changes, and the improvement after operation is considerable. Fig. 1 shows marked haemorrhages and oedema of the whole retina, especially evident at the macula, which is pushed forward by fluid from behind. In Fig. 2 all signs of haemorrhage and oedema have disappeared. Changes at the macula in this picture are those normally following inflammation or swelling, and are due to pigment disturbance. Venous network above is caused by dilatation of collateral circulation following venous thrombosis. The optic atrophy has developed as a result of the oedema, and so the patient's vision is below 6/60 and will remain so. I could not make out that the retinal arteries had changed at all in calibre between the two examinations, and it will be noted how fine they are, especially near the disk."

In another case Mr. Philps was again responsible for the water-colours (Plate, Figs. 3 and 4), and Mr. Rupert S. Scott reported on Jan. 7, 1947: "In spite of the fact that the retinal changes are present in hypertensive cases I prefer to label this condition renal retinopathy. There is a slight degree of oedema of the disks, and much change in the macular area of the retinae in the form of soft patches of exudate and superficial haemorrhages. At the right macula there is seen a well-marked macular fan. The retinal arteries show attenuation." (Fig. 3.)

Mr. Scott saw this patient again on March 13, 1947, after sympathectomy, and wrote: "Apart from some oedema of the lower margin of the left, the optic disks appear physiological The haemorrhages and patches of soft exudate previously seen in the retinae have now disappeared; the macular fan persists in the right eye, and a less-marked one is present in the left eye. The retinal arteries exhibit a slight increase in brightness of the light reflex but otherwise appear in good condition." (Fig. 4.)

Indications for Sympathectomy

It is interesting and useful to consider the probable indications for sympathectomy in the light of what we know, or with what we seem to have learnt, from recent work concerning the factors producing hypertension. During the early years of the disease the blood pressure increases and remains high, often without symptoms and certainly without organic renal disease. If sympathectomy were performed in such a case as the one previously described belonging to this group it is clear that operation would not be effecting any useful purpose so far as symptoms were concerned. Since the condition at this stage may remain symptomless for a number of years it is equally probable that sympathectomy would not be a justifiable measure from the point of view of the underlying pathological process. If a sympathectomy were done too soon regeneration of the sympathetic paths might occur, and a second sympathectomy would be rendered much more difficult later in the disease, when the effect of the operation would be more beneficial. Hypertension may remain symptomless for over 20 years, and so far the experience of the operation extends only to 10 years at the outside. There would thus seem to be no indication for sympathectomy during most of the earlier part of stage 1 of hypertension. On the other hand if operative treatment is delayed until the time when permanent arterial degeneration has occurred in the kidneys, producing in them a permanent source of renin, it would equally seem to be true that the measure has been delayed too long. It would logically follow that careful investigation and observation of a patient with hypertension should have as their chief aim the determination of the following two points: the previous duration of the disease, and an estimation whether it is in a stationary phase or whether there is the slightest indication of recrudescence or exacerbation.

There is at present no clinical test available which will enable us to judge the position exactly, but it is probable that a periodic thorough and careful investigation of the retinal arteries by a skilled ophthalmologist is likely to provide the best guide to whether the onset of arterial degeneration is beginning to threaten. A periodic careful investigation of the renal function is also desirable in such cases. Finally, every case must be considered on its individual merits—general, cardiological, renal, familial, and psychological.

The author would like to express his great indebtedness to Mr. E. G. Tuckwell for his very helpful and stimulating surgical co-operation.

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ROLE OF SYMPATHETIC NERVE IN CANCEROUS PAIN

AN INQUIRY ON 300 CASES

BY

MARCEL DARGENT

Surgeon to the Centre Anticancéreux de Lyon

[WITH PHOTOGRAVURE PLATE]

The question of pain-relieving operations on the sympathetic nerve in patients with evolutive carcinoma has been widely discussed. Although by experiment we have acquired much information concerning some of the functions of the sympathetic nervous system, a yet clearer view of its sensory functions may be obtained by a study of operative results and the anatomico-pathological findings in relation to this particular cancerous pain. Indeed, some of these operations have been performed in France as an empirical attempt to relieve pain in desperate cases : they have been only partly successful.

Spinal-cord surgery, as advocated by Putnam in the U.S.A. and Leriche and Wertheimer in France, is based on well-defined experimental facts, and consequently holds an important place in "pain surgery," as did radicotomy in the past.

This inquiry, which I started in 1940 under the direction of M. Leriche and have since pursued, has enabled me, first, to gather anatomico-pathological data ; secondly, to define the clinical features of sympathetic pain ; and, thirdly, to determine the limits of such operations. I do not intend here to describe the anatomical sensory pathways in the sympathetic trunk but simply to record clinical facts derived from experience.

At first, after a successful cocaine infiltration test, I performed surgical sympathetic-nerve resections—12 on the lumbar trunk and 26 on the cervical. As only temporary relief was obtained I gradually gave up this operation, as I found that repeated cocaine infiltrations had produced more lasting results. I have performed over 300 infiltrations of cervical, thoracic, and lumbar parts of the sympathetic trunk, but shall not describe the technique used, as it is well known. I employ 20 to 40 ml. of a 1% solution of "scurocain."

The use of alcohol I have found to be dangerous, as it often produces such intense irritation in the sympathetic ganglia that the results may be worse than the initial condition. It seems preferable to use repeated cocaine infiltrations.

Anatomico-pathological Data

Macroscopic and microscopical investigations of ganglia removed at operation have disclosed the existence of actual disease of the ganglion in patients undergoing pain. This fact was revealed in two different areas. First, when removing the lumbar trunk in women suffering from carcinoma of the cervix I found it to be tightly encircled by big lymph nodes extending all along the inferior vena cava or the aorta, just in front of the vertebrae and the anterior part of the psoas muscle. Often after radium therapy these patients were apparently healed as regards their pelvis, and the cancerous extension seemed to originate in the lower part of the lumbar column. The sympathetic ganglia were oedematous, with considerable congestive reactions in the surrounding area. Surgical removal was usually very difficult. Once there even occurred a wound of the inferior vena cava. The small veins passing under the psoas arches would often give rise to troublesome haemorrhages. Secondly, in the neck, when removing the upper sympathetic ganglion, I found it to be closely connected with the big lymph node often suppurative, owing to carcinoma of the tongue, t sils, or cavum, and lying under the sterno-cleido-mast muscle, before the splenius capitis.

I have given up removing the cervico-dorsal ganglio malignant process due to carcinoma of the breast, ha witnessed elsewhere an attempt which proved unsucce

All these oedematous ganglia were submitted to scopical examination. Arteriolitic lesions were found hyalinization of the media. But the most striking fa the presence of thick clusters of lymphocytes around the sympathetic cells even when no drugs had been previously injected (Plate, Fig. 1). On further examination it was seen that the cells had irregular borders, granulous protoplasm, and a pyknotic nucleus (Fig. 2). These lesions were surrounded by normal areas, thus constituting signs of sympathetic-cell agony.

Examination of the upper sympathetic cervical ganglion revealed in one case a very curious fact :

In a 56-year-old man—in perfect condition after treatment four years earlier for carcinoma of the tongue—a big malignant lymphatic tumour was found to progress in the upper portion of the neck. Pain was intolerable. Microscopical examination of the ganglion removed by sympathectomy showed several carcinomatous areas in the centre (Fig. 3). It was not exactly a direct involvement of nervous tissue but a metastatic growth in the lumen of the small vessels of the ganglion (Fig. 4), partially obturated by inflammatory thrombosis.

Further anatomico-pathological data have been supplied by arterial surgery. It is well known that the arterial wall, when irritated, may be the origin of sympathetic pain Here again we have found evidence of the arterial origin of pain.

Having operated upon a man who three weeks earlier had undergone ligation of the common carotid artery and resection of the upper sympathetic cervical ganglion, which proved ineffective after a three-weeks success, I found a thrombosis of the carotid bifurcation. Arteriectomy of the three carotids was then performed. This patient had cancer of the tonsil, with a large lymphatic node. Microscopical examination showed important lesions of the intima, and an organized clot was adherent to it. The tunica adventitia also was injured. After the operation pain was abolished during the two months that preceded death.

I have since examined arteries of other suffering patients. I have never found any thrombosis (which in the above case could only be explained by the ligature), but I have often

detected inflammatory or neoplastic growths in the tunica adventitia. This was observed especially in the facial and occipital arteries. Also I have always found the primitive iliac artery closely surrounded by hard neoplastic nodes, secondary to carcinoma of the cervix.

Besides these essential anatomico-pathological facts showing evidence of the sympathetic origin of this particular kind of pain two other less important facts may be mentioned. The first is the influence of sympathetic innervation on the conduction of sensibility along the peripheral nerves. On infiltration of the upper cervical ganglion anaesthesia of the cheek is observed to disappear for a few hours in patients with cancer of the upper jaw. These effects last but a short time and are not of enough therapeutic value to justify sympathetic operations for pain by compression of peripheral nerves. The second fact is the participation of periosteal nerve-branches in pain due to certain osteolytic bone metastases. In two instances when *x*-ray therapy was not available I performed cocaine infiltrations—once on a lumbar vertebra involved by a metastasis from breast carcinoma, and a second time on a similarly involved ischium. The result may be compared to that of an infiltration in the case of a sprain : it does not last long, and *x*-ray therapy, as an antalgic treatment, is far more reliable. In this case infiltration is but an emergency procedure pending the utilization of *x* rays.

To sum up, anatomical lesions are to be found in the sympathetic trunk and ganglia, as well as signs of reaction in the arterial wall in contact with cancerous lymph nodes—which explains the sympathetic origin of pain in some cases of evolutive cancer. The participation of the sympathetic nerve in pain due to compression or involvement of peripheral nerves, as also in pain produced by periosteal lesions, is of a much more accessory character.

Some Clinical Features of Sympathetic Pain

Prolonged observation of our patients and a close survey of the effects, whether satisfactory or not, following the infiltrations which I performed, at first as a routine, have led me to consider the features of this type of pain. Two are quite definite. They are as follows.

1. The first is encountered in the evolution of cancer of the cervix. In many cases the primary lesion is healed and the patients suffer from one-sided pain, in the buttock, the lumbar region, the posterior part of the thigh, and often in the leg. They speak, wrongly, of sciatica. But in reality they undergo paroxysmal crises, with a feeling of cold in the leg and numbness of the whole limb. Oscillometric investigations made during the crises showed a curve with a lower level for the injured side than for the opposite one.

This type of pain should be distinguished from other types: (*a*) By *x*-ray examination, from osteogenic pain due to involvement of the pelvic skeleton (which is mainly the case in cancer of the prostate). These patients are relieved by *x*-ray therapy. (*b*) Pain due to pyosalpinx and pyometritis (as shown by Ducuing, in France). In this case local operations may be successful. (*c*) Pain from hydronephrosis, caused by a tight stricture of the ureter. Here, too, operations on the urinary tract are advisable. (*d*) Pain from direct involvement of the obturator nerve, in which paralysis of the maximus adductor muscle is obvious clinically, as is the topography of the pain. (*e*) Pain due to involvement of the lower part of the pelvis, radiating to the vulva and obviously originating in the internal pudendal nerve.

In the last two instances, and in the event of associated sympathetic pain, posterior commissural myelotomy is recommended, provided the patient is in good general condition. It is generally admitted that this operation acts as a sympathetic operation on higher and more central pathways.

2. A second type of undoubted sympathetic pain may be described in relation to the malignant evolution of cervical lymph nodes secondary to carcinoma of the tongue, tonsils, etc. These patients often indicate with their hand the topography of the pain during the crises: one side of the head, the nape, temple, ear, eye, and teeth of the lower jaw. These crises are almost unbearable, especially at night. I have even witnessed in these circumstances a certain degree of enophthalmia and watering of the eye. As Leriche and Fontaine have shown in their book *La Chirurgie de la Douleur*, the dissection and pinching of the external carotid peripheral tunic in patients operated upon under local analgesia will awaken pain in the same area. This type of pain may also occur in the case of limited radionecrosis of the lower jaw after radium therapy.

Here again pain due to involvement of the skull base must be eliminated. It is generally out of the range of therapeutic action, although *x*-ray therapy may relieve it to some degree.

Pain sometimes will be produced by acute otitis in the course of evolutive cancer of the cavum. In such a case I have seen paracentesis of the drum bring relief.

Lastly, when continuous pain is localized to the trigeminal nerve and the cervical plexus, direct operations on these nerves should be preferred.

Besides these two syndromes there are others in which the influence of the sympathetic nerve is less obvious. For instance, brachial pain in the course of carcinoma of the breast is relieved in 50% of cases by routine infiltration of the cervico-dorsal chain. Oedema of the arm and hand is frequent. A phlebogram is not easily obtained in such cases. Nevertheless, when these symptoms seem to be produced by chronic phlebitis, infiltration is usually successful. Similarly, a patient had a cancerous node closely connected with the lower portion of the axillary artery, together with radial paralysis. Cervico-dorsal trunk infiltration resulted in the pain being relieved and the paralysis attenuated. This procedure, repeated every two months, was successful for a year and a half. In refractory cases I believe that a high posterior myelotomy, as advocated by Putnam, may give satisfactory results.

Intolerable pain in cancer of the stomach did not appear to be relieved by infiltration of the splanchnic nerve, except for a few hours. Pain in bladder and rectum in evolutive cancer of the cervix is not always abolished by section of the presacral nerve (Cotte, 1932) or by infiltration of the lower lumbar sympathetic trunk. Of three presacral sections one was a failure, one a three-weeks success, and in the other relief lasted one year. In the last case resection of both the fifth and fourth sympathetic ganglia of the lumbar trunk was performed simultaneously by transperitoneal approach.

I have noted that some accompanying symptoms may be relieved by infiltration of the cervical sympathetic trunk : (1) a few days' attenuation of dysphagia is obtained in upper pharynx carcinoma in 50% of the cases ; (2) dyspnoea in some laryngeal cancers is seen to disappear after infiltration of the middle cervical ganglion ; and (3) in the case of trismus due to inflammatory lesions associated with cancer infiltration of the upper cervical ganglion will cause it to yield noticeably.

Selecting the Sympathetic Operation

Most of the patients have already experienced drugs : they have got used to them, especially in the case of opium. A careful study should first be made of the actual characteristics of the pain in order to avoid misapplication of treatment. The general condition, cancerous extension, and the migratory nature of pain (as in diffuse cancerous osteosis) should be considered. The psychological condition of the patient must also be taken into account. At all events, infiltration of sympathetic trunks is an easy and harmless test. If successful, and the general condition is fairly good, these infiltrations may be repeated over a long period of time.

Should sympathetic operations be recommended in patients whose general condition is very good? I feel less and less convinced that they should. In spite of two

satisfactory results, extending over two years, of lumbar sympathectomy in patients with slowly evolutive cancer of the cervix, I have witnessed recurrence of pain after three weeks and two months respectively. It seems that the stumps of sympathetic trunks that have undergone section soon get irritated by the progressive involvement of lymph nodes and thus bring about recurrence of pain; besides, infiltration on a higher segment may yet be successful, so that operation may well be deemed useless. I still perform it, however, under the following circumstances: (1) In the case of left colostomy for very extensive and painful pelvic cancer. Before opening the peritoneum I explore the left sympathetic trunk by subperitoneal approach, and when accessible I remove it. (2) When haemorrhages render operation in the neck necessary I remove the external carotid, together with a considerable portion of the upper thyroid, facial, and occipital arteries—the most sensitive arteries in this area. In addition, I resect the upper cervical sympathetic ganglion.

Summary

Lesions of the sympathetic ganglia and arterial walls are encountered in cancerous patients undergoing pain.

There are in the lumbar region and in the neck well-defined types of sympathetic pain. These are greatly relieved by cocaine infiltrations of the sympathetic trunks. This procedure, which is simple, should be preferred to operations on the sympathetic nerve, which are difficult and which often lead to recurrences.

I am grateful to Prof. J. F. Martin, pathologist, and Mr. Delaunay, medical photographer, for the photomicrographs reproduced on the photogravure plate.

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Many of the functions previously exercised by the Ministry of Health under the Food and Drugs Acts have been transferred to the Ministry of Food in consequence of an Order in Council entitled the Transfer of Functions (Food and Drugs) Order, 1948, made under the Ministers of the Crown (Transfer of Functions) Act, 1946. Broadly, the effect of the transfer is that the Ministry of Food is concerned with the composition, description, and inspection of foods, while the Ministry of Health continues to be concerned in measures for dealing with infected food or food poisoning. These changes affect only departmental functions. The duties of enforcement and execution placed by the Acts and regulations upon local authorities are not affected. The Ministry of Food becomes the department concerned with the Preservatives and the Condensed and Dried Milk Regulations and other matters relating to the composition and description of food; with the Meat and Imported Food Regulations and other matters relating to food inspection and food hygiene generally; and with the Milk and Dairies and Milk (Special Designations) Regulations so far as they concern dealers and distributors. The Ministry will also become responsible for approval of terms of appointment of public analysts. The Ministry of Health remains the department primarily concerned with drugs and with matters directly related to the protection of the public from infected food—for example, food poisoning and regulations relating to ice-cream, shell fish, and the stoppage of the sale of infected milk. All regulations under the Food and Drugs Act, 1938, which are at present made by the Minister of Health, will in future be made jointly by the Ministers of Food and Health. None of the changes involved in this transfer of functions affects the position in Scotland.

ASEPTIC NECROSIS OF PANCREAS DUE TO ARTERIAL THROMBOSIS IN MALIGNANT HYPERTENSION

BY

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AND

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[WITH PHOTOGRAVURE PLATE]

The possibility of a vascular factor in the production of acute pancreatitis has long been suspected, yet no conclusive evidence has so far been adduced. Gerlei (1930) described two cases of embolic occlusion without any tissue damage. Two other cases with disseminated necroses were observed, but all were incidental findings due to multiple small emboli and were visible only under the microscope: none showed evidence of fat necrosis or haemorrhagic pancreatitis. Lynch (1940) mentioned a case of embolic infarction, the embolus originating in an atheromatous aortic patch. Here "massive haemorrhagic necrosis of the tail of the pancreas" is claimed, but no more exact description of the findings is given. By experimental injection of the pancreatic arteries of dogs with mercury pellets, Smyth (1940) produced anaemic infarcts localized to the infarcted areas in contrast with the spreading tendency of clinically observed acute haemorrhagic pancreatitis.

Of the older cases, those by Chiari (1900) and Rössle (1921) should be mentioned; in these arterial thrombosis was followed by anaemic infarction of considerable extent, but no appreciable fat necrosis or haemorrhagic pancreatitis was observed. Brentano's (1900) case, which is sometimes quoted in this connexion, is actually not concerned with primary vascular changes in the pancreas.

It is therefore still undecided whether multiple small or gross vascular changes and infarction of the pancreas can lead in themselves to acute pancreatitis, and a supplementation of the scarce material available appears to be imperative.

The following is a report of a case recently admitted to the Central Middlesex County Hospital, with the findings at necropsy.

Case Report

The patient, a builder aged 45, was admitted on Aug. 29, 1947, on account of a dull aching pain for two to three weeks in the epigastrium, radiating around the sides of the chest to the shoulder-blades and also over the front of the chest. He had had a similar attack of pain twelve months before, and bouts at intervals in the intervening periods. There was nausea but no vomiting.

Examination revealed several areas of petechiae on the skin, particularly around the shoulders and upper chest posteriorly. He was not apparently in severe pain, but had pain localized to the midline of the epigastrium. The abdomen was semi-rigid, and thus there was indefinite tenderness; the percussion note was tympanitic all over. The pulse was 100, and a regular apical systolic murmur was heard. The fundus oculi showed bilateral papilloedema (doubtful in the left eye) and haemorrhages, with exudates in the right eye. Blood count: white cells amounted to 18,400 per c.mm. (neutrophils 86%, lymphocytes 8%, monocytes 6%), with a marked shift to the left.

A clinical diagnosis of malignant hypertension with uraemia was made. The uraemia increased, ending in coma (blood urea, 275 mg. per 100 ml.), with evidence of pericarditis.

Necropsy.—The body was that of a thin man, with petechiae on shoulders, chest, and thighs. Brain: no changes. Uraemic pleurisy and pericarditis with subserous petechiae. Heart: left ventricular hypertrophy. No parietal or valvular thrombus

seen. Vessels: no thrombus in portal or splenic veins or splenic artery. Aorta: no changes. Peritoneum: about 1 oz. (28 ml.) of clear yellow fluid in peritoneal cavity (right paracolic gutter). Liver: no changes. Typical old and fresh haemorrhagic cholecystitic changes. Large bile ducts: apart from thickening and oedema of the walls, no appreciable changes. The pancreatic duct was neither thickened nor obstructed and appeared quite normal. Spleen: very small and firm, 65 g., 7.5 by 5 by 1 cm. Kidneys: right, 215 g., 12.75 by 5 by 3.5 cm.; left, 230 g., 12.75 by 6 by 3 cm.; cortex, 0.8 cm. thick. Both kidneys appeared swollen and showed the variegated subcapsular surface and appearances typical of "malignant hypertension." The pancreas appeared to be swollen and harder than normal. On the surface and cut surface about ten small anaemic infarcts up to 1.1 by 1.1 cm. could be seen throughout the organ, and in the centre a large area of confluent necrosis 3.2 by 1.2 cm. was present (Plate, Fig. 1). The areas of necrosis were sharply demarcated by narrow haemorrhagic margins. *There was no visible fat necrosis or anything in the nature of diffuse haemorrhagic pancreatitis.*

Histology.—The pancreas showed extensive but sharply demarcated areas of anaemic necrosis with incipient central liquefaction and narrow peripheral zones of haemorrhage (Fig. 2). In all sections of the pancreas examined, both within and outside the necrotic foci, the small arteries (about 0.2 cm.) showed extreme arteriolosclerotic changes, namely, intimal thickening and reduplication of the elastic laminae. Many of these arteries were occluded by thrombi, in some places completely and in others only partially, peripheral sedimentation of platelets and fibrin having occurred, leaving the centre of the lumen patent. There was no hyalinization or other evidence of tryptic digestion of the adventitia or media of the arteries, and no evidence of periarteritic changes. The kidneys showed extensive hyaline fibrinoid infiltration of the afferent vessels of the glomeruli, with tubular atrophy and scattered congestion and haemorrhage in the stroma.

Comment

Clinical Picture.—The underlying condition in the present case was "malignant hypertension" leading to uraemia. In this respect it resembles those observed by Chiari (1900), Rössle (1921), and Klemperer and Otani (1931), but in addition there were attacks of epigastric pain unrelated to meals and radiating to the back. The last attack, beginning three weeks before death, seems to be referable to the arterial changes followed by infarction in the pancreas. Neither the picture of the local condition nor the uraemic process overshadowing it had anything in common with acute haemorrhagic pancreatitis and fat necrosis.

Anatomical Findings.—"Vital reaction" in the margin of the infarcts (haemorrhages and leucocytic demarcation) excluded post-mortem changes. No evidence of periarteritis nodosa or of sources of embolism could be adduced, and in view of the incomplete occlusion of some of the arteries the clots were regarded as thrombi forming in small arteries about 0.2 cm. in diameter, with hypertensive changes. Blockage of many arteries of that size is obviously the cause of the widespread infarction, and it is unnecessary to follow Gerlei (1930) in discarding a vascular aetiology and grasping at a hypothetical pancreatic-duct obstruction from a congested ampulla of Vater. The intact condition of the adventitia and media contrasts with the hyalinization resulting from tryptic digestion and proceeding from without inwards found in pancreatitis (Rich and Duff, 1936). The changes in themselves are similar to those obtained by experimental embolism (Smyth, 1940).

We submit this report with the object of making clear the distinction between infarction of the pancreas and acute haemorrhagic pancreatitis.

Summary and Conclusions

A case is reported of aseptic necrosis (anaemic infarction), chiefly of the central portion of the pancreas, due to arterial thrombosis occurring in "malignant hypertension."

Neither the clinical nor the anatomical picture revealed any relationship to "acute haemorrhagic pancreatitis" and/or "pancreatic fat necrosis." Observations such as that reported cast doubt upon the "vascular factor" as the primary cause of acute pancreatitis.

We are indebted to Dr. J. S. Crowther for the clinical notes, to Mr. L. Spain for technical assistance, and to Mrs. B. Burnett for help with the photography.

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"TEMPORAL ARTERITIS"

SOME ASPECTS OF SUBACUTE ARTERITIS IN LATER LIFE

BY

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[WITH PHOTOGRAVURE PLATE]

With the present interest in the problems and diseases of old age more attention may well be paid to a complaint which is mainly found in people over 60. Severe protracted headaches and signs of inflammation of the temporal arteries often appear early and facilitate diagnosis, but from the earlier descriptions of the disease both in America (Horton and Magath, 1937) and in England (Jennings, 1938) it was clear that the term "temporal arteritis" was an inadequate title for the disease. Indeed, Gilmour (1941) described three probable cases of the condition which proved fatal but in which temporal arteritis was not seen.

Although inflammation of the temporal arteries has been the hallmark of nearly all the other 38 cases described, the whole aspect has been that of a prolonged general infection with widespread, if patchy, arterial involvement. In a case seen ten years ago there was not only evidence of inflammation of the temporal and occipital arteries but also bilateral retinal arteritis, left brachial arteritis, reduced pulses in the right foot, and some suggestive evidence of slight involvement of renal and mesenteric arteries. In this case (Jennings, 1938) the infection was certainly active for eight months, a duration now recognized as being not unusual.

Retinal arteritis has been observed in about half the cases; Kremer (1946) has shown a case, and in a series of seven cases in Birmingham (Cooke, Cloake, Govan, and Colbeck, 1945) six had not only general arterial involvement but also severe arteritis in the vessels to the optic nerves. Three of these six became quite blind. Gilmour's cases showed chief pathological changes in the aorta and the branches of its arch and in their branches. Cooke and his co-workers, who record three fatalities within two years of the onset of the illness, were twice able to make post-mortem examinations, and in the deeper vessels found involvement of the aorta and of the arteries of the heart, coeliac axis, mesentery, kidneys, limbs, and brain.

Arteritis of the limbs and of the brain gives accessible signs and symptoms, and from the former may result limb pains, muscle-wasting, reduced or absent pulses, and occasionally intermittent claudication. Brain manifestations of great severity—delirium, vertigo, coma, and

cerebral vomiting—have been described by Cook *et al.* in a case in which the small arteries of the brain were inflamed and thrombosed. Kremer's case had a minor left-sided spastic weakness, presumably due to right middle cerebral arteritis, while two of Gilmour's cases had gross cerebral infarction as a result of thrombosis of inflamed and narrowed internal carotid arteries.

Although the cause is unknown the infective nature of this complaint is often emphasized by the onset and course of the illness. Gilmour's three cases had an "influenzal" onset respectively 5, 9, and 26 months before death, and such features of general infection as fever, malaise, anorexia, loss of weight, and raised sedimentation rate are frequent and persistent findings. Early "rheumatic" symptoms and joint pains, with or without swellings, are a not unusual feature (Jennings, 1938; Brown and Hampson, 1944; Cooke *et al.*, 1945); and Case 4, below, showed prolonged activity and a late arthralgia.

Four recent cases of "temporal arteritis" are recorded to illustrate further its variable duration and distribution. One seen in 1942, during a time of bed shortage, was adequately treated as an out-patient; another ran a comparatively rapid fatal course. The predominance of female sufferers (three to one) was in accord with all obtainable previous reports (29 women and 15 men), and so, too, was the consistent negative of the Wassermann tests.

Case 1

The patient, a man aged 69, was a thin, rather arteriosclerotic subject with previously good health. He had had severe bilateral temporal headaches for about three weeks and showed thickening and tenderness of both temporal arteries, with reduced pulsation. There were a few pink nodular areas on the branches of the artery on the right side, and a week later similar nodules were observed on the left side, the right side being then in subsidence. Two weeks later he developed racking pains at the back of the neck and head, and there was tenderness along the course of the occipital arteries, though these could not be felt. There was great pain on turning the head. The temporal arteries were at this time thick, slightly tender, and pulseless. Although severe the pains were readily controlled in the day by an aspirin-and-phenacetin mixture, and at night small doses of codeine were sometimes also given to ensure sleep. There seemed to be little constitutional upset and there was no visual disturbance or evidence of arterial involvement elsewhere. Other systems showed no marked abnormality for age, though the blood pressure was 170/100. The Wassermann reaction was negative.

At the end of four months the condition appeared to have subsided, and after a gradual diminution the pains had gone. The branches of the temporal arteries had at this stage contracted so as to be almost entirely impalpable. They remained pulseless.

Case 2

A woman aged 67 was admitted on Nov. 19, 1946. She had been well apart from thyrotoxicosis with partial thyroidectomy three years before her admission. She complained of severe pains in the head for three months, starting on the right side and then passing to the left. Shortly afterwards severe occipital pains developed and she became conscious of "bumps" in all these painful scalp areas. There was marked general loss of hair during these three months. For three weeks before admission there had been notable general symptoms (fever, anorexia, nausea, and occasional vomiting) and severe general head pains, with aching in the eyes and mandibles.

Examination on admission showed a moderately obese old lady with evident thinning of hair on the scalp and eyebrows. There was no evident myxoedema or anaemia. The temperature was 100° F. (37.8° C.) and pulse 98. The temporal arteries and their branches were pulseless tender cords. There was a small pink oedematous area near the end of the frontal branch of the right temporal artery and some pinkness and induration for about 1 in. (2.5 cm.) in the middle of the left frontal branch. Pain and tenderness were less pronounced in the occipital region and the occipital arteries could not be felt. Examination of retinae (Mr. R. C. Williams) revealed some arteriosclerosis, but nothing abnormal for age. The heart was not enlarged. There was slight slurring of first sound but no other abnormality. The blood pressure was 150/80. Electrocardiograms showed slight left axis deviation. White blood cells numbered 6,000 (polymorphs 57%, lymphocytes 30%, monocytes 11%, eosinophils 2%). Blood Wassermann reaction was negative; blood cholesterol 126 mg. per 100 ml. An aspirin and phenacetin mixture, and occasional kaolin poultices to the forehead, gave effective symptomatic relief.

The two pink areas of artery were removed on the fourth day, and though the pain was already less by then it subsequently diminished rapidly. Temperature became normal by the end of one week in hospital and so remained, but on Dec. 5 a small raised red area appeared on the left mastoid region and settled in a few days. By then the temporal arteries were firmly thrombosed and free from tenderness. She was discharged on Dec. 21. Her later history was that she felt weak after discharge from hospital and in the first two months spent much time in bed. There was much giddiness at the time of writing (July 21, 1947) and she was compelled to lead a quiet life.

Report on Arterial Sections (Dr. H. C. Moore).—(1) *The adventitia* is thickened, with a pronounced cellular reaction at the adventitial-medial junction (Fig. A). There are lymphocytes, histiocytes, and epithelioid cells, and a marked eosinophil leucocyte response. (2) *The media* is thinned by loss of muscle and partial replacement with collagen. Cellular response is similar to that in the adventitia. There is an apparent increase in elastic tissue, but perhaps this is due to condensation of the normal elastica in a thinned media. No giant cells seen. (3) *The intima* is hypertrophied and shows collagenous and mucoid change with some fibroblastic reaction. The lumen of the other branch is partially occluded by a recent thrombus (Fig. A).

FIG. A.—Case 2. Thickened adventitia with marked cellular reaction at adventitial-medial junction. Thinned media and condensed elastica. Intimal hypertrophy and recent central thrombosis.

The other two cases showed a more severe and probably more widespread type of disease. In Case 3 the pituitary gland underwent partial necrosis, presumably as a result of local arteritis, and rapid wasting and death ensued. A severe anaemia also developed rapidly at the height of the illness. In this case, in which severe headaches preceded the signs of temporal arteritis by ten weeks, the limited cranial post-mortem examination was sufficient also to show meningeal arteritis and a thickened dura mater as possible causes of this symptom. There was also clinical evidence of involvement of the blood supply to the left auditory nerve.

Case 4, after early signs and symptoms of temporal arteritis, showed a late involvement of the arm arteries and prolonged activity of the condition as revealed by "rheumatic" joint symptoms and a much raised sedimentation rate eleven months from the onset. Such persistent activity is a feature of this condition and for many months makes advisable a guarded prognosis regarding the eventual fate of each patient.

Case 3

A woman aged 73 was admitted on March 16, 1945, with severe frontal and occipital headaches of one week's duration. During the same period she had noticed deafness and tinnitus in the left ear. The headaches were fairly continuous and were worse in the recumbent than in the upright position; they were also made worse by talking and by exertion. She had vomited twice just before admission.

On admission a thin and very arteriosclerotic old woman was seen; she was alert and intelligent, but evidently troubled by severe headache. Temperature was 100° F. (37.8° C.) at first, and subsequently an intermittent low-grade fever; pulse 88; blood pressure 180/100. The heart was not enlarged and was normal apart from marked accentuation of aortic second sound. There was no abnormality in the central nervous system.

Headache was somewhat relieved by phenobarbitone, aspirin, and phenacetin at first, but was very severe by March 28, when she was mentally muddled and seemingly neurotic. Blood pressure was 126/72. Increasing anaemia was evident. Headache was particularly severe on April 3 and 7, but rather better between these days. She had increasing radiating occipital pains after April 7, often of such severity as to cause her to rock to and fro in bed and require heroin tablets for relief; there was some stiffness of the neck. On April 19 she had severe left temporal pain, and the left temporal artery branches were found to be pink and tender. Similar but less marked signs were found in the right temporal artery. Next day she had pain in both temporal regions and marked jaw stiffness; neck still stiff. Throughout the following week both temporal arteries remained pink and tender and there was a rapid decline in the patient's general condition with marked wasting of the body but no visual upset. The anterior frontal branch of the left temporal artery thrombosed on April 25 and that on the right side on April 30; the posterior branches thrombosed on May 6. There was a decrease in the pinkness of the arteries and in the headaches as the temporal pulses faded, but on May 6 the patient became unconscious; she died on May 8.

Investigation Results.—Radiographs of skull, cervical spine, and chest on April 4 were all normal. On March 17 the cerebrospinal fluid showed: protein 20 mg. per 100 ml.; Pandy's test, trace; cells, 2. On March 23 the blood Wassermann reaction was negative; urea 38 mg. per 100 ml. The urine was clear on April 26. A blood count on March 21 showed: red cells, 4,020,000; Hb, 62%; colour index, 0.78. On April 18 the Hb was 52%.

Post-mortem Examination (limited to head)—Macroscopic (Dr. J. Hamilton Paterson).—"Temporal arteries very thick and very fine capillary lumen throughout. Accompanying veins normal. Middle meningeal arteries show changes similar to temporals. Circle of Willis only shows gross patchy atheroma. Brain substance normal apart from surface oedema. Dura mater thickened. Pituitary gland appears necrotic."

Report on Arterial Sections (Dr. H. C. Moore).—First section (Plate, Fig. 1): Early changes of temporal arteritis. (1) *The adventitia* is thickened and shows increased vascularity at the adventitial-medial junction with lymphocytic and histiocytic infiltration. No eosinophilic or giant-cell reaction. Many vasa vasorum thrombosed. (2) *The media* shows patchy thinning (not shown, Fig. 1) and slight replacement of muscle with collagen, but there is no cellular reaction. The elastic tissue is normal in amount, but in some areas shows fragmentation. (3) *The intima* shows a hypertrophy consisting mainly of reticulated collagen with a secondary layer of fibroblastic reaction.

Second section: (1) *The adventitia* is thickened and shows a focal cellular reaction of lymphocytes and histiocytes. This inflammatory process is spreading into the media. (2) *The media* is thinned and some muscle is replaced by collagen. The cellular exudate spreading from the adventitia shows occasional giant cells, lymphocytes, and histiocytes, with a slight eosinophil leucocyte reaction. The internal elastic lamina shows some reduplication and fragmentation in places; elsewhere it is absent. (3) *The intima* shows a very gross collagenous hypertrophy with secondary layers of fibroblastic reaction.

Case 4

A woman aged 73 had for long been subject to attacks of migraine and to post-menopausal arthritis in the knees. She was admitted on Jan. 8, 1947, with temporal-region pain, "not like headache," of between two and three weeks' duration. The sides of the head were painful and tender so that her glasses hurt her. A few days from the onset of the pain her husband noted discoloured swellings below the hairline, "as though she had knocked her forehead." Two weeks before admission she was shaken in a fall, and though her head was not injured she subsequently felt increased throbbing pain in the temporal and occipital regions.

Examination showed a palish, well-developed old lady with slight bagginess below the eyes and evident severe head pain. Temperature was 99.2° F. (37.3° C.) and pulse 80. The temporal arteries on the forehead were both just palpable as pulseless cords, the left showing slight tenderness, with a small pink area on its posterior branch. There was no evident active arteritis elsewhere in any palpable artery. The disks and central nervous system were normal, as was the heart. Blood pressure was 120/70. The knees showed crepitus.

Severe throbbing frontal and retro-ocular pains continued in long bouts with only temporary relief from aspirin and phenacetin, and at times from heroin in full doses. Potassium iodide was later tried without much effect. Temperature rose to 99.5–100° F. (37.5–37.8° C.) in the evenings in the first two weeks and the headaches were then at their severest. Arterial resection was made on Jan. 26, with transient relief. Sweating was at times quite marked, and all through February there were recurrent rises of temperature to 99° F. (37.2° C.), but the headaches were much less severe after the middle of that month. On March 4, without any marked symptoms, she was observed to show no brachial or radial pulses in the right arm, while in the left arm with normal pulses the blood pressure was 100/60. She seemed well, though still weak, at discharge on March 22.

On April 23 she was feeling very well and getting about comfortably, and had had no headache since her discharge. The right brachial pulse was not felt and the left was only just palpable. Left radial pulse was larger than right. Blood pressure in left arm was 125/95 and in right 98/80. The temporal artery branches were neither palpable nor tender. There was no general arteriosclerosis. The E.S.R. (Westergren) was 129 mm. On July 24 further good progress was recorded apart from severe intermittent rheumatic pains and stiffness in knees and shoulders in damp weather. There were no headaches. She showed no sign of active rheumatism; there was crepitus in the knees. The main temporal arteries both had good pulses, but none of the branches were felt. No tenderness was present. All arm pulses had now increased, but those on the left were still fuller than on the right. Foot pulses were all normal. Blood pressure in the left arm was 140/80 and in the right arm 110/85. The E.S.R. was 110 mm. On Nov. 13 she showed marked limitation of shoulder movement on both sides following severe rheumatism in August. Radiographs revealed pronounced osteoarthritis in the right acromio-clavicular joint—nothing else. The right arm and wrist pulses were still reduced, but there had been a rise in blood pressure in the left arm to 184/98 and in the right to 160/100. Urine, n.a.d. Foot pulses were normal; no further headaches; no pulses in temporal branches. E.S.R. 68 mm.

Investigation Results.—E.S.R. (Westergren) on Jan. 17, 120 mm., subsequent readings throughout stay in hospital were at this level. A blood count on Jan. 9 showed: Hb, 80%; red cells, 4,080,000; colour index, 1; white cells, 7,300 (polymorphs 68%, lymphocytes 30%, eosinophils 1%, monocytes 1%). On Jan. 17 the blood Wassermann reaction was negative. On Jan. 13 the cerebrospinal fluid was clear and colourless;

pressure 65 mm.; total protein, 20 mg. per 100 ml.; Pandy's test negative; lymphocytes, 3 per c.mm.

Section of a Frontal Branch of Right Temporal Artery (Dr. H. C. Moore).—*The media* shows the greatest changes and an increase of collagen has replaced much of the muscle (Fig. B). It is uniformly infiltrated with lymphocytes, histiocytes, and epithelioid cells, and shows a fibroblastic and giant-cell reaction (Plate, Fig. 2). There is one area of medial necrosis. The elastic tissue is absent. *The adventitia* is not thickened, and in one place shows a small area of inflammatory reaction similar to and continuous with the medial reaction. The vasa vasorum are normal. *The intima* is proliferated and the lumen of the artery almost occluded (Fig. B). The proliferating tissue is mucoid and collagenous, contains some lymphocytes and histiocytes, and is vascularized.

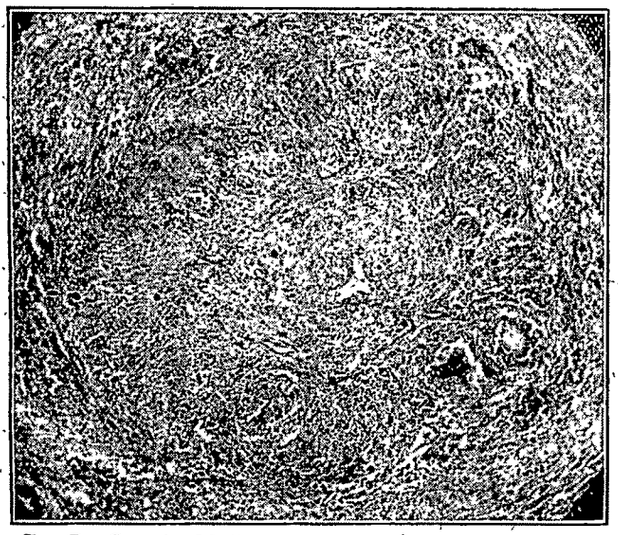

FIG. B.—Case 4. Media infiltrated with many cells and largely replaced by collagen. One area of necrosis (upper left). Lumen almost occluded by intimal proliferation. Adventitia not thickened.

Comment on the Pathology of the Temporal Arteries

Summary (Dr. H. C. Moore).—"Study of these sections suggests that the changes start as an 'inflammatory reaction' at the adventitial-medial junction, which results in partial destruction and replacement by collagen of the media and leads to fibrous thickening of the adventitia. Intimal hypertrophy follows as a secondary phenomenon. The cellular reaction is constantly lymphocytic and histiocytic; in most sections giant cells were present, and in two cases an eosinophil response was noted. Medial necrosis appears to be secondary to the inflammatory reaction; and in no section was it evident that its elastic tissue had proliferated in the manner described by the Birmingham investigators."

Our findings thus tend to harmonize those of Gilmour, who found the media chiefly involved, with those of Cooke *et al.*, who described an inflammation originating in the adventitia. With their marked medial involvement our sections particularly resemble those examined by Gilmour, but since one of the present cases showed no giant cells we do not consider that author's name for the condition, "giant-cell arteritis," an ideal title. The eosinophil response, noted in two of our cases, has been previously found in temporal arteritis (Bowers, 1940; Hoyt *et al.*, 1941; Scott and Maxwell, 1941), but we did not find the leucocytic infiltration of all the vessel coats mentioned by Gordon and Thurber (1946), and we consider absence of marked intimal cellular infiltration as a characteristic feature of the complaint.

The condition has features in common with both polyarteritis nodosa and thrombo-angiitis obliterans. Some of the chief points of distinction between the three complaints are included in the accompanying Table.

Discussion

The four cases illustrate many of the cardinal features of "temporal arteritis": (1) the occurrence of the condition in old people, more particularly in old women; (2) the extreme persistence and severity of its headaches; (3) the protracted nature of the complaint, only the fatal case being ill for less than four months, and one case being still unwell eleven months after the onset; (4) the general and widespread nature of the arteritis revealed even by the limited examinations open to us—temporal, posterior auricular, occipital, meningeal, pituitary, and brachial arteries all being involved in one case or another; (5) a variable intensity of the infection, with a general tendency to a severe fluctuant illness, and with direct fatalities in a small minority; and (6) a course and a pathology which suggest that the arteries are involved in a low-grade inflammation which is not syphilitic and which differs to some extent from other known forms of arteritis.

Table of Comparison of Forms of Arteritis

	Thrombo-angiitis Obliterans	Polyarteritis Nodosa	Temporal Arteritis
Clinical picture	Occasional early thrombophlebitis. Arterial thrombosis in limbs with intermittent claudication, loss of pulses, trophic changes, and gangrene in extremities. Loss of weight, but little fever or general upset	Very varied. Fever, tachycardia, sweating, loss of weight. Possible infarction of almost any viscus. Polyneuritis; muscular and joint pains. Anaemia and often pronounced leucocytosis	Low fever, sweating, malaise, anaemia, and loss of weight often present. Muscle and joint pains; joint stiffness and swelling. Neck and jaw stiffness; painful mastication. Tender and inflamed temporal arteries
Headache	Not marked	Not marked	Very severe and protracted
Sex and age incidence	Almost entirely in young or middle-aged men	Four times more frequent in men; usually in young adults	Twice as common in females; nearly always over 60
Type and site of lesion	Chiefly in limb arteries; retinal arteritis rare. No aneurysm formation	Nodular lesions in medium-sized and small muscular arteries (often visceral). Retinal arteritis rare. Aneurysm formation	Patchy arteritis, particularly in aorta and arteries to head and limbs. Reported in visceral arteries. 50% incidence of retinal arteritis. No aneurysm formation
Arterial reaction	1. Acute stage: patchy lesions; all coats invaded by polymorphs. 2. Chronic stage: fibrosis in and around vessels: organization and recanalization of thrombi; proliferative endarteritis	1. Acute stage: (*a*) Severe medial necrosis with fibrinous exudate. (*b*) Infiltration of all coats with leucocytes, histiocytes, and lymphocytes. Liability to aneurysm and rupture. 2. Chronic stage: Granulation tissue and later fibrosis in all coats	1. Inflammation at adventitial-medial junction. Cellular infiltration of both coats, chiefly with lymphocytes and histiocytes. Medial necrosis and giant-cell formation. 2. Granulation tissue in both outer coats; secondary collagenous hypertrophy of intima
Periarterial reaction	Fibrotic matting together of affected arteries and their companion veins in later stages	Cellular exudate in acute phase	Increased collagen deposition in the periarterial connective tissue
Thromboses	Present	Present	Present in smaller arteries
Venous involvement	Phlebitis and periphlebitis both present	Phlebitis in veins adjacent to inflamed arteries	Absent
Progress of Disease	Tends to cause loss of limbs	Usually fatal within a year (emaciation, haemorrhage, infarction of heart or kidneys, etc.)	Usual slow recovery with tendency to relapse. Occasionally fatal.

The absence of retinal arteritis in our group is unusual, for this has been recorded in about half the cases so far reported.

The C.S.F. examination twice showed no definite increase in protein such as was found thrice by Cooke and his co-workers (1945). Similar negative findings have been recorded in the past (Horton and Magath, 1937; Hoyt, Perera, and Kauvar, 1941).

The three cases examined all showed microscopical evidence of inflammation, and although one had thrombosed vasa vasorum there was no suggestion that the condition could just be due, as was suggested by Horton and Magath, to spontaneous thrombosis of these tiny vessels in senile arteries. Quite apart from the clinical evidence of infection and from the histological evidence of the arterial inflammatory reactions the patients were not senile, and in two of them there was neither marked hyperpiesis nor marked arteriosclerosis. Possibly the arteries of old age are less resistant to a virus, and this might account for the age incidence of the infection, but the condition is not a simple outcome of marked arterial degeneration.

Treatment.—The infective agent being unknown, no specific treatment can be given. Nor does it appear to be related to other local or general infections that can be eradicated. A superficial resemblance to rheumatism and to syphilitic arteritis has led to the use of salicylates and iodides, but it cannot be said that either of these has a proved value. Penicillin has not yet been used.* The main treatment is palliative; an aspirin-and-phenacetin combination will in all but the most severe cases give hours of relief. The addition of heroin or codeine will be required in the more severe cases to give sleep at night. Removal of a part of an inflamed temporal artery has been found to diminish the headache in some cases, but as this was done in the stage of subsidence in two of our cases it is difficult from them to assess its therapeutic value. Certainly the pain immediately lessened in both, but in one of them it returned in a modified form after a short interval. A similar effect from resection of a piece of inflamed artery is recorded by Shannon and Solomon (1945), while Dantes (1946) found his case quite unaffected by the procedure. Where intracranial arteries are also involved, as in Case 3, little relief can be expected from such a measure. Nicotinic acid, tried in the Birmingham cases with possible benefit, was not used in our last two cases, as these patients were not willing to be long without their aspirin-and-phenacetin mixture.

Conclusions and Summary

Temporal arteritis is usually, at least, part of a fairly generalized arteritis in old people.

This condition is probably more frequent than is suggested by the 44 or so cases hitherto presented in the literature.

This form of arteritis only rarely occurs without declaring its nature by temporal-artery inflammation, but in all suspected cases other palpable pulses should be observed for changes.

The main cause for suspecting the illness is a protracted severe headache associated with some general malaise in old people, and particularly in women.

In such subjects the tendency to diagnose a functional cause of the pain should be firmly resisted, and a careful watch should be kept on the temporal arteries.

Adequate doses of the coal-tar analgesics give considerable relief. The condition, though lasting many months in most cases, tends towards recovery in the majority. By this fact and by the nature of the vascular reaction to the infection some distinction can be made between it and polyarteritis nodosa and thrombo-angiitis obliterans.

*Since this was written a failure with penicillin treatment has been recorded by K. Robertson, *British Medical Journal*, 1947, 2, 168.

The cause of the infection remains unknown.

Four recent cases of temporal arteritis are recorded and the condition compared with other forms of arteritis.

I am greatly indebted to Dr. H. C. Moore, who has made the detailed histological reports on the arterial sections, and also to Dr. J. L. Hamilton Paterson for the interest he has taken in this subject and for the help he has given me in its investigation. The photographs reproduced here and on the special plate were taken by Miss M. H. Shaw.

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THREE CASES OF SYNOVIOMA

BY

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[WITH PHOTOGRAVURE PLATE]

Considerable interest has recently been shown in atypical mesoblastic tumours arising in connexion with joints, bursae, and fascial planes, occurring most often in the lower limbs. The following are three such cases which at present are mainly interesting from the pathological point of view but are here reported from the clinical standpoint.

Case 1

The patient, a married woman aged 61, was first seen in November, 1946. She gave a history of "rheumatism" in many joints for some years and a pain for the past eight months in the left ankle. There was a swelling about the size of a plum on each side of the tendo Achillis posterior to the ankle-joint. This swelling was firm and tense, and was at first

FIG. A.—Case 1. Leg before amputation.

FIG. B.—Case 1. Tumour of ankle after amputation.

thought to contain fluid. Aspiration was attempted, and a very small quantity of blood-stained fluid was recovered. The patient was admitted to hospital in January, 1947, and the swelling was exposed through an incision on the lateral side of the tendo Achillis. It was a firm mass, dumb-bell in shape, about the size of a tangerine orange, in the situation of the bursa. It was apparently encapsulated, and was enucleated with some difficulty.

A preliminary pathological report suggested that it was epiblastic in origin, but after further examination it was considered to be a mesoblastoma, probably synovioma. Radiography of the chest was negative for any secondaries, and that of the ankle negative for bone involvement; there were no palpable enlarged glands. On account of this pathological report operation was decided upon, and in March, 1947, amputation was performed at the junction of the middle and lower thirds of the thigh. The pathological report of the amputated specimen stated: "The specimen is a mesoblastic tumour—i.e., a synovioma—not resembling the original specimen, which is more fibroblastic than endothelial, with little haemosiderosis. It is involving the ankle-joint and tip of the astragalus." (Figs. A and B.)

Case 2

The patient, a married man aged 33, was first seen in March, 1947. He gave a history of a fall on the left leg eight weeks before which was not at the time followed by any symptoms. He stated that one week previously he had noticed a swelling in the left calf, and he walked with a slight limp. There was found to be a tense somewhat fusiform swelling in the left calf muscles. *X*-ray examination of the leg was negative for any lesion of the bone. The swelling was at first thought to be inflammatory in origin, but a biopsy was performed at the end of April. The pathological report on this was: "Myxosarcoma. If the leg is amputated please send for dissection to see where it is arising." He had a trace of sugar in the urine, but this cleared up. A glucose-tolerance test showed that the glycosuria was renal in origin. A radiograph of the chest was negative, and there were no palpable glands.

At the beginning of May amputation was performed at the junction of the middle and lower thirds of the thigh. The report of the amputated specimen was: "A mesoblastic tumour with cells of different type. Some are endothelial in appearance while others are fibrosarcomatous. This appearance conforms to the characteristics of a synovioma." (Plate, Fig. 1.)

Case 3

The patient, a married man aged 37, was first seen in April, 1947. He gave a history of several months' swelling in the adductor muscles of the right thigh; he also complained of some pain in the back. The swelling, which was hard and tense, was situated high up on the anterior internal aspect of the right thigh. Abduction of the leg was limited and the mass was fixed in the adductor group. A radiograph of the thigh was negative for bone involvement, and radiographs of the spine and lungs were also negative. There were no palpable glands. Biopsy was performed in May, and the pathological report on this was: "The specimen is most unusual, and is undoubtedly malignant. It is an undifferentiated reticulosarcoma, and may have arisen from a fascial plane. Further report will follow." After consultation with Mr. Thurgar, the consultant radiotherapist, it was decided that in view of the nature of the tumour and of its situation it would be best treated by a combination of surgery and radiotherapy, and in order to achieve continuity in this the patient was transferred to the Royal Victoria Infirmary, Newcastle-upon-Tyne.

At first it was thought that it would be necessary to do a hind-quarter operation, but it was finally decided that it would be possible to get above the mass by disarticulation at the hip-joint, and this was performed by Mr. McIvor. The pathological report on the amputated specimen was: "The specimen is mesoblastic tumour largely composed of undifferentiated mesenchyme cells with no tendency to haemosiderin pigmentation. It is very haemorrhagic, anaplastic, and has a few areas resembling endothelial cells. It is developing in the adductor group of muscles and is best classified as a synovioma." (Plate, Fig. 2.)

Clinically, from the point of view both of treatment and of prognosis, the above notes are necessarily at the moment incomplete. So far there have been no signs of recurrence. It is particularly interesting that three such cases should have occurred in a relatively small community in so short a time.

It is of course too early to assess the ultimate prognosis of these cases, but it may be stated that, up to date, Cases 1 and 2 are fit and well, both having put on weight with no sign of recurrence, local or otherwise. Case 3 died in November, 1947, the cause of death being multiple generalized recurrences in the lungs and abdominal glands. Unfortunately it was impossible to get permission to do a necropsy, so that the exact nature of these cannot be described.

In addition to Mr. Thurgar and Mr. McIvor, mentioned in the text, my thanks are due to Dr. Faulds, Carlisle, for his most helpful interest and discussions on the pathology of the above cases.

The photographs were taken by the author.

BALANTIDIAL DYSENTERY

REPORT OF A FATAL CASE IN ASSAM

BY

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AND

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[WITH PHOTOGRAVURE PLATE]

This form of dysentery is distinctly rare, and has been studied much less than the commoner dysenteries. Cases have been reported from temperate and tropical climates: they have been found in Asia, Africa, Europe, and America. The balantidium commonly found in pigs is regarded as the ciliate responsible for human infections.

Wenyon (1926) cited Malmsten as having in 1857 discovered this parasite in two patients suffering from dysentery, and Walker as having stated in 1913 that only 137 cases had been recorded in the 56 years following Malmsten's discovery, and of these 57 had been reported from the Philippines. Strong (1942) states that Weston, working among prisoners in Manila, found ciliated parasites three times in 4,000 routine examinations of dysentery stools, that Anderson in the Andaman Islands discovered them five times in 920 dysentery stools, and that Young reported seven cases among 142 mental hospital cases in South Carolina.

Mortality figures vary considerably. Strong (1942) gives 29% in 111 Philippine cases, and Walker, cited by Wenyon (1926), gives 7% in 57 Philippine cases and points out that of 40 necropsies recorded in the literature ulceration of the large intestine was present in 36.

Very few cases have been recorded in India. Das Gupta (1944) cited Sinton as having recorded the first case in 1923, and Hermitte, Sen Gupta, and Biswas as having reported balantidial infection as common in the tea gardens in Cachar, Assam, in 1926. Acton and Knowles (1928) state that during many years of work in India they had not encountered the human infection except in one isolated case. They also mention a fatal case which occurred in the Medical College Hospital, Calcutta, in 1926 (Major Shanks, I.M.S.). Das Gupta (1944) states that "about half a dozen cases of balantidiosis, including a fatal infection, have been observed in Calcutta." Claireaux (1945, unpublished observations), working among West African soldiers in India, found balantidia three times in 2,403 routine examinations of stools.

We present this report mainly because of the unusual occurrence of fatal balantidial dysentery in this part of India, and also to point out the difficulties which may be

met with in diagnosis. The following case was discovered in the course of routine histological examinations in a military laboratory in Shillong, where large numbers of specimens were sent from units east of the Brahmaputra. Perusal of the laboratory records for a period of almost three years, in which time approximately 260 pieces of intestines had been examined, revealed no other instance of human balantidial ulceration.

Case Report

An Indian sepoy aged 30 was admitted to a military hospital in Assam on Oct. 21, 1944, with a two-day history of diarrhoea, with blood and mucus. On an average there were five or six motions a day. No previous history of dysentery or intestinal infection could be obtained. The patient's general condition was poor. He had slight pyrexia, and was markedly dehydrated. On examination he was tender over the caecum and pelvic colon. Microscopical examination of the faeces showed an indefinite exudate in which no entamoebae, balantidia, cysts, or ova were seen. Bacteriological cultures failed to produce pathogenic organisms.

On Oct. 22 his condition was worse. The diarrhoea was more pronounced, his bowels moving six to seven times in the day. Again the stools were negative for parasites and pathogenic bacteria. The remainder of the history is one of rapid deterioration, ending fatally on Oct. 24—that is, three days after admission to hospital.

Necropsy.—This was carried out seven hours after death. The significant findings were as follows :—Small intestine : areas of congestion were seen in the terminal ileum. Large intestine : a few ulcers covered with greenish sloughs were found in the caecum and ascending colon ; a large collar of ulceration covered with green tenacious sloughs was seen extending over the mucosa of the pelvic colon for 2 to 3 in. (5 to 7.5 cm.). The other organs showed no gross abnormalities.

Histology—Pelvic Colon.—Sections revealed a large ulcer with overhanging margins penetrating well into the submucous layer but short of the circular muscle layer ; at each side it burrowed for some distance into the submucosa ; the walls and floor were lined by structureless pink-staining hyaline material in which cellular remains and nuclear fragments could be seen. The mucous and submucous layers adjacent to the ulcer and for a considerable distance from the actual margins showed pronounced hyperaemia and oedema and were infiltrated with inflammatory cells : these were mainly lymphocytes and polymorphs, with a proportion of plasma cells and histiocytes. The muscle fibres beneath the floor of the ulcer showed loss of structure and were infiltrated with round cells and polymorphs. The subserous coat was also hyperaemic and was infiltrated with exudative cells. Moderate numbers of parasites were found scattered haphazard throughout the walls and floor of the ulcer and also in the subjacent mucous and submucous coats. They were large, round or oval in shape, and on an average measured 54.4μ by 37.3μ. Many had ciliated membranes and funnel-shaped depressions at the anterior poles. The cytoplasm was granular and contained ingested red blood cells and showed prominent macronuclei and one or two large vacuoles. These parasites were found single and in small clumps in the tissue spaces of the submucous coat (see Photogravure Plate) and lying inside and between the mucous glands. Small numbers of degenerate forms staining deep purple or pink were seen among the hyaline acidophile debris in the floor of the ulcer. These parasites had the typical morphology of *Balantidium coli.*

Commentary

This was a case of an acute illness, alleged to be of five days' duration, in which the presenting features were pyrexia, abdominal pain, diarrhoea, and dehydration. Repeated microscopical and cultural examinations of the faeces failed to reveal the cause of the diarrhoea. One of us (C.R.P.) who was responsible for these examinations considered it unlikely that parasites so large as balantidia could have been missed.

In the absence of laboratory findings a provisional diagnosis of amoebic dysentery was made. These two forms of dysentery may be similar in their clinical and post-mortem findings. In this case the gross anatomical appearances of the pelvic colon and the histological features of the ulceration were those often found in amoebic dysentery. The discovery of the balantidia, however, suggested an alternative diagnosis.

Summary

Fatal balantidial dysentery is regarded as distinctly uncommon in India.

The clinical, post-mortem, and histological features of a case in an Indian sepoy have been described.

We are indebted to Sergeant D. Canwell, R.A.M.C., for technical assistance and to Professor R. J. Pulvertaft for the photomicrographs.

ADDENDUM.—Since this article was completed Shun-Shin (1947) has reported ten cases of balantidial dysentery, one of which was fatal. He emphasizes the fact that in balantidial dysentery the clinical and pathological features may closely resemble those of amoebic dysentery.

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INTRAUTERINE RUPTURE OF THE UMBILICAL CORD

BY

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[WITH PHOTOGRAVURE PLATE]

Intrauterine rupture of the umbilical cord is a rare condition, and the recent experience of two cases in the practice of this hospital prompted this brief report. In both cases the rupture was due to absolute shortness of the cord—in one associated with a normal foetus which survived in spite of moderate blood loss ; in the other there was a gross exomphalos and deficiency of the anterior abdominal wall, the foetus succumbing soon after delivery.

Case 1

The patient was a primigravida aged 34. The estimated date of delivery was Aug. 15, 1946. In the third month of her pregnancy a mucoid carcinoma of low-grade malignancy was removed from the right axillary tail by local excision. This was followed by dissection of the glands in the right axilla. These showed no naked-eye or microscopical evidence of malignancy. Her antenatal period was otherwise uneventful and she went into labour spontaneously on July 31.

Full dilatation of the cervix was reached after a normal first stage lasting 18 hours. In spite of good uterine contractions during the second stage of labour the foetal head failed to descend. After 2 hours and 20 minutes in the second stage the patient was examined under anaesthesia. The occiput had rotated into the hollow of the sacrum. Manual anterior rotation was carried out without difficulty and Neville's forceps were applied. Moderate traction failed to secure descent of the foetal head. The forceps were removed and the patient was re-examined. The head was in a satisfactory position, with the occiput anteriorly well down in the pelvic cavity,

and no coils of cord were felt about the foetal neck. The pelvic outlet seemed satisfactory. (The examining hand had not passed beyond the neck of the foetus, since absolute shortness of the cord was not considered as a possible diagnosis.) The forceps were reapplied and very considerable traction exerted. There was a tearing sensation, and the true nature of the condition was suspected. Rapid delivery of the foetus followed, associated with a second-degree rupture of the perineum. The umbilical cord was seen to be ruptured, and blood was spurting freely from the foetal end. It was rapidly clamped with forceps, and the infant placed in its cot. The placenta delivered itself spontaneously 10 minutes later, with very slight blood loss.

The cord was found to be 10 in. (25 cm.) long, and neither it nor the placenta showed any abnormality on macroscopic examination. The infant was a female, weighed 6 lb. 13 oz. (3.1 kg.), and was apnoeic and moderately shocked. The upper respiratory passages were rapidly cleared, and an endotracheal catheter was then passed under direct vision. Artificial respiration was maintained with Gibberd and Blaikley's apparatus, and after 20 minutes the infant began to respire normally. Superficial abrasions and deep forcep marks were present about the head, and the left eye was somewhat oedematous. There was a right facial palsy. A blood examination made soon after delivery showed: Hb, 104%; red cells, 5,400,000 per c.mm.; blood group B. In view of these findings and the clinical condition of the infant, 60 ml. of group O blood was transfused via the right saphenous vein at the ankle.

A blood count next day showed: Hb. 108%; red cells, 4,800,000. After the first 24 hours the baby ceased to be a cause of anxiety, and in view of the maternal breast condition it was fed on "ostermilk" No. 1. It was discharged well on the sixteenth day. Unfortunately a haemoglobin estimation was not done on discharge. The mother's puerperium was uneventful.

Case 2

The patient was a 20-year-old primigravida. The estimated date of delivery was May 21, 1946. Her antenatal period had been uneventful except for the fact that the head had failed to engage in the pelvic brim before labour began. No overlap was detected, however. Labour began spontaneously on May 1, and the foetal head passed through the pelvic brim with ease. Full cervical dilatation was reached after 15 hours and the head had descended into the pelvic cavity. Strong uterine contractions for 2½ hours in the second stage failed, however, to effect delivery. Examination under anaesthesia confirmed that the occiput was lying anteriorly. Neville's forceps were applied and traction made. Very considerable force failed to secure any advance at first. There was a sudden sensation of "something giving way" and delivery proceeded unhindered. A living foetus of indeterminate sex suffering from a severe degree of exomphalos (see Photogravure Plate) was delivered; the umbilical cord had been ruptured *in utero*. There was no bleeding from the foetal end of the cord and the foetus survived for 15 minutes after delivery. The placenta and membranes were delivered shortly afterwards without difficulty, and the patient's puerperium was uneventful.

Discussion

Intrauterine rupture of the umbilical cord has been reported several times, but the foetus has seldom survived. Except in rare cases of cord pathology, the rupture is due to shortness of the cord, either relative or absolute. Relative shortness of the cord due to coiling round the neck or extremities of the foetus may lead to dystocia and intrauterine asphyxia, but is likely to be discovered before enough traction has been exerted to produce cord rupture. Absolute shortness, however, usually escapes detection until either rupture or placental separation occurs, as is demonstrated by the two cases here presented. Absolute shortness of the cord appears to be rare in the absence of associated umbilical deformity. In such cases the cord may be so short that the umbilical area is actually in contact with the placenta. Delivery may be extremely difficult, but the deformity is often so gross that it matters but little whether the cord ruptures or not during delivery.

Most authorities agree that the cord must not be less than 10–12 in. (25–30 cm.) in length for delivery to occur without difficulty. Should the cord be shorter than this it may rupture and the placenta become separated, or the uterus may be inverted if the condition is not diagnosed and delivery is effected from below. I am here concerned with absolute shortness of the cord only, as it has already been stated that vaginal examination should reveal those cases of relative shortness due to convolutions about the neck.

Is true shortness of the umbilical cord diagnosable? The points upon which diagnostic emphasis has been laid may be enumerated as follows: (1) The presence of a funic souffle; (2) recession of the presenting part between contractions after full cervical dilatation has been reached: (3) a discharge of blood with each uterine contraction: (4) periodic dribbling from the bladder due to intermittent pressure by the presenting part. It is difficult to believe that any of these points are of any diagnostic value, as they all occur more often in commoner conditions. It is easy to agree with Munro Kerr when he says: "It has been suggested that the condition has been diagnosed by the presence of the funic souffle and recession of the presenting parts between the pains. We have only found it possible to appreciate this complication whilst actually extracting the child and finding difficulty in so doing." Both the above cases illustrate the truth of this statement.

Titus (1937) suggests that the association of failure of the head to advance during the second stage and upset of the foetal heart rate denoting foetal asphyxia may be of diagnostic value. Faugère (1938) believes that a short cord may interfere with cervical dilatation. In neither of my cases was there any delay in labour, and it is difficult to see why there should be.

True shortness of the cord is rare enough to preclude generalizations regarding treatment. It is extremely unlikely that any hint of the condition will arise before the second stage of labour has begun. Second-stage delay in spite of contractions of adequate force will necessitate examination. Correction of foetal malposition and application of forceps and gentle traction will fail to effect delivery. Further examination at this stage will exclude relative cord shortness due to coils about the neck; and displacement of the presenting part and more extensive examination may reveal a truly short cord. In neither of the above two cases was this more extensive examination carried out. Should a truly short cord be discovered, the choice of treatment lies between caesarean section in a potentially infected case, therapeutic division of the cord followed by rapid delivery, or traumatic rupture followed by as rapid a delivery as possible. The choice of treatment would not be an enviable one, and, fortunately perhaps for the obstetrician's peace of mind, the line of treatment is often predetermined.

Summary

Two cases of intrauterine rupture of the umbilical cord are presented. In Case 1 the infant was normal, and rapid delivery after the nature of the accident was realized ensured a live birth. Blood loss was subsequently repaired by transfusion. Case 2 is an example of short cord associated with gross foetal abnormality, the more common finding. Neither of these cases was diagnosed early enough for any alternative line of treatment to be considered.

The diagnosis is considered, and the conclusion is reached that the condition is rarely suspected before the cervix has dilated fully and the head has failed to advance. The umbilical cord is unlikely to withstand moderate traction with obstetric forceps, but, as illustrated by Case 1, provided the nature of the accident is realized, the danger to the foetus can be

minimized by rapid delivery. Inversion of the uterus must be a very rare accident, and there are few records of placental avulsion due to short cord.

My thanks are due to Dr. E. E. Philipp for his help, and to Mr. S. Scarfe for his excellent photograph.

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Medical Memoranda

Pyopericardium

The majority of authors strongly favour surgical drainage. Silverberg (1940) could find only one case of recovery without operation. He regarded paracentesis as dangerous, but allowed that it might conceivably be justified as a diagnostic measure; he then went on to report one case of *Staph. aureus* pyopericardium with recovery after repeated tapping. Whittemore (1921) and Vander Veer and Norris (1939) each reported recovery after tapping only. Applebaum (1945) recorded one case which recovered after aspiration only. Wadsworth (1942) reported two cases, one of which recovered after aspiration. I have not been able to find any record of a considerable series treated by aspiration. Shipley and Winslow (1935) analysed 99 cases treated by surgical drainage; 49 recovered, while 46 died. Norman and Ainsworth (1945) reported one case treated by catheter drainage and penicillin instillation.

CASE REPORT

A prisoner of war in Japanese hands, aged 25, was found to have left-sided tuberculous empyema on his release in September, 1945. Thick pus containing *Mycobacterium tuberculosis* was aspirated. He was evacuated to New Zealand, where aspiration was repeatedly carried out. In April, 1946, he returned by hospital ship to England. He was considered then fit to go on leave. In May, however, he developed low backache and had a continuous fever up to 103° F. (39.4° C.) for over two months. In August the leucocyte count was 10,500, with 68% neutrophils. At the same time pericardial effusion was diagnosed clinically and confirmed by *x*-ray examination and aspiration of green pus containing *Staph. aureus haemolyticus* which was penicillin-sensitive. Six aspirations, each of about 200 ml. of pus, were carried out over a period of four weeks, and on each occasion 400,000 units of penicillin was introduced. By the middle of September he was afebrile. It was thought at this time that the pericarditis was primarily tuberculous, with a secondary *Staph. aureus* infection superimposed, but Loewenstein culture and direct examination of Ziehl–Neelsen films were negative throughout for *M. tuberculosis*.

In October recurrence of fever was treated without effect by a course of sulphadiazine, and subsequently a parenteral course of 3,000,000 units of penicillin was given, also without effect. Severe and persistent pain in the left shoulder was a prominent symptom.

On Nov. 27 he rapidly became gravely ill with cardiac tamponade and pleuro-pericardial friction. Blood pressure was 95/65 mm. Hg, with pulsus paradoxus. A skiagram showed gross increase in the cardiac shadow. Severe abdominal pain also occurred, and physical examination suggested peritonitis. The aspirations had previously been performed by the subxiphisternal route, and it was thought that pus might be leaking down one of the former needle tracks. On the same day parasternal paracentesis yielded 39 oz. (1.1 litres) of thick pus containing a pure culture of *Staph. aureus haemolyticus* which was again penicillin-sensitive, although the sensitivity was one-third that of the standard Oxford strain. Intramuscular penicillin, 50,000 units three-hourly, was given for nine days, and the peritoneal signs gradually subsided without surgical intervention.

The pericardium was aspirated through a large-bore needle on alternate days for 14 days, and 100,000 units of penicillin was injected into the pericardium through a finer needle twice daily for six days and once daily for a further five days. Cultures of the pus still yielded a pure growth of *Staph. aureus haemolyticus*, and no further penicillin was used. The third to seventh aspirations were accompanied by pericardial lavage with normal saline, washing being continued until the returning fluid was only slightly turbid.

On Dec. 12 the hospital was closed and the patient was moved 100 miles by ambulance without harm. He has required no further aspiration. Unfortunately an *x*-ray film taken in July, 1947, shows that a previously static focus of tuberculous infiltration in the right lung has again become active and now requires further treatment. Nevertheless he has been ambulant for about two months, free from symptoms of cardiac disability, and has enjoyed 10 days' leave from hospital.

COMMENT

This case seems to justify a contention that pericardial paracentesis holds out good hope of success in the treatment of pyopericardium, and that the former strong bias towards surgical intervention should now be reviewed. The combination of aspiration with intrapericardial lavage and penicillin presented no great technical difficulties, and there was no evidence of any irritation of the pericardium by penicillin. The final outcome, apart from the tuberculous infection, remains conjectural, but eventual pericardial symphysis appears inevitable, although there are no signs of it at present.

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A Fatal Case of "Malignant" Syphilis

The general and skin manifestations of early syphilis respond quickly to penicillin therapy, and, as Dexter and Tucker (1946) have shown, gummata of the skin can also be expected to improve rapidly with penicillin treatment.

The following case report may be of interest for two reasons: (1) "Malignant" secondary syphilis with profound toxaemia and weakness is very rare; in 857 cases of secondary syphilis Kampmeier (1944) saw only one case. (2) Penicillin therapy produced very little effect on the skin or mouth lesions; it had no effect on the toxaemia, the case ending fatally.

CASE REPORT

The patient, a widower aged 59, was seen on Sept. 18, 1947, at the request of Dr. Veale, who had been called in consultation by the patient's doctor. There was a history of exposure to infection between six and nine months previously. About the end of May, 1947, a rash appeared on the trunk and spread to the limbs and genitals. His voice became hoarse, he started to lose weight, and there was increasing weakness.

On examination he was extremely emaciated, his skin had a dull *café au lait* colour, the voice was hoarse, and he was so weak that he could scarcely move himself in bed. He had an extensive rupial eruption on the trunk and limbs. There were indurated impetiginous ulcers on the glans penis. Over the shaft of the penis and scrotum moist papules had coalesced to form moist and crusted patches. A few mucous patches were seen on the buccal mucosa. He had an indurated glossitis and ulcers on the margin of the tongue. In the midline of the palate there was gummatous ulceration, but it had not penetrated deeply. Ulceration was also present in both fauces. The inguinal and superficial cervical glands were enlarged. Examination of the blood showed: red cells, 4,800,000 per c.mm.; white cells, 7,500 per c.mm. (differential count normal); Wassermann reaction, positive. The temperature was 98° F. (36.7° C.), pulse 90, and respirations 20.

Treatment.—Penicillin therapy was started on Sept. 18, 10,000 units in saline being given three-hourly for three days, the dosage then being increased to 40,000 units three-hourly. The total penicillin given was 2,680,000 units. With this treatment the moist patches on the penis and scrotum became smaller and drier, and the ulceration of the tongue improved. Penicillin had no effect on the general condition, and the patient gradually became weaker and his mind very confused. General medical measures failed to improve his condition. "Mapharside," 0.03 g., was also given, but the patient was *in extremis*, and died on Sept. 27.

At post-mortem examination a slight hypostatic congestion of the lungs was seen, but no other macroscopic abnormality, and death appeared to have been due to the luetic infection.

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WILLIAM FOWLER, M.B., Ch.B.

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Reviews

INTRACELLULAR MISSIONARIES

Nucleic Acid. Symposia of the Society for Experimental Biology. No. 1. (Pp. 290; illustrated. 35s.) Published for the Company of Biologists on behalf of the Society for Experimental Biology by the Cambridge University Press. 1947.

This book, the first of an annual series of reports, contains the 19 papers read in 1946 at the Cambridge meeting of the Society for Experimental Biology. It sets a high standard for the rest of the series, both in the presentation and in the importance of the subject matter. In the words of one of the contributors, C. D. Darlington: "We are now witnessing, after the slow fermentation of fifty years, a concentration of technical power aimed at the essential determinants of heredity, development, and disease. This concentration is made possible by the common function of nucleic acid as the molecular midwife of all reproductive particles. Indeed it is the nucleic acids which, in spite of their chemical obscurity, are giving to biology a unity which has so far been lacking, a chemical unity." The exaltation of nucleic acid to such prominence is due to a series of independent and surprising discoveries. Thus, cytochemical tests have shown that nucleic acid is not restricted to nuclei but occurs also in the cytoplasm of normal and abnormal cells, especially in regions of active protein synthesis. Micro-analysis by ultra-violet absorption enables purines to be located in cell structures. Titration curves indicate that nucleic acids are not uniform polymers of a tetranucleotide unit but are assembled from irregularly distributed mononucleotides, which makes possible the existence of a large number of isomeric nucleic acids, so that variety in gene constructions is provided for. Virus studies have shown that some viruses at least are crystallizable nucleoproteins.

The paradoxical status of nucleic acid in chromosome mechanics is being revealed. Built up by the chromosomes, it is used to build up the chromosomes, each unit being thereby endowed with a set of physiological attributes and the additional attribute of being able to reproduce the set in the daughter cell. Consequently the nucleic acids can be regarded as fertile missionaries, propagating their kind as well as their creed, sometimes to the detriment of the entire community when the agent happens to be a virus. The evidence for these conclusions, and much else, is given and criticized in the several contributions to this stimulating symposium.

W. R. FEARON.

ASPECTS OF GOITRE

On Goitre and Allied Diseases, Especially Thyrotoxicosis. With Particular Reference to the Surgical Treatment. By John Hertz, M.D. Translated from the Danish by Hans Anderson, M.D. (Pp. 586; illustrated. 40s.) Copenhagen: Einar Munksgaard. London: Geoffrey Cumberlege (Oxford University Press). 1943.

The publication date of this book should be noted. In medicine, especially in endocrinology, five years are a very long time. They become relatively even longer when half of them are years of war, when the osmosis of information across almost impermeable frontiers is a slow and laborious process. This book is out of date through no fault of its own. It contains no reference to thiouracil and its derivatives, which have revolutionized not only the treatment but the understanding of thyroid disease. The more recent English work on the ophthalmic aspects of Graves's disease seems to be unknown to the author, whose knowledge of earlier work is commendably international. He does not mention the muscular complications of thyrotoxicosis or the relationship between the thyroid and the thymus; indeed his discussion of the relationship between the thyroid and the other endocrine glands is most inadequate. He does not even mention radioactive iodine.

Yet one cannot withhold from this book a certain meed of praise. It is a most painstaking work and gives the impression that the author has read carefully and absorbed completely everything that has been written about thyroid disease in every country and language from the Middle Ages until about 1940. Occasionally he has misunderstood what he has read: the king's evil, for instance, was scrofula, not goitre, and there is no reason to believe that Dr. Samuel Johnson suffered from thyrotoxicosis. He has not always found it possible to attempt a critical assessment of his vast reading, which is understandable when one calculates, from internal evidence, that his personal experience was then limited to about 100 cases. It is natural in an author of such small practical experience that he should sometimes have difficulty in making up his mind. He is notably confused on the question of ligation of the inferior thyroid arteries, and it is clear that he had then never split the sternum. He exaggerates the difficulty of operations for relapse and wastes space in discussing various complications of treatment which from time to time have had their day and departed to deserved oblivion.

Despite all this, the book is of very great value, not as a contribution to knowledge, but as a source book. This is especially true of the historical chapter; with a little expansion it is worthy of separate publication. It will be very interesting to read a second edition, which it is to be hoped the author will prepare when he has treated 1,000 cases of thyrotoxicosis.

RAYMOND GREENE.

EYE TREATMENT

Office Treatment of the Eye. By Elias Selinger, M.D. (Pp. 542; 67 figures. 43s.) Chicago: The Year Book Publishers, Inc. London: H. K. Lewis and Co. 1947.

This is a novel type of book in which the author discusses the aetiology, symptomatology, and treatment of those diseases of the eye that can be adequately tackled in the consulting-room and the home. This necessarily results in a somewhat artificial choice of subject matter, and Selinger is certainly courageous in the procedures he carries out without hospital facilities—iridectomy for a prolapsed iris after trauma, the removal of a foreign body penetrating the cornea and into the anterior chamber by pushing it backwards through the cornea with a knife introduced into the anterior chamber under general anaesthesia, plastic operations on the lids, and so on. In fact, the book is a general textbook of ophthalmology which omits description of the major surgical procedure.

The teaching throughout is in general sound and up to date, and one or two suggestions are novel (in the reviewer's experience) and interesting—such as the formation of a new punctum by passing a suture through the everted punctum to emerge on the conjunctival surface of the lid and leaving it for some weeks until epithelization occurs. As is common in America the author advises us to correct errors of refraction up to the age of 50 under homatropine mydriasis and as a routine to measure the intraocular tension tonometrically before and after the pupils are dilated in all patients over 30 and preferably over 25, which seems an elaborate procedure. Despite these precautions the author states that such a routine has precipitated a congestive glaucoma in three cases in his experience. He claims that these patients were better off "because a glaucoma which might otherwise have remained undetected was discovered," but from the social and medico-legal point of view it might be argued that the advent of an acute glaucoma, if it cannot be anticipated, is more happily left to an act of God than ascribed to the ophthalmologist. The book is interesting and instructive, well written, and luxuriously produced.

STEWART DUKE-ELDER

RESTORING FACIAL CONTOUR

Rhinoplasty and Restoration of Facial Contour. With Special Reference to Trauma. By Jacques W. Maliniac, M.D. (Pp. 341; 214 figures. $7.50.) Philadelphia: F. A. Davis Company. 1947.

Dr. Maliniac has written an interesting book, though its use to the British surgeon is limited. In the first three chapters he discusses a few points of historical and anatomical interest, well illustrated by excellent diagrams. He then considers the aetiology and diagnosis of fractures of the nose. The author stresses the need for reduction soon after injury because these fractures consolidate within fourteen days. There is a detailed account of damage to the nasal septum and of operative measures for correction. The author refers to concomitant fractures of the maxilla but gives the impression that severe fractures of the nasal bones and septum are of greater

importance. He describes a method of local analgesia for all reparative surgery of the nose, but it is not one that would meet the requirements of British surgeons.

The use of profilometers and plaster casts that the author recommends for the planning of reparative operations is of little value and may be described as "window dressing." He gives a summarized account of the types of splint used to maintain reduction: in my opinion the leather headcap illustrated is useless. The author recommends using intranasal splints, which in turn are fixed to extranasal splints; it is the experience of plastic surgeons in Britain that intranasal splints are badly tolerated and usually do more harm than good.

He quotes Brown's work on composite free grafts in detail, and the results fully justify his doing so. A large section of the book comprises illustrations and brief descriptions of well-known methods of repair of nasal defects and injuries of the septum. In the section on radiology he considers simple fractures of the nose; the discussion is a repetition of the elementary anatomy of the nose described earlier in the book.

F. T. MOORE.

HOSPITAL ADMINISTRATION

Secretarial Practice and Office Administration for Hospitals. By Capt. J. E. Stone, C.B.E., *M.C.*, F.S.A.A., F.R.Econ.S., F.S.S., F.H.A. Foreword by Sir Ernest Pooley, K.C.V.O., M.A., LL.B. Introductions by Capt. H. Brierley, O.B.E., *M.C.*, and Mr. S. Clayton Fryers, F.H.A. (Pp. 204. 21s.) London: Faber and Faber. 1947.

All interested in hospital administration will find any contribution by Capt. Stone on a subject connected with it well worthy of careful attention. His new book will serve as a useful companion volume to his *Hospital Organization and Management*, already regarded as a classic. He writes in the same forthright manner, for he knows his subject thoroughly; he is satisfied that there is a right way of doing a job and has no hesitation in saying so. He discusses his subject in a practical way, no space being given up to policy or theory. He shows clearly that the office work of hospitals is not necessarily different from similar work in business, and that there is no more justification for antiquated or slipshod methods in the one than in the other. Indeed business men might well study this book: much of it—particularly the chapter on style of writing, in which he criticizes the approved clichés—ought to reach a wider public. We thoroughly recommend the book to all hospital authorities.

ANDREW TOPPING.

PHARMACOLOGY FOR STUDENTS

The Essentials of Materia Medica, Pharmacology and Therapeutics. By R. H. Micks, M.D., F.R.C.P.I. Fourth edition. (Pp. 399. 18s.) London: J. and A. Churchill. 1947.

This book was first published in 1935, and since it has now reached a fourth edition it must be fairly widely read by medical students, most probably in preparation for examinations in pharmacology. Teaching on the use of drugs can be based either on their action as seen in the animal or on clinical experience. In recent years instruction founded on experimental observations has been increasingly successful, as may be concluded from the growing appreciation of books like that by Goodman and Gilman in America and those by Clark and by Gaddum in Britain. In so far as the medical student can be taught to link up his clinical work with his knowledge of what has been shown by experiment he ceases to belong to the class of doctor who has been obsolescent in the U.S.A. since 1920.

This book represents predominantly the clinical experience of the author, which he presents in many places in a somewhat dogmatic way. For many students this offers the advantage that the subject-matter is easy to learn, and in so far as pharmacology is reduced to a nodding-acquaintance with the medical use of a large number of substances the student should find all he needs to know, including accounts of drugs introduced very recently. In this edition the author has revised the section on general anaesthetics and narcotics, but it may be doubted how much wiser the student will be after reading the account of the stages of narcosis. This seems to be an exception to the clarity of presentation which prevails elsewhere.

J. H. BURN.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

British Surgical Practice. Vol. II. Edited by Sir Ernest Rock Carling, F.R.C.S., F.R.C.P., and J. Paterson Ross, M.S., F.R.C.S. (Pp. 540. £3.) London: Butterworth. 1948.

Conditions listed alphabetically from "Backache" to "Bursae."

Akute Äussere Prozesse. By Dr. Josef Riese. (Pp. 326. 40 Swiss francs.) Vienna: Verlag Wilhelm Maudrich. 1948.

A manual of acute external surgical conditions.

Medicine. Essentials for Practitioners and Students. By G. E. Beaumont, M.A., D.M., F.R.C.P., D.P.H. 5th ed. (Pp. 831. 30s.) London: J. and A. Churchill. 1948.

Much new material has been added to this well-known textbook.

Nature's Own Zoo. By C. M. Beadnell, C.B., F.ZS. (Pp. 141. 7s. 6d.) London: Watts. 1948.

Stories of natural history for children.

Medizinische Terminologie. By Dr. Rudolf Abderhalden. (Pp. 1,213. 32 Swiss francs.) Basle: Benno Schwabe. 1948.

A medical dictionary; in German.

Telepathy and Medical Psychology. By Jan Ehrenwald, M.D. (Pp. 209. 12s. 6d.) London: George Allen and Unwin. 1947.

A short account of telepathy occurring in psychotherapy.

Hindu Psychology. By Swami Akhilananda. (Pp. 241. 12s. 6d.) London: George Routledge. 1947.

A criticism of Western psychology and an introduction to Hindu thought.

Fundación Lucas Sierra. First Jornada Clinica, 1947. (Pp. 304. No price.) Chile: Uña del Mar. 1947.

Papers on various topics, including diabetes, cholecystitis, and jaundice.

Diseases of the Nose, Throat and Ear. By W. L. Ballenger, M.D., F.A.C.S., and H. C. Ballenger, M.D., F.A.C.S. 9th ed.; illustrated. (Pp. 993. 63s.) London: Henry Kimpton. 1947.

A textbook for the specialist; much new material for this edition.

Microscopic Anatomy of Vertebrates. By James I. Kendall, Ph.D., D.Sc. 3rd ed.; illustrated. (Pp. 354. 30s.) London: Henry Kimpton. 1947.

A manual for the student of comparative anatomy.

A Textbook of Mental Deficiency. By A. F. Tredgold, M.D., F.R.C.P., F.R.S.Ed. 7th ed. (Pp. 534. 30s.) London: Baillière, Tindall and Cox. 1947.

Mental deficiency is discussed and types described and illustrated with photographs.

Handbook of the Scientific Instrument Manufacturers' Association of Great Britain, Ltd. (Pp. 219. 10s. 6d.) London: The Secretariat, 26, Russell Square, W.C.1. 1947.

A list of member firms and their products.

Esiste una Vaccinazione Spontanea nella Tubercolosi? By Armanda Sala. (Pp. 55. No price.) Padova: Societa Cooperativa Tipografica. 1947.

A monograph on vaccination against tuberculosis by means of dead bacilli taken by mouth.

L'Œuvre de Louis Pasteur. By Henri Simonnet. (Pp. 106. 220 francs.) Paris: Masson and Cie. 1947.

A short review of Pasteur's work.

Vaccination par le B.C.G., par Scarifications Cutanées. By L. Nègre and J. Bretey. 2nd ed. (Pp. 107. 180 francs.) Paris: Masson et Cie. 1947.

A monograph on B.C.G. vaccination in man

La Pénicilline en Oto-Rhino-Laryngologie. By J. Terracol and J. Lapouge. (Pp. 150. 220 francs.) Paris: Masson et Cie. 1947.

A monograph on the clinical applications of penicillin.

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ONLY A BEGINNING

During the past three months few supporters of the Act have contributed to our correspondence columns. In each of three successive weeks a rough estimate showed that we were receiving between 20,000 and 30,000 words in letters from medical men in Britain. Not all these letters could find their way into print, but to be fair to the supporters of the Act a much smaller percentage of their letters was rejected than of those from opponents of the Act. It is right that those who disagree with the B.M.A. and are in favour of the Act should have the opportunity of expressing their opinions. We therefore open this week's correspondence columns with letters from two influential medical men who are members of the Socialist Medical Association and advocates of the National Health Service Act, the provisions of which are in part or in whole disapproved of by the overwhelming majority of the medical profession of this country. The first letter is from Dr. Stephen Taylor, M.P., who was formerly on the staff of the *Lancet* and is now Parliamentary Private Secretary to Mr. Herbert Morrison. Dr. Taylor has been loyally supporting the policy of his party, and many medical men have probably read the debate between him and Dr. Charles Hill in the recent issue of *Picture Post*, and have also heard him in the debate over the air with Dr. R. W. Cockshut, a member of the B.M.A. Council. He is, if we may say so without appearing to be patronizing, an able man whose willingness to argue in public with those who disagree with him commands respect. The second letter in this week's *Journal* is from Mr. Aleck Bourne, a consultant who by his contributions to medicine has earned the right to be called "eminent" in his own field of work. Though we may disagree with the opinions of these two medical men, what they say demands the careful consideration which should be given to opinions sincerely held by men of intelligence.

Mr. Aleck Bourne is at some pains to explain away the results of the plebiscite. The B.M.A., he says, "might have assumed around 56,000 Noes without troubling to ask the question"—that is, the first question in the plebiscite. If the plebiscite had resulted in a majority of approval, we may beg to doubt whether Mr. Bourne would have troubled to write to the *Journal* questioning the interpretation to be put on it. He believes that what he calls the *volte-face* of the whole-time medical officers of health is due less to consideration of the Act than to disapproval of Mr. Aneurin Bevan as Minister. But he does not ask whether this was also the motive of the 634 whole-time Government medical officers. Like all powerful political figures, Mr. Bevan has his enemies, and he would certainly seem to have trailed his coat before the medical profession, or, at least, before the B.M.A. It is, of course, possible that some men may have voted the way they did from animosity to Mr. Bevan. It is also possible that some men voted Yes out of animosity to the B.M.A. But it is idle to suggest that such a huge proportion of an intelligent section of the community should be so irresponsible as to arrive at a decision out of personal pique. Mr. Bourne and those who think as he does should reflect that there is something seriously wrong with the present National Health Service Act when large majorities of every section of the profession express their disapproval of it, especially when it is borne in mind that the medical profession as a whole has agreed with the principle of providing a comprehensive medical service for the whole community. There must obviously be many and varied grounds for disapproval, but we believe that there is one common factor—and that is the grave fear of the effect upon the art and science of medicine of the nationalization of what has hitherto been an independent and free profession. It is not necessary to look far across the Channel to see how easily these days liberty and freedom are trampled upon in the name of that much interpreted word "democracy." We agree with Mr. Bourne's view that "now is the time for wisdom, vision, and sense of proportion; not for emotion, heat, battle-cries, and the metaphors of war." One of his observations, however, will cause considerable surprise. He writes: "If the B.M.A. attempts to lead the profession into conflict on July 5 by continued *refusal to accept the Minister's offer to re-examine the four unacceptable provisions of the Act* it must fail. . . ." (Our italics.) The Minister of Health has made no such offer. We cannot forecast what the attitude of the Council of the B.M.A. would be if such an offer were made, but it seems highly unlikely that the Council would refuse to re-examine with the Minister what Mr. Bourne describes as "the four unacceptable provisions of the Act."

An air of sweet reasonableness pervades the letter by Dr. Stephen Taylor. He appeals to the B.M.A. "as a group of good constitutional democratic reformers." But Dr. Taylor seems to forget that the efforts of these good constitutional democratic reformers have been completely without avail. For eight months last year the Negotiating Committee argued patiently with the officers of the Ministry of Health on points which to them as workers in the new Service were held to be unacceptable. The Negotiating Committee had reason to believe that some at least of these points were looked upon by the Minister's officers as reasonable ones. But all this hard work was brought to naught by the Minister when he met the Negotiating Committee on Dec. 2 and 3. In fact, the Minister told the Committee that his officers had no right to hold opinions, but were there to administer policy. In this he was no doubt constitutionally accurate, but it made the negotiations entered into with his approval, and with the possibility of amendment of the Act in mind, rather farcical.

Dr. Taylor persuasively examines some of the points at issue and tries to whittle away each one of them. The only positive suggestion he has to make is that those who wish

should be able to pay their basic salary to the superannuation fund—a somewhat ingenuous avoidance of the real objection to the basic salary. Dr. Taylor, in fact, advises the medical profession to come into the Service and then get the Act amended when it is seen to be unworkable in this, that, or the other respect. But what confidence can the medical profession have in their ability to do this once they are all in a State medical service, knowing that when they were independent they failed to secure modifications which would make it possible for them to enter the Service? And Dr. Taylor once more begs the question in his statement that "any attempt to frustrate the law by extra-parliamentary means is bound to end in failure"; and he reminds us of the General Strike of 22 years ago. The position of the medical profession is perfectly clear. It seeks to amend the Act and conditions of service so as to make it possible for doctors to take part in it as willing co-operators with the Government in providing an efficient medical service for the nation. If the medical profession cannot persuade the Government to introduce such modifications it remains free in the terms of the Act itself and in accordance with the utterances of the Minister of Health not to accept service under the Act. The position is quite unambiguous, and Dr. Taylor knows it.

We have asserted over and over again in these columns that it is the intention of the present Government to introduce a full-time salaried medical Service. It is because of this intention that the medical profession resists the payment of the general practitioner partly by salary. Government spokesmen have rubbed in the fact that it is by salary that they will be able to control general practitioners, because of the Treasury's fear that the doctor's certificate will lead to a heavy drain on the social insurance funds. The motive behind basic salary is distrust of the doctor. Dr. Taylor considers that the medical profession is safeguarded by the Government's declaration that it has no intention of introducing a salaried service. Those who recall the Government's promise in 1940 that the E.M.S. was not a step towards the introduction of a State hospital service now know what value to attach to Government promises made, no doubt, in good faith at the time they were made, but quickly forgotten after a lapse of a few years. The fears of the medical profession are endorsed and completely justified by a published statement made by Mr. Somerville Hastings, M.P., in December,[1] in the same month in fact that Mr. Bevan was putting before the Negotiating Committee his proposals for a universal basic salary. *"Before long,"* Mr. Somerville Hastings writes, *"the logic of events will make clear that for a really efficient Service full-time salaried officers are essential"* (our italics). Mr. Somerville Hastings is a very influential medical figure in the Labour Party, and the profession should be grateful to him for giving them this warning and for having the honesty to state what we know to be the intention of the Labour Party. "The National Health Service Act," he writes in the same article, "makes a beginning of the socialization of one of the learned professions and the conversion of a series of commercial enterprises into a national service run for the public good. Of course," he adds, "it is only a beginning. . . ." He observes that the health centres provided for in the Act are an essential part of the new Service. "An inalienable part of the health centre idea," he observes, "is team work by all who are working in and from these centres"; and then comes another warning which general practitioners should take to heart: "But how can this be possible in the case of doctors paid by capitation and inevitably, therefore, competing with one another for patients?" In the light of these observations it is easy to understand why the Minister of Health ignores the Negotiating Committee's request that the method of remuneration by capitation fee should be embodied in the Act, and why he adheres to the idea of a universal basic salary. The plan behind the present National Health Service Act is plain. It is a State medical service, and if the present Government is given another five years of office in the next election Mr. Somerville Hastings's logic of events will be followed to a logical conclusion.

[1] *Medicine To-day and To-morrow*, Dec., 1947, 6, No. 4, 12.

LUPUS VULGARIS AND VITAMIN D

For many years the management of lupus vulgaris has been a troublesome problem to the dermatologist. Though fortunately not a particularly common disease, its chronicity and resistance to treatment combined with the unsightliness it so often produces have made it one of the most awkward of the problems connected with tuberculosis. It is true that considerable progress has been made during the last half-century, beginning with the discovery by Finsen of the beneficial effect of light, a discovery which was developed by Sequeira with much success at the Queen Alexandra Institute of the London Hospital, for many years the Mecca of sufferers from cutaneous tuberculosis. More recently local treatment by means of concentrated light has been reinforced by general light baths, and this has reduced the percentage of refractory cases very considerably; but it has always been a prolonged and tedious method of treatment, and the great expense involved has discouraged other institutions from emulating the example of the London Hospital in making special provision for Finsen-light treatment. The public conscience was aroused long ago over the treatment of tuberculosis, but lupus, being a non-fatal complaint, has never been taken as seriously as it deserves by the various health authorities concerned. Special centres with an adequate number of beds and staffed by the appropriate specialists have never been provided. All over the country there are ill-equipped out-patient clinics at which patients suffering from lupus attend more or less regularly for many years. Some few are benefited and even cured, but there are many in whom the disease remains stationary or even progresses. Fortunately there is now fresh hope for these patients.

The usefulness of cod-liver oil in the treatment of many forms of tuberculosis has of course long been known, and it appears that it occurred quite independently to Charpy in France and to Dowling in London to try the effect on lupus of treatment with large doses of calciferol. Charpy began his work in 1940, but his results were first published

in 1943 in an extremely short communication to the Lyons branch of the French Society of Dermatology in July of that year, and this was followed in December by another communication to the Paris meeting of the Society. And it may here be remarked that surely there never was a discovery of a new therapeutic method of great importance so modestly announced. Dowling began his observations in 1943, and his first patient was a severe case which had been treated unsuccessfully by Finsen light and general light baths for a number of years, and which after three months' treatment with calciferol improved dramatically. We suspect that in this first instance the calciferol must have been given as a forlorn hope. Thus encouraged, Dowling and his colleague Prosser Thomas collected all the cases they could find, and in November, 1945, were able to demonstrate the value of the new remedy by exhibiting 11 of their patients to the Dermatological Section of the Royal Society of Medicine. A great impression was made on those present, and since then the excellent results they reported have been confirmed by other dermatologists all over the country.

The employment of calciferol in large doses for the treatment of lupus is now recommended in the textbooks, and in the recent edition of Gardiner's well-known handbook Kinnear writes that it is the treatment of choice. But that of course is not the end of the matter. In this issue of the *Journal* we are publishing a report by Dowling containing his observations on a series of 44 cases treated in the Treloar Hospital and the Morland Clinics at Alton, institutions which have for many years been devoted to the treatment of tuberculosis, especially in the young. The patients there are resident and therefore much more easily observed and controlled than if attending a crowded out-patient department. (It is interesting to find that one of his colleagues in this investigation is Dr. Suzette Gauvain, the daughter of the late Sir Henry Gauvain, who was Medical Superintendent of the Treloar Hospital from its foundation until he died.)

Three important questions are now raised by Dowling and his colleagues. First, how does calciferol act? Secondly, how can it be used most effectively? And thirdly, can it be made safe or relatively safe? We are far from being able to answer as yet the first of these questions. We can only say that calciferol certainly does not owe its curative properties to its direct action on the tubercle bacillus, for even *in vitro* it has none. It seems to act in the same way as the older remedies such as cod-liver oil, heliotherapy, and ultra-violet light baths, which all depend on vitamin D for their action, but in the massive doses now employed—100,000 to 150,000 i.u. per day—calciferol promotes much more rapid healing of tuberculous tissue. It appears that a strong stimulus is given to the connective tissue, which proliferates actively, invading and breaking up the granulomatous deposit.

Such an active remedy as this is not likely to be free of dangers, for, as Dowling says, few remedies are absolutely safe, and slight signs of toxicity are not infrequent. They were noticed in 17 of the 34 adult cases treated at Alton, and it is a curious fact that clinical improvement in the disease has often been most marked during the toxic phase. It is probable, therefore, that the most effective therapeutic dose is very near the toxic limit. The signs of calciferol poisoning are pallor, thirst, polyuria, headache, loss of appetite, and sickness. There is always a rise in the blood sedimentation rate, and in children a rise in the blood urea. Results very similar to those of Dowling and his colleagues at Alton were reported in last week's *Journal* by Powell, Pearsall, and Wigley, from the Dermatological Department at Charing Cross Hospital, but the latter workers seem inclined to prefer pure calciferol in alcoholic solution to the high potency "ostelin" tablets used by Dowling and his colleagues. This resembles the method of administration employed by Charpy, and, they state, seems less inclined to produce toxic symptoms than the ostelin tablets.

Valuable as this new method of treatment is, it will certainly not cure all cases of lupus vulgaris. The Charing Cross team estimate that it is safe to assume that about 60% of the cases may be cured by calciferol alone, while the Finsen Institute in Denmark claims about 75% by the employment of actinotherapy, etc. Dowling and others point out that, though calciferol reinforces enormously the effect of local treatment, it does not replace it. In patients whose treatment was begun with calciferol improvement was greatly accelerated when local treatment was added, and it was also found that in patients with extensive disease who had been receiving actinotherapy for long periods the patches so treated were the first to respond to calciferol. A further advantage was that the plastic operations so often required in cases of severe lupus could be undertaken much sooner than was possible when calciferol was not used. In such cases the drug seems to promote the early healing of wounds. It is therefore not likely that the elaborate centres which have been required for the satisfactory treatment of lupus vulgaris can be dispensed with, but obviously much better and more rapid results will be achieved than hitherto.

A further question which must occur to everyone is, Does calciferol prove effective in other forms of tuberculosis? It has already been tried in 31 adult cases of non-cutaneous tuberculosis at Alton, with on the whole extremely good results—especially on tuberculous glands, in which it produced rapid shrinking and calcification. In last week's *British Medical Journal* Ellman and Anderson described the remarkable improvement which followed the administration of calciferol to a patient severely ill with tuberculous peritonitis. In tuberculosis of the larger joints, however, results have been rather disappointing. It is also a disappointment to find that Sandiland and Franklin, trying out the effect of calciferol on pulmonary tuberculosis at the Kettlewell Hospital, Swanley, have met with no success whatever. Bearing in mind that actinotherapy in phthisis has long been known to be unsatisfactory, and indeed often extremely dangerous, it is not surprising that calciferol, the action of which seems to be closely allied to that of actinotherapy, should also prove a failure in this field. Nevertheless there is no doubt that we have here a new therapeutic method of great importance.

CHONDROMALACIA PATELLAE

Chondromalacia patellae is a condition of osteoarthritis of the knee limited to the patello-femoral articulation. The cartilage on the under surface of the patella becomes roughened and fibrillated, and hence the knee grates on movement. Small osteophytes grow on the periphery, and the synovial membrane becomes sensitive where it is attached to the border of the patella. Quite young adults may suffer from chondromalacia patellae, and therefore its aetiology probably differs from ordinary osteoarthritis, which can be regarded as a senile degeneration following faulty nutrition of the articular cartilage. Many of the patients report a previous injury, and it is known that large fragments of bone and cartilage are not infrequently broken off from the back of the patella to become loose bodies in the knee-joint.[1] It seems likely, therefore, that the degeneration results from repeated minor injuries caused by the patella moving on a bed that does not fit it exactly. The patella is constructed to move up and down on the femoral condyles. Nature never meant it to move sideways, but it frequently does when there is a lack of balance between the medial and lateral vasti muscles.[2] According to some observers chondromalacia is always found on patellae that are subject to recurrent dislocation.[3] Excision of the patella in preference to the more orthodox realigning operations is advised by McFarland[4] in cases of recurrent dislocation, since he believes that chondromalacia will inevitably result in a degenerated painful patello-femoral articulation in later life.

The symptoms of chondromalacia patellae are those of osteoarthritis in general—giving way, pain after use, and stiffness after sitting. The giving way, besides being due to a reflex inhibition of the quadriceps muscle in response to a twinge of pain, may be caused mechanically if, as sometimes happens, the cartilage on the back of the patella is split tangentially to the surface to form a loose flap. The pain, which is more of an ache than a real pain, is located in the knee. Coarse grating can be felt when the patella is pressed down on the femur and moved from side to side, and this manœuvre causes pain. Movements of the knee, though full, are painful through a small arc. Many knees otherwise normal creak and grate when moved, and the diagnosis of chondromalacia patellae should not be made unless the grating is painful and unless there is a painful arc of movement, particularly since the patient is in danger of having his knee-cap removed once the diagnosis is made.

There seems no doubt that chondromalacia patellae is a clinical entity, but whether it warrants operative treatment is open to question. The condition has been brought into prominence by Swedish surgeons.[5] They advocated paring off the fibrillated cartilage and removing the peripheral osteophytes. The rationale of the operation did not commend itself to many members of the British Orthopaedic Association on their visit to Scandinavia just before the war. They felt doubtful whether the symptoms warranted operation, and they thought that if operation was necessary the patella had better be removed. Elsewhere in this issue Mr. C. Gray reports favourably on the results of removal of the patella for this condition. All his nine patients were relieved of symptoms which in many cases were of long standing, and their knees recovered full range and full power.

Excision of the patella has become popular as a method of treating fractures of the patella ever since Brooke[6] demonstrated that patients could return to work sooner after this than after any other operation. Nevertheless some experienced surgeons are unconvinced of the merits of this procedure. The operation is certainly not foolproof, for unless the gap left in the quadriceps apparatus after removal of the patella is cobbled together tightly the patient is unable to extend the knee fully against powerful resistance. In several of Gray's cases recovery was long delayed on account of persistent weakness of the quadriceps.

The long-term effects of removal of the patella on the function of the knee are as yet unknown. The medium-term results are good, for once the quadriceps has regained full power the knee appears to function as well as a normal knee. It would seem that excision of the patella, when properly done, is a justifiable and useful operation, and that it is indicated for those patients with chondromalacia patellae whose symptoms persist in spite of treatment with rest and physiotherapy.

[1] Coleman, H. M., *J. Bone Jt Surg.*, 1948, **30B**, 153.
[2] Duchenne, G. B. A., *Physiologie des mouvements démontrée à l'aide de l'expérimentation électrique et de l'observation clinique*, 1867. Paris.
[3] Wiberg, G., *Acta chir. scand.*, 1941, **85**, 421.
[4] *J. Bone Jt Surg.*, 1948, **30B**. 158.
[5] Karlson, Stig., *Acta chir. scand.*, 1939, **83**, 347.
[6] *Brit. J. Surg.*, 1937, **24**, 733.

SURGICAL TREATMENT OF HYPERTENSION

Experience of the results of lumbo-dorsal sympathectomy (Smithwick's operation) in cases of essential and malignant hypertension is accumulating in this country. A recent discussion at the International Conference of Physicians helped to clarify the present position.

Though the aetiology of hypertension remains obscure important new observations have been recorded in recent years. The experiments of Goldblatt, Wilson and Pickering, Wilson and Byrom, and others, focused attention on the kidneys; but subsequent histological studies on the kidneys of hypertensive patients—the material being obtained both at biopsy and necropsy—revealed no evidence of renal ischaemia in the earlier stages of the disease. The illuminating work of Trueta and his colleagues, however, has indicated that functional renal cortical ischaemia may develop as a result of the juxta-medullary by-pass coming into operation too readily. Those who react excessively to the cold pressor test of Hines may well develop such a shunt too easily. Again, the hereditary factor recently stressed by Platt might determine the sensitivity of this mechanism or the extent of the by-pass. It is now suggested that the success of sympathectomy may depend upon its shunt-preventing effect. Elsewhere in this issue Dr. Geoffrey Bourne discusses these views. He maintains that the ideal time to perform lumbo-dorsal sympathectomy should be at the end of the functional stage of hypertension, before the development of irreversible changes in the renal juxta-medullary and cortical vessels. Few would advise sympathectomy in cases of mild hypertension without degenerative cardiovascular changes, for the prognosis is then good and incapacity *nil*; yet when these conditions no longer hold good it may be too late. This is the crux of the problem.

Bourne thinks that sedation by means of sodium amytal is as good a test as any for attempting to assess the likely result of sympathectomy. One difficulty in predicting the outcome depends on the fact that after sympathectomy the blood pressure may fall for more than one reason —because normal vasoconstrictor tone in the legs and splanchnic area is eliminated; because spasm of the renal cortical vessels is abolished; or because veno-motor tone in the legs is reduced. Post-operative faintness from postural hypotension is probably due to a reduced cardiac output resulting from collapse of the venous pressure in the erect posture and incomplete filling of the heart. Lowering of the blood pressure brought about in this way would not be beneficial, and a reduction of the renal blood flow might well have a directly adverse effect. More work on this aspect of the subject is needed.

SALICYLATES IN RHEUMATIC FEVER

When D. B. Lees popularized the use of sodium salicylate in the treatment of rheumatic fever he recommended large doses (20 g. or more a day), and advised that it should be combined with twice as much sodium bicarbonate. Since his time, however, the value of salicylates in this disease has been much debated, and his advice has been largely forgotten. The usual mixtures of sodium salicylate contain sodium bicarbonate, but as a rule in the same dose. The belief has grown that while salicylates control the fever and joint pains of acute rheumatism they have no influence on the course of the disease and do not prevent the all-important carditis.

In most hospitals the custom is to administer salicylates in doses sufficient to relieve pain and temperature and to stop them when the first signs of salicylism appear—commonly tinnitus, deafness, or vomiting. However, in 1943 Coburn[1] reopened the whole question by claiming that, if given early and in doses large enough to produce a concentration in the blood of 35 mg. per 100 ml., salicylates have a curative action and will prevent the development of carditis. Coburn advised intravenous administration in order to obtain this concentration rapidly and with certainty. It soon became clear that this method of giving the drug was unnecessarily dangerous, because concentration in the blood as high as that recommended by Coburn can easily be obtained if it is given by mouth. Further, Coburn's views on the efficacy of salicylates given in this way were not confirmed. Smull, Wegria, and Leland[2] investigated what effect the simultaneous administration of sodium bicarbonate had on the salicylate concentration in the blood, and they found that it was decreased. They suggested that this was the reason for the lower incidence of toxic manifestations when alkali was given. Parker[3] confirmed this and showed that the decreased level of salicylates in the blood was due to an increased rate of excretion by the kidneys in the presence of the alkali. More recently, however, it has been pointed out by Peters[4] that while there is some increased renal excretion of salicylates when sodium bicarbonate is administered simultaneously this does not materially affect the blood concentration. He states, as Lees did, that to obtain the full benefit of salicylates they must be given in large doses (at least 15 g. daily), combined with twice as much sodium bicarbonate. He claims that this has a specific detoxicating effect, greatly reducing the symptoms of salicylism despite the large doses given. Furthermore, he believes that salicylates have a curative effect. It is interesting to note that Peters states that he came to his conclusions, which are exactly the same as those of Lees, while unaware of the latter's work or advice.

While there is no doubt about the value of salicylates as analgesics and antipyretics it is plain that their influence on the course of rheumatic fever is still a matter for conjecture and further study. Twenty years ago Derick, Hitchcock, and Swift[5] suggested that salicylates inhibited antibody formation. Perry,[6] using acetyl-salicylic acid in doses of 2–3 g. daily, was unable to demonstrate in volunteers any effect on the antibody response following the injection of typhoid vaccine. More recently Jager and Nickerson[7] have studied the antibody response to typhoid vaccine in a series of patients whose plasma salicylate level was being maintained at from 20–41 mg. per 100 ml. by means of massive doses of the drug. They found that the formation of typhoid H and O antigens was considerably reduced compared with controls, and that other blood changes noted in the controls—leucocytosis, increase in fibrinogen and gamma globulin—were slight or absent in the patients receiving salicylates. These conflicting findings are probably due to differences in dosage of the drug.

1 *Johns Hopk. Hosp. Bull.*, 1943, **73**, 435.
2 *J. Amer. med. Ass.*, 1944, **125**, 1173.
3 *Quart. J. Med.*, n.s., 1947, **16**, 309.
4 *Acta med. scand.*, 1947, **128**, 51.
5 *J. clin. Invest.*, 1927–8, **5**, 427.
6 *J. Path. Bact.*, 1941, **53**, 291.
7 *Amer. J. Med.*, 1947, **3**, 408.

COMPLICATIONS OF MUMPS

Mumps is one of the "nuisance" infectious diseases which has never achieved a serious notoriety in this country. Occurring chiefly in children, the complications are few and of minor importance. Smith,[1] whose experience was among boys around the age of puberty, found it a disease of very wayward infectivity and considered it so mild as not to warrant any attempt at prevention by passive immunization. The recent article in our columns by Lawrence and McGavin[2] is of value in drawing attention to its occasional severity in adults.

Although meningo-encephalitis is the most alarming complication and has great interest to the clinician it is not perhaps the most important. It is rarely fatal and sequelae are uncommon, although it should be noted that they occurred in four of Lawrence and McGavin's cases. Whether mumps is primarily an infection of the central nervous system, as Philibert[3] has argued, is not yet clear, but there is considerable variation in the incidence of meningitis recorded by different workers. Candel[4] found pleocytosis of the cerebrospinal fluid in 30 out of 38 cases. In Lawrence and McGavin's series involvement of the central nervous system could be suspected in 42 out of 235 cases; on the other hand Dermon and Le Hew,[5] dealing with a similar kind of population, recorded one such case out of 129. Holden, Eagles, and Stevens[6] performed routine lumbar puncture on the fourth day of illness and found in 33% of their cases some evidence of meningitis, although the cerebrospinal fluid abnormality was slight in a number of instances. Much depends, obviously, on the care with which the abnormality is looked for, for involvement of the central nervous system would not be suspected in many cases.

Although meningo-encephalitis may be disturbing, the prognosis is almost invariably good. It is more difficult to

1 Smith, R. E., *Guy's Hosp. Rep.*, 1943, **92**, 1.
2 *British Medical Journal*, 1948, **1**, 94.
3 *Progr. méd., Paris*, 1932, 145.
4 *Nav. med. Bull., Wash.*, 1944, **42**, 861.
5 *Amer. J. med. Sci.*, 1944, **208**, 240.
6 *J. Amer. med. Ass.*, 1946, **131**, 382.
7 *New Engl. J. Med.*, 1942, **227**, 277.
8 *Nav. med. Bull., Wash.*, 1944, **42**, 1388.
9 *J. Urol.*, 1945, **54**, 547.
10 *Amer. J. med. Sci.*, 1945, **210**, 661.

be dogmatic about the permanent effects of orchitis, and not the least interesting aspect of Lawrence and McGavin's paper lies in the follow-up of patients who suffered from this complication. They found atrophy in some degree in 43%, a total figure not greatly at variance with those of Wesselhoeft,[7] 55%, and Dermon and Le Hew,[5] 48%. It must be remembered that both testicles are not usually involved, so that lowered fertility rather than complete sterility might be expected. In Lawrence and McGavin's cases only nine showed a severe degree of atrophy, but from the subsequent history it seemed that sexual activity was not impaired. Whether their evidence on this point can be regarded as evidence of fertility is arguable, for of course an atrophic testicle might not affect sexual activity although the sperm was infertile.

The subject has interest at present because of the conscription of young men in this country for military service. An increased incidence of mumps among these men, with its attendant risk of orchitis, might thus be expected. The information required for a proper appraisal of the results of orchitis is the history of the involved patients after marriage, and it would be of great service if someone with the available facilities could study the problem. Decompression operations have been advised by Wesselhoeft[7] and others,[8 9] but even this does not ensure that atrophy will be avoided. Most writers agree that sterility is uncommon, and Lawrence and McGavin's paper would suggest agreement with such a conclusion. The possible value of gamma globulin prepared from mumps convalescent serum, as suggested by Gellis *et al.*,[10] in preventing orchitis is perhaps worth further study.

INCLUSIONS IN THE RED BLOOD CORPUSCLES

Granules within red blood cells have for long excited interest and speculation. Sometimes these granules seem to indicate the presence of parasites, variously classified as *Bartonella, Grahamella, Eperythrozoa,* or *Anaplasma.* Some of these parasitic granules appear in large numbers only when splenectomy has been performed. Other granules in red cells—the well-known Schüffner bodies—are seen when certain species of malarial parasite are present. They are presumably formed by the breakdown of cytoplasmic constituents of the red cells. Nuclear remnants, Howell–Jolly bodies, can be differentiated by the fact that they stain with haematoxylin and with methyl green and also give a positive Feulgen reaction for nucleic acid. Heinz granules are eosinophilic; Isaac's granules[1] appear black in unstained preparations and fail to take up the usual stains. Wenyon and Low in 1914[2] reported that Seidelin's bodies, which are seen in the red cells of young guinea-pigs, stain purplish-blue by Leishman's method, but their significance requires further investigation. Some granular inclusions in red cells are apparently associated with toxins in the body; for example, the basophilic stippling seen in cases of lead poisoning is well known. Mushett and Siegel[3] have recently found that administering massive doses of mepacrine to various animal species causes an anaemia and the occurrence within both red cells and lymphocytes of inclusion bodies staining dark blue with Wright's stain but giving no reaction for iron. Pyridoxin deficiency, according to Wintrobe and his colleagues,[4] also gives rise to bodies within the red cells which stain blue by Wright's stain. In this condition there is excess of iron in the blood (hyperferraemia) and marrow hyperplasia, but no evidence of excessive haemolysis.

These findings contrast with those of Pappenheimer and others[5] in 1945 of curious erythrocytic inclusion bodies in man. Two of the patients were women with haemolytic anaemia of the acquired type; the third patient was a young man with anaemia of undetermined type associated with splenomegaly. Splenectomy was performed in all three cases and it was only after this operation that the inclusions were seen. The bodies were coccoid or less commonly bacillary in form, and stained reddish-purple or purple-blue with Giemsa's method while giving a positive reaction for iron but a negative Feulgen test. The bodies were later found in the reticulo-endothelial cells of the bone marrow, liver, and lymph nodes of the two cases of haemolytic anaemia. In a subsequent search similar bodies were found in the red cells or endothelial cells of the spleen in cases of thrombocytopenic purpura, haemolytic jaundice, sickle-cell anaemia, fatal cases of rheumatic fever, and in four cases of a group of 22 comprising cases of Banti's disease, cirrhosis of the liver, and congestive splenomegaly.

McFadzean and Davis[6] have recently studied the occurrence and nature of these Pappenheimer bodies; their communication is accompanied by excellent photomicrographs and coloured plates. In addition to those in red cells in the peripheral blood the inclusion bodies have been found in monocytes, reticulum cells, and the bone marrow. In the marrow they may be seen in all members of the red-cell series which show evidence of haemoglobin formation but not in early basophil normoblasts or in early erythroblasts. Material giving similar staining reactions was also seen lying free in the marrow as discrete granules of globulate masses. Presumably such material arises from rupture of affected cells. It does not fluoresce when examined by fluorescent microscopy. While cases with acquired idiopathic haemolytic anaemia show after splenectomy a considerable increase in the number of red cells with inclusions in the peripheral blood stream, this is not the case in congenital acholuric jaundice. McFadzean and Davis have failed to find Pappenheimer bodies in the blood of 62 normal people, but they have noted their occurrence in cases of erythroblastosis foetalis, traumatic rupture of the spleen with splenectomy, blackwater fever, and anaemia associated with chronic infection, carcinomata, and chronic nephritis.

The nature of the Pappenheimer bodies is still not known with certainty. It seems unlikely that they are parasites, and their relationship to the siderotic granules described by Grüneberg[7 8] and Doniach *et al.*[9] in mice with a genetic abnormality is still uncertain, although they are possibly fundamentally similar. For the time being all that can be said is that they develop as a result of interference with haemoglobin anabolism.

1 *Anat. Rec.*, 1925, **29**, 299.
2 *J. Trop. Med. Hyg.*, 1914, **17**, 369.
3 *Blood*, 1946, **1**, 537.
4 *Johns Hopk. Hosp. Bull.*, 1943, **72**, 1.
5 *Quart. J. Med.*, n.s., 1945, **14**, 75.
6 *Glasg. med. J.*, 1947, **28**, 237.
7 *Nature*, London, 1941, **148**, 114, 469.
8 *J. Genet.*, 1942, **44**, 246.
9 *J. Path. Bact.*, 1943, **55**, 23.

THE EDITOR OF "THE TIMES"

We announce with much regret the death at the age of 57 of Mr. R. M. Barrington-Ward, the Editor of *The Times.* He was the fourth son of the Rev. M. J. Barrington-Ward, D.D., and one of five brothers who were all King's (or Queen's) Scholars of Westminster. His brother, Sir Lancelot Barrington-Ward, F.R.C.S., is Consulting Surgeon to the Hospital for Sick Children, Great Ormond Street.

Mr. Barrington-Ward was on the staff of *The Times* from 1913 to 1914 as one of the Editor's secretaries. During the war of 1914–18 he was awarded the M.C. and the D.S.O. After that war he joined the staff of the *Observer*, on which he served as Assistant Editor for eight years. He rejoined the staff of *The Times* in 1927 and succeeded Mr. Geoffrey Dawson as Editor in 1941.

RHEUMATISM IN JOHN HUNTER'S TIME

HUNTERIAN ORATION

The annual Hunterian Oration was delivered before the Hunterian Society at the Mansion House, London, on Feb. 23 by Dr. W. S. C. Copeman. Although Hunter made no major contribution to our knowledge of rheumatic diseases, Sir Charles Scudamore, writing on rheumatism, said that no more original genius illuminated the horizon.

Dr. Copeman pointed out that the eighteenth century was the age of theorists and system-makers. De Sauvages in his great work *Nosologia Methodica*, published in 1763, made the first real attempt at a systematic classification of diseases; he defined the word "rheumatism" as a generic term for many diseases affecting the bones and muscles and accompanied by pain and disability. The humoral theory of the origin of these diseases lasted well into the eighteenth century, and no aetiological distinction between acute and chronic rheumatism was made except for the "scorbutick" type described by Sydenham, a term which seemed to have been designed by him as a generic one for all cases which he found it difficult to classify otherwise. Lesions of the heart in acute rheumatism were not mentioned until Lettsom reported the result of a necropsy he performed in 1786 on a child aged 6. David Pitcairn (1749–1809) was the first to attribute cardiac disease entirely to acute rheumatism, and William Heberden the elder (1710–1801) was the first to describe and name angina pectoris, which he did in 1768, quoting twenty such cases in his *Commentaries*. The first post-mortem report on a case of rheumatic disease that Dr. Copeman had been able to discover was one by John Hunter himself in his "Account of the dissection of morbid bodies" (No. 54 in the Hunterian MSS.). The case was evidently one of osteoarthritis in an old woman. Hunter found multiple loose bodies in both knee-joints and one in the ankle.

Very little information was available on the incidence of rheumatism in the eighteenth century. A pamphlet on diseases in the Army, published in 1703 by T. D. Reide, surgeon, stated that rheumatism was common among the men in Chatham barracks and in the West Indies, but "was not attended with such severe symptoms as I have seen in our army in America." In the first month of its opening in 1734 St. George's Hospital, out of a total of 65 cases, received 5 with a diagnosis of rheumatism, and one of these patients died. Sir John Pringle, the Army physician, was the first to make specific reference to the possibility of preventing rheumatism when in 1752 he suggested that, as cold appeared to be the cause, extra clothing and blankets should be issued to the troops in winter, also fuel with which to dry their clothes, but not their bodies, seeing that this was better done by exercise.

Methods of Treatment

The object of treatment was to depress any fever and to draw off "acrid substances," which was done by bleeding, purging, vomiting, and locally by blistering. Boerhaave declared that rheumatism "is always cured by bleeding, cooling, and repeated purges, ally'd at night with a narcotic." The same writer, in advocating other measures, suggested that towards the end of the case "dry hot frictions should be tried, together with the use of antiscorbutics." For bleeding, up to a dozen leeches might be used, and for purging the drugs chiefly employed were scammony, senna, and Glauber's salt; ipecacuanha, guaiac, and Jesuit's bark were also prescribed. Colchicum was reintroduced by Stoork, of Vienna, in 1763, but its use remained chiefly in the hands of quacks. Vitamin therapy was perhaps envisaged by Sir R. Blackmore in 1726 when he recommended for scorbutical rheumatism remedies compounded of vegetable juices, "scurvey grass," and water of horse-radish. Excess of wine and spirits was advocated "to burn off the gout," until Heberden in 1768 pointed out the folly of this procedure, and Cadogan later advocated an austerity regime. Towards the end of the century Latham enjoined total abstinence.

Blackmore seemed also to have been the first to advocate water for medicinal drinking purposes. Falconer in 1795 recommended that when any fever had abated cautious immersion in a bath at 85–90° F. for ten to fifteen minutes —never for longer—might be tried, and repeated two or three times a week, with a slight increase of temperature. A curious type of bath treatment was referred to by Latham as being popular on the Continent. This was the marine-acid bath for gouty patients. Exercise on horseback had been advocated by Sydenham, or, if this could not be tolerated, the same effect might be obtained by "riding in a sedan chair." English spas such as Buxton had records which showed them to have been used for the treatment of rheumatic disorders as far back as the sixteenth century. By the end of the eighteenth century most of the leading physicians had adopted some form of "expectant treatment," as it was generally found that patients did as well under this regime as when subjected to the earlier elaborate and exhausting methods.

A vote of thanks to the orator was proposed by Dr. Forestier, of Aix-les-Bains, and seconded by Mr. Mortimer Woolf.

Reports of Societies

FUTURE HOSPITAL SERVICE

A Reply to the Surveys

A meeting of the Epidemiological Section of the Royal Society of Medicine was held on March 1, with Dr. W. S. C. COPEMAN in the chair. Sir ERNEST ROCK CARLING opened a discussion on "The Hospital Service of the Future."

He began by saying that when he criticized the hospital service of the past and present he wanted to make it clear that the defects were due, first and foremost, to a burden too grievous to be borne. Sometimes the difficulty was lack of money, often it was the time-honoured existing system or plurality of systems; in one area it was the rigidity of parochial boundaries, in another it was isolation. Everything he had to say had been known for over a quarter of a century, was stated in the Dawson Report of 1920, and had been restated by responsible bodies in the professional journals.

It was the Surveys instituted by the Ministry of Health to ascertain the facts which put the knowledge on a firm basis. The Surveys were carried out by men of great experience, and quite independently, but the results showed a remarkable degree of similarity. North, south, east, and west, the criticism followed the same general lines. In his view the National Health Service Act, with every feature of which he must not be supposed to be in accord, met the situation in a way calculated to redeem the system and to keep hospital organization in the forefront of progress.

Such system as had existed was a purely haphazard growth. In the great cities the hospital opportunities open to the population were extremely good, and were tending to be better for the lower and lowest-income classes than for those who, though better off, were not by any means in unembarrassed ease. In small towns and rural areas, with some exceptions, there were but meagre arrangements. It was important especially for the Londoner, who was accustomed to think of the famous teaching hospitals, to realize that peripheral voluntary hospitals were severely handicapped, sometimes by their own ambitions. To maintain their prestige they must proclaim their success in providing everything that the advances in the science and art of medicine had suggested, often to the peril of convenient planning. "Almost every urban voluntary general hospital in the country ought to be rebuilt on a new site, from two to ten times the size, on the periphery of the town."

It happened sometimes that healthy rivalry between hospitals led to uneconomic provision of departments for which there were no available specialists, though co-operation, had it superseded rivalry, might well have led to complementary services which would have covered a considerable area satisfactorily. In nearly every town there were small hospitals dealing with special classes of disease, cut off from association with general medicine. There was no justification for such "forlorn spinsters." The more particular the specialization the greater the need for integration.

It would serve no purpose to go into the historic reasons for the existing state of affairs whereby the voluntary hospitals had been fully absorbed in the treatment of short-term illness while long-stay cases had been almost entirely confined to Poor Law institutions. The chronic sick were admitted in many

instances without previous investigation, and the most difficult tasks were handed over to the less competent, who were inadequately supplied with the necessities for their work. In 1944, as a result of the Surveys, it was estimated that nearly 100,000 additional beds were required, and there was still an unspecified but serious shortage of well-trained staff.

Problems of Hospital Provision

What, then, were the problems of hospital provision presented to any government? First, an intensive study of the function of the hospital in the modern community should logically have followed the Surveys. Secondly, organization of the existing accommodation on the most economical plan possible was needed. Thirdly, dispersal and distribution of the available medical talent to the greatest advantage. Fourthly, organization of ancillary services to obtain reasonably uniform standards. Fifthly, training facilities, with grants for every class of individual constituting an integrated hospital personnel. Sixthly, a universal transport system. Lastly, a vast building programme, at present impracticable.

In considering the adequacy and appropriateness of the new Act to improve the hospital service it was necessary to take into account the other measures for national assistance and national insurance, the functions of the Universities' Grants Committee, and the implications of the Goodenough recommendations, among other matters.

After touching on other aspects of the problem, Sir Ernest Rock Carling went on to refer to the conception of local management committees controlling all the resources of their area irrespective of their boundaries, and the development of these resources to a pitch of autonomous self-reliance which needed to resort to headquarters only for exceptional specialties. The intelligent layman and strong administrator would look to the medical committee for advice, for ideas and plans and advances. It was for the profession to see that the machinery—which he personally believed to be sound—now put into their hands functioned to full capacity.

There were, however, certain defects in the Act which left open a possibility of trouble. The gulf between voluntary and municipal hospitals had been closed, but the division of authority might promote the development of another cleavage. The major preventive services ought to be intimately associated with the hospitals. Industrial medicine in its limited and wider aspects alike would, if so related, enlarge the horizon of surgeons and physicians in the direction of environmental aetiology. The medical officer of health, with all his experience of community services, should have an entry to general hospital councils. Health centres should be the antennae of hospitals, and between the two there should be unimpeded passage. He pleaded for the most active co-operation in order to avoid any hindrance to progress from the division of authority.

A Possible Cleavage

Dr. T. S. MCINTOSH expressed the opinion that, great as the need for additional beds might be, the replacement of unsatisfactory accommodation was even more urgent. Most important of all was the provision of a sufficient and properly distributed staff. At the present time the number of beds, and perhaps even the quality of beds, though poor in many cases, was better than the quality of staff in a great many parts of the country away from the centres. The thing that had particularly struck some of those who took part in the Surveys was not only the shortage of accommodation, nor the inferior quality of a great deal of it, but the fact that the best use was not being made of existing resources. With almost monotonous regularity the Surveyors made the recommendation that there ought to be pooling of resources. Where there were two authorities, as there were in some places, namely, the regional hospital board and the board of the teaching hospital, this should not be allowed to interfere with a complete and satisfactory pooling. He saw some danger of a gap being created between teaching hospitals and the hospitals of the region, but given good will and a desire to meet the needs of the community there was no reason why it should appear.

On the subject of the general practitioner and his connexion with the hospital system, it was a difficult but important task to bring him into close relationship with the hospital service. The treatment of patients ought to be in every case a partnership between the general practitioner and the appropriate specialist.

General Practitioner Hospitals

Prof. J. A. NIXON said that he agreed with practically everything Sir Ernest Rock Carling had said about what the Surveyors—of whom he was one—found in the hospitals, but he also found much to praise. In particular he praised the emergency public health laboratories which were attached to hospitals. He had in mind one of the most shocking of the workhouse infirmaries which raised itself into a most efficient E.M.S. hospital largely as a result of having a first-class pathologist who was almost a resident and who was also clinician. This miserable institution, which he would have bombed to atoms, had become a very efficient hospital.

Again, he had been impressed by the work of some of the general practitioner hospitals in the South Wales area. Small district hospitals in those mining areas were doing their work extremely well. This new Act, he believed, was admirable in the opportunities it offered for instruction at the periphery through specialists planted out on the edges of regions. "Do you want to turn me into a travelling circus?" one of them had said to him. But that was exactly what was wanted—a travelling circus pitched on a fair-ground in the neighbourhood of Penzance or out in Pembroke—and that did lie within the framework of the Act.

A defect in the Act was that it opened up the possibility of a gap between the teaching hospital and the regional hospital, though he had not the slightest doubt that any sensible provincial university teaching hospital would throw itself holus-bolus into the regional work. The regional hospital must be staffed with specialists just as good as those of the teaching hospital. The function of the latter was undergraduate teaching, but the function of the former would have to be post-graduate teaching. He did not know how far that cleavage could be foreseen and avoided. Prof. Nixon concluded by pleading that all nurse-training hospitals in the big towns should be attached to the university, not for educational but for social purposes, in order that all nurses might be given the social facilities of a university.

Cautions and Suggestions

Sir CLAUDE FRANKAU took a view somewhat different from the previous speaker concerning general practitioner hospitals. In the area which he surveyed there were a number of 50- or 100-bed hospitals entirely staffed by general practitioners. They were asked whether they had a consulting staff, and they would produce a list of distinguished people; but apparently these people came only when asked, and major operations were undertaken without reference to them.

Dr. CHARLES MAITLAND spoke of the shortage of nurses, which was not a phenomenon peculiar to this country. It was to be found also in North America and Scandinavia. It was a peculiarity apparently of the modern so-called democracy that there should be shortages of this sort. He also asked the question, "What is a hospital?" The average individual would say that it was a place to which sick people were admitted. He thought the emphasis should be increasingly on treatment and that admittance or residence should be a secondary matter. The medical superintendent of one large county hospital had declared it to be "an out-patient department supported by beds." They might find that if, together with the out-patient department, they put aside beds specifically for the investigation of patients they would get a quicker turnover. Perhaps the aim might be to have fewer beds and better treatment, and he believed this could be done without inhumanity.

Sir WELDON DALRYMPLE-CHAMPNEYS mentioned the danger of the "sausage machine." It was always possible to fall into the habit of saying, "This is a patient with such-and-such a disease. We will now put him through the routine." It was to avoid such a performance that the general practitioner scheme was so important. Someone had spoken about the co-operation of the general practitioner and the specialist. Such co-operation was, of course, obviously desirable, but it was the general practitioner who should be in charge of the patient, not so much for his own sake as for the patient's,

because he was the one person who could protect the patient against mishandling by the specialist. With him in charge there would be some continuity of personal touch in the matter. The patient would be far happier to see his own doctor and to be able to ask him, "Do you think it is all right?" and the general practitioner with his knowledge of the case and of the patient's personality and background would be able to reassure him.

In some further discussion Dr. HORACE JOULES said that Scotland was ahead of the rest of Great Britain in that in Scotland the teaching hospital was included within the region. If this were not done in England it would place the regional hospitals at a distinct disadvantage from the start. Dr. ROGERS (Liverpool) pleaded for greater attention to man-management—another name for administration. Dr. URSULA BLACKWELL suggested as a means of alleviating the nursing problem that the mother or wife of the patient should be brought into hospital for certain nursing duties. Dr. E. L. STURDEE pointed out the danger arising from divided administration. He knew of one hospital, for example, where they had an excellent arrangement of ambulance service whereby the patient was brought in at a certain particular time for out-patient treatment. But in future the hospital would be under one authority and the ambulance service under another. He also referred to the opportunities for undergraduate teaching in the municipal hospitals.

Dr. COPEMAN from the chair said that a tribute should be paid to the foresight of Lord Dawson's Committee in 1920 which had initiated so many of these ideas. He felt that sufficient credit had never been given to its prescience in the matter. Sir Ernest Rock Carling had pointed out that all necessary specialties must be decentralized within the regions, and he had been very pleased to hear him say that the more specialized the subject the more reason there was to make sure that it remained within the broad stream of general medicine. He realized the importance of this in the specialty in which he was interested—the provision of treatment for chronic rheumatic diseases. Too often these patients were labelled chronic without having been brought within the scope of general medicine.

Sir ERNEST ROCK CARLING, in reply, said that several had spoken about the possibility of severance between the teaching and the regional hospital. He himself believed that within five years England would have followed the example of Scotland. It would be impossible to keep the two classes of hospitals apart, and there were already signs in the provinces—not so much in London—that they could not be kept apart from one another.

He agreed with Sir Claude Frankau that complacency regarding the general practitioner surgeon must not be allowed to continue. His insulation from criticism might lead to work which was very unsatisfactory. Even the most accomplished specialist could do his best work only in his own unit. He thought that the surgeon who had great skill and found himself in a small hospital in a Welsh valley or anywhere else ought to be given a bigger field in which to exercise his talents. He agreed that the district nurse ought to be brought more into contact with the hospital. At present she felt isolated, but she could save the hospital a considerable amount of work.

CLINICAL PATHOLOGY IN RENAL DISEASE

SECOND LETTSOMIAN LECTURE

In his second Lettsomian Lecture, delivered before the Medical Society of London on Feb. 23, Dr. CUTHBERT E. DUKES considered the pathology of essential haematuria and of renal tuberculosis. In each of these diseases, he said, the urine showed an abnormality which became the starting-point for further investigations. He purposed to show the sort of contribution the clinical pathologist could make to the elucidation of these problems.

Essential Haematuria

In most cases of renal haematuria the lesion responsible for the bleeding could be discovered fairly easily, but cases occurred from time to time in which all tests failed to reveal any pathological explanation for the continued presence of red blood corpuscles in the urine. Painless bleeding from the kidney might occur in chronic Bright's disease; it might be the first indication of a tumour in the kidney or renal pelvis; occasionally in renal tuberculosis a sudden haemorrhage might precede all other symptoms; and sometimes a calculus firmly fixed in the renal pelvis might cause painless haematuria. Re-examination after a period of observation generally settled the question, but many examinations and consultations might be necessary.

The pathologist's first duty was to make sure that the urine did contain blood, and it was useful to make an approximate estimate of the blood that was being lost. When blood oozed slowly into the urine a daily leakage of 3 to 5 ml. would keep the urine constantly red, and much less than this would give it a smoky appearance. The benzidine test was still positive when only 0.25 ml. of blood was mixed with a 24-hour sample.

The urine should then be examined microscopically, special search being made for tubercle bacilli. If this was negative a complete blood count should be carried out to see whether any anaemia had developed and to exclude any blood disorder. Cases of renal haematuria due to blood disorders were relatively rare and easily recognized. In most cases of unexplained renal haematuria the blood count was normal except perhaps for a slight secondary anaemia. The diagnosis of "essential haematuria" was eventually reached by a process of exclusion. The term was an unsatisfactory one, and should never be used to an intelligent patient. This diagnosis was resorted to somewhat apologetically by physicians to describe persistent unexplained haematuria in an otherwise healthy person. It was a clinical diagnosis which in the past was used too indiscriminately and therefore fell into disrepute. Hale-White advised that the name should be reserved for bleeding from the kidney in which no evidence of disease could be found either by naked eye or microscopical examination, and suggested that in these patients a poison was formed which, when it reached the kidney, damaged the blood vessels and allowed the blood to escape.

Although there might be such cases of haematuria without discoverable cause, they constituted only a minority of the cases in the literature. More often, when nephrectomy had been performed for persistent unexplained haematuria, examination of the excised kidney revealed an angioma or a capillary naevus of the renal papillae, a small submucous haemorrhage in the renal pelvis, a varicosity of veins, or some unsuspected tuberculous lesion. These reported cases might not be a fair sample, because pathologists who found something were more likely to publish their cases than those who found nothing.

No one was likely to have had an extensive experience of kidneys removed for unexplained haematuria. His own was limited to nine cases, and had convinced him that a demonstrable lesion existed in cases of persistent unilateral haematuria, regarded clinically as "essential haematuria," but that the nature of the lesion varied from case to case. Angioma of the renal papillae was one of the commonest causes. The term was used to describe a tumour-like network of the papillary blood vessels, but there was no proof that the lesion was a neoplasm or even a vascular malformation. His own view was that the lesion was probably not neoplastic but due to vascular reparative tissue secondary to trauma or infection. However, the term "angioma" had long been used and was often applied to similar doubtful lesions in other parts of the body.

In some of the kidneys he had examined the bleeding seemed to be derived from comparatively trivial lesions which, had their existence been known, might have been disregarded. To distinguish these from cases in which haematuria was a symptom of serious disease was always difficult. Sometimes the bleeding ceased as abruptly and unaccountably as it began, and it seemed to him that it was only in such cases that the diagnosis of essential haematuria could be accepted with confidence. A great deal more had to be learned about the pathology, diagnosis, and treatment of the condition.

Renal Tuberculosis

Dr. Dukes said that he approached this subject with diffidence, but cases of uncertain character were often met with in which aid from the laboratory was welcome. The discovery of tubercle bacilli in the urine was always proof of the existence of a tuberculous lesion somewhere in the genito-urinary tract. Tubercle bacilli could not be excreted by a healthy

kidney. It would, of course, be an inestimable advantage if it were possible from examination of the urine alone to foretell not only the existence but also the extent of the disease in the kidney. This was not possible. But in some cases analysis of the urine might help to a greater degree than was usually supposed in deciding whether the renal lesion was large or small, open or closed, or whether the patient should be regarded as a medical or a surgical case.

Of the various tests, the culture test was more delicate than the stained-film test. It might reveal tubercle bacilli when the renal lesion was closed, and was sometimes positive before the urine contained either blood or pus. The culture method was specially useful for the exclusion of tuberculosis. The guinea-pig test had come to be regarded as the final court of appeal in all doubtful cases. There were occasions when it was indispensable, but it was often resorted to unnecessarily. In a case of advanced renal tuberculosis with cavities and open communication with the renal pelvis the tubercle bacillus could generally be found in stained films and was usually accompanied by pus and sometimes by blood cells. If the tuberculous lesion was imbedded in the substance of the kidney and had not broken down, then tubercle bacilli could be excreted only intermittently in the urine and in relatively small numbers, so that they were unlikely to be found except on culture or in guinea-pig tests. Such tests, repeated, were the only means of proving the existence of lesions in the kidney not accompanied by any urinary symptoms.

Looking back on a long experience of the examination of tuberculous kidneys he was struck by the bewildering lesions revealed when these organs were examined. In most nephrectomy cases the tuberculous lesions were obvious. In others at first glance the kidney might look almost normal and only on section was the tuberculous lesion displayed. The lesions observed in the tuberculous kidney were the resultant of two opposing forces acting for a long time, one tending towards destruction and the other towards repair. The extent to which natural healing was possible in renal tuberculosis had been the subject of much argument in the past. There was, of course, no possibility of natural cure in the advanced tuberculous lesions with which the urological surgeon was familiar, but there was plenty of evidence that at an earlier stage of development the disease might heal spontaneously in the kidney as it did in other organs.

He had been struck by the different meaning given by different writers to the word "cure." Most commonly the word was used to describe a clinical cure—relief from urinary symptoms and the disappearance of pus and tubercle bacilli from the urine—but this might indicate only that the disease was in a negative or latent phase. To be certain that a clinical cure was complete required a long period of observation. He preferred to use the word "cure" to describe the process of natural healing in a tuberculous lesion, leading to complete restoration of normal renal function.

The lecturer proceeded to give what he called a bird's-eye view of the pathological process. Not all cases of renal tuberculosis ran exactly the same course, but the closer one looked the deeper were the resemblances and the more superficial the differences. He described four stages of renal tuberculosis:

First stage.—Haemic emboli of tubercle bacilli causing bilateral multiple microscopic lesions.

Second stage.—One or more of the tubercles developing into visible lesions, others having disappeared. Tubercle bacilli occasionally present in the urine.

Third stage.—Discharge of tubercle bacilli down the renal tubules, leading to tuberculous ulcer at the apex of the papillae. Tubercle bacilli now constantly present in urine.

Fourth stage.—Tuberculous cavity communicating with the renal pelvis. Lesions appearing in the ureter and bladder. No hope of natural cure. Nephrectomy indicated.

All this was, of course, a continuous process. Once the lesion had broken down and discharged the symptoms began. So one reached the paradoxical conclusion that natural or spontaneous healing could only be expected in those tuberculous lesions of the kidney which had not yet caused any urinary symptoms. In these complex subjects clinical pathology could perhaps offer little more than the light of a flickering candle, but, as a Chinese proverb had it, "It is better to light the candle than to curse the darkness."

Correspondence

National Health Service

SIR,—May I, as a Labour Member of Parliament who happens also to be a doctor, be permitted to commit a trespass to put the point of view of those of us who support the Government over the National Health Service?

The results of the plebiscite have made it clear that the great majority of doctors do not like the Act in its present form. They have not, however, made it plain that there is an equal degree of unanimity about which bits of the Act are objected to. In coming to their final conclusions there are certain points which emerged in the House of Commons debate on Feb. 9 which every doctor should bear in mind:

1. The Conservative and Liberal Parties, no less than the Labour Party, accept the decision of Parliament over the National Health Service Act. If the B.M.A. wishes to alter the Act, its duty, as a group of good constitutional democratic reformers, is to try to persuade public opinion of the wisdom of its case, and to gather a sufficiency of Parliamentary support to get the law altered. Those who object to the laws Parliament has made in the past have followed this course throughout history; and in the long run, where their case has been good, they have been successful. Any attempt to frustrate the law by extra-parliamentary means is bound to end in failure. Without committing myself, I must remind my colleagues of the lesson the Labour movement learnt in the General Strike twenty-two years ago; and even that was not directed against an Act of Parliament.

2. On the subject of *sale and purchase of practices* and *appeal to the high court*, Conservatives and Liberals support the Government. To be quite fair, Mr. Butler, who was leading for the Conservatives, suggested that appeal from the tribunal to the Minister should be dropped, thus making the tribunal the final arbiter. It is therefore quite useless to press the Government to abandon its decision. Even if they were persuaded to do so against their better judgment, of which there is no chance, they would be unable to carry such amendments against a combination of all political parties. Let me add my own view that the real freedom of the individual doctor will be greater with the Act's proposals than it would be if the B.M.A. amendments were accepted.

3. On the subject of *negative direction* (so-called), support for the B.M.A. view from the Conservatives is lukewarm, while Liberals and Labour are united against; and the Liberals regard themselves as keen champions of individual freedom. To the ordinary Labour member of Parliament, concerned primarily with the needs of his constituents for more doctors, the case for non-admittance of extra practitioners in the public service to over-doctored areas, as long as other areas are under-doctored, seems overwhelming. Particularly is this so when Control of Engagement Orders (far harder in their operation) affect mainly Labour's own supporters, and are accepted in the national interest almost without complaint.

I pointed out in the debate that, once under-doctored areas have ceased to exist, the need for even this small measure of restriction will also have gone. Then is the time to press for amendment of the law. Then I certainly, and, I suspect, all my colleagues on the Labour benches, would be only too pleased to see it go.

4. On the subject of *basic salary plus capitation-fee payment*, the profession's objection, as I see it, is not to the proposal itself but to what it may become. Any Government, at any time in the future, can alter a decision arrived at now, whether embodied in regulation or Act of Parliament. So embodiment of the non-wholetime salary principle in an amending Act would give no protection whatsoever against a Government determined to make the alteration.

There are only two safeguards, which I can think of, which will help the profession. The first is a clear declaration of the present Government's intention. The second is to make a success of the alternative to salaried service. The Government has now repeatedly declared it has no intention of introducing

a salaried service. The Labour Party has accepted the Act in this respect as in others, though it departs considerably from our original policy (and is a great improvement on it). There is nothing inherently unsocialist in payment by capitation fee. And there are great advantages in the combination of capitation fee and basic salary for at any rate a large number of general practitioners. We all want to avoid bureaucracy; two levels of capitation fee, one for doctors with basic salary and another for those without, would increase greatly the difficulties of administration. So I suggest the simple idea that those doctors who do not want it should have the basic salary paid into their superannuation fund. There may be other, and simpler, solutions, but surely this is a matter for real discussion and negotiation.

So much for the facts of the case, as I see them. Unfortunately personal issues have been allowed to cloud these facts. It is difficult not to spring to the defence of a friend, even a bellicose friend, when one thinks he is being unfairly attacked. On this occasion, however, he can look after himself without any assistance. All I want to say is this. I watched the Minister of Health persuade our Labour Party to accept decision after decision on the National Health Service which turned our ideas upside-down. But for him, we might have got all the hospitals under the Local Authorities. But for him, there might have been no private practice for all general practitioners, and no private wards in the hospitals. But for him, there might have been no tribunal between the executive councils and the Minister, and no participation of doctors in the executive side of the Service. And, strangely enough, but for him we might well have had a whole-time salaried service. He did not persuade us against our better judgment, but convinced us he was right—as indeed he was. It is just because he is so vigorous a personality that he was able to put these ideas over. If now his vigour is showing in another direction, it is only fair to add that so also is that of his opponents. In any reasonable attempt to find a solution and make a success of the Health Service, he will play fair; in battle, he will neither give nor ask for quarter.

If the B.M.A. decides to continue the fight, the public will be gravely injured, the chance to start the Health Service with real co-operation and good will will be lost, and the ultimate defeat of the B.M.A. is certain. I believe this would be a bad thing for the medical profession. If its main negotiating body is discredited now, it may be many years before it can regain its rightful position. But for the public, defeat of the B.M.A. is certainly preferable to capitulation of Government and Parliament to the B.M.A.

I would ask every doctor to think over carefully the issues on which he may be called to fight. Are sale and purchase, appeal to the high court, and so-called negative direction causes worthy of battle? There is everything to be said for an idealism which is ready to make personal sacrifices. But idealism is something too valuable to waste on a bad cause. On the other side, the Act offers the profession greater chances of service than ever before; it offers terms which are generous, and, I believe, a fuller freedom than in the past; and to the people it offers every asset that medicine has to give, with material capacity as the only limitation.

As one who has no personal animosity to the B.M.A., and a deep belief in the future of our profession, I want to give a word of advice:

1. Drop the demand for the reversal of the law. You may be sure of amending Acts later if they are needed; they always follow all big Acts of Parliament when difficulties show up in practice.

2. Approach the Minister again on the subject of basic salary, but this time with constructive proposals.

3. Go all out for the really useful guarantees of freedom—full rights to publish what you like, regular public advertisement of the over-doctored areas so that everyone knows where they stand, and public advertisement of all vacancies in general or hospital practice.

4. Have a constructive look at the problem of partnerships in the new set-up. I have a suspicion that it might be a good thing to wind up cash partnerships, and now would be the time to fix up compensation problems. I believe the partnership of the future may be a sharing of work rather than a sharing of money. But, in any event, there is nothing here which cannot be ironed out round a table.

5. Finally, let me emphasize that the next move is with you. It is for you to declare war or to make a gesture of peace. If you declare war, you will lose. If you make a gesture of peace, you can yet find, in spite of what has passed, the spirit of good will. With such a gesture, if it be genuine, you can gain the sympathy not only of us in the Labour movement, but of the public at large. Labour people are just as keen on liberty as you are. They do not want a servile tribe of doctors, but a strong free profession with whom they can join in the battle for health.—I am, etc.,

House of Commons. STEPHEN TAYLOR.

Solidarity of Profession

SIR,—Now that the result of the plebiscite is known the Representative Body is to decide what action it will take in advising the profession. It is imperative therefore that every member of the Representative Body should think hard on the value of the plebiscite as a guide to making his decision. He is certainly armed with a mandate to advise rejection of service under the Act if the results of the plebiscite are read at their face value, but can we be sure that the interpretation of the figures is as simple as the enthusiasts would have us believe? How far do the figures reflect the real opinions and, what is still more important, the intention of the voters? Question A was expressed in such a form that scarcely a single doctor—perhaps not even Mr. Bevan himself—could have answered "Yes" without mental reservations.

No one can approve the whole Act in its present form because it is a compromise between conflicting opinions, and therefore the B.M.A. might have assumed around 56,000 "Noes" without troubling to ask the question. The critical question was the third. It was asked in an attempt to measure the solidarity of the profession, in view of the experience of 1911–12. I believe that this question was answered by a large number under a mistaken sense of loyalty to the more vocal and senior members of their Divisions, hospitals, and other corporate bodies, and in some cases under a moral duress. The large number pledging themselves to refuse service under Question C have to take no action yet, but the earnest hope of the majority who put "Yes" to this question was that during the four months before "going over the top" into financial disaster some face-saving concessions will be made which will release them from their bond. Perhaps the figures of answers to Question C would be very different if it were to be asked on July 4.

The question has been put at a time when the profession has been goaded into a state of emotion, heat, and anger, and I submit that the majority is quite worthless as an indication of what even a substantial number of doctors will be ready to do on July 5. When we take into account the general political colour of the profession, opposed for various reasons to the present Government, and the increasing efforts to substitute an emotional dislike of the personality of the Minister for measured discussion of the points at issue, it is clear that the majority figures of the plebiscite represent not an opinion of the Act but the strong feeling against Mr. Bevan personally as Minister of Health. This view is supported by the results of the voting by those employed in public service, though you, Sir, claim that this vote is very significant as a criticism of the Act. But those employed in public service, such as the medical officers of health, have previously approved a National Health Service in the days of the far less acceptable first White Paper. I suggest that the *volte-face* of this group is due less to consideration of the Act on its merits than to active disapproval of Mr. Bevan as Minister.

Now is the time for wisdom, vision, and sense of proportion; not for emotion, heat, battle-cries, and the metaphors of war. We do not want mutual abuse whether it be the "raucous voice" epithet from the floor of the House or acid comments on the Minister in the columns of the *Journal*. There is no place now for "fighting speeches" and turgid letters to the medical press. We need a cold re-examination of the points of dispute and how far they really matter to the profession as a whole or to each individual doctor. It will need courage on the part of the leaders of the B.M.A., for they have manœuvred themselves into a difficult and responsible position.

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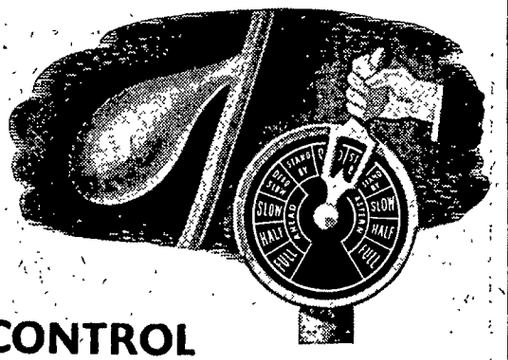

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Always the curse of a situation of impasse is the pride which must have its face saved. Gradually this becomes the major consideration, suffocating calm discussions of points of disagreement. If the B.M.A. attempts to lead the profession into conflict on July 5 by continued refusal to accept the Minister's offer to re-examine the four unacceptable provisions of the Act it must fail because no sectional resistance can prevail against the wish of the community, but if, on the other hand, it reconsiders the value of the plebiscite as a guide to action, if it measures its tremendous responsibility and is inspired by courage and wisdom, the situation can be saved to the great relief of the mass of doctors.—I am, etc.,

London, W.1. ALECK BOURNE.

The Best Medical Service?

SIR,—By Order-in-Council the bureaucratic totalitarian National Health Service machine is to start on July 5. The Minister has the effrontery to call this machine the best medical service in the world. The number of panel and hospital patients will be doubled. There are no beds and no single rooms. Voluntary hospitals have long waiting-lists. There are insufficient nurses, ward maids, cleaners, technicians, and medical staff. Patients will have to queue up to queue to obtain a registration number when they cease to become individuals. After sitting on a hard bench in a crowded waiting-hall for an hour or so they will see a doctor for a few minutes. They will not be able to see the doctor they want and they will be lucky to see the same doctor twice. To quote a famous comedian, the patient will not be able to have the disease she wants. The doctors will be blamed and become the scapegoats for this chaos, which will be much worse than the housing programme.

The National Health Service is to cost £152 million per annum; only £32 million, or 10d. per head, is allocated from the National Insurance. The remaining £120 million comes from taxation. Moreover, the contributions, subscriptions, donations, etc., to the voluntary hospitals throughout the country amount to more than £100 million per annum. These will disappear. The people do not know that this is the sort of medical service they are going to get or how much it will cost them except that they will have to contribute about 4s. 9d. per week for each person. Patients are not interested in basic salaries, the buying and selling of practices, and the right of dismissal, but they are interested in the type of medical service which will be forced on them. The people are also interested in an ideal plan for a national health service which the B.M.A. has advocated. This is the information which should be put over to the Press and public at frequent intervals.—I am, etc.,

London, W.1. E. D. D. DAVIS.

Criticism from Holland

SIR,—With great interest I followed your articles about the Health Service Act. As a Dutchman I certainly have to keep far from any struggle between the British doctors and their Government. But when heavy rains are pouring down in Britain we Dutchmen see dark clouds on our horizon. And here are the highest principles of the medical profession at stake. You said so well in your leading article, "Why Be Fearful?". (Jan. 17, p. 104), "They work hard—probably harder and certainly for longer hours than any other section of the community."

Now it is a curious fact that many people take freedom to discuss the amount of money that a doctor might earn by this hard work and constantly under great strain. I never noticed that the same procedure is applied to solicitors, barristers, bankers, manufacturers, etc. Still more painful is the fact that a struggle for the freedom of the medical profession is sometimes looked upon as only a struggle for more money. I am sure that the great majority of the British doctors if they had to choose between higher payment as a State officer and less payment as a free man would vote for the latter. To be totally ruined by the mere fact that one wants to be free is another question.

Now, why has the medical profession to be free? Once a State medical organization is in full action, the State will be able by force of the purse to compel the doctors to many things which they regard as not fit to the ethics of their profession. Such things will certainly threaten, as the highest authority in a State organization will not be in the hands of medical men, but in the hands of political groups which are in the possession of State power. The State once on its way to organize will never stop again. So frightful disorganization will be in the end. The medical profession will be more and more impersonal. The doctor will work for the State and not for his patients.

Now, how will a doctor find strength and energy for the daily heavy work in a great practice when he nowhere finds an adequate stimulus? This stimulus is certainly not the question, the more I work, the more money I make. It is the satisfaction that though a lot of trouble comes to the man who dedicates himself to the medical profession, it is the happiness of a hard but free life that makes it possible not to mind the deceptions, the irritations, the heavy strain of every doctor's day, that makes it possible to see, above all, the glory of the "Nobile Officium," which does not mean State office.—I am, etc.,

Amsterdam. C. LANDHEER.

Amend the Act

SIR,—Surely Mr. Bevan must be perturbed by the result of the plebiscite. Supposing the Act were amended to suit the doctors, who would really suffer? Certainly not the patients, and certainly not the economic position of the country. Mr. Bevan, however, might feel frustrated. Mr. Bevan cannot be expected to climb down; he is determined to have the Act as it stands, and only the loyalty of the doctors can prevent him from gaining the desires of his heart. From now on we must expect a furious onslaught on our determination. The people will again hear of us striking at the roots of democracy.

The Cabinet's plan to peg wages met with strong disapproval of certain bodies, yet not a word was spoken about these bodies, although to oppose such a plan must have been very disloyal to the country. We lately have read of a number of strikes at a time when production is so important. Yet it seems that certain strikes get encouragement.

There are a few members of the medical profession who approve of the Health Act as it stands; surely these men are dangerous. They will tell us that we cannot win, so why "kick against the pricks"? They will say, "Look at the doctors in 1911, when they joined the National Health Insurance scheme although they disapproved of it so stongly." The faint heart will listen to such talk and might start a landslide. Surely some move must be made soon by the B.M.A. If we doctors cannot get this Act amended we deserve to have it as it stands, and we will be doing a great disservice to generations of doctors who will receive our inheritance.—I am, etc.,

Trimdon Station, Co. Durham. ALBERT MILLER.

Compromise by Amendment

SIR,—May one with no axe to grind but who is very anxious to see a satisfactory solution by some amendment of the Act put forth a few ideas?

Appeal.—As a former chairman for three years of a Pensions Tribunal appointed by the Lord Chancellor, we adjudicated on hundreds of cases. Appeals against our decisions were *nil*. A medical man brought before a tribunal—two being doctors not connected in any way with the Ministry, and a barrister as chairman—would not I think care to risk his money in an expensive lawsuit when the case is given against him.

Sale of Practices.—We know a lot of untruths have been published on this point, but a great number of the public believe what has been said. The vendor should have the right to sell to a purchaser chosen by him at the 1938+16% figure or the last financial year's income figure, the money being found by the State and paid over without waiting, after completion—purchaser to repay gradually.

Basic Salary.—Paid only to those with less than 1,000 on their lists; to be repaid gradually as the numbers increase.

Direction.—Conditions are much the same either way. More doctors apply for a practice than there are for sale. A man, unless he squats, cannot go and live where he would prefer. Executive Councils should have the power to increase in some way the remuneration where it is difficult to get applications to practise.

Assistants.—Single-handed practices of 3,000 and over on the list should be only allowed to take more patients if they employ an assistant—suitable pay arranged according to numbers on the list, partly by the State.

Sale of Doctors' Houses.—To try and prevent a doctor or his widow obtaining the value of his house sold at public auction to the new man is making it most likely that the auctioneer has orders on no account to sell to the newcomer. Under these conditions he is without a house or place to practise and loses a valuable part of the goodwill which goes with the house.

The Insurance Act as we know it has worked on the whole smoothly. After twenty-two years' experience I cannot remember any disagreement or disagreeable orders.—I am, etc.,

Middleton Stoney, Oxon. J. HOLMES.

Considered Planning

SIR,—The need for an improved medical service is generally acknowledged, and I am as anxious as any that such a scheme should be introduced as soon as possible. However, having followed the discussions in the medical journals and the press, it is hard to escape the conclusion that the medical profession is being asked to sacrifice present freedom for a nebulous future. Wise decision in the matter is made more difficult because there is very great financial pressure to accept by a certain date, while at the same time the terms of service and conditions of work are very uncertain. Not to accept may mean financial ruin; to accept may mean serious loss of income, not to mention inferior conditions of life and quality of service. At the same time one cannot avoid the impression that haste to bring in the new Service is due largely to exploitation of health for political motives.

As is well known, there is an acute shortage of nurses; 50,000 beds are closed already, and under the new Service vastly greater hospital accommodation will be needed. There is an acute manpower shortage, and lack of personnel for the health centres, which are not yet built. The country is in the middle of a life-and-death struggle for economic survival, and the equipment needed for the Service is lacking. There are many such factors. I do not wish to appear defeatist, but realistic. In the next five years will the Service provide anything materially better than the facilities already provided? Why the rush to apply rubber stamps? There is time for considered planning and evolution. Work can be commenced in many directions and the medical profession will fit into an evolving plan. What is the need so abruptly to control the profession?

If National Health Insurance trebled the number of items of service, much the same may be expected in the present instance. One of the common criticisms of the G.P. is that he is too busy to do thorough work. A tremendous additional burden is now to be placed upon him with no materially increased facilities.

A disgruntled medical service will be facing demands which they cannot fulfil, and the people may suffer not only economic hardship, but deterioration in the quality of service. There has been an unfortunate emphasis on personalities, and much has been said from emotion rather than reason. The position, however, is now much clearer than before, and it is clear that our profession is being asked to sign away freedom with unnecessary precipitation, when matters of principle are being denied and points vital to individual futures are obscure.

In these circumstances it would appear a duty to oppose the Minister with a firm "No," at the same time avoiding negation and seeking the positive, by every means in our power helping to develop a sound basis for a national health service which shall promote the health of the nation.

The Minister's demand to sign on the dotted line by July 5 or . . . is for the reasons (financial) given above tantamount to blackmail. Would it be unethical (or futile) to suggest that practitioners should all sign, under protest, in self-defence, and announce that from the appointed day they would go solidly on strike in the best trade union tradition unless in the interval the obscure points are made clear and their just demands are met?—I am, etc.,

Reading. M. E. M. HERFORD.

An Unworkable Act

SIR,—As a general practitioner one of my chief objections to the new Health Act in its present form is that we are being asked and expected to give to the public a service which is quite impossible at the present time. We know the difficulties hospitals are having—long waiting lists, serious shortage of nurses and domestic help, overworked honorary staffs. General practitioners also as a whole are fully employed. The public will be compelled to contribute quite a substantial sum every week for health services, and are being led to believe that all the resources of medicine will be at their disposal for the asking. They will naturally endeavour to get a good return for their money and will not be backward in coming forward. Result—overcrowded surgeries, incessant telephone calls, our lives a little hell, our work not what it should be.

It is now the duty of our representatives to put these facts before the Government and to say firmly that we cannot possibly at present give the service required by the Act. They should also state what we are able and prepared to give. A service that would appeal to me would be: (1) to extend the present N.H.I. to include the family of the insured; (2) the rest of the population to contribute a weekly sum sufficient to provide a fund to (*a*) materially help to build, equip, and maintain hospitals, and (*b*) adequately pay the honorary staffs. In return they should be entitled to hospital treatment whenever necessary free of further payment. The amount and nature of such treatment to be specified; it should be comprehensive but not extravagant.

The public are not interested in the sale of practices and so forth, but they could surely be made to understand that there are not enough hospitals or doctors to give the service the Act seems to promise them. They could be made to see that the Act must be modified and also I think that at all costs we must retain our freedom. Unless the Act can be modified I would rather keep out of it, and I do not envy the lot of those who join and attempt the impossible. Theirs a life of toil providing a paradise for the "malade imaginaire."—I am, etc.,

Melksham, Wilts. I. C. KEIR.

An Alternative Wanted

SIR,—My question may have been put by others, but I have not seen an answer, although I follow fairly closely the correspondence in the *B.M.J.* Doctors have received a separate copy, and a full report of the proposed National Health Service has been published in the *B.M.J.* Can the British Medical Association publish in a similar manner their alternative health service scheme in detail or circularize doctors with copies of the amended scheme that they propose—in every detail? Can this be done at an early date so that those concerned can decide before the appointed day how they are going to earn a living for themselves and their dependants when the appointed day arrives?—I am, etc.,

Moreton, Cheshire. MARGARET ROUND.

Alternative Plan

SIR,—We have shown by the ballot that in the opinion of all sections of the profession there is something very wrong with the present Act. In order to hold our prestige it is essential that the B.M.A. quickly publish a clear and concise alternative plan. In order to do this successfully it is equally essential that the wording of this alternative plan be drawn up with the aid of the best legal opinion available. It would greatly add to the influence of such a plan if it were signed by (1) one of the leading members of each section of the medical profession; (2) several leading legal experts; (3) several prospective patients drawn from all sections of the community; (4) several administrators of hospital, panel boards, and regional boards; (5) several members of the nursing profession.

To remove the present suspense in the public mind the B.M.A. should now state over the radio and in the Press that such a plan is in the course of preparation and will be published on a definite date.—I am, etc.,

SERVICE PRACTITIONER.

Alternative Suggestions

SIR,—Now is the time to make suggestions for an alternative health service. I doubt if there are many practitioners who in their heart of hearts really like N.H.I. as it is at present. It would therefore be a mistake to extend it to dependants.

What are the salient evils of N.H.I.? I would say: (1) The encouragement of the bottle-of medicine addicts, the neurotics, and those who feel they are entitled to a week on the panel after paying in for years. (2) The latitude given patients to join one's panel for the first time, though long resident in district, on occasion of an illness at night, subsequent visits being

necessary. The patient leaves district shortly after and the doctor is entitled to a fee of 3s. 10½d. paid some months later. (3) Patients presenting cards, receiving attention, and subsequently found not to be entitled to benefit. There are of course other abuses, not enumerated. Imagine under the National Health Service the items of attention per year for a baby, for whom the capitation fee will be not a penny more than for an adult.

All the above irritations and injustices can be avoided by the following: (*a*) Option for all, including dependants, below a certain income limit to join a contributory scheme. This would not penalize those who do not wish to contribute. (*b*) Cash payment for service by patient, who passes receipt to the Government for partial repayment. (*c*) An extension of pathological facilities and hospital accommodation.—I am, etc.,

Bournemouth. A. R. THATCHER.

Alternative Insurance Scheme

SIR,—The recent plebiscite shows that the profession opposes a certain system of payment and control, but no one opposes an extended insurance service of some sort. Do we have to wait until the Government organizes this for us? In the case of general practitioners at least it seems feasible for the individual doctor to offer services for an annual subscription. The B.M.A. could lay down model forms of contract and suggest rules to prevent abuses and fix subscriptions. Entry should be voluntary, but open to anyone. Now that we have shown our dislike of the Government's plan, can we not produce a practical plan of our own, piecemeal if necessary, to commence as soon as possible?—I am, etc.,

Paignton, Devon. J. F. BURDON.

Alternative Service

SIR,—While the profession has won a notable victory, they must be careful that they do not lose the peace. It is now up to the B.M.A. Council to draw up a well-considered plan to replace the politically forced creation of the Government.

Unless they are to fail even more miserably the following points must be closely borne in mind. (1) The profession's general-practitioner strength is nothing like large enough to cope with the enormous increase of work that will accrue when the whole population is entitled to free medical attendance. (2) We should strike a blow for the nursing profession in our own interest as well as theirs. I suggest tentatively a 50% increase for doctors, and about 200% increase for nurses. These recruits could be obtained (*a*) by subsidizing medical education and nurses' education; (*b*) by Government propaganda fixing hours of work, promising good food to nurses, and recreational facilities, generous holidays, and pensions for sickness and retirement. (3) Unless the Service is going to be gravely discredited it must not be started until such time as the Government's clinics are ready and properly staffed with telephonists, typists, and adequate domestic service.—I am, etc.,

Gt. Yarmouth, Norfolk. LEONARD LEY.

Profession Should Plan Service

SIR,—Having at last, thanks to the B.M.A. and aided by Mr. Bevan, obtained what formerly seemed impossible, a united profession, surely the time has come to decide what we want. I was in agreement with Mr. Bevan in one of his statements in the Commons debate, that we disagreed with all the Ministers of Health who have tried to produce a National Health Service. Why? Because as experts we will not be told how to do our job. We should be told by Parliament to produce a comprehensive service, and within broad limits, agreed mutually without rudeness, threats, or preconceived prejudices on either side, we should work out the details ourselves. As in other spheres, the expert is called in, told what result is wanted, and left to produce it.

It is a great pity that the National Health Service has become a political issue. The nation's health should be above party strife; and the medical profession dislikes Labour, Conservative, and Liberal dictatorship on details—in varying degrees, doubtless, but all disliked.

We should now inform the Press and the Minister that if a health service is wanted we will organize it, provide it, and work it. Tell us how much money is available, give us the necessary aid from financial experts and statisticians, and we will do the job. If we have not done our job within a certain time, say 2 years or 5 years, then we cannot complain if we are told how to do it. We must then work out some details and agree on them among ourselves. No doubt the B.M.A. Council has plans, but I suggest we should express our opinions in letters to the *British Medical Journal* and through study groups to the Representative Meeting on points about which individually we feel strongly: the abiding principle throughout to be freedom, of thought, word, and action, under the laws affecting everyone and with a reconstituted G.M.C. for disciplinary procedures.

My own essential points are:

(1) A service available to 100% of the population, but "contracting out" allowed. (Freedom for the public.)

(2) Goodwill to be retained. (Freedom for the profession.)

(3) Payment by capitation only, 21s. per head, perhaps less if and when health centres are provided, with secretaries, nurses, instruments, telephone operators, cleaning, lighting, heating, etc., complete.

(4) Increased capitation fee in under-doctored areas and in rural areas.

(5) Limit of 3,000 in urban areas, with the opportunity for doctors with special skill, experience, or aptitude to earn more by a part-time specialty.

(6) Abolition of some of the minor irritations of the present N.H.I. regulations—e.g., the unnecessary frequency of certification.

—I am, etc.,

Torquay. R. A. LATTEY.

Profession Must Find Solution

SIR,—As one of the minority who, from deep conviction, voted "Yes" to the first two questions of the plebiscite, whilst pledging my unconditional loyalty to the Association by my reply to the third question, I feel that I have the right to urge my views at the present juncture, in the hope that they may contribute towards the settlement which we all desire. The plebiscite revealed two things.

First, it revealed the depth of feeling created by the Minister in his handling of the profession. We have, as a profession, expressed this feeling in no uncertain way; nevertheless, we must remember that it is the Act which we have to decide upon, and it will serve no lasting purpose whatever to try and make the Minister a scapegoat. Let us now bury this personal feud.

Secondly, the plebiscite revealed that the majority of doctors have shied at the last fence; that in point of fact they do not, subconsciously, want a National Health Service at all. They are still thinking in terms of some general medical service for the nation, some compromise between nationalization and private enterprise. In point of fact this Act is itself a compromise; from the point of view of the Labour Party most definitely so. When one considers without prejudice the varied schemes mooted in the past few years one realizes that with all its faults and potential dangers this present Act is the most workable scheme that has been evolved to date. It can be compared in its breadth and latitude with the great Education Acts which our social order has produced.

If we analyse all the points at issue between the profession and the Government in turn we cannot but realize how weak these points are from our own point of view. In the recent debate in the House the support offered us by the Conservative Party on the question of buying and selling was so feeble that we should realize that this is a closed issue which no Government can concede. No lay person can understand why we should object to the minimum of control in the matter of permission to practise, since this measure is a protection for ourselves as well as for the public. In practice it will work less hardship that the present system. The supremely rational reply of the Government to our representations on the matter of appeal would convince any other mind than ours. How can we expect the support of public opinion on any of these three points?

There remains (apart from purely technical matters such as partnership arrangements) only the question of the basic salary. The profession itself originally suggested this and supported

it. Ideally it is a most attractive suggestion in itself, serving real purposes; and it is only because we persist in regarding it as the thin end of a wedge that we reject it. I am opposed to a whole-time salaried service no less vigorously than any other member of the profession; we are all agreed that such a service would spell the ruin of medicine; but I am convinced that the Government no less than ourselves realize this fact, that they are not so foolish as to entertain a provision that would ruin the Health Service. What some neo-communist Government might do in 50 years' time is not within the realm of practical politics; it is for us to prevent such a calamity by proving that the present Service is workable. It matters little whether or not the basic salary is retained; if the Government concede this point (and it is the only point which, on principle, they can concede), then all that will have been achieved will be the saving of the face of the profession.

We want freedom; freedom is inseparable from responsibility. It is for us now, as a profession, to accept moral responsibility for the present situation and to find the solution, which inevitably entails considerable sacrifice on our own part. Our case, point by point, is not strong enough to stand the strain of a prolonged conflict, and nothing would damage our prestige more than an eventual drift as individual doctors one by one come to realize how necessary a national service of medicine is in this changing world.—I am, etc.,

Devizes, Wilts. A. C. MOWLE.

Constructive Proposals

SIR,—It must be apparent to many of us that the overwhelming majority against the present National Health Service Act was not obtained entirely on the four principles iterated by the British Medical Association. If the B.M.A. really does want a good Health Service now is the time for really constructive proposals for a good scheme to be put forward. The suspicion that some of the leaders of the B.M.A. do not want any form of National Health Service must be removed. Here, for what it is worth, is my idea of a plan.

1. The standard of general practice must be maintained, and not allowed to decline owing to the vast amount of work and the limited amount of time that can be devoted to individual patients. The accumulated knowledge and experience over a number of years must not be thrown on the scrap-heap. The conscientious doctor who takes a pride in accurate diagnosis and treatment should be allowed to treat his patients as he likes; quality and not quantity should be our aim.

2. Consideration for the doctor ageing should be taken into account. (It is unreasonable for him to work at full pressure all through his professional life when the character of his work, both physically and mentally, does not change one scrap.) Here is scope for an alternative to a basic salary to operate. From the age of 45, increments of £50 should be paid at five-yearly intervals as an addition to the capitation payment to compensate for the inevitable progressive loss in the doctor's earning capacity.

3. Full diagnostic facilities for all practitioners should be made available immediately. The public would be shocked to know that any limit is placed on the scope of treatment of National Health patients as compared with private patients, and the present Act has done nothing as yet to remove this anomaly.

4. Health centres must be provided immediately; for how is the doctor to cope with the work without the help of nurses, clerks, telephone operators, etc., and how is he going to have any rest unless the work of a district is arranged by rota? Again, is the doctor's wife still to be an unpaid servant, this time of the State? The difficulty of erecting health centres is recognized, but, whatever the disadvantage, existing buildings must be utilized as a temporary measure.)

5. The capitation fee must be 25s. If this fee were agreed upon as partial compensation for loss of practice, then the question of abolition of sale of practice would resolve itself. It would also enable the doctor to limit his panel to reasonable proportions, and not to be forced to accept work and responsibility which he is unable to carry out to his satisfaction.

6. We should appreciate the provision of superannuation made in the present Act as it stands.

It will be seen that all these suggestions are practical and would not involve an amending Act—simply a retractation of the avowed intent of some members of the Government to introduce a full State-salaried service.—I am, etc.,

Ruthin, Denbighshire. TREVOR HUGHES.

Compromise and Safeguards

SIR,—Our representatives must make a determined stand on the points at issue, but if it becomes necessary to compromise on the buying and selling of State lists some insurance or other machinery should be set up to enable a practitioner to occasionally change to another district without immediate loss of income. Negative direction will give rise to so many abuses that it should be resisted at all costs. It should be made definite that a doctor in the Service may sell his house and the private part of his practice freely. I am one of those "not so young" G.P.s who have been almost entirely engaged in private practice for many years, and I feel quite unable to face large-scale contract practice. I suggest that clauses in the Act penalizing private practice should be revised. (1) There should be no power to take over hospitals and nursing homes after the appointed day without their consent. (2) An allowance should be granted towards the cost of the drugs on private doctors' prescriptions, and purchase tax should be abolished.—I am, etc.,

London, W.14. C. W. ROE.

Four Main Issues

SIR,—I am opposed to the Act in its present form. But of the four main points at issue, one only is to me anathema; the others, however objectionable, I could accept. I am sure there must be many who feel as I do. Would it not be possible to find out, by another plebiscite, on which of these four main issues most general practitioners are adamant and on which they would be prepared to compromise? The information might help our leaders to obviate a fight which, however necessary and heroic, will be to many of us a costly and distasteful affair and to most of our patients a sordid and unedifying spectacle.—I am, etc.,

West Drayton. A. COYER.

Fear of Salaried Service

SIR,—So far as I can judge the main fear is that general practice should become a full-time salaried service. Personally I am of opinion that such a service would be damaging to the best interests of doctors and patients alike. If this fear were to be removed it would, to my mind, negative any objection to the £300 basic salary as the thin end of the wedge and would also mitigate, if not even entirely negative, the objection to the ending of the buying and selling of practices.

My suggestion is as follows: (1) There should be a provision in the Act that the question of a full-time salaried general practice service should not be brought up at all until the service has been running for ten years. (2) If by that time there is reason for the matter to be brought up the case should be decided by having a quiet and friendly plebiscite of general practitioners who at that time are running the general practice service, excluding all others. If, as is likely, the voting were to be against the full-time salaried service, the plebiscite decision should be accepted as final. Payment by capitation, with or without a small basic salary, would then continue as the ultimate rule. If the voting were to go the other way, then discussions as to details would be required, but the majority vote should hold. Such a delay would allow for heated spirits on both sides to cool and would give an opportunity to test the scheme for a sufficiently long time to judge of its merits or demerits. I believe it would also lead to an arrangement which would be agreeable to most of the doctors, most of the patients, and (is this too much to expect?) most of the politicians.—I am, etc.,

Dundee. A. E. CHISHOLM.

Retain Goodwill

SIR,—The question now is on which point shall we fight the main battle. Surely the important thing is to maintain our independence and to preserve the doctor–patient relationship. To secure these two conditions it is essential that we retain the goodwill of our practices. The Socialists knowing this have done a lot of propaganda against what they call "buying and selling of patients," and this has had its effect even amid our own ranks. Nevertheless, if we give way on this point we might just as well throw up the sponge and save ourselves a lot of worry and expense.

We should say to the Government: Let us retain the goodwill of our practices and we will concede you the other points at issue; furthermore, we are prepared to accept some measure of control over the transfer of practices. In fact we could safely hand this function over to the board which will replace either the insurance committee or the panel committee, it would probably do the job better than the commercial agencies do it, and it would act in the best interests of buyer and seller.

What are the other points? Appeal to the Courts?—a double-edged weapon and one which would be very rarely used. Basic salary?—no danger at all if we retain the goodwill of our practices, in fact it could be very usefully used to subsidize young men or to encourage them to practise in undesirable areas. Partnership difficulties?—these again would resolve themselves for the great part, but in any case the Minister is prepared to give way on this point. I sincerely hope the Representative Body will decide to make the retention of goodwill the major issue, and if we put it to Government and public that we are prepared to concede all other points for this one then I think we would have a great volume of support. If we won our point we would have achieved victory.—I am, etc.,

London, S.E.1. W. B. PEMBERTON.

The Panel Yoke

SIR,—Mr. Bevan's delusions of a raucous-voiced politically minded minority of doctors intent on an evil thing develop one step further towards carpet-chewing when he declares in Parliament that he has made all the concessions and the doctors none. We have made so many concessions that we are left with a weakened case to present to the public. The rights to buy and sell practices, to appeal to the courts, to move without permission, and not to be salary-earners seem relatively small matters to the average man. To win public support we should now take a firmer stand, with a clearer case which all can appreciate.

Possibly we have called a halt too late in the process of sacrificing ourselves—and our wives. We have suicidally offered a "free" G.P. service to every man, woman, and child in this country, undeterred by the fact that most conscientious panel doctors are half worked to death already. But now mercifully our sacrifices are scorned. We have the opportunity to reconsider and restate our case. Now we have the chance to redeem the mistake made in 1911. The panel yoke is about to be lifted from our galled shoulders. No longer will twenty million people feel that they pay doctors and so might as well "have" them, considerately or inconsiderately. Let us boldly state that advances in medicine render it impossible for honest doctors to contract to supply all possible aids to all patients, especially if bothered by bureaucrats. Let us confess the bitter truth that the panel system debases the practice of the art and science of healing.

Should we not now return to the time-honoured dealing between doctor and patient in which each gives what he can? If there must be intervention of cash-collectors between doctor and patient then let our patients pay our own collectors so much a week or month off their accounts. This system has worked in Lancashire, and has this to recommend it: that patients only pay for what they have had and only ask for what they need. There would be no question then of the divine rights of Parliamentary collectors of our earnings.

Our case for the public would be simple if we confessed our distrust of any form of contract practice and our resolve to preserve some freedom for ourselves. It would be strong if we insisted that we hold the doctor–patient relationship sacred and will not admit unnecessary intrusion on its privacy. It would be invincible if we sufficiently explained the great sacrifices and concessions we have already made as panel doctors with little peace in our homes owing to the insensate demands of contract patients and bureaucrats. We know that we have not got the time and strength to do half what we should like to do for our patients. Let us say so. Let us add that we wish to be doctors, not M.O.s, not even panel doctors any longer. We will be wise, kindly, generous helpers of our own free will, and not by contract any more.

You well point out that Mr. Bevan has failed to find a narrow target for his vituperation of persons. But you fail to make clear that this Welsh class-warlock, building on the Welsh Wizard's foundations laid in 1911, has dangerously narrowed the apparent differences between his plans and ours. Across that too narrow gap he hopes to throw the blame for the disappointment of electors' hopes falsely and treacherously raised. So let us tell the truth about the panel and so set ourselves free from his trap.—I am, etc.,

London, W.1. WILLOUGHBY CLARK.

Remuneration

SIR,—The plebiscite makes it abundantly clear that the doctors as a whole are opposed to the new Act, but it does not say why. There have been reasonable criticism in the Press and from the public that the B.M.A. have been destructive, but not constructive; that they have no agreed plan of their own. This is regrettably true. The explanation lies in the fact that nowhere in the world has a wholly satisfactory system of remuneration for a complete service been evolved.

In all forms of employment and of organization of labour there is inevitably some degree of loss of freedom and frustration of initiative, but nowhere is this loss of freedom so vitally important as in the arts and in the personal relationship of medicine. For this reason a rigid State salaried service is ruled out. There is no doubt that a capitation system with professional freedom would be much better than a State salaried service, but the capitation system itself suffers from two incurable defects: (1) The elderly and chronic sick, who make up such a large part of practice, are put in the humiliating position of feeling that they are a nuisance. They are acutely aware that they are a liability rather than an asset to their doctor and, if they are sensitive, feel apologetic when asking to be accepted as a patient. (2) There is no financial inducement for the doctor to undertake any particular service. In theory this should not count, but in practice many men prefer to be paid for what they do because they feel that it is a safeguard against any tendency to slip into slackness.

All will agree that for those who could afford it private practice has in the past given as good a service as doctors were able to provide with the limited facilities at their disposal. It would seem evident that it is desirable not that all should be "on the panel" but that all should be "private patients." We want a true health service based upon insurance; one in which the patient chooses his doctor and decides when he needs help without fear of cost, while the doctor, backed by the State insurance funds, has at his disposal all the necessary facilities to give of his best.

Clearly the cost of the best possible service cannot be met by an equal contribution from all classes—the individual contribution would be far too high for the poor. Therefore, either, as in the present Act, the State must meet the extra cost from general taxation or, as in the New Zealand system, it must be borne by a personal security tax rising with income. The New Zealand system provides a complete health service, and the plan for remuneration is satisfactory except that it is open to abuse by excessive claims. The patient chooses his doctor and the State pays the account at a fixed rate per service. It is also permitted to doctors, in agreement with these patients, to make an extra charge for visits to the home. In this way doctors whose services are especially in demand may earn a larger income. This extra incentive may or may not be approved, but it does take note of quality as well as quantity of work and helps the older, experienced practitioner in his years of declining strength.

In other countries where high wages are the rule the principle of making the patient contribute part of the charge at the time is considered to check unnecessary visits and to give the patient a sense of responsibility without imposing any hardship. A safeguard against excessive claims by doctors could easily be devised by limiting the extent to which a doctor's claims on State funds should be met to an agreed total figure per thousand patients—this figure to be based on the Spens report. A higher rate would need to be allowed under special conditions.

In the past many doctors have disliked the intrusion of financial questions into their personal relation with their patients. The main reason for this feeling was the fact that so often serious illness resulted in heavy expenses for their patients when they could least well be met, and that in any

case no estimate of costs could be given in advance. If they could afford it all patients would prefer to feel that they were giving something for services rendered. They would prefer to know that, as at present, they could pay for the privilege of asking their doctor to call although it might be physically possible for them to attend at a centre. This preference is exercised by all classes to-day and its loss would be resented. Mothers in the lowest income groups frequently pay an extra charge to save the inconvenience of a surgery attendance when children and housework need to be considered. If it be thought that an extra payment for visits in prolonged illness would impose undue financial strain, a larger State fee could be allowed in all cases in which a patient is confined to the house for more than one week.

At present there are not sufficient doctors to provide a general service of the best private practice type, and the aim for the future should be that no doctor should be responsible for more than 2,000 people. As this point is approached the rate of payment per service and the number of claims allowed per 1,000 would need to rise if the income and consequently the quality of doctors are to be maintained. This must mean an increase in cost to the State, but in no other way can a service of the highest quality be organized. Should remuneration be arranged after some such plan, those patients who need most help would feel that they were an asset rather than a burden; doctors would be rewarded according to the quality and quantity of work performed, and the State finances would be adequately protected.

If Mr. Bevan and the Government are sincere in their assurances that no approach to a whole-time salaried service is intended, they should have no objection to this plan. It cannot be argued that it is too complicated to work, for it is, in fact, working in New Zealand in spite of the absence of the safeguard suggested. Were this plan accepted the public and profession would be free and there would be no four points for deadlock.—I am, etc.,

Bexhill-on-Sea. L. NORMAN REECE.

Compensation and Hardship

SIR,—Having retired from practice I have no personal interest in the National Health Service Act, though whole-heartedly in favour of its rejection in its present form. However, there is one aspect of the proposed abolition of the sale and purchase of practices which I have not seen mentioned. The Minister of Health prides himself on his magnanimity in offering the younger members of the profession a chance of entering practice free from debt. This may sound attractive to some, but have they thought of their future? The present proposal is that all practices in existence on the appointed day shall be compensated either on death or retirement of the owner, should he enter the Service, on some future unspecified date. For those entering practice after this day, in the event of death or retirement, there will be no compensation, and no pension, to say nothing of the proposed penalties in regard to sale of houses, thus leaving no assets beyond what could be saved during the years of practice. The prospect of hardship to dependants appears to me to be much greater than under the present system of sale and purchase, which has worked quite satisfactorily up to now, and with capital available on favourable terms at the present time no insuperable embarrassment should be caused in the early days of practice. It is easy to see why the Minister lays such stress on this abolition, as until this is effected it would be impossible to introduce a whole-time State medical service. —I am, etc.,

Hassocks, Sussex W. E. L. HORNER.

Extend Panel

SIR,—(1) Let the Health Service for all, which we all advocate, develop by evolution—not revolution. (2) Let us realize that there are not enough doctors at present to give a free service for all efficiently. (3) Let the public be told this fact and be reassured that all the poor will be cared for. (4) Let the present panel be used as a basis, including dependants and all pensioners and public assistance patients. (5) Let the income limit be adjusted as there become more doctors available to give a good service.—We are, etc.,

Birmingham, 11. CHARLES AND DOROTHY BIGGER.

Remuneration of Consultants and Specialists

SIR,—Although the remuneration of consultants and specialists cannot be determined before the results of the Spens Committee are made known, I feel that the time has come when we should make some definition of the nature of consultants and specialists and consider something of their remuneration. I would suggest that we should define three categories. First, consultants might be described as those possessing higher degrees—M.D., M.R.C.P. or M.S., F.R.C.S.—and engaged solely in a specialty of medicine or surgery (including, of course, general physicians and surgeons). Secondly, senior specialists might be considered as holding a diploma in a special branch and to have practised this work for ten years or more. Thirdly, junior specialists being those who hold such a diploma but have practised less than ten years in the chosen work.

With regard to remuneration I am of the opinion that a consultant might reasonably ask for five guineas for a two-hour session. The fee suggested as a minimum by the B.M.A.—that is, four guineas—would be reasonable for the senior specialist and three guineas for the junior for a similar session. Longer sessions should be paid accordingly. It is unfair to make the basis on the number of patients seen if insufficient patients are available to fill the session.

When we consider the present payment it is to be seen that remuneration varies absurdly. Some clinics have advertised five guineas a session, and in the *Journal* of Feb. 21 there is a post of part-time psychotherapist offering only £2 12s. 6d. per session. No mention is made of the qualifications required, except the applicants must have experience in child psychiatry. Surely the correct way to determine how much should be paid per session is by seeing how much a consultant or specialist could earn *if engaged solely in sessional work*. The fees I have suggested would give a reasonable if not exorbitant salary. It would be interesting to know what others think of the definitions I have given and the suggested remuneration.—I am, etc.,

London, W.1. CLIFFORD ALLEN.

Power of the Minister

SIR,—May I advance a certain solution to the problem of our conflict with the Minister of Health and, it must be now realized, owing to his cunning tactics, with Parliament. The three main points of disagreement—buying and selling of practices, the basic salary, and the lack of appeal outside the Minister—are unacceptable because they all add up to the dictatorship of a single politician. It is a dictatorship because this man has the right, within a very wide framework, to adapt and alter as he alone sees fit, by regulation and without reference to Parliament. If Parliament would decree the main details of the medical service and refuse Mr. Bevan permission to alter the structure of it, then his powers are limited and defined and we need not fear dictatorship by him or any single individual. If this were so I personally, and many with whom I have spoken, see no reason to sustain our objections to the present Act.—I am, etc.,

Manchester, 13. T. B. FITZGERALD.

Misrepresentation

SIR,—After the years the profession has spent in the study and discussion of the National Health Bill and Act from the time of its inception to its entry on the Statute Book, Mr. Bevan's allegation that we do not understand the Act and that it has been misrepresented to us by our "leaders" would be amusing if it were intended for *our* consumption. But it was not. It was intended for those members of his own party and for those members of the public who do not understand the Act as well as we do.

Those who think Mr. Bevan knows no better than to believe that we have been misdirected are mistaken. Mr. Bevan is fully acquainted with the democratic constitution of the B.M.A., and I have been informed—rightly or wrongly—that he has studied the "Handbook" in which the working of our constitution is explained. He knows that the will of the profession is expressed through the Representatives of the Divisions, who are instructed to carry out the wishes of the individual members: he knows that the Council is the executive which carries out

the decisions of the Representative Body, and therefore of the profession as a whole. He knows that the officers are the spearhead through which the decisions of the profession are promulgated. We know all this, but the public do not. Whether in view of all this Mr. Bevan's gross misrepresentations are innocent and to that extent honest, or whether deliberate and otherwise, may safely be left to the judgment of the profession.

Does he really believe that a profession to which he himself has applied the adjectives "honourable and learned," to which he himself has paid the unintentional compliment of accusing them of "rejecting the Act before they knew the terms of remuneration;" does the Minister, I say, really think that this "honourable and learned profession" is incapable of judging for itself and coming to a decision? Or does he think we are spoon-fed with the opinions of others?

There are many other points on which one could enlarge, but we are not a flock of sheep to be stampeded, and we are proof against bullying. I think the profession owes Mr. Bevan a deep debt of gratitude for welding it into a state of solidarity such as it has never before attained.—I am, etc.,

Brookwood, Surrey. H. M. STANLEY TURNER.

Tell the Public

SIR,—I have read the correspondence in the *Journal* of Feb. 21 with more than passing interest, and especially the letter by Dr. Reginald C. Jewesbury (p. 359), advocating a short exposition of what we stand for and what we are standing against—not more than 500 words, attractive enough to secure general attention, simple enough to be within the grasp of every man's intelligence, to be broadcast far and wide. A series of such pamphlets might be issued with great advantage during the next few weeks. As a matter of fact, there appeared in *The Times* of Feb. 21 just such an admirable exposition, under the name of Prof. J. H. Dible, of London University, entitled "The Doctors' Plebiscite." This was ample explanation for the relatively small but enlightened circle who read that journal; but for the "Plebs" as a whole I would advocate something that explains adequately the true significance of the basic salary and the selling and buying of goodwill, something that shows these to be matters concerned with our freedom, and not a squalid haggle over filthy lucre, which is precisely what a commercially minded public believe them to be—a belief which the Socialists are exploiting with clever perseverance.

Further, the public must be taught here and now that their interests and those of our profession are one and the same—namely, freedom, and the keeping of politics out of medicine; nor should the things of the spirit be ignored.

Time is in the essence of this matter, and these expositions should be scattered with persistence for some weeks to come.—I am, etc.,

Liverpool. J. GORDON DANSON.

The Fight taking Shape

SIR,—The fight that is now taking shape between the medical profession and the Ministry of Health has not been unforeseen by most of us, and I for one envisaged the present position in the columns of the *Journal* in 1945, but we all hoped Mr. Bevan might see reason and settle this dispute sensibly, as it must be eventually. Mr. Bevan with his characteristic stubbornness is no compromiser and may therefore have to go, and then the Government's headache really begins. Mr. Bevan may join up with Mr. Dalton to help to fire the malcontents.

Mr. Bevan has already fired the first broadside by throwing doubts on the validity of the doctors' plebiscite, and he has suggested the doctors are defying the Act of Parliament. This is certainly not so, for, at present anyhow, as the Act stands the doctors may or may not join the Health Service according to their wish. It is not the doctors who need worry—it is Mr. Attlee.

The result of the plebiscite leaves no doubt that a huge majority will prefer not to join the Service and so decline to operate the Act in its present bad form—bad for the doctors and bad for the public. It is believed the Cabinet ill-advisedly have decided in advance to make no concessions to the doctors, and so the fight is on. The Government therefore hope that the individual doctor will enter the scheme even if he votes against doing so in the plebiscite. Indeed the recalcitrants will come under heavy and continuous pressure as the appointed day draws nearer for the formation of the Health Service. The Cabinet again have made a mistake.

I am sure this country is slowly but surely sliding down the hill with our present incompetent "planners" in control, and this is no empty vain statement. It is therefore up to one and all of us to accept responsibility when we can and help to pull us out of our present troubles. It is indeed this great feeling of necessity, of almost despair for one's country, that has brought a nonentity in the medical world such as myself into the political arena. We live in one of the most perilous periods of our history, but never perhaps in such a parlous state of weakness as we are in to-day. The people of this country must wake up to the full realization of how we are saddled to-day with an incompetent and dogma-ridden batch of theorists.

The doctors must now do their part by standing firm, and it will only be a matter of time (and not a very long time) until the Government seek to come to terms with the profession, when we can then amend the present badly framed Act and establish, as we have always desired to establish (irrespective of political flavour), a sound health service for the benefit of all members of the community in this country.—I am, etc.,

London, W.1. NORMAN P. HENDERSON.

Action Now

SIR,—The time for action has come and we look to the B.M.A. to give the profession a lead *now*. July 5 is awfully near, and every day spent in defensive tactics not only lowers the morale of those who are unwilling to accept the Act as it now stands but gives the Minister just cause to continue his cynical attitude that the majority of us who voted "No" will change our mind as the appointed day gets nearer. It should be realized that economic pressure and—let's face it—the fact that we are not certain that our colleagues will not waver will tend to drive a large section of the profession into the Minister's waiting net. Therefore why wait until March 17 before the Representative Body decides on the next move?

The plebiscite result demands that *immediate* action be taken, and I suggest that forthwith the Minister be informed that we resign from the N.H.I. on April 1 (or some convenient date) unless between now and then it is agreed between him and our representatives: (1) That there be no basic salary as such but an expenses allowance. This would, I feel, satisfy the Minister's urge to help young doctors and at the same time would not make them salaried servants of the State. (2) That there be freedom to join the service without penalty at any time. (3) That there be no direction—negative or otherwise—but that special inducements be offered to enable the under-doctored areas to be efficiently served. (4) That the capitation fee should remain unaltered for each patient, irrespective of the size of the doctor's list. (5) That a compromise could be reached about sale of goodwill. At the same time the public must be told by an intensive Press campaign exactly what we are fighting for. I feel that this is of great importance, as at present the large majority of the public think that our dispute with the Minister is either financial or political, or both.

One thing I feel is certain, that unless we get *immediate* action our present united army will have dwindled sadly by the time the appointed day arrives. If we are going to put up a fight against the curtailment of our individual and professional liberty we cannot start fighting too early. This is no time for defensive action—and anyway we don't need that kind of action if we are to retain our freedom and self-respect. Time is not on our side, nor at the moment are the majority of the public. We need an alternative scheme for them. Why not extend the panel system and leave it at that?—I am, etc.,

Plymouth. A. S. BRADLAW.

Attack Now

SIR,—I am whole-heartedly in favour of widespread integration of the hospital and auxiliary medical facilities of the country. I believe all doctors are, as in this way we can better the service we render our patients. I am whole-heartedly against the present Act, which, under cover of this integration, aims at completely removing personal liberty from the doctor, and in large part from the patient. I think it is pathetic that

this noble profession should try to fight such a great issue on the narrow field that has been chosen. The State aim is obvious. Let us fight that, not quibble over the means which the State is employing. May I associate myself completely with Dr. K. Knowles's advice (Feb. 21, p. 357) and say fight *now* before Mr. Bevan can starve us out? After July 5 the spirit may be willing but the flesh will be weak.—I am, etc.,

Burton-on-Trent. R. LUNT.

Stand Firm

SIR,—The vast majority of the profession having now won a commanding position *vis-à-vis* the Minister, it is surprising and alarming to find so many of our colleagues—e.g., Dr. R. A. Nash (Feb. 21, p. 358) and others—seeming to cast doubts on the validity of that position and expressing the opinion that this and that principle for which we have been fighting are not after all worth fighting for. Some miss the point altogether; for example, one of my own correspondents, after airily dismissing three of our main contentions as unimportant, says of the abolition of goodwill: "Our strongest point—the Minister's remark about buying and selling patients—is sheer bunk."

Some think the Minister should be approached with suggestions of compromise, etc. Surely, Sir, such an attitude towards so intransigent a Minister is the height of folly and would merely delight him who is banking on cleavage in our ranks. It is devoutly to be hoped that the 90% will stand firm this time and that no approaches to the Minister will be made either directly or indirectly by the B.M.A. or by others apart from the B.M.A. Any such approaches for further negotiation must come from the Minister, for to his request for an answer Yes or No to enter the Service as it stands he has twice been given the answer No in no uncertain voice, and the objectionable parts of the scheme have been pointed out to him *ad nauseam*. He says our objections are unreasonable and our fears unfounded. Let him then expunge the objectionable parts and then we can talk again. Why does he not do so? Simply because he knows very well that these parts are fundamental to our freedom, which is what he is set on depriving us of.—I am, etc.,

Thame, Oxon. C. H. BARBER.

Basic Salary and "Squatting"

SIR,—While the basic salary is rightly or wrongly suspect in its political implications by the vast majority of the profession there are other grave objections to it that appear to have been overlooked. (1) The squatter, who has always been objected to by the established practitioner, in being subsidized will be paid at a very much higher rate per patient than the long-established practitioner. (2) The squatter is not required to submit any evidence of competence apart from a registrable one. In general he will be a young inexperienced doctor who has short-circuited the usual avenues affording experience—hospital appointments, assistantships, etc. The net result will be that the inexperienced in being subsidized will be encouraged to be an embarrassment to decent established practice and practitioners. At the same time there is no recognition by way of additional remuneration of approved experience in practice or for higher qualifications.

Witnessing this state of affairs, can anyone seriously believe Mr. Bevan when he claims that the idea behind the N.H.S. Act is to provide a comprehensive and better service for the whole community? Surely a better plea for any kind of supplementary remuneration would be additional capitation in recognition of approved experience and qualification to encourage a better and higher standard of service in general practice.—I am, etc.,

Fraserburgh. J. MACLEOD.

No Option

SIR,—In the *Supplement* of Oct. 14, 1944 (p. 83), you published a letter from me (then a wing-commander in the R.A.F.) in which I asked what the B.M.A. was doing or intended doing regarding the reinstatement of men who like myself had lost their private practices as a result of war service. In my own case, within six months of my recall to the Services in 1939 I had lost the whole of the income from my practice and over £2,000 capital I had invested in it up to then. For this I received no compensation, and on reverting to the retired list in May, 1946, I received a miserable gratuity of £175. With this I had to start all over again at the age of 46 and with a family of five children ranging from 1 to 15 years old to bring up.

After the hopeless failure of the B.M.A. Protection of Practices Scheme I can hardly be blamed for lacking faith in the integrity of my fellow practitioners.

In the recent B.M.A. plebiscite, while voting my disapproval of the Health Scheme in its present form, I did not agree to abide by the decision of the majority. If the scheme is forced upon us in July I for one intend to enter the Service, not because I approve of it, but because financially I have no option. And—as I remarked in my letter of 1944—there must be hundreds in similar circumstances to myself.—I am, etc.,

Diss, Norfolk. J. H. CULLINAN.

The Moral Issue

SIR,—The letter from Dr. Thomas J. Agius under the above heading (Feb. 21, p. 362) should be read by every practising doctor, as it portrays the appalling encroachment of the State into the "sacred secrets" of a man's life. These secrets up to now have been confided to the doctor only, and because the doctor up to now has also been called a friend. This bond which many doctors have with their patients must not be encroached upon or medicine will become a trade and be no longer an art.

"Discretion tested by a hundred secrets"—this was part of R. L. Stevenson's tribute to the medical profession, and he also wrote, "Generosity he had, such as is possible to those who practise an art, never to those who drive a trade." Sir, I would say that under State service we shall be driving a trade, and those of us who enter the scheme unamended will have destroyed the very soul of medicine.

Let us by every means at our disposal, whether it be by talks to our patients or lectures, but above all by a united front in our own district, convince the public that this is not the way to Beulah but to Bedlam.—I am, etc.,

Sidmouth, Devon. ARTHUR H. DUNKERLEY.

Nationalized Charladies?

SIR,—While in complete agreement with the views of doctors' wives on their importance to the N.H.S. as expressed in recent letters in the *Journal*, I should like to point out that there are quite a number of women practitioners who, if they unfortunately have no family relative to act as housekeeper, have to bear the double burden in many cases of running both their practice and their house, including surgery, accommodation, etc. Those of us who are thus situated will indeed welcome the nationalized receptionist-cum-charlady already visualized as yet another of the benefits to be conferred on us by Mr. Bevan.—I am, etc.,

Newbury Park, Essex. PHYLLIS C. MACKENZIE.

Brodie's Abscess

SIR,—Under this title Messrs. Stanley Scott and F. S. Preston (Feb. 14, p. 296) state, "It also occurs commonly after compound comminuted fractures." The case history of a patient developing an abscess in the tibia thirteen years after a compound fracture of that bone is reported. This raises a point of importance not only to medical historians but also to clinical teachers, authors, and statisticians.

There is a fascination in employing the name of the discoverer of a disease or of the first to describe a clinical entity. Unfortunately, as time passes, the original description is forgotten and there appears in medical literature and in bedside teaching a broader interpretation (or even a new one) of a condition once described in a masterly manner.

Benjamin Brodie read his first paper on this subject on March 27, 1832, and it was published in *Medico-Chirurgical Transactions* (1832, 17, 239) under the title of "An Account of some Cases of Chronic Abscess of the Tibia." The clinical details are set out concisely and lucidly. He lectured on the subject at St. George's Hospital on Nov. 19, 1845, and this

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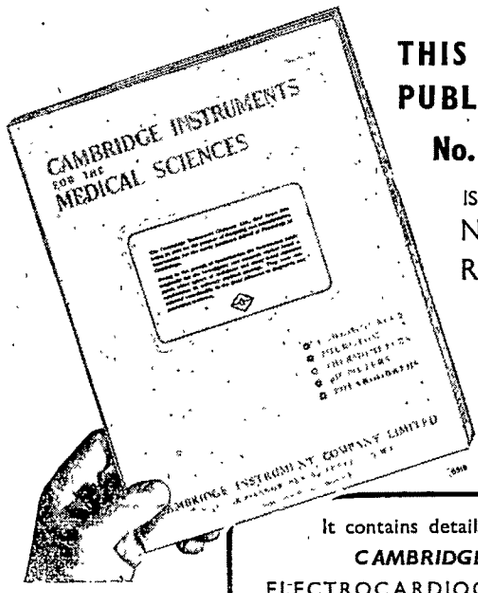

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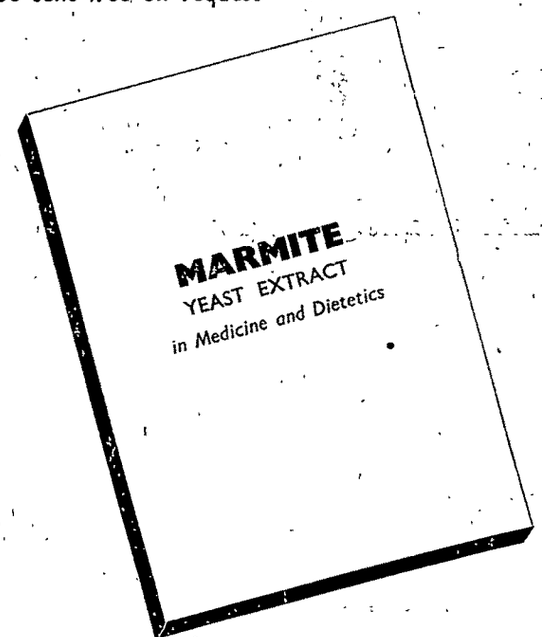

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lecture was published in the *London Medical Gazette* (1845, **36**, 1399). The first patient in whom he recognized an undescribed condition was seen by him in 1824, but I find no record of him reporting this case prior to 1832; Scott and Preston did not state the reference when they wrote that Brodie had described "his abscess" in 1824.

It is quite clear that the latent abscess occurring at the site of a compound fracture long years after is not the entity described by Brodie, for there had been no open wound of the limb in his cases. The medical literature in our language is valued and we are proud of those whose names we associate with well-known conditions. If only for the sake of those who will read present literature in future days it seems important to realize what condition was described by the man whose name is associated with it. By this means the value of the original work is accurately reported from time to time and the memory of a great man is perpetuated.—I am, etc.,

London, W.1. ST. J. D. BUXTON.

Louse-borne Relapsing Fever in Persia

SIR,—Drs. R. I. Bodman and I. S. Stewart in their interesting article (Feb. 14, p. 291) claim that this disease had not previously been reported in Persia. They may be interested to know that it was encountered in Iraq and Persia on a wide enough scale as to cause much anxiety among our Forces in the campaign of 1914–18. The subject was reviewed at considerable length by W. H. Willcox and J. C. G. Ledingham in addresses to the Royal Society of Medicine on Jan. 27, 1920 (*Proc. R. Soc. Med.*, 1920, **13**, 59). In his opening address Willcox said that the disease was known by native practitioners as "recurrent fever" and by the Turks as "chronic fever," both typhus and relapsing fever being endemic and of greater incidence than enteric fever. Our troops were uninfected until their contact with the local population and Turkish prisoners. Louse infestation was appallingly common in the Turkish army and relapsing fever was known to be prevalent at Kut in the winter of 1915–16. The disease also occurred in the civil and military population of Bagdad in 1917, after its conquest by the army led by General Sir Stanley Maude. The following incidence of cases among military personnel was recorded (the total amounting to 1,883):

Year	British	Deaths	% Mortality	Indian	Deaths	% Mortality
1917 ..	20	—	—	196	8	4·08
1918 ..	110	6	5·5	1,557	126	8·09

Sir John Ledingham demonstrated the correspondence in the incidence curves for typhus and relapsing fever month by month from 1917 onwards which Drs. Bodman and Stewart notice again in 1946. The epidemic started in the last quarter of the year and attained maximal height in April, whereas in the 1946 epidemic January was the month of maximal incidence—a difference accounted for solely by variations in temperature and relative humidity of the atmosphere. On reading the accounts of the two epidemics it is interesting to note that they correspond in almost every detail with regard to symptomatology, complications, and the response to treatment with N.A.B. The mortality was about 1% for Arabs in 1918, being considerably less than for Indian and British troops. It was noted that cerebral relapsing fever might sometimes clinically resemble meningococcal meningitis. Jaundice was often a complication. There was evidence that lice are sometimes infective for both typhus and relapsing fever at the same time. For example, a medical officer contracted relapsing fever exactly 6 days after attending two cases of typhus, and there were other experiences from which it was concluded that lice can be vectors of the two diseases simultaneously.—I am, etc.,

Windsor, Berks. PHILIP H. WILLCOX.

Trichlorethylene in General Anaesthesia

SIR,—Since the introduction of trichlorethylene into anaesthetic practice in 1942, the two factors concerning this drug which have provoked more discussion than all others would appear to be (1) tachypnoea and (2) the necessity of employing only minute amounts of the agent. Concerning these two points, Dr. Gordon Ostlere (Jan. 31, p. 195) does little but reiterate what has been said already many times over.

He states, "The secret of a successful trichlorethylene administration lies in the employment of only small quantities of the drug," previous to which he has said that he uses as a vehicle for his vapour a 20% mixture of oxygen in nitrous oxide. There is, however, no mention of the effect of oxygenation upon tachypnoea and this to my mind is equally important. Using a 20% oxygen–nitrous-oxide mixture rapid respiration will indeed ensue if the amount of trichlorethylene vapour exceeds the minimal. If, however, the oxygen content is raised to 30% or more, then much greater latitude with the amount of trichlorethylene can be allowed and a more easily controlled anaesthesia obtained even though in the long run more of the agent may be vaporized.

Adequate oxygenation would appear to be an exceedingly important factor in the prevention of trichlorethylene tachypnoea, and since Dr. Ostlere's paper appears to have been written for the benefit of persons unaccustomed to using this agent I feel that this point should be stressed. I agree wholeheartedly with the writer when he refers to the use of minimal amounts of the drug, but may I make so bold as to add an amendment to his statement and say that "the secret of a successful trichlorethylene administration lies in the employment of only small quantities of the drug, together with a high oxygen percentage in the mixture"?—I am, etc.,

York. J. MCNAUGHT INGLIS.

Simple Test for Pulmonary Tuberculosis

SIR,—With reference to the letter under this heading (Jan. 24, p. 173) the monocyte–lymphocyte (m/l) ratio is recognized as one of several aspects of the differential count having special interest in tuberculosis, more particularly in relation to "resistance" ($m/l<1/3$) and to "spread" ($m/l>1/3$) of the disease. The idea is promulgated in the Houghton and Frimodt-Moeller indices, where monocytes and lymphocytes are regarded respectively as "liabilities" and "assets"; but in these indices the m/l ratio makes only minor contribution towards the final result, and Muller, who reviewed the literature, concluded that monocytic variations are relatively crude measures of the disease process and in the form of the m/l ratio are not diagnostic. In an established case of tuberculosis, serial haemograms (including the m/l ratio) can be helpful in assessing progress, but unfortunately the controversial significance of the monocyte and the multiphasic aspect of the disease (co-existence of recent and old-established lesions) preclude rigorous correlation with the underlying pathology and there is an inevitable "haziness" when we come to interpret the haematological data.

Classification in terms of an m/l ratio also implies confidence in the value observed, but the differentiation of monocytes and lymphocytes is not always easy and any error in this respect is doubled in the ratio. For example, an error $-x$ in the monocyte count leads to $m-x/l+x$ in the ratio, for what is lost to one is gained to the other. Although supravital staining has been used to improve differentiation, this difficulty still remains—in 1936 Dr. Heaf submitted identical blood films from three cases to each of 11 "competent authorities" and received the following range of reports: Case 1, lymphocytes, 12–29.5%; monocytes, 4.5–40%. Case 2, lymphocytes, 4–19%; monocytes, 4–16%. Case 3, lymphocytes, 36–65%; monocytes, 2–15%. The site and method of the puncture may also alter the picture, as monocytes can stagnate in the lobe of the ear.

Finally the standard error of the ratio which is of the order $\sqrt{m}/l$ (more nearly $m/l[\frac{1}{m}+\frac{1}{l}-\frac{2}{w}]^{\frac{1}{2}}$) must be considered. In a differential count of 100 cells ($w=100$), where $m=8$ and $l=24$, the true value of the m/l ratio is not necessarily $8/24=1/3$, but merely somewhere within the range $1/3\pm2$ SE—viz., between 1/13 and 1/1.7.

To summarize—not only is the m/l ratio largely indeterminate in relation to the general and special pathology of tuberculosis but it is also subject to considerable cytological and mathematical uncertainty. Hence it lacks scientific desiderata essential to any reliable diagnostic test and must be viewed with circumspection. Incidentally, bacteriological tests are just as "simple" to do and much "simpler" to interpret.—I am, etc.

Papworth, Cambridge D. BARRON CRUICKSHANK.

Injection Errors

SIR,—Mr. Harold Dodd (Feb. 14, p. 320) raises an interesting and vital subject. The greatest medical tragedies are surely those following the injection of a solution, prepared either in error by the pharmacist or administered wrongly by the surgeon. Not only are these catastrophes avoidable, but in the majority of cases they occur in the treatment of minor maladies, in which, were it known that even the slightest possibility of risk to life existed, operative treatment would never be considered by the patient or the relatives. As long as this smear on the good name of the profession exists, either individually or collectively, surely it is imperative that no effort be spared to reduce this risk.

The suggestion of tinting the fluids and of etching the contents of ampoules would contribute towards the end we should all have in view. Such methods would require enforcement by Act of Parliament to prove effective, for only by an addition to the Dangerous Drugs Act, making it obligatory for pharmacists to conform to a standard range of colours for common injection solutions, would the danger of these lethal drugs be properly appreciated and avoided.

Even with this additional safeguard it is not likely that the number of fatalities would greatly diminish so long as the present method of inquiring into the cause of death exists. The coroner's inquest is the mode of investigation to determine the cause of death, and this court has as its object to exclude the possibility of murder or manslaughter, a possibility in a death on the operating table so slight as to be ignored. But let us face the fact that the truth is not always spoken, perhaps in some cases from altruistic motives, and also in others when the temptation to conceal is there, if full exposure might tarnish some reputation. If negligence or lack of care is revealed at an inquest it is only by chance, as the purpose is not to inquire into its possibility.

There seems to have arrived the time when all anaesthetic deaths and all others taking place in the course of operative procedure should be investigated by a court other than that of the coroner. This could be composed of three medical men appointed by the General Medical Council with possibly a member of the Bar to advise on legal procedure. The findings and conclusions would be made public and be of inestimable value to the profession.

The public to-day are suspicious of medical evidence and an undercurrent of dissatisfaction is abroad. If the initiative does not come from our own ranks pressure will certainly be brought to bear from other quarters in the very near future.

"Nane ever feared the truth to be told,
But they whom the truth would indite."

—I am, etc.,

Stretford, Lancs. W. T. WESTWOOD.

Emergency Bed Service

SIR,—The E.B.S. has now been in operation for nearly ten years and experience has shown that it can be of real assistance to general practitioners. Hitherto it has dealt solely with finding beds for acute patients requiring immediate assistance. In the course of this work it has become apparent that doctors could be greatly helped if the service were able to give them guidance as to the facilities other than in-patient treatment available for their patients, the time and place of out-patient clinics, such agencies as there are to help chronic patients, details of ambulance services, and so on, and all matters on which from time to time doctors require advice, and an endeavour has now been made to acquire the information necessary to answer such inquiries.

The service cannot hope to be omniscient, but it seems likely that most questions of this nature can be answered if the reply is not needed instantly and time is available for the service to make inquiries through its own channels. Where the answer is already known answers will be given immediately. It is proposed therefore to give a trial to a scheme by which the E.B.S. will extend its functions to providing doctors with information on points arising out of their work. Inquiries should be addressed to Monarch 3000.—I am, etc.,

London, E.C.2. R. E. PEERS, Secretary.

Cancer of the Lung

SIR,—With reference to the letter written by Mr. E. W. Sheaf (Jan. 24, p. 173), I would like to bring out the following observations :

(1) It is stated that the incidence of the above disease between 1921 and 1938 has greatly increased, and it is suggested that this is due to increased smoking. It would be of further interest to find out the incidence in the last ten years, as I am informed that smoking has still further increased since the war, especially in the case of women. (2) One often hears the suggestion that it might be due to the tars in the tobacco. Might I suggest that the carbon in the burnt tobacco may have something to do with it ? It is a fact that much carbon is present in burnt tobacco as seen in the bowl of a pipe or deposited on a vulcanite denture plate. If the smoke is inhaled a large amount of this carbon must, one would think, be left in the lungs, either in the tubes or alveoli. (3) One should not forget that both smokers and non-smokers are continually inhaling tobacco smoke whenever they are present in enclosed places where smoking takes place, the great difference being that cigarette inhalers are breathing in hot concentrated fumes. It is noticeable that smoke arising from a burning cigarette is blue in colour while that seen after exhalation is a greyish colour. It has either lost something in the process of being inhaled or gained something such as moisture. (4) It is not unreasonable to suspect carbon as being responsible for the disease if merely on the assumption of the cause in "chimney sweeps' cancer," unless of course there is some element of tar in the latter. It would be interesting to know how the tars and carbon are interrelated. Also, how does the incidence of this disease compare in non-smokers and smokers and various categories of the latter ? Does the quality of tobacco have any apparent effect on the incidence ? Has anything introduced into the tobacco during the process of manufacture any possible effect ?

These are but a few of the questions one might ask concerning this terrible disease.—I am, etc.,

Church Village, Glam. T. ISLWYN EVANS.

An Unusual Appendix

SIR,—On Oct. 30, 1947, one of us (T. M. C.) was called to see a woman aged 53, in a rather isolated district. The patient complained of having been "rather slight" for the previous week with epigastric pain and vomiting. The pain had now gone, though she had a lump in her groin which had burst the night before, and she could walk about and felt much better. She was actually walking about her kitchen on my arrival, and had not even seen fit to apply any sort of dressing to the discharging abscess.

On examination there was a large abscess above the right inguinal ligament discharging freely, and on wiping away the excess pus the vermiform appendix was seen protruding through the abdominal wall.

She was taken to hospital forthwith, and the abscess cavity was opened widely (by R. L. O.). The appendix was completely gangrenous and full of pus, with a perforation about 1 in. (2.5 cm.) from the base which was adherent to the bottom of the cavity just to the right of the femoral artery. The mesoappendix could still be made out. A curved clamp was placed across the base and the appendix removed. The abscess cavity was packed with flavine gauze. A course of penicillin and sulphamezathine ensured an uneventful convalescence.

It was apparent that the appendix had actually worked its way through the internal abdominal inguinal ring.—We are, etc.,

R. L. OAKES,
St. Austell, Cornwall. T. M. CRABTREE.

Pathogenic Fungi

SIR,—Since the natural habitat of pathological fungi is not known the following note is being communicated. For isolating yeast-like symbiotic germs from insects I used prune-juice media with or without other metabolites, like liver and yeast extracts. While working at the Indian Institute of Science, Bangalore, I used to be confronted with occasional infection of pathological fungi, but when I happened to continue similar work in Berlin contaminations from pathological fungi became very frequent and I had to concentrate my attention as to the possible source of these germs. In Berlin I worked mainly with homopterous insects which I used to collect from woods, feeding there on

shrubs and small trees. The contamination was not confined to one genus, but *Trichophyton* species predominated. The Petri dishes, on being opened, would give an acrid smell produced by these fungi strong enough to check the breath for a time. The frequency of this infection was such that I had to seek the advice of the late Prof. Bruhns and of his colleague Dr. Alexander, joint authors of *Allgemeine Mykologie*, in Jadassohn's *Handbuch der Hautkrankheiten* (1928).

Dr. Alexander kindly told me that they had found woodcutters and similar labourers who frequently came in contact with wood and timber most liable to such infections. They had presumed that the natural habitat of pathological fungi must be wood or freshly cut timber. The place where I used to collect the insects was exactly such a habitat.

In Europe mycotic infection of the feet, particularly of the toes, is rather common. It is often believed that the infection is derived from public bathing institutions. There wooden planks are provided for bathers to stand on immediately after leaving the bath. Wood, thus constantly moist, would appear to form an artificial habitat for such germs. This explanation brings in line with the main finding communicated above.—I am, etc.,

Bombay, India. S. MAHDIHASSAN.

Milk-borne Tuberculosis

SIR,—We read with interest the annotation (Feb. 14, p. 303) of two articles which appeared in the Swiss journal *Gynaecologia* (1947, **123**, 265). We draw attention to the last sentence, which reads, "Many of these infections are undoubtedly milk-borne and serve to emphasize yet again the importance of providing a safe milk supply."

There is only one way of knowing whether an infection is of bovine origin or not, and that is to isolate the organism and determine its type. Our protest is against the subtle insinuation that "many are undoubtedly milk-borne" without any proof to support such a statement. Our own experience is that bovine infections are not so common now as some people suggest, and recent surveys also support our view. The dangers of contact infections with tubercle bacilli of human origin are greater than infections from unsafe milk, even in those forms of tuberculosis so persistently suggested as being milk-borne.

We welcome sensible efforts to provide a safe milk supply and believe that this can be achieved without ignoring facts or having recourse to misrepresentation or to exaggeration.—We are, etc.,

PETER W. EDWARDS.
LESLIE J. CUTBILL.

Market Drayton, Salop.

Relief of Pain in Midwifery

SIR,—The subject of analgesia in labour has recently been discussed in your columns. In this connexion it must be remembered that there are two components in the pain of labour. (1) First stage—pain due to uterine contractions. These should, like gastric contractions, be painless, and with proper training in relaxation, as advocated by Dr. Grantley Dick Read, can become so. Nevertheless, just as gastric contractions may be rendered painful by underlying pathology such as an ulcer, so may uterine contractions also in a few cases cause pain and require pethidine. (2) Second stage—pain due to distension of the perineum. Now if the skin of any other part of the body is stretched it is certainly painful; and how in the world is Dr. Read to persuade us that the perineum is less sensitive than any other portion of the anatomy? No. These pains are very real and severe and in most cases call for anaesthesia.

We must remember that 80% of women in this country are delivered by the midwife alone, so the most important thing is to find an anaesthetic which she can safely administer without medical aid. Only the Minnitt fulfils this. Striking success is obtained with this machine *provided the patient is properly trained in its use beforehand*. May I issue a plea to all doctors and midwives who have lost confidence in the Minnitt to try it again, this time giving their patients a good half-hour's antenatal introduction to it and instruction in its use? This could quite easily be done in groups at clinics. I am sure those who take the trouble to do this will find themselves amply rewarded by results.—I am, etc.,

Leek, Staffs. ANNE M. TOMS.

The Problem of Chilblains

SIR,—Dr. R. John Gourlay's comprehensive treatise on chilblains (Feb. 21, p. 336) commends itself to all interested in the study of that and other vascular disorders.

I would draw his attention to an inaccuracy in his description of cyanosis. He states that carboxy-haemoglobin is responsible for the cyanosis and that cold interferes with the formation or causes the breakdown of carboxy-haemoglobin and thus prevents the elimination of the waste products of cellular metabolism. Carboxy-haemoglobin is a relatively stable compound of carbon monoxide and haemoglobin, and as such it does not exist in normal blood.

The cyanosis is due to the presence of reduced haemoglobin, and depends fundamentally upon the absolute amount of reduced haemoglobin in the capillary blood and not upon the relative proportions of reduced haemoglobin and oxyhaemoglobin. The capillary blood must contain approximately 5 g. of reduced haemoglobin per 100 ml. blood before cyanosis will appear (Lundsgaard, C., and Van Slyke, D., *Cyanosis*, 1923, Baltimore). Carbon dioxide can form a loose carbamino compound with haemoglobin which although small in amount is important in CO_2 carriage, but which as far as I can ascertain does not contribute to the cyanotic colour of blood.—I am, etc.,

Dublin. WILLIAM P. MCKEEVER.

Dicoumarol

SIR,—In view of the recent correspondence on the control of dicoumarol therapy by prothrombin-time estimation I should like to make three points which have not hitherto been mentioned and which have been noticed in a series of 50 cases, using Fullerton's method.

1. The variability of individuals. In 40 normals, prothrombin times of 10–22 seconds were obtained (av. 16.2), but the individual himself remains fairly constant and any departure from this time due to operation or dicoumarol therapy is related to his own base line, and to it he returns in course of time. Consequently when testing reagents or when comparing abnormals with normals at least 5 normals must be taken to avoid gross errors (Aggeler *et al.*, *Blood*, 1946, **1**, 220), and for each new patient a base line should always be obtained if possible and all subsequent readings related to this.

2. In the standardization of technique, I found that I could not get reproducible results if the tubes containing plasma and "stypven" were in the 37° C. water-bath for less than 3–6 minutes—after a half-minute the shorter the time at 37° C. the quicker the reaction. At 1/2 or 1 minute one could get times of 11–12 seconds or less, but they were not constant. The prothrombin times increase with the length of time in the 37° C. water-bath till 3–6 minutes, and thereafter remain relatively constant till 12 minutes, when they again increase slightly.

3. The Wintrobe anticoagulant was found to be quite suitable for the collection of specimens, but it was most important to observe that the volume of blood added was in accordance with the amount of oxalates which had been dried into the collecting tube. If smaller volumes of blood were added to the Wintrobe anticoagulant falsely long prothrombin times were obtained.

Even if all these points are observed patients will occasionally bleed slightly with prothrombin times only 1½ times their normal, but in these cases the clotting time is prolonged in spite of a Quick's Index in the region of 40%.

It is hoped to publish a more detailed report some time in the near future.—I am, etc.,

Sector IV Laboratory, Watford, Herts. G. A. JAMES.

Juvenile Delinquency

SIR,—In your leading article entitled "Juvenile Delinquency" (Jan. 31, p. 203) you emphasize the urgent necessity for further investigations into "the efficacy of different methods of treatment as judged by the after-histories of cases of different types." There are, I suggest, several more urgent measures, solidly founded in psychology and calculated to produce practical results far more quickly.

Virtually all juvenile delinquents are made, not born, and the principal factors in their making are the parents' attitude and the child's economic and social environment. Unquestionably the first factor is the more important. Good parents can do much to

neutralize a bad economic environment. Good material surroundings cannot dull the impact on the child of unwilling, ignorant, or contentious parents. In *Unwanted Child* I have described the havoc wrought on successive generations by parents who, because of emotional immaturity or educational or temperamental inadequacies, are unequipped to discharge their responsibilities. The most direct cause of parental shortcomings is the prevailing lack of education for the practical aspects of marriage. Until this need is met all measures to curb juvenile delinquency and the other effects of parental delinquency will be mere palliatives.

An allied measure which would have more immediate effects would be the expansion of what we might call the psychological-welfare aspects in the training of doctors, clergymen, teachers, nurses, midwives, social workers, and others whose work gives them early access to family situations and who, if adequately prepared, could detect the first signs of juvenile delinquency. Changes in school and court procedure should, I think, be instituted to compel parents to be more responsible and, failing that, to remove children from an atmosphere in which they might reasonably be expected to develop into delinquents. Adequate safeguards for the parents' rights should and could be devised.

I recommend that all children entering school should be interviewed by a psychologist. He would follow up cases in which the home situation seemed to require it. In cases where the home situation was not bad enough to justify legal intervention, a procedure might be devised under which the child would be temporarily adopted by foster parents with the consent of the actual parents.

As for corrective measures, it seems to me that short and severe punishments, followed by psychological treatment, would probably be far more effective than, say, three years of comparatively negative confinement in an approved school. Psychology cannot be wholly effective, however, if the underlying economic factors are neglected. At present little can be done to eliminate the economic causes of either adult or juvenile delinquency. But the imperativeness of their early removal must always be borne in mind.—I am, etc.,

London, W.1. EUSTACE CHESSER.

Drug Addiction

SIR,—I am in the fullest agreement with Dr. Eric Coplans (Feb. 14, p. 320), who makes a good case against the opinion so widely held that morphine addiction is incurable.

Incidentally, I have found that drug addiction is too frequently started by over-administration of barbiturates for dysmenorrhoea and menopausal nervous troubles. An aggravating factor in the position is that patients are given open prescriptions for phenobarbitone in quantities of as many as 100 tablets at a time.

I rather like Dr. Coplans's phrase "a benevolent swindle." He would appear to have enriched the language by a brilliant antithesis.—I am, etc.,

Southport. JOHN H. HANNAN.

Dogmas of Medicine

SIR,—The review by Dr. D. V. Hubble of Dr. Bernard Aschner's book *The Art of Healing* (Jan. 17, p. 103) admits the need for a new outlook in medicine and a new form of therapy, not a mechanistic one and not one preoccupied with end-results of disease processes, but with "the whole man." Yet Dr. Hubble turns down Dr. Aschner's book which contains a new (although old) outlook out of hand, making it the object of satirical remarks. He accuses the author of dogmatism. It would appear that Dr. Hubble is the dogmatist in condemning without trial methods which another doctor claims to have successfully used in a large number of cases for about 30 years.

I do not know whether it would "occupy a regiment of research workers for a lifetime" to test Dr. Aschner's contentions, but this is not a proper rejoinder nor is the complaint of these methods being "messy." They should be investigated by modern methods of science.—I am, etc.,

London, W.2. E. K. LEDERMANN.

Not Enough Fat

SIR,—The problem of production in industry is one that occupies a first place in the mind of every thinking person at the moment. The very fact that a responsible Minister has called for a greater effort from work-people and repeated the exhortation twice in six months must force everyone to realize the seriousness of the position. Yet it is surprising that no one has pointed out that to expect any significant addition to present-day output is impossible on our current rations.

A basic allowance of 1.1 oz. (31 g.) of fat, 2 oz. (57 g.) of protein, and perhaps 8 oz. (227 g.) of carbohydrates a day is bound to show its effect mentally. Irritability, lassitude, lack of concentration power, inability to work for long at a stretch full out, absenteeism due to nervous causes (which has shown such an increase)—all these are signs of fat deficiency. This is a natural course since so great a part of brain tissue is lipoid and cholesterol. Fatty replacement is therefore an essential. Energy used by the brain may not be measurable in many calories; but it produces breakdown products and repair has to go on.

The main need at the present moment is to increase our basic, readily absorbable, fats to not less than 18 oz. (510 g.) per head per week. This could be done without expenditure of dollars by buying from sterling countries. The aetiology is clear; the diagnosis made; the prognosis is grave. But the cure is there if the physician has courage enough to attempt it.—I am, etc.,

London, W.1. R. N. A. LEYTON.

School Ophthalmic Service

SIR,—I support the contention that the present school ophthalmic service is inadequate. There are two reasons for this. The school medical officer has insufficient time allotted for the general examination of the school child, and the eye examination —i.e., the reading of Snellen's types, etc.—is often delegated to the health visitor. Secondly, in doubtful or difficult cases there is no time and no special provision for special ophthalmological examination. As a result a harassed medical officer may overlook a serious eye condition. I will quote two cases from my own clinical observation while engaged as a full-time assistant M.O.H.

Case 1.—A girl aged 13 years, Welsh speaking and regarded as mentally backward or mentally deficient. This child had been examined by previous school medical officers and was considered to be unsuitable for the ordinary council school. I found that she had bilateral congenital cataracts and I considered that her intelligence was above the average. My observation about the eye condition was confirmed by the ophthalmic surgeon and this case was operated on successfully. I left the district after that, so I cannot say what her present condition is.

Case 2.—A girl aged 10 years was being examined by the health visitor for visual acuity while I carried out the usual examinations of other children at the same time in the same room. I noticed that this child missed reading the 6/18 letters with both eyes (R. and L. taken separately). The health visitor did not notice this and told me that the child's vision was 6/6. I asked the health visitor to substitute another vision test card with different lettering. I found that the child could only read 6/60 R. and L. This was an intelligent child with a good memory and she had memorized the letters in the first test card, but in reading out the letters she had completely forgotten the 6/18 line.

I quote only two cases from three years' experience as full-time M.O.H. I am quite convinced that there must be many other such cases taking the country as a whole.—I am, etc.,

Atherstone, Warwickshire. MARK BRADFORD.

The Lazy Eye

SIR,—It might be inferred from Mr. S. Black's letter (Feb. 21, p. 368) that high refractive errors *per se* are likely to lead to the development of squint. Such of course is not the case. Moreover there does not appear to be any good reason to support his plea for a routine annual refraction of children. In fact I can think of several for condemning it.

There is, however, an overwhelming case for the early and frequent assessment of visual acuity. Two conditions alone justify such a policy. (1) The problem of amblyopia can only be solved by diagnosis of the condition at a time which offers the optimum chance of cure—i.e., before the age of eight. (2) There is the important group of children who, reading 6/6 to-day, cross within a short time the borderline of emmetropia to become myopic. In too many cases the condition goes unrecognized, possibly for years.

In Kent a system is being instituted which it is hoped will cater for all the various problems arising in connexion with eye defects in children.—I am, etc.,

Tenterden, Kent. FRANCIS J. LORRIMAN

POINTS FROM LETTERS

Where the Power Is

Dr. W. M. McINTYRE (London, W.8) writes: A leading article of *The Times* of Feb. 10 contains the following passage: "Mr. Bevan was weakest in his defence of the basic salary. He defended once again the basic salary for particular groups of doctors with special needs, a case which even the B.M.A. does not seriously question. But he utterly failed to justify the basic salary for all doctors, as Mr. R. A. Butler was quick to point out. His attitude confirms the suspicion that the universal basic salary has passed beyond rational discussion and is now a symbol." If the question of the basic salary has passed beyond rational discussion and is now a symbol, the next step is to embark on a rational inquiry into the significance of this symbol and to try to discover what, in political terms, it stands for. To be endowed with such political importance, a symbol must represent some important political aim.

Mr. Bevan's political Odyssey may therefore be worth a glance. It is contained in his own words in *Hansard* (vol. 395, col. 1615, December, 1943) and reads as follows: "When I was quite a young boy my father took me down the street and showed me one or two portly and complacent-looking gentlemen standing at the shop doors, and, pointing to one, he said, 'Very important man. That's Councillor Jackson. He's a very important man in this town.' I said, 'What's the council?' 'Oh, that's the place that governs the affairs of this town,' said my father. 'Very important place indeed, and they are very powerful men.' When I got older I said to myself, 'The place to get to is the council. That's where the power is.' So I worked very hard, and, in association with my fellows, when I was about 20 years of age, I got on to the council. I discovered when I got there that the power had been there, but it had just gone. So I made some inquiries, being an earnest student of social affairs, and I learned that the power had slipped down to the county council. That was where it was, and where it had gone to. So I worked very hard again, and I got there—and it had gone from there too. Then I found out that it had come up here. So I followed it, and sure enough I found that it had been here, but I just saw its coat tails round the corner."

In my opinion Mr. Bevan did a great service to the country as an Opposition leader, representing, as he did, the desire of the ordinary man to control his own destiny, as he has expressed it himself in words that follow immediately the passage I have transcribed: "The ordinary man in Great Britain has been spending his life for the last couple of generations in this will-o'-the wisp pursuit of power, trying to get his hands on the levers of big policy and trying to find out where it is, and how it was that his life was shaped for him by somebody else." Mr. Bevan has now the levers of big policy in his hands, and it is there more than in any other particular place that our lives may be shaped for us by somebody else. His big levers should respond to the control of the community's wishes, and the smaller levers of the B.M.A. can also be of service in meeting the people's wishes and preventing a deadlock.

State Dictatorship

Dr. J. H. POWER (Coventry) writes: Dr. Bruce Cardew (Feb. 7, p. 270) makes a number of statements that are worthy of comment. He says that doctors claim exemption from parting with a portion of our personal freedom for the sake of social security. Does he realize the difference between social security and social "Babbitry," and that the doctors are perhaps putting up the first active stand against State dictatorship? There is no commercialism in the buying and selling of practices. In fact it is a very good "insurance policy" for the patients that the doctor will put his back into his work to ensure a speedy return of his outlay. Buying a practice does not mean that the patients are bound to him. . . . Pathologists, etc., are in a rather different category to the private doctor: they are in no *personal* relationship to their patients.

The salaried worker is indeed no slave to his employer, but he has to watch his bread-and-butter. The acceptance of the present Act now—salary or no—puts us completely into the clutches of the Minister and those magic letters S.R. and O. Will the "vast majority of G.P.s be better off"? Dr. Cardew cannot have compared Mr. Bevan's *gross* figures with the Spens Committee's *net* figures, and they will have sacrificed *all* their and their patients' freedom. . . .

Individual Responsibility

Dr. NOEL JACKSON (Scarborough) writes: The present fashion seems to be a great concern about working conditions. I think most of us are aware that our patients are liable to become ill or injured at any time of the day or night, and speaking for myself I don't think that one should be too resentful of the fact. Again, I may be incorrect, but it does not seem to me to be wrong to feel a definite reluctance to hand over the responsibility for one's patients and clock on and off strictly according to a time-table. At present the ultimate and final responsibility for a patient rests with an individual doctor. This responsibility is sometimes shared with another doctor by consultation, but it certainly seems to me that if this responsibility is to shift away to comply with a policy determined by some remote body, however expert, the patient will lose something worth having. In my opinion the effect of the Act is to transfer interest and responsibility for patients from the doctor to the State. The complicated machinery of administration does not exist, in my opinion, for any other purpose. For my part, I started with a few ideals which I had when I was a student. I thought they might change after nearly ten years' practice, but they haven't, and I steadfastly refuse to swop them for a medical policy to be determined by an Act of this or any other Parliament. I have always understood that the leaders of our profession were doctors, and quite frankly I cannot see high ideals of medical progress and practice surviving for long in an administration of politicians and economists, however expert they may be.

Fighting Committee

Dr. I. LIBMAN (Heywood, Lancs) writes: I would like a special committee set up by the B.M.A. to formulate a line of attack and defence that will result in certain victory. . . .

Victory for Socialism?

MEDICUS writes: The following letter received to-day from my son at Winchester College may interest you: "We had a fine debate on Friday night. The motion was that this House considers that the Socialist Government deserves the continued support of the electorate. Speaking for the motion was Dick Crossman, M.P., and against it Brigadier Low, M.P. for Blackpool. Crossman said the middle classes were finished for ever and that the Government was going to go much further to the left. He said *à propos* Bevan and the doctors that within six months "the B.M.A. will come crawling to the Government" and that he will be very glad, as it would mean a great victory for socialism." The motion was defeated by 130 votes to 45. Still, it was nice pabulum for schoolboys!

Foreign Body in the Ear

Dr. S. GNESSEN (London, W.1) writes: Mr. Sean O'Beirn's letter (Feb. 14, p. 321) reminds me of an experience which befell me while serving in the R.A.F. Examining a candidate at an aircrew medical board I found one external auditory meatus apparently filled with wax. On proceeding to remove this with a ring-probe its hardness became apparent and it was obvious that I was dealing with something more than wax. The obstruction was removed with little difficulty and found to be a glass marble covered with wax, which the young man remembered pushing into his ear over ten years ago. He had been afraid to tell his mother for fear of a scolding, and there it had remained. On returning home, he informed a Sunday newspaper of the occurrence and I still have a cutting describing the event! In this case, too, there was absence of pain, discharge, and tinnitus, and no marked impairment of hearing.

Dogs and Poliomyelitis

Dr. J. W. SHACKLE (London, W.1) writes: I have read with much interest your correspondence on this subject. My own dog (a dachshund) recently had an attack of a mysterious disease with a sudden onset, consisting of acute pain and tenderness of diffuse distribution; his efforts to be comfortable were heart-rending to watch. This was followed in about twelve hours by a flaccid paralysis from the waist down, with apparent retention of urine for twenty-four hours, at the end of which time there was some return of movement in one leg, followed in a further twenty-four hours by some return of movement in the other. At the end of a week he was almost completely recovered, but on my going to pat him one evening he gave a loud cry and had a complete return of the condition, followed as before by a flaccid diplegia from the waist down. He recovered much more slowly this time and is to this day (a month later) not so "limbersome" as before. I have since heard from friends of a similar attack in their own dog, the paralysis in the relapse being much more extensive, necessitating his destruction as he was unable to swallow.

Sex Instruction

Mr. H. J. WOODLIFF (Edinburgh) writes: I read Dr. R. T. Bevan's article on "What the Medical Practitioner wants to Know" (Feb. 14, p. 294) with interest and particularly his figures and comments on the letters dealing with sex problems. As a medical student I find it distressing that sexology is not taught fully as a separate subject during the medical education of doctors. Surely it is now time that the universities and medical schools set up a department of sexology with a full-time head. This department could carry out the research that is needed in this subject as well as giving a course of instruction in sexology. Postgraduate diplomas could be given after a course at the department so that young doctors wishing to specialize in this subject could get a firm basis for their subsequent work. Far too many doctors are ignorant of modern advances in sexology and do not know how to deal with patients asking advice on various subjects of a sexual nature.

Obituary

SIR H. LINDO FERGUSON, C.M.G., M.D., F.R.C.S.I.

New Zealand has lost its oldest and most distinguished medical man with the death of Sir Lindo Ferguson on Jan. 22 at the age of 90. He served the medical school of New Zealand as a teacher of ophthalmology for over fifty years, and for twenty-three years as dean of the Faculty. Throughout this period he gave himself with the greatest energy and devotion to the task of establishing the medical school on sound foundations.

Henry Lindo Ferguson was a man of exceptional intellectual ability, winning a gold medal in his Arts course at Trinity College, Dublin, in 1876 before proceeding to a brilliant medical course at that College. He travelled to New Zealand as medical officer on the s.s. *Takapuna* on her first voyage to New Zealand late in 1883 and immediately set up in practice as an ophthalmic surgeon, the first in New Zealand. On Jan. 1, 1884, he opened the ophthalmic department at the Dunedin Hospital, a department which he continued to control until his retirement from active practice in 1936. The Dunedin Hospital authorities marked this long period of service by naming the new ophthalmological ward the Lindo Ferguson Ward, and the Otago University Council by creating him emeritus professor of ophthalmology in the university.

Sir Lindo's greatest achievement, however, was in the development of medical education, to which he devoted his great gifts of creative vision, breadth of outlook, administrative ability, and human understanding. He has left a profound impression on the teaching and practice of medicine in New Zealand. He was also a founder of the Australasian College of Surgeons. At the twenty-first annual conference of the College held in Dunedin on Jan. 27, Prof. Gordon Bell, president of the Royal Australasian College, paid the following tribute to his memory: "He was a founder of the College and its oldest Fellow, and I hoped that he would adorn our meeting with his distinction of person, his undiminished intellectual supremacy, and the dignity of an exceptionally long life devoted to the highest interests of our calling, but that was not to be. It is the happy lot of few to come to a young country as a young man, to spend 65 years in it, to establish in the southern hemisphere a new specialty, that of ophthalmology, and at the same time to carve for himself a unique position in the hearts of his fellow citizens through enriching his chosen city by the depth and variety of his interests in its intellectual life. On the professional side he introduced into this young university centre an old-world charm and dignity, a sincerity of purpose, a disregard for pecuniary considerations, and a burning zeal for educational advancement which, in the course of half a century, brought its own reward. He is in truth the architect of our Otago Medical School in its present form, and happily he lived to see most of his cherished purposes come true, and to know that he occupied an enduring place in the affections of his colleagues and of his pupils."

Sir Lindo Ferguson was awarded the C.M.G. in 1918 and knighted in 1924. He was a member of the New Zealand Board of Health, and he was president of the New Zealand Branch of the British Medical Association in 1919.

P. E. H. ADAMS, M.B., F.R.C.S.

Philip Edward Homer Adams, who died on Feb. 9 at the age of 68, was a son of the late Dr. G. E. D'Arcy Adams. He was educated at Lancing and Exeter College, Oxford, and later was a student at the London Hospital. After graduating he took the F.R.C.S. in 1905 and the diploma in ophthalmology in 1910. He was connected with the Oxford Eye Hospital, which was founded by his uncle, Robert Doyne, for over fifty years, and first came there while still a student in 1896. He was a clinical assistant in 1904; assistant to the honorary staff in 1905; appointed a surgeon in 1910; and from 1913 to 1941 he was a honorary surgeon and Margaret Ogilvie reader in ophthalmology to the University of Oxford. Since 1912 he had been consulting ophthalmic surgeon to the Radcliffe Infirmary. Mr. Adams was in private practice in Oxford for over thirty years and retired in 1941.

The Oxford Ophthalmological Congress was founded by Mr. Adams among others. He was its Master from 1926 to 1928, and deputy master from 1929 to 1942. He had been a member of the B.M.A. since 1906, and was president of the Section of Ophthalmology when the Association met at Oxford in 1936. He was president of the Ophthalmological Section of the Royal Society of Medicine in 1944 and in 1945. Since his retirement in 1941 Mr. Adams had been living at Theberton, Suffolk. He leaves a widow, a son, and two daughters.

Dr. ROLF CREASY, who was the last surviving son of the well-known historian the late Sir Edward Creasy, author of *The Fifteen Decisive Battles of the World*, died in London on Feb. 20. Dr. Creasy was a student of Guy's Hospital and qualified there in 1885. He had been associated for many years with the All Saints' Hospital for Genito-Urinary Diseases, and was at one time clinical assistant to the West London Hospital and on the staff of the Royal Victoria Hospital, Ascot.

Dr. A. Hope Gosse writes: The death of Rolf Creasy will be a sad loss and deeply felt by his many friends, and especially by the members of the Medical Golfing Society. To many of them, in fact, the society was Rolf Creasy and he was the society. He was its founder towards the end of the last century and was its secretary for an unbroken period of half a century, a unique form of service to colleagues. He retired from the office of secretary in its jubilee year in 1947 and the members marked the occasion with a presentation. The fifty-first annual meeting and dinner happened to fall on the very eve of his death and an episode at the dinner well illustrated the purpose Rolf had in mind when he founded the society and helped to make it flourish, for a new silver challenge cup was presented by one of the members of the society "as a mark of appreciation of the happy days and good fellowship he had enjoyed at very many meetings of the society." Rolf Creasy had achieved one of his ambitions and established a tradition.

Dr. WILLIAM HENRY DICKINSON, who died at his home in Hoylake on Jan. 31, was the son of Edward Harriman Dickinson, M.D., F.R.C.P., of Liverpool, in which city he was born in 1874. After education at Charterhouse School and Trinity College, Cambridge, he went on to St. George's Hospital for his clinical work, and there he qualified M.R.C.S., L.R.C.P. in 1903. He was house-physician first at the Northern Hospital, Liverpool, and later at St. George's Hospital. He served in France with the 6th London Field Ambulance of the 47th Division from March, 1915, to April, 1919, with the rank of captain. As a young man his singular good looks and engaging manners made him a great favourite not only with his contemporaries but with his seniors. That good judge and great teacher, the late Marmaduke Sheild, was much attached to him. Their mutual love of golf was, naturally, another link. Nor did social success in any way spoil his sunny nature, for he remained throughout one of the most unassuming of men, and his friends knew that he was as straight as a die. Dr. Dickinson was never married.—H. R.

Medico-Legal

ATTRIBUTABLE TO WAR SERVICE

[FROM OUR MEDICO-LEGAL CORRESPONDENT]

The appeal of an ex-Serviceman claiming a pension for a disability due to hernia gave Mr. Justice Denning an opportunity recently[1] of stating how the courts should decide whether a disease is attributable to war service or only aggravated by it. The appellant had earlier had a left inguinal hernia brought on by accident before the war, but he claimed in respect of a hernia on the right side which had arisen after war service. The Medical Services Division of the Ministry rejected the claim, holding that it was a consequence of a developmental weakness of the musculature. The tribunal said that it had been preceded by a cough which the claimant had while in the Service, and was not attributable to war service.

To be attributable to service a disease must, said the judge, arise during the service, which must be one of the causes of its arising. It was often difficult to say when a disease, especially an insidious one, arose. If the Minister asserted

[1] *Marshall* v. *Minister of Pensions*, 1947, 2 All E.R., 706.

that it arose before the service, the burden was on him to prove this, and that burden was not discharged by merely proving a predisposition or susceptibility. A disease would in its natural progress cause illness or incapacity even though no other cause might operate; a susceptibility might never become injurious unless some other cause operated. On the question of whether in a given case war service was one of these causes the medical advisers of the Minister used to divide causes into two classes—predominant and contributory—and say that the disease was attributable to the predominant cause and aggravated by the contributory cause. For instance in hernia, where the predominant cause was the inherent weakness in the wall of the abdomen and a contributory cause might be an injury in war service, they used to hold that the hernia was not attributable to war service but was aggravated by it. Many decisions, said Mr. Justice Denning, had shown that approach to be wrong. If one of the causes was war service, the disease was attributable to war service, even though it might also be attributable to other and more powerful causes. The courts therefore approach the problem from much the same angle as a workman's case, in which compensation is awarded if the employment has contributed materially to the condition.

Medical Notes in Parliament

University Grants

Replying to Sir ERNEST GRAHAM-LITTLE on Feb. 20 Sir STAFFORD CRIPPS said that provision would be made for recurrent grants to universities for general purposes and for medical and dental education on the scales announced by Mr. Dalton in his statement of March 10, 1947. Since that date responsibility for aiding agricultural and veterinary education had been assumed by the Treasury. After the present academic year the teaching hospitals would be financed under the National Health Service Act, and the need for Treasury grants to them would cease. Provision for such grants could therefore be reduced to £250,000. As regards non-recurrent grants, experience had shown that the rate of expenditure on capital developments was somewhat overestimated last year. He proposed this year to provide £2,000,000 for this purpose. Accordingly the total amount which Parliament would be asked to vote for 1947–8 was £11,880,000.

Thames Water and Radioactivity

On Feb. 24 Mr. G. R. STRAUSS told Major BEAMISH that thorough precautions were being taken by the Ministry of Supply to ensure that the Thames water used at the atomic energy research establishment at Harwell was returned to the river free from risk of harmful radioactivity. The precautions were adopted on the advice of the Medical Research Council's research committee on the medical and biological applications of nuclear physics. A certain amount of radioactivity in drinking-water could be tolerated by human beings. The tolerance laid down by the Medical Research Council for the Thames water was such that medical and biological effects due to the consumption of water during the life span of human beings would be negligible.

Remuneration of Specialists

Sir ERNEST GRAHAM-LITTLE on Feb. 26 told the Minister of Pensions that the rates of remuneration of the specialist medical officers employed by his Department were much below those fixed by the British Medical Association as a minimum and accepted by most hospitals. Mr. GEORGE BUCHANAN replied that rates of remuneration of specialists employed by his Department on a part-time basis for hospital work were in general accord with the rates agreed by the British Medical Association with appropriate authorities. The rates payable to specialists and consultants for sessional medical board work were the subject of discussion between his Department and the B.M.A.

Research.—In 1946–7 approximately £130,000 of the Parliamentary grant to the Medical Research Council was used for research projects mainly of a clinical nature. The remainder was expended on projects mainly involving laboratory work and on administration.

Vaccination.—Mr. BEVAN states that the National Health Service Act does not require the issue of regulations governing the carrying out of vaccination. It is intended, however, to make available to doctors authoritative medical opinion about up-to-date methods of vaccination.

Married Women Doctors.—Mr. HOUSE was assured by Mr. BEVAN on Feb. 26 that married women doctors would be considered for appointments as house-physicians and house-surgeons in hospitals under the National Health Act.

Diphtheria Immunization.—From 1940 to June 30, 1947, approximately 6,875,000 children under the age of 15 in England and Wales were immunized against diphtheria through local authority arrangements.

Universities and Colleges

UNIVERSITY OF CAMBRIDGE

The following medical degrees were conferred by proxy on Feb. 14:

M.D.—H. M. Woodman.

M.B., B.CHIR.—M. G. H. Lewis, K. Ll. Williams, J. H. Angel, G. M. Woodwark, J. S. Jenkins, J. D. G. Turner.

The following candidates have been approved at the examination indicated:

M.CHIR.—L. L. Bromley, R. N. Jones.

UNIVERSITY OF MANCHESTER

The following appointments are announced: *Reader in Human Physiology*, A. A. Harper, M.B., Ch.B. *Lecturer in Pathology*, John Wainwright, M.B., Ch.B. *Assistant Lecturer in Anatomy*, E. P. Samuel, M.B., Ch.B. *Assistant Lecturer in Pathology*, John Ball, M.B., Ch.B. *Lecturer in Medical Ethics and Conditions of Medical Practice*, D. R. Goodfellow, M.D. *Honorary Clinical Lecturer in Child Psychiatry*, Winifred M. Burbury, M.B., B.S., D.P.M. *Clinical Tutor in Child Health*, R. I. Mackay, M.B., Ch.B., D.C.H. *Surgical Tutor in Orthopaedic Surgery*, J. K. Wright, M.B., Ch.B. *Lecturer and Demonstrator in Anaesthetics in the Dental Department*, Tom Dinsdale, M.B., Ch.B., D.A.

UNIVERSITY OF BIRMINGHAM

John Rupert Squire, M.B., B.Chir., M.R.C.P., has been appointed Leith Professor of Experimental Pathology and Director of the Department of Pathology in the University, and John Washington Orr, M.D., M.R.C.P., to the second Chair of Pathology.

UNIVERSITY OF LEEDS

The following appointments are announced: D. N. Ross, M.D., F.R.F.P.S., Research Fellow in Rheumatism; E. C. Allibone, M.D., Clinical Lecturer in Paediatrics; W. Goldie, M.B., Ch.B., Lecturer in Pathology (part-time).

UNIVERSITY OF SHEFFIELD

The following appointments are announced: C. E. Davies, B.M., B.Ch., M.R.C.P., Research Assistant in Clinical Medicine; T. Stapleton, B.M., B.Ch., M.R.C.P., D.C.H., Tutor in Child Health; A. Jordan, M.B., B.S., M.R.C.P., Honorary Lecturer in Clinical Biochemistry.

Dr. Margaret H. Miller has resigned from the post of Research Assistant in Medicine, and the Council has thanked her for her services to the University.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

Through an oversight the names of following members of the medical profession were omitted from the list of Fellows in Dental Surgery printed in the *Journal* of Feb. 21 (p. 373): G. B. Pritchard, M.R.C.S., L.R.C.P., George T. Hankey, O.B.E., M.R.C.S., L.R.C.P., Prof. W. E. Herbert, M.R.C.S., L.R.C.P., Prof. M. A. Rushton, M.D., A. E. W. Miles, M.R.C.S., L.R.C.P., Prof. J. Boyes, F.R.C.S.Ed., and Prof. A. I. Darling, M.R.C.S., L.R.C.P

ROYAL COLLEGE OF OBSTETRICIANS AND GYNAECOLOGISTS

At the meeting of Council of the College, held on Jan. 24, Sir William Fletcher Shaw agreed to accept an invitation from the Members of the College in Canada to visit them on behalf of the College. He hopes to leave England in April and will visit various centres to discuss with the Fellows and Members of the College matters affecting the practice of obstetrics and gynaecology in the Dominion.

No. 7

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Feb. 14.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	54	5	21	2	—	78	2	22	4	—
Deaths		3	—				1	—		
Diphtheria	211	14	53	17	8	211	23	58	23	6
Deaths	4	—	—	—	—	3	—	1	—	—
Dysentery	164	25	46	—	—	41	6	19	—	—
Deaths				1	—					—
Encephalitis lethargica, acute	1	—	—	—	—	5	—	3	1	—
Deaths		—					—		—	
Erysipelas			51	6	3			47	6	1
Deaths		—					1			
Infective enteritis or diarrhoea under 2 years				24					26	
Deaths	46	5	9	9	2	80	4	26	10	—
Measles*	6,179	649	802	107	18	16,749	597	303	62	489
Deaths†			2	1	—	15	2	1	—	2
Ophthalmia neonatorum	45	4	19	—	1	59	2	17	—	1
Deaths										
Paratyphoid fever	2	—	1 (B)	—	—	1	1	—	—	—
Deaths	1	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal	871	40	15	3	4	1,404	80	27	25	7
Deaths (from influenza)‡	16	—	3	—	—	163	19	6	7	8
Pneumonia, primary			228	25				296	46	
Deaths	268	40		18	11		106			23
Polio-encephalitis, acute	4	—				—	—			
Deaths							—			
Poliomyelitis, acute	28	3	3	—	1	8	—	—	5	—
Deaths§	3	—					—			
Puerperal fever		—	10		1		2	6		—
Deaths			—							
Puerperal pyrexia‖	104	13	8	1	—	160	9	13	1	—
Deaths		1					—			
Relapsing fever	—	—			—	—	—			—
Deaths										
Scarlet fever	1,925	150	328	32	46	1,051	67	240	9	41
Deaths†			—	—	—	1	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	7	2	—	11	1	5	—	—	5	1
Deaths	—	—	—	1	—	1	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	2,576	193	50	19	—	1,964	180	381	81	32
Deaths	10	2	—	1	—	14	1	4	3	3
Deaths (0–1 year)	362	49	53	43	14	579	70	113	47	24
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	4,954	749	643	234	142	8,091	1359	880	366	237
Annual death rate (per 1,000 persons living)			13·0	14·6				18·3		
Live births	8,193	1382	952	443	249	10,195	1620	1233	481	278
Annual rate per 1,000 persons living			19·2	27·7				24·8		
Stillbirths	236	32	28			288	41	41		
Rate per 1,000 total births (including stillborn)			29					32		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Cases of Smallpox

The figures tabulated below are provisional but effect has been given to any corrected diagnosis notified to date.

Age Groups	1946	1947
0–	3	2
5–	8	6
15–	24	35
45–	10	14
65 and over	2	26
Age unknown	9*	—
Total all ages	56	83

* Notifications from Port Health Districts.

In 1946 there were 14 deaths from smallpox, and for 1947 the provisional figure is 15.

Discussion of Table

In *England and Wales* there was an increase of 583 in the notifications of measles and a decrease of 141 in the notifications of acute pneumonia.

The incidence of measles has been almost doubled in the past month. The largest rises during the week were London 138, Norfolk 116, Middlesex 109, and Northamptonshire 104. Notifications of acute pneumonia fell in every region except the south-east, where a slight increase was reported; the largest decrease was Lancashire 35.

Although the notifications of whooping-cough were only 4 more than in the preceding week there were considerable fluctuations in the local trends; the largest increases were Warwickshire 59 and Nottinghamshire 32, and the largest falls were Essex 45 and Kent 34. No appreciable changes occurred in the local returns of diphtheria. The chief features of the returns for scarlet fever were a rise of 40 in London and a decrease of 28 in Lancashire.

The chief centres of dysentery were London 25; Lancashire 56 (Liverpool C.B. 15, Oldham C.B. 14, Preston C.B. 14); and Yorkshire West Riding 43 (Sheffield C.B. 15, Bingley U.D. 11). The largest returns of poliomyelitis were 3 in London and in Kent; no administrative area had more than one case.

In *Scotland* the only large fluctuations in the notifications of infectious diseases were decreases for acute primary pneumonia 51 and for measles 29. Notifications of dysentery increased by 7, and the chief centres of this disease were Edinburgh 14, Glasgow 9, and Aberdeen 8.

In *Eire* increases of 10 in the notifications of diphtheria and diarrhoea and enteritis were recorded, and there were decreases in the incidence of measles 14 and whooping-cough 17. Of the 11 cases of typhoid fever 8 were notified in the U.D. and R.D. of Dundalk, Co. Louth.

In *Northern Ireland* no case of whooping-cough was notified from Belfast C.B., but the incidence of measles and scarlet fever in this city remained practically unchanged.

Week Ending February 21

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,828, whooping-cough 2,552, diphtheria 180, measles 7,209, acute pneumonia 788, cerebrospinal fever 36, acute poliomyelitis 27, dysentery 191, paratyphoid 3, and typhoid 1.

A women's conference arranged by the London Labour Party at Caxton Hall on Feb. 25 was addressed by Mr. R. Stamp, chairman of the Statutory Health Committee of the London County Council. In the course of his address Mr. Stamp said, "The L.C.C. has ample evidence that the service provided by a large number of doctors in part- and full-time employment with public authorities, described by the B.M.A. as 'Civil Service doctors,' do not suffer interference with their clinical service to the patient, and that at all times the relationship between doctor and patient is confidential and strictly in accordance with professional practice." Continuing, he expressed the opinion that very few doctors would be so unwise as to throw away their goodwill and allow others to take their patients when the public were asked to select their doctor under the new Service. "Any who do carry their opposition too far will within a few weeks be very much poorer, and I hope wiser, men." According to a report in *The Times*, Mr. Stamp was later asked if there would be some recognized channel for complaints of any abuse of the new Service. Mr. Stamp replied that there was always the Post Office.

Medical News

Writs for Libel

The British Medical Association has issued writs for libel against Dr. S. W. Jeger, M.P., Dr. Somerville Hastings, M.P., Dr. L. Comyns, M.P., and Dr. H. B. Morgan, M.P., in respect of a letter from them published in certain newspapers touching on the conduct of the plebiscite recently carried out by the B.M.A. The Association has taken this step against four doctors with great reluctance, but has felt constrained to do so since it feels that the honesty of the Association has been publicly impugned.

Greetings from Illinois

The Council of the Illinois Medical Society resolved, at a meeting held in Chicago recently, that official interest, sympathy, and a message of understanding be sent to the members of the British Medical Association. "Since the passage of the National Health Service Act in Britain, the medical profession in this nation has realized that our confrères in Britain are faced with the most important issue in the whole of its history. . . . We see in the fight you have been forced to wage in your own behalf the forecast of what the profession in this country may face if our Federal legislature passes any of the several Bills of a similar nature which have been introduced for consideration. As a component part of the American Medical Association the members of the Illinois State Medical Society desire to express a feeling of confidence in the members of the British Medical Association, and wish to extend official sympathy and understanding to all."

Tudor Edwards Memorial Fund

The Tudor Edwards Memorial Fund will be closed on March 31. Until that date donations may be sent to the treasurer of the fund, Lord Courtauld-Thomson, at Brompton Hospital, London, S.W.3.

Surgeon-General of U.S. Public Health Service

Dr. Leonard A. Scheele has been nominated as Surgeon-General of the U.S. Public Health Service and will succeed Dr. Thomas Parran in that office on April 6. Dr. Parran became Surgeon-General of the Service in July, 1936, succeeding Dr. Hugh S. Cumming.

Lecturing in Hungary

Prof. R. Platt, Professor of Medicine in the University of Manchester and Physician to the Manchester Royal Infirmary, is lecturing in Hungary under the auspices of the British Council on "Recent Advances in the Study of Kidney Diseases and High Blood Pressure."

Italian Cardiologist Visits Britain

Prof. D. Arrigo Poppi, Cardiologist at the Pathological Institute of Bologna, is in Britain on a short visit under the auspices of the British Council in order to study the methods adopted for prevention and treatment of rheumatic diseases, especially in children.

Training of Nurses

The British Hospitals Association has submitted a Memorandum on the Report of the Working Party on the Recruitment and Training of Nurses to the Minister of Health. Though admitting that the Report has value, the B.H.A. Memorandum observes that as a practical instrument it is seriously depreciated by its "concentration on a long-term policy which can only be described as Utopian." Discussing the figures of wastage during training, the B.H.A. rejects some of the inferences drawn by the Working Party from its data, many of which relate to abnormalities caused by the war; indeed the B.H.A. maintains that the principal purpose of the preliminary course is to enable the schools to eliminate unsuitable candidates or for the candidate herself to withdraw if she wishes. The Working Party's emphasis on excess or harshness of discipline is thought to be exaggerated. The B.H.A. suggests that every hospital should have a small advisory committee of lay members to interview students contemplating resignation. The B.H.A. emphatically disagrees with the Working Party's suggestion that training time is unduly lengthened by excessive domestic work and unnecessarily repetitive nursing duties. It criticizes the Working Party's proposals for training and advocates a three-year course. In a concluding section on administration the B.H.A. states: "We do not agree that the nursing services of the community ever could or should be effectively administered by the Minister of Health."

Marriage Guidance

The Home Secretary has appointed a departmental committee to consider in what way marriage guidance can be most advantageously developed in England and Wales if assisted by Exchequer grants, and to advise how these grants could properly be made. The chairman is Sir Sydney Harris, who is British Representative on the Social Commission of U.N., and the members are: Mrs. E. G. M. Barlas, Mr. G. E. Haynes, Sir Edwin Herbert, Dr. Edward Larkin, and Miss W. M. Goode.

Scholarships at Foreign Universities

Scholarships for the academic year 1948–9 will be offered to students and graduates of British universities and colleges by the Governments of a number of foreign countries, including Belgium (8 scholarships), Hungary (6), the Netherlands (6), Sweden (3), and the University of Teheran, Persia (2). The scholarships are intended for postgraduate study. Two scholarships have also been offered by the University of Cologne and two by the University of Munster. Scholarships may also be offered by the Governments of Czechoslovakia, Finland, and Norway. Those interested in scholarships to Belgium, Hungary, the Netherlands, Sweden, and Persia should apply for full particulars as soon as possible to the Controller of the Education Division, the British Council, 3, Hanover Street, London, W.1. Those interested in scholarships to Czechoslovakia, Finland, Norway, and Germany should send a stamped addressed envelope to the British Council. Scholars will be selected by a board including members of the British Council Medical Advisory Panel and representatives of the country concerned.

Film on Curare

A film on *d*-tubocurarine chloride, prepared by the Wellcome Film Unit, received its first showing at the Wellcome Research Institution on Feb. 19. In colour, the film demonstrates the effect of the drug both experimentally and in surgical practice. It is now available for exhibition to practitioners and students. Application for copies should be made to Wellcome Film Unit, 183–193, Euston Road, London, N.W.1.

Corsets Released

Restrictions on the supply of corsetry by manufacturers have been withdrawn. In order to ensure that anyone who needs a surgical support for medical reasons shall be able readily to obtain it, the Ministry of Health will continue to make arrangements for the supply of special materials to the manufacturers. A medical certificate covering the need for the appliance will be required so that the medically necessitous cases may be readily identified and supply assured. Such certificates, given and signed by medical practitioners, should state (*a*) the date, (*b*) the name and address of the doctor and of the patient, and (*c*) the nature of the condition necessitating supply of the appliance. Giving the certificate is not restricted to certain named conditions, and it is not necessary to send certificates to the Board of Trade for endorsement. When the practitioner does not wish to disclose the nature of the condition to the patient, the certificate should be sent direct to the Supplies Division of the Ministry of Health, Whitehall, London, S.W.1, with a separate signed document stating the patient's name and address and giving a description of the type of appliance required (for the guidance of the manufacturer). The certificate will be retained by the Ministry of Health. The second document will be endorsed and returned to the patient, who will then be able to use it as a certificate to obtain a surgical support or corset.

Vivisection

The Home Secretary has recently told a deputation of anti-vivisectionists that he would consider their suggestion to appoint a Royal Commission to inquire into vivisection.

Wills

Major-General Sir Thomas Joseph O'Donnell, late D.M.S., India, left £3,540. Sir Frederic Rowland Mallett, who practised in Bolton for many years, left £31,976.

COMING EVENTS

Chelsea Clinical Society

Chelsea Clinical Society will hold a general meeting at the South Kensington Hotel, 47, Queen's Gate Terrace, S.W.7, on March 9 at 7 for 7.30 p.m. Discussion on "Medical Experiments in Nazi Germany" to be opened by Major Keith Mant, R.A.M.C., of the British War Crimes Group, B.A.O.R.

Cutter Lecture on Preventive Medicine

The Harvard University School of Public Health announces that Dr. William N. Pickles (Medical Officer of Health, Aysgarth Rural District, Yorkshire) will deliver the Cutter Lecture on Preventive Medicine on April 12, at Boston, Massachusetts, U.S.A. Dr. Pickles has chosen as his subject, "Epidemiology in Country Practice." The Cutter Lectures on Preventive Medicine have been held annually since 1912, having been established by Dr. John Clarence Cutter, of the class of 1877, Harvard Medical School. The medical profession, medical and public health students, and others interested are invited to attend.

APPOINTMENTS

Col. H. A. Sandiford, *M.C.*, M.B., Ch.B., D.P.H., A.M.S.(ret.), has been appointed Medical Director of the Empire Medical Advisory Bureau, B.M.A. House, Tavistock Square, London, W.C.1.

SOCIETIES AND LECTURES

Monday

MEDICAL SOCIETY OF LONDON, 11, Chandos Street, Cavendish Square, W.—March 8, 8.30 p.m. *"The Aetiology of the Common Cold and Influenza."* Discussion to be introduced by Dr. C. H. Andrewes, Prof. C. H. Stuart-Harris, and Dr. Freddy Himmelweit.

Tuesday

ROYAL COLLEGE OF PHYSICIANS OF LONDON, Pall Mall East, S.W.—March 9, 5 p.m. *"Concerning Megalocytic Anaemias."* Oliver-Sharpey Lecture by Dr. J. F. Wilkinson, F.R.C.P.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—March 9, 5 p.m. *"Physio- and Electro-Therapy,"* by Dr. R. T. Brain.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—March 9, 5 p.m. *"Some Aspects of General Physiology,"* by L. E. Bayliss, Ph.D.

Wednesday

ROYAL SOCIETY OF ARTS, John Adam Street, Adelphi, London, W.C.—March 10, 2.30 p.m. *"The Trade and Technical Press,"* by Mr. R. E. Dangerfield.

ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE, 28, Portland Place, London, W.—March 10, 3.30 p.m. *"The Disorders of Childhood"* (Illustrated), by Dr. D. W. Winnicott.

ROYAL MEDICAL SOCIETY, 7, Melbourne Place, Edinburgh.—March 10, 8 p.m. *Annual Extraordinary General Meeting.*

Thursday

ROYAL COLLEGE OF PHYSICIANS OF LONDON, Pall Mall East, S.W.—March 11, 5 p.m. *"Concerning Megalocytic Anaemias."* Oliver-Sharpey Lecture by Dr. J. F. Wilkinson, F.R.C.P.

ANGLO-AUSTRIAN SOCIETY.—At British Council (Theatre), 6, Hanover Street, London, W.1, March 11, 6.30 p.m. *"The World Food Situation,"* by Prof. J. R. Marrack. Members and friends are invited.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—March 11, 5 p.m. *"Diseases of the Hair,"* by Dr. W. J. O'Donovan.

MEDICAL SOCIETY OF LONDON.—At Claridge's, Brook Street, London, W., March 11, 7.30 p.m. for 7.45 p.m. 168th Anniversary Dinner.

PHARMACEUTICAL SOCIETY OF GREAT BRITAIN, 17, Bloomsbury Square, London, W.C.—March 11, 7.30 p.m. *"The Work of the Medical Staff of the Ministry of Health."* by Sir Weldon Dalrymple-Champneys, Bt., D.M., F.R.C.P., Deputy Chief Medical Officer, Ministry of Health.

SOCIETY OF CHEMICAL INDUSTRY: FOOD GROUP.—At Welbeck Hotel, Nottingham, March 11, 7.15 p.m. Joint meeting with the Nottingham Section of the Society. Paper: *"Physical Chemistry of Food with Particular Reference to Bakery Products,"* by W. Cunliffe, B.Sc., F.R.I.C. A discussion will follow.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, S.W.—March 11, 4.30 p.m. *Psychiatric lecture-demonstration,* by Dr. D. Curran.

Friday

BIOCHEMICAL SOCIETY.—At Department of Biochemistry, University College, Gower Street, London, W.C., March 12, 2 p.m. Annual general meeting. Papers will be read.

INSTITUTE OF ALMONERS.—At Conway Hall, Red Lion Square, London, W.C., March 12, 6 p.m. Annual General Meeting. Address by the Rt. Hon. Aneurin Bevan, Minister of Health.

LONDON CHEST HOSPITAL, Victoria Park, E.—March 12, 5 p.m. *"The Indications for Bronchoscopy in Chest Diseases,"* by Dr. H. V. Morlock.

ROYAL INSTITUTE OF PHILOSOPHY, University Hall, 14, Gordon Square, London, W.C.—March 12, 5.15 p.m. *"Philosophy and Medicine: Philosophy and Psychiatry,"* by Prof. Aubrey Lewis.

Saturday

NUTRITION SOCIETY.—At London School of Hygiene and Tropical Medicine, Keppel Street, W.C., March 13, 10 a.m. *"Results of Recent Investigations into the Nutritional Status in Great Britain."* Whole-day conference.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Chance.—On Feb. 16, 1948, to Phoebe Chance, M.R.C.S., L.R.C.P., wife of James H. O. Chance, M.R.C.S., L.R.C.P., 418, Westdale Lane, Mapperley, Nottingham, a daughter—Rosemary Ann.

Crichton.—On Feb. 20, 1948, at Brackenlea Nursing Home, Shawford, Winchester, to Jean (*née* Akerman), wife of Squadron Leader David Crichton, M.B.E., R.A.F., a daughter.

Ferguson.—On Feb. 18, 1948, at Cloverley Nursing Home, to Dr. and Mrs. Alan Ferguson (*née* Kathleen Smethurst), a son.

Hennessy.—On Feb. 19, 1948, at Fairfield Nursing Home, Doncaster, to Doris, wife of Dr. Jeremiah D. Hennessy, Flight Lieutenant, R.A.F.V.R., a daughter.

Hopkins.—On Feb. 24, 1948, to Betty (*née* Morrison), wife of Dr. Ian B. Hopkins, Ellon, Aberdeenshire, a daughter.

Woolf.—On Feb. 18, 1948, at the Clovelly Maternity Home, Finchley, N., to Kathorn, wife of Lieutenant Douglas L. Woolf, R.A.M.C., The Avenue, Highams Park, a daughter.

MARRIAGE

Kelleher—Barrett.—On Jan. 7, 1948, at Kinsale, Daniel M. Kelleher, M.B., B.Ch., to Mary Barrett.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Melaena Neonatorum and Peptic Ulcer

Q.—*In Cecil's "Textbook of Medicine," 7th ed., 1947 (p. 797), Walter L. Palmer states that "in about 50% of the cases melaena neonatorum is due to peptic ulcer." In the same book (pp. 1104–5) George R. Minot claims that in the newborn "melaena due to ulcer is seldom seen," the condition being due to vitamin-K deficiency. Contradictory statements in textbooks written by various authors are by no means rare, but usually they are a matter of opinion and not a matter of fact. One must assume that both Palmer and Minot base their conclusions on post-mortem findings, and the evidence obtained in the dissecting-room is not a matter of opinion. As both treatment and prognosis are so utterly different, depending on which of these views is correct, I would be glad to have an up-to-date authoritative opinion from a third expert.*

A.—Post-mortem findings do not provide a satisfactory answer to this query, as the great majority of cases of haemorrhagic disease of the newborn recover with treatment. It is unlikely that this is equally true of cases of duodenal ulcer occurring in the neonatal period, and the condition, though it may be suspected during life, can seldom be confirmed except at necropsy. Most paediatricians would agree that haemorrhagic disease of the newborn is a much commoner cause of melaena during the first week of life than is duodenal ulcer, though this opinion is largely based on the clinical diagnosis of haemorrhagic disease being confirmed (*a*) by prompt response to treatment with vitamin K or transfusion, or (*b*) by the occurrence of haemorrhages elsewhere than in the gut, in the absence of sepsis, and by the rarity of ulcer as a post-mortem finding. The prothrombin level, though reduced in haemorrhagic disease, is not conclusive, since it is normally reduced during the first week of life and may be so when an ulcer is present. Neither the bleeding nor clotting time is consistently abnormal in haemorrhagic disease. The following figures, from the practice of a maternity hospital having 2,000 to 4,000 deliveries a year, and where post-mortem examination is carried out on almost all neonatal deaths, are given as an indication of the relative frequency of the two conditions, with the above qualifications.

During the years 1939–47 inclusive 44 cases of haemorrhagic disease were observed in which the diagnosis was considered proved. Of these, 36 showed melaena as a presenting symptom. Of five fatal cases—four with melaena and one without—post-mortem examination showed cerebral haemorrhage in three; one was a premature infant weighing 3 lb. 5 oz. (1.5 kg.); and in one (which had not shown melaena but in which the stomach was filled with blood) duodenal atresia and mongolism were present. No ulcer was present in any of these cases. During the same period one duodenal ulcer and one pyloric ulcer associated with ectopic pancreatic tissue were observed in all post-mortem examinations of newborn infants.

The disparity between the incidence of the two conditions is probably considerably greater than indicated by the above figures, since doubtful cases of haemorrhagic disease (in which, for instance, cerebral haemorrhage in the absence of bleeding from the gut was the principal post-mortem finding) have been excluded, whereas no example of ulcer is likely to have been missed at post-mortem examination.

Sulphanilamide Powder in Nasal Catarrh

Q.—*There are certain preparations on the market for the treatment of nasal catarrh, sinusitis, etc., which contain from 0.4% to 5% sulphanilamide powder. In view of the growing concern about developing sulphonamide-resistant strains of bacteria, is this a proper and valuable use of sulphanilamide?*

A.—Any indiscriminate use of such drugs is to be deprecated. On the other hand, the use of sulphonamide snuffs,

with or without penicillin, is often effective in eliminating staphylococci, haemolytic streptococci, meningococci, and diphtheria bacilli from the nose or nasopharynx, particularly in carriers and when the sinuses are not involved (it is doubtful whether the efficacy of this treatment extends beyond the main cavity). Preferably, therefore, a bacteriological examination should precede treatment, as well as a clinical examination to determine the extent of the infection. In a somewhat different category is the use of such preparations in order to prevent secondary bacterial infection in the common cold and thus reduce its duration. This form of treatment has been favourably reported on, and seems justifiable in so far as these reports are correct. Sulphathiazole, owing to its lower solubility and thus more persistent action as well as its greater antibacterial activity, is more useful than sulphanilamide for these purposes.

Combined Action of Penicillin and Sulphonamides

Q.—(*a*) *Whitby, in the "Practitioner" (1947,* **159**, *239), states that penicillin and the sulphonamides have a directly contrary action, in so far as the former prevents the passage of glutamic acid through the cell wall of the organism, while the sulphonamides produce an abnormal accumulation of glutamic acid within the organism. From this one must assume that penicillin and sulphonamides should not be used in conjunction. Has this been confirmed?*

(*b*) *What are the advantages of giving penicillin and a sulphonamide simultaneously, and in what condition is this combined therapy of value?*

A.—Interference with glutamic acid metabolism is not established as a final and complete explanation of the mode of action of either penicillin or the sulphonamides. The recorded facts are, however, of interest and importance, and may be regarded as pieces in a jigsaw puzzle which has not yet been completed. In any case, the two facts are not evidence of a directly contrary action. It is not as though penicillin prevented the passage of glutamic acid while sulphonamides facilitated the passage. The facts are that: (1) penicillin prevents passage; (2) sulphonamides do not prevent passage through the cell wall, but prevent utilization when the glutamic acid is within the cell, so that abnormal accumulation results. There is no clinical evidence that a combined use of penicillin and a sulphonamide defeats its own ends or that these substances are antagonistic or incompatible. Theoretically the main argument for combined use is in the case of mixed infections, where one organism—e.g., staphylococcus—may be relatively resistant to sulphonamides and another—e.g., *Bact. coli*—resistant to penicillin.

Ligation of the Common Femoral Vein

Q.—(*a*) *Ligation of the common femoral vein is stated to be often employed in cases of post-operative venous thrombosis of the lower limb in America. Is the ligature applied proximal to the entrance of the long saphenous? If so, what are the after-effects on the venous return, and what course does the return take?*

(*b*) *Is there a condition of incompetence of the deep veins of the lower limb? Under what circumstances would such a state be diagnosed, and could this operation be performed for it?*

A.—(*a*) The ligature is as a rule applied below the saphenous opening unless the saphenous vein is thrombosed, when it is placed above. Some prefer to go even lower and ligate below the deep femoral junction. Whatever the position of the ligature, there is no difficulty about venous return: even ligation of the inferior vena cava does not cause any difficulty. Naturally if thrombosis has occurred before the ligation, as is so often the case, then some permanent oedema and other changes will result. This must not be put down to the ligature, because it is found that ligation of the femoral vein in a normal leg produces no changes at all in venous return. Nature has been very generous with collaterals.

(*b*) There is a condition of deep incompetence, and it is diagnosed when complications, usually associated with varicose veins, are present, but varicose veins are either absent or not present in sufficient degree to explain the skin changes. There need not be a previous history of deep thrombosis.

Procaine in Asthma

Q.—*How is intravenous "novocain" used in cases of bronchial and cardiac asthma?*

A.—"Novocain" (procaine), by intravenous injection, has been used extensively in cases of bronchial asthma, particularly in France. It does not appear to have any advantage over the commoner antispasmodics, and there have been instances where aminophylline was successful in relieving an attack after procaine had failed. There is experimental evidence that procaine, administered intravenously, so modifies the bronchial musculature that it no longer responds to stimuli previously causing bronchoconstriction. It has been given in dilute solution—1 g. of procaine in 500 ml. of isotonic saline by intravenous drip lasting two hours—or, in more concentrated form, in doses of 5–10 ml. of a 1% solution in isotonic saline. References to its use in cardiac asthma have not been found.

Injection of Vitamin D in Psoriasis

Q.—*Some time ago I came across a reference to the use of daily injections of vitamin D in a series of cases of psoriasis, a large proportion being reported as having done well. Can you give me further details as to technique and length of treatment needed?*

A.—Several reports upon this subject in the last ten years have appeared, particularly in the American literature, but few have been favourable, and authorities are almost unanimous in rejecting the measure. The dosage of calciferol in these cases has varied between 50,000 and 400,000 i.u. daily, administered over the course of some months by mouth or by injection. The treatment is a dangerous one, carrying with it the risk of serious disturbance of calcium metabolism (a toxic rise of diffusible calcium) and of severe renal damage, and should not be employed for psoriasis. (Reference: G. E. Clarke, *Arch. Derm. Syph., Chicago,* 1940, **41**, 664.)

Dosage of Vaccines

Q.—*What is considered to be the correct dosage according to age of cholera vaccine, T.A.B., T.T., and typhus vaccine?*

A.—Although there is no general agreement about the gradation of doses of vaccine according to age, it is often recommended that for infections like the enteric group, cholera, and typhus the dose should be one-third to one-quarter of the adult dose for children under 5 years, and one-half the adult dose for children aged 5–15. Many authorities do not advise inoculation of children under 2 years against these infections, which are very rare or very mild in young children, but certificates of prophylactic inoculation for every immigrant irrespective of age are demanded by certain countries. In the case of tetanus the risk of infection in young children may be considerable in some countries, and not less than one-half the adult dose of tetanus toxoid, which is as a rule free of any reaction, should be given. It must be remembered that in order to establish a good basal immunity the first dose (the primary stimulus) must be adequate to sensitize the tissues, and that children under 1 year probably give a poorer response to antigenic stimulus than older children or adults.

Passage of Antibodies from Foetus to Mother

Q.—*Certain neonatal diseases are now ascribed to the passage of maternal agglutinins or other antibodies through the placenta; can maternal toxaemia, with its resemblance when acute to the effects of an incompatible transfusion, be similarly related to the passage of antibodies from the foetus to the mother? It is said that the newborn do not develop definite blood groups at first, but does this exclude the possibility that they produce antibodies in their serum?*

A.—The blood groups of newborn infants are quite fully displayed at birth so far as concerns the agglutinogen content of the red cells. The serum of the newborn, however, does not display the reciprocal relations of agglutinogens and agglutinins characteristic of the adult, any iso-antibodies present in the infant's serum being derived from the mother's circulation. The infant gradually develops its own appropriate iso-agglutinins during the first year of life. The capacity of the

foetus to produce antibodies of any kind seems to be very limited. The suggestion that maternal toxaemia may be due to the passage of antibodies developed in the foetus through the placenta into the mother has been made but has never been substantiated, and the nature of the alleged antigen or antibody is quite hypothetical. There is no proof, for example, that an A mother transmits A substance to an O child, and no evidence that the child reacts to it by producing anti-A. If maternal toxaemia is related to an antigen-antibody reaction it is far more likely that the antigen is derived from the foetus and the antibody produced by the mother, the reaction perhaps being in the nature of a hypersensitive crisis. There is a recent discussion of this problem in *Nordisk Medicin*, 1947, **36**, 2281.

Testosterone in Angina Pectoris

Q.—*Is it true that the Americans have had great success in the treatment of angina pectoris with testosterone?*

A.—There is no uniformity of opinion regarding the value of testosterone propionate in the treatment of angina pectoris either in America or in this country. For example, Waldman (*J. clin. Endocrinol.*, 1945, **5**, 305) claimed that seven out of ten patients treated by him were improved symptomatically. Patients with stable electrocardiograms were more responsive to this treatment than those whose records showed progressive deterioration. On the hand, Levine and Sellers (*Amer. J. med. Sci.*, 1946, **212**, 7) stated that neither the intramuscular nor the sublingual administration of testosterone propionate was of any value in the treatment of angina. These authors said that the treatment was useful in relieving the chest discomfort at the male climacteric or the similar precordial ache of neurocirculatory asthenia in the same age group as patients with angina.

Epileptic Fits at Menstrual Period

Q.—*What is the relation between epilepsy and menstruation? I have a patient who has fits at every menstrual cycle, beginning two or three days before the period. They first started after the birth of her child six years ago, and during the last six months have become worse; at times she has a transient unconsciousness. I have tried phenobarbitone 1/2 gr. (32 mg.) twice daily, which lessened their severity. Epanutin, 1½ gr. (0.1 g.), taken two weeks before the period, prevented the fits at her next period but not after that. What do you suggest?*

A.—The onset of epileptic fits is sometimes precipitated by pregnancy or lactation. Moreover, fits are commonly aggravated by menstrual periods and may appear only at that time; one of the possible reasons for this is the tendency to retention of sodium and fluid in the tissues which is a feature of the premenstrual phase. Restriction of fluid intake to 1 pint (0.57 litre) in 24 hours and elimination of salt from the diet for ten days before each period should be tried. Ammonium chloride, 10 gr. (0.65 g.) thrice daily, could be given at the same time. If such measures fail, the regular administration of sedatives before each period will have to be continued.

Hagner's Operation

Q.—*Is Hagner's operation for stenosis in the tail of the epididymis often performed? Is it successful?*

A.—Hagner published such excellent results that surgeons in this country are now using his technique. The operation is worth doing since it is the only possible remedy for this kind of blockage. It is difficult to give statistics of successes, as patients disappear and the final result is not known. It is probable that in about one in four cases sperms reappear in the semen. This does not of course mean that the wife necessarily conceives.

Effect of Heat on B.S.R.

Q.—*Citrated blood for a B.S.R. was put into two Westergren tubes and one was placed in the middle of a cold room and the other near to a radiator. The first tube read 3 mm. after one hour, and the warmer tube read 28 mm. How can correction be made for temperature when doing this test as a routine?*

A.—The effect on B.S.R. readings of variations in room temperature such as ordinarily occur is so slight that no correction is necessary. The very great difference between the two readings quoted is quite unaccountable on this basis: by way of illustrating this, two Westergren tubes of the same blood were set up at room temperature (then 22° C.) and in an incubator (37° C.). The readings at one hour were 7 and 12 mm., respectively. The questioner may care to make some further tests himself at observed temperatures.

Vitamin B and Growth of Hair

Q.—*Can p-aminobenzoic acid affect the growth of hair? A woman with post-influenzal debility and a doubtful thyrotoxicosis was given 100 mg. of p-aminobenzoic acid three times a day after meals. Fourteen days later her hair, which had been grey and lank for some years, was growing more lustrous and darker. Has this compound any effect on the growth and pigmentation of the hair?*

A.—The observation which has been made is interesting. There is no experimental evidence that *p*-aminobenzoic acid has any effect on the growth of hair, but such an effect is not inconceivable. Hairlessness in mice has been shown to result from a deficiency of inositol, and it might well be that a deficiency of *p*-aminobenzoic acid could lead to poor hair growth. More patients must be tried; the treatment can at least do no harm.

NOTES AND COMMENTS

Ringworm of Scalp.—Dr. A. J. E. BARLOW (Huddersfield) writes: In view of the considerable correspondence on this subject I hope that the following notes may be of interest. We have at present an epidemic of *Tinea capitis* in Huddersfield, and as the result of co-operation between the public health department and the Huddersfield Royal Infirmary a large series of cases has been obtained in the last eight months. All school-children and all home contacts have been regularly inspected with Wood's light and approximately 175 cases have been obtained. Culture has been done in each case and all have produced *M. audouini* with the exception of one *M. felineum*. Recent cultures have been confirmed by Dr. J. T. Duncan.

While we have dealt with some cases by *x*-ray epilation we have at the same time made an attempt to assess the effectiveness of local therapy without epilation. Among others the following local applications have been used: (1) 5% salicyl anilide in a carbowax base; (2) 10% salicylic acid in a turpentine emulsion; (3) phenyl mercuric nitrate and several other compounds in bases incorporating new emulsifying agents.

We have treated 150 cases in this way, and while our results are as yet incomplete we find that we have now 25 cases which for three consecutive examinations at monthly intervals in Wood's light have not fluoresced. A further 45 cases have been negative for a period of less than three months. The remaining 80 cases consist of 20 that have started treatment in the last six weeks; 16 in which local therapy has been abandoned for *x*-ray epilation; and 44 which show signs of improvement, or in which the parents are unwilling to allow epilation.

It is much too early to express any opinion, but it is hoped to publish the series in detail at a later date. There are, however, certain practical points about diagnosis and treatment which may be of help to anyone thinking of undertaking local treatment. (1) All cases should be confirmed by culture, preferably by someone experienced in the work. (2) All cases should be examined regularly in Wood's light and should not be pronounced cured until at least three monthly examinations have proved negative. (3) It should not necessarily be assumed that because cases have responded to a certain line of treatment the local application has penetrated into the depths of the hair follicle. We have several cases which have either cleared spontaneously or on therapy in which there could have been little or no penetration; and attempts to demonstrate penetration, even in cases which are clearing, have proved disconcerting. (4) Unless the parents are sensible and co-operative local treatment at present is likely to prove a waste of time.

Our general impressions are similar to those of Dr. R. T. Brain (Jan. 10, p. 86), that in the near future it is likely a rational and effective method of local treatment will be elaborated, but that at present *x*-ray epilation is a less time-consuming and more reliable method.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone.
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SUPPLEMENT TO THE

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THE STATE OF NUTRITION IN SINGAPORE BEFORE, DURING, AND AFTER THE JAPANESE OCCUPATION

BY

LUCIUS NICHOLLS, C.M.G., M.D.

Before the war Malaya was prosperous owing to the export of large quantities of rubber, tin, and coconut produce. The imports consisted largely of food, consumer goods, machinery, and motor vehicles.

Food Available in 1940

The staple article of diet of the population of Malaya was rice; about two-thirds of the rice consumed in the country was imported from Burma, Thailand, and to a lesser extent from Indo-China and other countries of the Far East. In 1940 the principal imports of foods of vegetable origin were: rice, 646,076 tons; wheat flour and prepared cereals, 91,243 tons; pulses (dhals, peas, and beans), 36,304 tons; and sugar, 113,935 tons.

The population of Malaya may be estimated at between 5½ and 6 million persons. Taking the figure of 6 millions, a calculation of these imported foods in terms of calories daily per head of the population gives the following:

	lb. per Head per Year	Calories per Head Daily
Rice	240	1,000
Wheat and other cereals ..	33	140
Pulses	13½	50
Sugar	42	180
Total		1,370

The foodstuffs of animal origin that were imported and used in Malaya appear impressive at first sight: 25,117 head of cattle; 212,281 pigs, sheep, or goats; 1,365,972 poultry; over one hundred million eggs; 1,145,765 cases of condensed milk; and 1,209,626 lb. of dried milk. But these do not give more than 30 calories daily per head of the population. During 1940, therefore, foodstuffs to the value of about 1,400 calories daily per head were imported into Malaya.

After the outbreak of war in Europe a drive was started to produce more food, and some progress was made before the Japanese invaded Malaya. The estimates of the Agricultural Department for 1940 indicate that 812 calories daily per head were obtainable from foods, other than oils, grown in the country. The amount of fish and meat available would have been about 100 calories in value. There was ample oil in the form of coconut products and red palm oil.

Thus a conservative estimate of the calories per head daily available in 1940 is: imported foodstuffs, 1,400; rice grown locally, 560; roots, bananas, etc., 202; garden vegetables, 50; fish and meat, 100; oils, at least 250. Total, 2,562 calories. The rice, roots, banana, and garden vegetable figures are Agricultural Department estimates.

The Food Position under the Japanese

The quantity of rice and other foodstuffs imported during the Japanese occupation is not known. But the havoc of war had prevented cultivation in vast areas of Burma, the greatest rice-exporting country in the Far East; the transport systems of Indo-China, Thailand, and the Netherlands East Indies had broken down; and owing to many sinkings by the enemy very few, if any, steamships were available to transport goods for civilians. It is certain that imports of foods into Malaya were far less than in the years before the war. It is known, however, that some rice and other foodstuffs were imported by land over the borders of Thailand, and further supplies were brought by junks and other small coastal craft.

The rice-growing areas of Malaya were self-supporting, but in the towns and most country districts the Japanese introduced rationing, apparently fairly efficiently in view of the stocks available. A ration of rice of 5 oz. (140 g.), 4 oz. (115 g.), and 2 oz. (57 g.) daily for men, women, and children respectively was distributed in Singapore Island right up to the time the Japanese surrendered.

Local Agricultural Production.—The production of rice in Malaya, estimated at 341,000 tons in 1939, had diminished by at least 100,000 tons yearly by the last year of the Japanese occupation. The reasons for this falling off in production were: (1) The drainage and irrigation systems were not properly maintained; these progressively deteriorated during the whole period of the Japanese occupation. (2) The Japanese confiscated much rice, and the cultivators reacted by producing little more than their own needs. (3) There was some displacement of the population, partly due to labourers being taken for forced work elsewhere. (4) The Japanese introduced and compelled the cultivation of a type of rice plant, called taiwan, new to Malaya, which turned out to be unsuitable for the climate and agricultural conditions of the country. (5) There was a shortage of water buffaloes for ploughing owing to slaughter for meat. (6) Lack of control measures led to a marked increase of pests such as rats, wild pigs, monkeys, and insects.

The Japanese realized that the only way to prevent famine among the general population was by growing large quantities of roots, mainly manioc (tapioca) and sweet potatoes. In this they were successful as regards widespread famine. But roots are a bad substitute for rice unless they are well supplemented with foods rich in proteins, such as meat, fish, milk, and pulses. The evidence of the Japanese food drive can be seen on all sides: rubber trees were cut down, virgin jungle was cleared, and the open spaces in the towns and villages were turned into gardens.

The estimate from the Agricultural Department is that in 1940 there were 48,000 acres under roots on the Malay Peninsula, and the Japanese had raised this to 140,000 acres, giving an increased yield of 396,000 tons, the equivalent of about 99,000 tons of rice in terms of calories. A similar estimate for bananas is 35,000 acres in 1940 and 78,500 acres by 1945, the increased production being 174,000 tons of *peeled* bananas, the equivalent in calories of 69,000 tons of rice. Also there were small increases of maize, millet, and sugar. Garden vegetables were also grown in abundance. When the new areas were first cultivated the yields may have been far greater than these estimates, because fallow and virgin lands have a high fertility.

The production was brought about by direct and indirect forced labour. The Japanese gave powers to selected persons in country areas to compel others to cultivate the land. Tin mines were closed down and rubber was no longer produced on most of the estates. Numbers of rural labourers were recruited for various purposes of war, and others had to turn to growing food for their subsistence. Business in towns ceased to function; clerks and others in subordinate positions were

replaced by Japanese or were no longer required. Many from the towns were sent to the country and settled on the land to fend for themselves. Office work ceased about 2 p.m., and the clerks were compelled to work in gardens or on allotments from 3 p.m. till dusk daily, Sundays included.

Animal Husbandry:—The Veterinary Department estimates that during the Japanese occupation the live stock of Malaya was reduced by at least 40%. The reduction would probably have been greater were it not for lack of transport, because in districts within easy reach of towns the stocks of cattle were reduced by 60% and pigs by 80%.

Fish.—Prior to the war the deep-sea fishing was largely in the hands of the Japanese, and this continued during the occupation. But the greater part of the coastal and fresh-water fishing was done by Malays. By the end of 1945 many boats had been lost, others were unseaworthy, and much of the fishing-gear had perished. Consequently there was a great reduction in the supply of fish, and it may have been 50% less than in 1940.

Vital Statistics Before, During, and After the Japanese Occupation

The Japanese maintained much of the British administration with the subordinate Asiatic staffs of the Government offices. The efficiency was very variable in different offices. Where it was inefficient it was not necessarily due to the failure of the Asiatic staffs but to the exigencies of war and other causes over which the staffs had no control. The work in the offices of the registrars was continued as previously, but the statistics kept in Malacca, Penang, and Kuala Lumpur are faulty and difficult to assess. This, however, is not the case in Singapore, where the statistics for the years after 1941 and 1942 are complete and give ample testimony to the health conditions in the island of Singapore under Japanese rule. Therefore the statistics only for this part of Malaya will be considered.

The records show the number and causes of deaths; but it is impossible to give the death rates with accuracy, because the last census of Singapore was taken in 1931, and there had been a considerable movement of population since the outbreak of war. Between 1937 and 1945 the civil population averaged about 750,000; of these somewhat more than 60% were males. Deaths among the Japanese forces and prisoners of war are not included in these statistics.

The numbers of deaths for the four years (1937–40) prior to the Japanese occupation and the deaths for the four years (1942–5) during the Japanese occupation were:

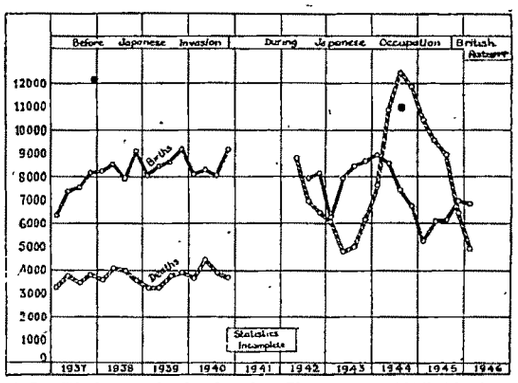
	1937–40	1942–5
Males	35,596 (60%)	86,697 (66%)
Females	23,765 (40%)	43,685 (34%)
	59,361	130,382

There was a great increase in the number of deaths of both males and females during the years 1942 to 1945, but the increase was greater among the males. It might appear that many deaths were due to executions or massacres, but these are not included. For instance, during the four months July to October, 1944, when the recorded deaths were more than three times as numerous as in the years before the war, the number of executions is given as seven. Further, the causes of all deaths are included, and the consistency of the rise and fall under each heading is such as to indicate that they were not falsely loaded with deaths from violence.

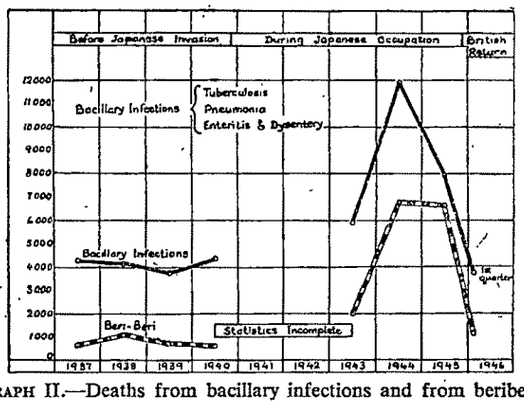
Graph I gives the number of births and deaths for the years 1937 to 1945 and for the first quarter of 1946. It will be noticed that before the war there was an unusually high birth rate, which fell considerably during the Japanese occupation. The number of deaths fell greatly after the British return, to reach pre-war figures in the first quarter of 1946.

Graph II.—This shows the number of deaths from three bacillary infections added together and from beriberi. More deaths were returned under beriberi than under any other single heading, the yearly average from 1938 to 1940 being 781 deaths, which rose to an average of 5,136 for 1943 to 1945. The deaths under the headings "tuberculosis," "pneumonia," and "enteritis and dysentery" rose from a yearly average of 4,136 for 1938–40 to 8,609 for 1943–5. Thus the rise in the beriberi deaths was about 6½ times, whereas in the case of the bacillary infections it was little more than twofold. It may be that deaths from general malnutrition in which the patients had marked oedema were included under the heading "beriberi."

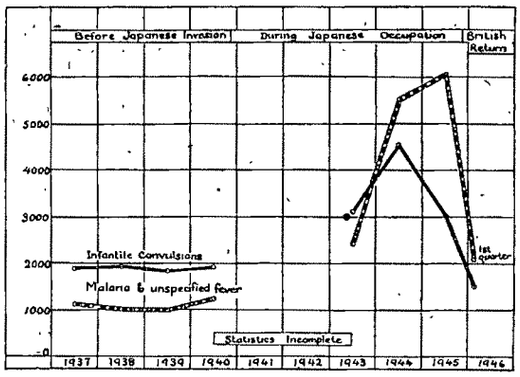
Graph III.—Here the deaths under the single heading "infantile convulsions" are compared with the combined deaths under the two headings "malaria" and "unspecified fevers." There are many causes of infantile convulsions. They are common in neonatal deaths of the infants of malnourished women of the Tropics: the infants pass into convulsions and die, and the aetiology is seldom apparent either clinically or at necropsy. Many infants weaned on cereal paps



GRAPH I.—Births and deaths in Singapore, 1937–46 (quarterly statistics).



GRAPH II.—Deaths from bacillary infections and from beriberi.



GRAPH III.—Deaths from infantile convulsions compared with those from malaria and unspecified fevers.

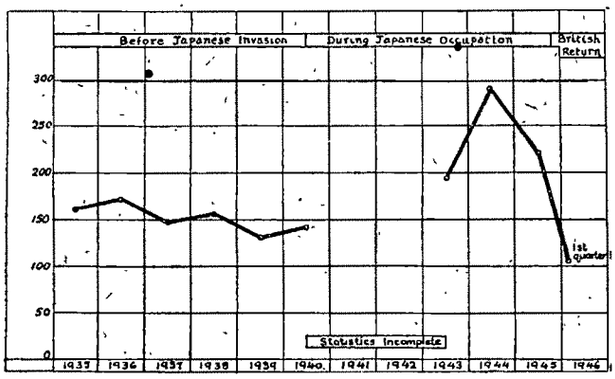
die in convulsions; and infantile beriberi is another cause. Again, convulsions in infants occur in many infections, especially malaria, where they are equivalent to the ague fits of adults. It will be seen that the deaths from convulsions do not run parallel with the deaths from the fevers: between 1944 and 1945, when the deaths from fevers were increasing, there was a marked fall in the deaths from convulsions. It is probable that malnutrition was the principal cause of these infantile

deaths. In a few months after the British return improved feeding of infants and the restarting of antimalarial work brought the death rates to the pre-war level.

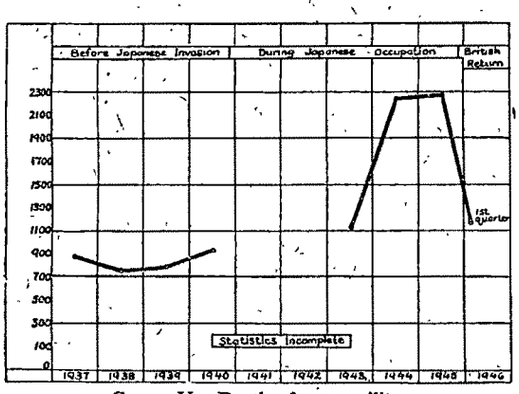
Graph IV.—This shows the infant mortality rates; it will be seen that the graph closely follows that for deaths from infantile convulsions.

Graph V.—This shows the deaths under the heading "senility." It was a hard time for the aged, the deaths among them being three times as numerous as the yearly average before the war. Again the situation was quickly improved under British rule.

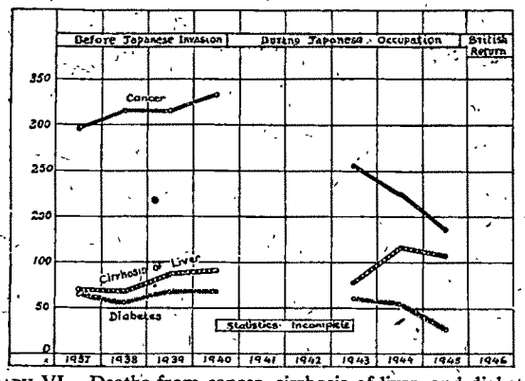
Graph VI.—This gives the numbers of deaths from cancer, cirrhosis of the liver, and diabetes. There was a fall in the



GRAPH IV.—Infant mortality rates.



GRAPH V.—Deaths from senility.



GRAPH VI.—Deaths from cancer, cirrhosis of liver, and diabetes.

number of deaths from cancer; this may be attributed partly to faulty diagnosis, as many medical men had left or were interned, and partly to deaths among those who had reached the age of greatest liability to cancer. In other words, there was a smaller population of those in the "cancer age." Probably malnutrition hastened death in the early stages of cancer, when diagnosis was difficult. The statistics give cirrhosis of the liver under two headings: "alcoholic" and "non-alcoholic"; the figures for only the latter are given. Cirrhosis of the liver is six to seven times as common in the Tropics of the Far East as it is in temperate climates. It occurs mainly among the poorest classes. There is evidence that it follows the long consumption of low-protein diets deficient in various vitamins. This may account for the increase in 1944 and 1945, though it might be expected that the number of deaths would have been greater. Diabetes is common among the wealthy classes of the Far East, who habitually eat excessive amounts of rice highly laced with curry stuffs of an appetite-stimulating and irritant nature. There was a fall in the number of deaths from diabetes, but it was not as great as might be expected under the exigencies of the times.

INSURANCE ACTS COMMITTEE

A meeting of the Insurance Acts Committee took place on Feb. 19, with Dr. E. A. Gregg in the chair.

The Chairman of Council (Dr. Dain) commented on the results of the plebiscite which had been announced on the previous day. The results had exceeded anything they could have anticipated. The figures proved that the Minister had not succeeded in dividing the profession and that the "raucous-voiced politicians" were not so unrepresentative of the rank and file as he had assumed. The wise thing for the moment was to allow the figures to speak for themselves. Possibly, when the Government had had time to consider the effect of the figures, it might have something to say to the profession about future developments. Following the Special Representative Meeting on March 17 a campaign to instruct the public about the position would be undertaken. It was now their duty to announce to the public their constructive policy and the sort of service they were proposing to give. A conference of public relations secretaries was being held on the following day. Another proposal to which the Council had agreed was to recommend the S.R.M. that a new fund to be called the Independence Fund should be set up, to which subscriptions would be invited forthwith. The Guarantee Fund would be closed, and the guarantees would not be called in.

Dr. Woolley expressed on behalf of the Committee grateful appreciation of the efforts of officers and staff of the Association in carrying through the plebiscite.

Dr. Fraser attended in order to support a resolution passed at a joint meeting of the Cumberland and Carlisle Panel Committees that the Insurance Acts Committee be urged to invite resignation from all insurance practitioners with three months' effect from March 1 as a protest against the introduction of the National Health Service in its present form. He said that the idea behind the resolution was that the resignations should be collected and handed to the Insurance Acts Committee. Already the collection of resignations had compelled the Minister to abandon a position he had taken up. The course suggested would also be a means of holding the profession together and preventing any drifting away, especially in industrial areas where practitioners might not be well known to each other.

Various objections to this course of action were voiced by members of the Committee. It was pointed out that there was no analogy between what had been done in the past with regard to resignations and what was now proposed, also that such action would be labelled as sabotage, and again that it was a slightly illogical position to ask practitioners to resign from a service with which they were fairly satisfied because they did not want to enter a service with which they were dissatisfied.

Dr. Fraser said he quite appreciated these and other points which were urged against his committee's resolution.

It was agreed that no action be taken.

The Committee agreed to place on the agenda of the Special Panel Conference to be held on March 16 the recommendation which the Council had agreed on the previous day to make to the Special Representative Meeting urging such changes in the Acts as were necessary to maintain the integrity of medicine and to prevent doctors from being turned into State servants (*Supplement*, Feb. 28, p. 36). It also endorsed the recommendations of the Council concerning the setting up of an

Independence Fund in the hands of a Trust consisting of ten members appointed by the Council and six by the National Insurance Defence Trust.

Independence Fund

Sitting as Trustees of the National Insurance Defence Trust the members received a statement concerning the recommendation to the Representative Body that an Independence Fund should be set up. The Chairman said that the present Guarantee Fund, which in any event was due to expire on March 1, would be closed, and the guarantors would not be called upon; but they would be asked to convert their guarantees, or larger sums, into actual contributions to the new Fund. When the present storm was over the new Fund would be wound up and the unexpended balance returned in the appropriate proportions to those who had contributed. Even then there would still remain the same need as before for the existence of the N.I.D.T.

Dr. J. W. Bone, Treasurer of the Trust, said that on Feb. 18 the National Insurance Defence Fund stood at £491,000. He drew attention to the considerable funds which were held by certain Panel Committees, and pointed out that a difficult position might arise in July when Panel Committees ceased to exist.

It was decided to take legal advice for the benefit of Panel Committees on the disposal of funds which they might possess.

The following were elected as the six trustees to represent the N.I.D.T. on the Independence Trust Fund: Drs. Gregg, Knox, Pearce, Steel, Wilson, and Woolley.

It was agreed unanimously that an initial contribution of £400,000 be made from the National Insurance Defence Trust to the Independence Trust when established.

National Association of Local Executive Councils

Dr. N. E. Waterfield, a member of a provisional committee charged with preparing a draft constitution for a new National Association of Local Executive Councils, to be run in the same manner as the National Association of Insurance Committees, attended the meeting to urge that proper representation of the professional elements on Local Executive Councils should be secured in such a constitution. He reminded the Committee that in the old days the National Association was almost entirely in the hands of the Friendly Society representatives.

The view of the Committee was that, as the doctors, dentists, and pharmacists have a 50% representation on Executive Councils, whereas they were only in a small minority on the old Insurance Committee, they could be trusted, without making specific provision, to ensure that they were adequately represented on a national body.

The Committee gave some consideration to the draft statement of evidence to be given to the Departmental Committee on Certification under the N.H.S. Act, but certain points of detail were held over for further discussion. It was stated by a member of the Departmental Committee that it was not likely to be in a position to receive this evidence for perhaps two or three months, or to report for about a year.

GENERAL PRACTICE COMMITTEE

The General Practice Committee of the Association, under the chairmanship of Dr. S. Wand, held an all-day meeting on Feb. 11. Some 70 items were on the agenda, including reports from five subcommittees, one of them embracing four sets of minutes. Much of the business was concerned with the revision of fees for various services and the remuneration of practitioners in the whole- or part-time employment of Government Departments and other bodies.

A preliminary matter concerned petrol restrictions. It was reported that the Minister of Fuel and Power, while not able to remove all forms of restriction from doctors as a class, was prepared to agree that if a doctor undertook a social or recreational engagement and was at the time on call it was reasonable for him to use his car. The use of his car by a doctor when he had made an alternative arrangement for his patients was not justified. Petrol would be allowed to doctors for attending Association and other professional meetings in their locality. Where a practitioner urgently required to send drugs to a patient or a sample to a laboratory it would be in order for the journey to be made in the practitioner's car driven by his wife. Regional petroleum officers had been notified of these concessions.

It was reported that the Ministry of Pensions had refused to allow payment of mileage to members of medical boards, and the Committee resolved that the Ministry should again be pressed to come into line with other departments in this respect. In considering the scale of fees for attendance upon ex-Service pensioners for whom the department accepted responsibility, it had been agreed that a night visit should be regarded as one made between 8 p.m. and 9 a.m.

The Committee gave some consideration to the case of the small group of civilian medical practitioners employed by the Army authorities on a whole-time basis, and hitherto extremely badly paid. The Association had previously claimed that their payment should be at the rate of 5 guineas a day. The War Office was unable to agree to this but was prepared to make the remuneration 3 guineas a day, being more than a 200% increase on what they have been receiving. The Committee, after considering the circumstances of these officers, accepted this proposal, subject to its being made retrospective.

The Ministry of Health had agreed to a suggestion from the Committee that the status of the hospital member of the Medical Interviewing Committees under the Disabled Persons (Employment) Act should be clarified, and in the latest instructions to regional officers this member was defined as one possessing a higher qualification in medicine or surgery. The Ministry had also made it clear that either the industrial doctor or the hospital member was eligible for chairmanship of the committee. The question of sessional remuneration of specialist members and payment of travelling expenses was under consideration, and any decision subsequently reached would be given retrospective effect. With regard to sessional fees for members of Disablement Advisory Committee panels, the Ministry had offered an increase of from 1½ to 2 guineas, but the General Practice Committee decided to urge again that the minimum fee should be £2 5s. per session, plus mileage payment at standard rate and subsistence payment in accordance with the Civil Service scale.

Entrants to the Mining Industry

The Chairman reported that he with the Assistant Secretary had met the chief medical officer of the National Coal Board on a number of matters. It had been urged that pre-employment medical examinations of entrants to the mining industry should be undertaken by medical boards, but the chief M.O. was not convinced of their advantages, and considered that an individual practitioner with a knowledge of the industry could undertake the work equally satisfactorily. Medical boards would have to serve a wider area, involving travelling and subsistence allowances and affecting the cost of the examination. The coal areas, he said, were not so compact that these factors could be disregarded. The Committee resolved to explore this matter further.

The question of international vaccination certificates for intending passengers to the Far East occupied the Committee for some time. The authorities of Hong Kong and Singapore have insisted on certificates being signed by medical officers in the service of central or local governments and have refused to accept the certificate of a general practitioner as valid; in some other quarters, while the certificate of a general practitioner is accepted, it requires to be countersigned by a Government medical officer. It was stated that the whole question had been reviewed by an expert committee, which is recommending to the World Health Organization at meetings shortly to be held that, although it is advisable that certificates be countersigned, they should not be rejected merely on the ground that this has not been done.

Burden of Certification

The Committee reviewed the draft statement of evidence which it is proposed to submit to the Departmental Committee on Certification. The evidence included a classified list, not exhaustive, of certificates which general practitioners are commonly required to give at the present time. These were set out in four groups, making 32 items in all. A recommendation was passed that the Association was satisfied that effective steps

could be taken to lighten the burden of certification. The steps suggested included reducing the number of varying forms of certificate in order that one or two stereotyped forms might serve a variety of purposes; simplifying the forms of certificate wherever practicable; ensuring that new certificates are not introduced without due consideration and consultation with the profession; abolishing the necessity for giving medical certificates for commodities in short supply where there is no official sanction for such requirement; and reducing the frequency with which certificates may be renewed. The subcommittee which has prepared the evidence rather drastically pruned the occasions for which practitioners may be expected to give certificates, and the General Practice Committee made some further deletions. A model form of certificate was approved.

WORLD MEDICAL ASSOCIATION

The General Assembly of the World Medical Association at its meeting in Paris last September delegated to the Council the task of selecting a site in North America for the headquarters of the Association, the selection being subject to the approval of the American Medical Association and the Canadian Medical Association. The Chairman of the Council, Dr. T. C. Routley, of Canada, and Dr. Louis H. Bauer (U.S.A.), Member of Council, have reported that on behalf of the Council they are acquiring offices in the building of the New York Academy of Medicine at 2, East 103rd Street, New York. It is believed that they will admirably meet the needs of the Association.

The Council will hold a meeting in New York on April 26–9, and it is hoped that the new offices will be available by that time. After the meeting the Members of the Council will be the guests of the American Medical Association, the Mayo Foundation, the University of Minnesota, and some other universities for a ten-day tour which will take them as far west as Minneapolis.

HEARD AT HEADQUARTERS

Public Relations

The appeal is now to Caesar, Caesar being the British public, and the public relations organization of the Association (both the department at Headquarters and the public relations committees and their secretaries in the Divisions) is working hard. A Public Relations Conference assembled within 48 hours of the announcement of the plebiscite, and many of the secretaries brought forward ideas which they have successfully followed in their own localities. Every channel of publicity—leaflets, posters, public meetings large and small, the local and national press—was discussed. One of the difficulties is, of course, that while the individual doctor is regarded with affection doctors collectively do not command the same regard, and never have done. Moreover, the patient who is a most sympathetic and receptive person when seen by himself in the surgery is a very much more sceptical sort of person when he is one of a crowd at a public meeting. Another difficulty is that there is not one public, but two, or many, and that the approach which may be suitable to the readers of picture papers would be despised by those who take their views from the serious journals, and perhaps ten of the latter are more important in the formation of public opinion than a hundred of the former. But the Public Relations Department has got all this in hand.

How Many Patients a Day?

How many patients can a doctor see in a day? There has been an amusing correspondence in the American journals on this subject. A Wisconsin doctor put in a claim that he could see 75 patients a day. He was taken to task by a New York doctor, who pointed out that even if each patient took only ten minutes that would still add up to 12 hours, and even then it would mean that his chair never got cool. "A good service," he said, "cannot be given in ten minutes." But then came along a doctor from California who went whizzing past the Wisconsin record and declared that he saw personally as many as 120 patients a day, and his day was less than 12 hours. Easily done, he says it is: it is just a question of having sufficient space and organized team-work between doctor and nurse. It is true that a new patient may even require as much as 15 minutes, but on the other hand it takes only two or three minutes to give a patient a repeat injection and send him on his way. He concludes, perhaps rather ingenuously, "Maybe we don't give the best, but we treat the most."

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Stanley (Co. Durham), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

H.M. Forces Appointments

ROYAL AIR FORCE

DENTAL BRANCH

D. C. P. Battersea to be Squadron-Leader.

ROYAL AUXILIARY AIR FORCE

L. Watt to be Flight-Lieutenant.

ROYAL AIR FORCE VOLUNTEER RESERVE

Flight-Lieutenant D. M. Brown has resigned his commission, retaining the rank of Squadron-Leader.

Flying Officers T. M. Cullingworth, A. Fernandez, R. L. Goldson, D. B. Harries, J. M. Kelly, J. McInally, J. E. Marrett, J. W. Moffitt, C. H. Neville-Smith, B. Poole, S. R. Sims, D. R. Smith, L. Temkin, T. G. Tuffnell, C. N. Atkinson, C. B. Burdett-Smith, J. P. Clayton, D. E. Cullington, A. L. T. Eason, J. H. H. Glin, L. W. Godfrey, G. R. S. Grogono, W. J. L. Harries, T. D. Hawkins, J. P. Jackson, A. R. Jones, T. J. Jones, R. E. Leighton, D. L. Mackinnon, W. T. S. Moore, R. A. Morris, R. Owen, R. A. Parker, J. P. Penson, P. R. B. Sankey, W. M. B. Strangeways, W. K. Sutton, S. Beacon, A. J. Beale, A. V. Craig, S. Croft, G. Forrester, K. B. N. Freeman, L. M. Green, W. P. Gurassa, J. D. Hennessy, J. J. Henry, F. G. Ince, F. J. G. Kinsella, H. R. Macleod, R. S. Male, N. G. Nicholson, J. A. O'Garra, B. H. Pentney, T. W. Price, B. E. Roebuck, W. H. R. Smith, S. A. Somers, J. Walsh, R. G. Welch, F. J. Woodley, and J. M. Talbot to be Flight-Lieutenants (Substantive).

The following have been granted the Substantive rank of Flight-Lieutenant: R. H. Sage, W. M. Sandeman, G. E. Schofield, M. G. Scott, P. F. Scott, R. M. E. Seal, G. H. Seal, J. S. T. Searle, P. Seltzer, D. S. Sharpe, W. J. W. Sharrard, C. S. Shaw, J. F. Shaw, D. W. S. Sheldon, F. L. Shepherd, A. Sherlock, D. A. Sherman, J. G. Shirreffs, H. Shooman, L. Shuck, R. E. Sidebotham, E. Silver, P. H. S. Silver, L. Silverstone, R. D. Simpson, D. H. Sinclair, J. A. Sindell, I. P. D. W. Skempton, H. H. Slack, H. R. Smart, J. G. Smirk, E. R. Smith, H. H. Smith, C. J. W. Soutar, J. Stevenson, R. H. Stillman, J. B. Stirling, D. F. Street, S. D. K. Stride, H. F. Sugden, G. P. Sutherland, H. D. Symon, J. McA. Tagrant, C. E. Tait, G. S. Tapsall, J. C. Taylor, J. G. Taylor, T. Taylor, W. C. Taylor, D. C. Tennant, G. I. Tewfik, D. L. C. Thomas, J. M. Thomas, M. Thomas, P. H. Thomas, J. L. G. Thomson, T. J. Thomson, W. S. T. Thomson, M. Tobias, C. Todd, W. F. Toomey, D. K. M. Toye, P. R. Travers, D. E. Truscott, R. R. Trussell, A. J. Underwood-Whitney, F. N. Valdez, J. G. Vause, A. D. Verniquet, C. C. Vidot, P. Vlasto, J. C. L. Wade, H. Wainstead, I. A. Waldie, G. A. Walker, R. V. Walley, J. Ward, N. C. T. Watford, D. A. Watkins, I. G. Waugh, J. A. Waycott, M. T. Welford, G. G. Wells, P. W. Wells, P. West, G. A. Wetherell, J. D. Whitehouse, T. C. D. Whiteside, L. R. Whittaker, D. E. C. Whittome, R. H. Whitworth, H. Wickham, R. A. Wilkinson, R. W. Wilkinson, R. F. Williams, A. M. Williamson, C. P. Williamson, H. B. Willington, J. D. Willins, K. M. Willis, D. G. Wilson, J. R. E. Wilson, R. R. Wilson, C. A. Wilson-Sharp, D. Wimborne, E. A. Witheridge, J. F. H. Wood, G. R. Wotton, K. A. A. Wray, T. A. Wylie, P. O. Yates, A. Young, F. R. M. Young, C. E. Phillip, and R. Youngman.

The notification concerning F. Latham in a *Supplement* to the *London Gazette* dated Jan. 13, p. 270, col. 1, and in the *Supplement* to the *Journal* dated Jan. 31, p. 21, has been cancelled.

The notifications concerning J. A. B. Mounsey and T. H. Redfern in a *Supplement* to the *London Gazette* dated Jan. 20, p. 500, have been cancelled.

SPECIAL LIST (EX-INDIAN ARMY)
BRITISH ARMY

Colonels R. L. Vance and Sir G. R. McRobert, C.I.E., have retired.

Lieutenant-Colonels W. McAdam, O.B.E., J. E. Ainsley, and D. H. Waldron, O.B.E., have retired and have been granted the honorary rank of Colonel.

Lieutenant-Colonel W. J. Shipsey has retired on account of ill-health and has been granted the honorary rank of Colonel.

Lieutenant-Colonel R. W. H. Miller has retired.

Majors D. McC. Black and T. P. Binns have retired.

Majors R. K. Muir, F. C. Leach, and O. Walker have retired and have been granted the honorary rank of Lieutenant-Colonel.

Majors L. H. F. Michael and J. H. Cater have retired.

Captains (War Substantive Majors) E. L. Wilson and T. J. Powell have retired and have been granted the honorary rank of Lieutenant-Colonel.

Lieutenant S. N. Eate has retired.

COLONIAL MEDICAL SERVICE

The following appointments have been announced: J. Boyd, L.R.C.S., L.R.F.P.S., Medical Officer, North Borneo; C. W. J. Hingston, M.R.C.S., and D. F. MacBean, M.B., Medical Officers, Gold Coast; W. J. McGuiness, M.B., Medical Officer, Tanganyika; A. M. Robertson, M.B., Medical Officer, Malaya; C. A. Bathfield, F.R.C.S., Orthopaedic Surgeon, Mauritius; T. A. Doran, M.D., Medical Officer, Fiji; P. Frischmann, M.D., Medical Officer, Nigeria; W. J. L. Neal, M.B., Temporary Medical Officer, Aden; E. S. Shoucair, M.B., Medical Officer, Jamaica; A. H. Barwell, M.R.C.S., Medical Officer, Kenya; D. D. McCarthy, M.B., Assistant Director of Medical Services, Uganda; G. I. Shaw, M.B., Ch.B., Senior Health Officer, Hong Kong; J. R. C. Spicer, M.B., Senior Medical Officer, Tanganyika; W. J. Vickers, M.R.C.S., Director of Medical Services, Singapore; A. McKelvie, M.B., Medical Officer in charge of Leprosy Work, Gold Coast.

Association Notices

CONSULTANTS AND SPECIALISTS COMMITTEE

Representative of Part-time Consultants' Roll

As a result of a postal ballot held to fill the casual vacancy upon the Consultants and Specialists Committee caused by the resignation of Mr. A. H. Baker, F.R.C.S. (Scarborough), Mr. T. F. R. Griffin, F.R.C.S. (Scarborough), has been appointed to serve on the Committee as a representative of the Part-time Consultants' Roll for the remainder of the session 1947–8.

PRIZES FOR NURSES

The Council of the British Medical Association is prepared to consider the first award in 1948 of three prizes each of the value of 20 guineas for the best essay and three prizes each of the value of 10 guineas for the second best essay submitted in open competition by each of the following categories of nurses: (i) Pupil nurses; (ii) State registered nurses working in a hospital; (iii) State registered nurses not working in a hospital—i.e., district nurses, private nurses, etc.

The subjects of the essays for 1948 shall be: Category (i) "Suggested Improvements in the Methods of Training Nurses"; Category (ii) "Nursing the Patient, not the Disease: the Nurse-Patient Relationship"; Category (iii) "Difficulties of Nursing in the Patient's own Home and their Solution."

The purpose of these prizes is the promotion of systematic observation among nurses. In awarding the prizes *due regard will be given to evidence of personal observation.* No essay that has previously appeared in the medical press or elsewhere will be considered eligible for a prize. Nurses who are undergoing a course of training at a hospital are eligible to compete under category (i); nurses registered by the General Nursing Council are eligible to compete under categories (ii) and (iii). If any question arises in reference to the eligibility of a candidate or the admissibility of his or her essay, the decision of the Council of the British Medical Association shall be final. Should the Council decide that no essay entered is of sufficient merit, no award shall be made. Each essay must be typewritten or legibly written, must be unsigned, and have attached to it a sealed envelope containing the name and address of the candidate and the category into which he or she falls. Essays must be forwarded so as to reach the Secretary of the British Medical Association not later than May 31, 1948. Inquiries about the prizes should be addressed to the Secretary, British Medical Association, B.M.A. House, Tavistock Square, London, W.C.1.

SCHOLARSHIPS IN AID OF SCIENTIFIC RESEARCH

The Council of the British Medical Association is prepared to receive applications for Research Scholarships as follows: An Ernest Hart Memorial Scholarship of the value of £200 per annum, a Walter Dixon Scholarship of the value of £200 per annum, and four Research Scholarships each of the value of £150 per annum. These scholarships are given to candidates whom the Science Committee of the Association recommends as qualified to undertake research in any subject (including State medicine) relating to the causation, prevention, or treatment of disease. Preference will be given, other things being equal, to members of the medical profession.

Each scholarship is tenable for one year starting on Oct. 1, 1948. The scholar may be reappointed for not more than two additional terms. A scholar is not necessarily required to devote the whole of his or her time to the work of research but may hold an appointment at a university, medical school, or hospital, provided the duties of such an appointment do not interfere with his or her work as a scholar.

In addition, applications are invited for the first award of the Insole Scholarship of the value of £250 for research into the causes and cure of venereal disease.

Conditions of Award: Applications

Applications for scholarships must be made not later than Friday, April 30, 1948, on the prescribed form, a copy of which will be supplied on application to the Secretary of the Association, B.M.A House, Tavistock Square, London, W.C.1. Applicants will be required to furnish the names of three referees who are competent to speak of their capacity for the research contemplated.

CHARLES HILL,
Secretary.

Diary of Central Meetings

MARCH

16 Tues. Special Conference of Local Medical and Panel Committees, 11 a.m.
17 Wed. **Special Representative Meeting,** 10 a.m.
24 Wed. **Council,** 10 a.m.

Branch and Division Meetings to be Held

SOUTH-EAST ESSEX DIVISION.—At Southend Municipal Hospital. Rochford (Nurses' Lecture Hall), Friday, March 12, 8.30 p.m B.M.A. Lecture by Sir Heneage Ogilvie: Some Lessons of War Surgery.

Meetings of Branches and Divisions

EAST YORKSHIRE BRANCH

A general meeting was held on Feb. 11, when Mr. Parkes, biochemist to the Hull Royal Infirmary, gave a lecture on "Some Tests on Liver Function." He discussed the values of the different tests done to assess the function of the liver. He first described the galactose and laevulose tolerance tests, showing how their elimination from the blood stream is impaired with liver damage. He then went on to consider plasma proteins. He next discussed the blood cholesterol, which is increased in amount in obstructive jaundice and decreased in advanced cases of cirrhosis of the liver. He ended by emphasizing that in the investigation of any one case it was necessary to perform a series of tests and to balance the results.

DORSET DIVISION

A meeting of the Division was held on Feb. 17; 39 members were present. Dr. Geoffrey Evans delivered the B.M.A. Lecture on "Some Aspects of Kidney Disease." He spoke on the classification of kidney disease and its treatment, with special reference to Schlemm's diet in the treatment of oedema. He described the uses of the artificial kidney in the treatment of suppression of urine.

LINCOLN DIVISION

A general meeting of the Division was held on Feb. 8 with Dr. A. M. Maiden in the chair. Sixty members and non-members were present.

The chairman put to the meeting the question: "Are you in favour of the National Health Service Act as it stands at present?" On a show of hands 3 were in favour of the Act and 56 were against it. It was then announced that 32 postal votes had been received, and of these 1 was in favour and the remainder against. The total voting of the Division was therefore 4 in favour of the Act as it stands at present and 87 against it.

SUNDERLAND DIVISION

On Jan. 16 Mr. B. W. Rycroft spoke on plastic implants into eye sockets. He then delineated the methods of corneal grafting, and demonstrated with the aid of lantern slides the instruments used. He discussed in detail the technique of obtaining grafts with the trephine and the methods of suturing across the graft to retain it in position; he then considered the post-operative treatment. Mr. Rycroft concluded by showing an American film depicting the technique of corneal grafting by the Castroviejo method.

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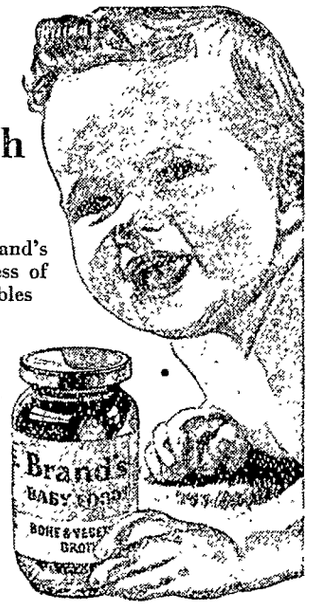

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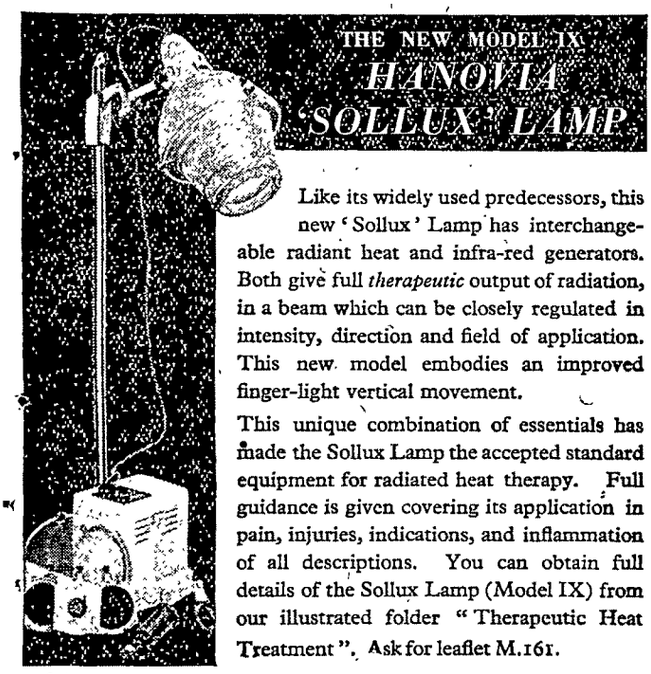

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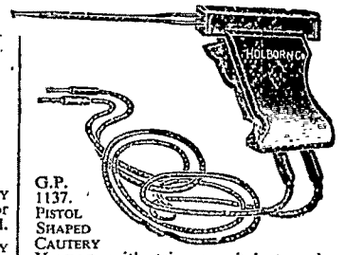

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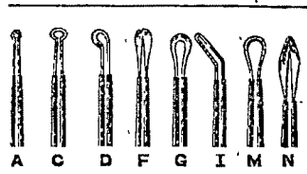

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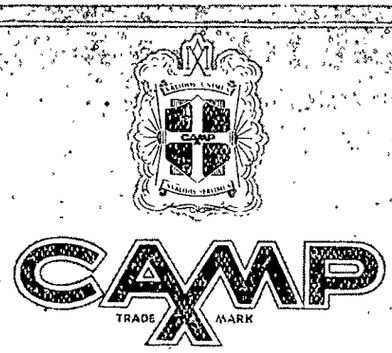

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References. Lancet, 1944, 247, pp. 175 and 176. British Medical Journal: 1946, I, p. 50. Pharmaceutical Journal: 1945, 155, p. 245.

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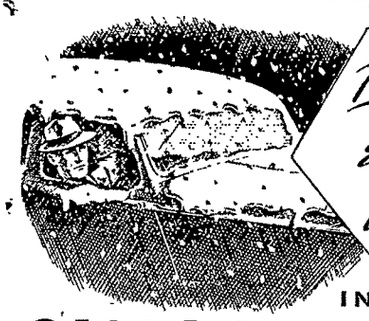

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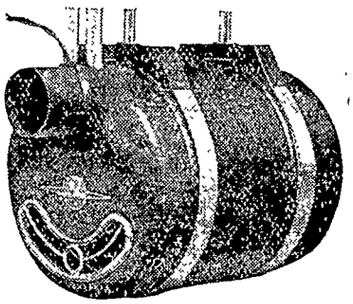

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SENIOR ASSISTANTS (one in Bacteriology and one in Pathology). The senior assistant in Pathology must have a registrable medical qualification and the senior assistant in Bacteriology must have either a registrable medical qualification or other suitable scientific qualification. Salary £1,000 per annum plus a personal non-pensionable allowance of £200 per annum and a temporary cost-of-living allowance (at present £84 per annum for a married man and £28 for a single man).

SENIOR LECTURER IN PHYSIOLOGY. Candidates must have a scientific qualification in physiology; a medical qualification will be a recommendation. The lecturer will be required to teach in practical classes in human and experimental physiology and to take part in the routine lecturing. Salary £1,000 per annum plus a personal non-pensionable allowance of £200 per annum and a temporary cost-of-living allowance (at present £84 per annum for a married man and £28 per annum for a single man).

Applications (with copies of testimonials) must be submitted in triplicate and must give age, qualifications and experience and the names of two or three referees to whom the University may refer. Two copies of the application must reach the Secretary of the Universities Bureau of the British Empire, 8, Park Street, London, W.1, by April 5, 1948, and the other copy sent direct to the Registrar, University of Capetown, Private Bag, Rondebosch, South Africa. A memorandum giving the general conditions of appointment is obtainable from the Secretary of the Universities Bureau.

UNIVERSITY OF BRISTOL
HONORARY SURGEON
to the Ear, Nose and Throat Departments

The University of Bristol, in conjunction with the Bristol Royal Hospital, the Bristol Royal Hospital for Sick Children and Women and the City and County of Bristol, invites applications for the post of Honorary Surgeon to the Ear, Nose and Throat Departments of the above two hospitals. The appointment also offers opportunities for work at the City Hospitals and the Health Clinics. Payment would be made by the City on a sessional basis in accordance with the agreed B.M.A. scale. Applications, stating age, qualifications, and experience, which should include the names of three referees and be accompanied by copies of not more than three recent testimonials, should be forwarded to the undersigned on or before March 31, 1948.—Winifred Shapland, Secretary and Registrar.

UNIVERSITY OF BRISTOL
SURGICAL REGISTRAR

The University of Bristol, in conjunction with the Bristol Royal Hospital and the City and County of Bristol, invites applications for the non-resident post of Surgical Registrar. The appointment is for one year and renewable. The salary will be on a scale from £500 to £750 per annum according to qualifications and experience. There is a University Scheme for Children's Allowances. Applications giving full names, age, qualifications, details of education and experience together with the names of not more than three referees and copies of not more than three recent testimonials, should reach the undersigned, from whom further particulars may be obtained, on or before April 3, 1948.—Winifred Shapland, Secretary and Registrar, University of Bristol, Bristol, 8.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
WHARNCLIFFE HOSPITAL, Sheffield
PSYCHIATRIST

Applications are invited from registered medical practitioners for the post of Psychiatrist in the Neurosis Centre of the above-mentioned hospital. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Experience in Psychiatry is essential. The post is in the Emergency Medical Service under the Ministry of Health, and is on a salary range of £750 to £1,000 per annum, or £1,000 to £1,400 per annum according to experience and qualifications. The salary is payable by the Ministry of Health, and is assessed on a non-resident basis; it will be at the rate of £100 per annum less if free board and lodging are provided at the expense of the Hospital. The appointment is terminable by a month's notice on either side. Applications should be addressed to the Medical Superintendent, Wharncliffe Hospital, Sheffield 6, not later than March 27, 1948.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

MINISTRY OF PENSIONS
QUEEN ALEXANDRA HOSPITAL
Cosham, Portsmouth
SENIOR MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of Senior Medical Officer at the above named hospital. Salary £800 per annum plus appropriate consolidation addition and free board and lodging or an allowance of £100 per annum in lieu, if permission is given to live out. Preference will be given to applicants who hold a higher medical qualification and in this connexion suitably qualified R practitioners holding B1 posts who are ineligible for H.M. Forces are invited to apply.

QUEEN ALEXANDRA HOSPITAL
Cosham, Portsmouth
SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (men and women) for the appointment of Surgical Officer (B1) at the above named hospital. Applicants should have held House appointments and have had surgical experience. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary is at the rate of £350 to £550 per annum according to experience, plus consolidation addition, and free board and lodging or an allowance of £100 per annum in lieu if permission is given to live out.

QUEEN MARY'S HOSPITAL
Roehampton, London
MEDICAL OFFICER (B2)

A vacancy exists for a Medical Officer (B2) in the Tropical Department of the above-named hospital, and applications are invited from registered medical practitioners (male and female) including R practitioners who already hold A posts. The appointment offers opportunities for experience in general and tropical medicine. If an R practitioner is appointed the appointment will be limited to six months. Salary £300 per annum plus consolidation addition and free board and lodging or an allowance of £100 per annum in lieu, if permission is given to live out. Applications, stating date of birth, qualifications (with dates) and nationality, accompanied by copies of two recent testimonials, should be addressed to the Secretary, Ministry of Pensions, Medical Services Division, Norcross, Blackpool, Lancs.

MINISTRY OF LABOUR
FULL-TIME MEDICAL OFFICERS

Medical Officer (full-time), men and women, required in the Prison Service (England and Wales). Must be medical practitioners between ages 28 and 55. Psychiatric experience an advantage. Consolidated salary (London rates) £1,000 at age 35, subject to £30 variation for each year below or above (up to age 40). Slightly lower scales for posts outside London. Non-pensionable, but successful candidates can be considered for permanent posts at next Civil Service open competition. Application forms, obtainable from Appointments Officer Ref. B.N.21, Ministry of Labour and National Service, 1-6, Tavistock Square, London, W.C.1, returnable within 10 days of appearance of this advertisement. Only candidates selected for interview will be informed.

KENT EDUCATION COMMITTEE
School Health Service
PSYCHIATRIST

Applications are invited from suitably qualified persons (male or female), including those in H.M. Forces, for appointment as full-time Psychiatrist, for duties in the Child Guidance Service of the Education Committee. The salary will be within the range of £910, by increments of £25 to £960, plus a temporary cost-of-living bonus. The appointment is superannuable and the successful candidate will be required to pass a medical examination. An appropriate travelling allowance will be paid on the County Council's scale. Applications, accompanied by the names and addresses of two persons to whom reference may be made as to professional ability and character, should be addressed to the undersigned not later than March 16, 1948.—A. Elliott, School Medical Officer, County Hall, Maidstone.

SOUTHLAND HOSPITAL BOARD
SOUTHLAND HOSPITAL
Invercargill, New Zealand
PATHOLOGIST

Applications are invited from qualified medical practitioners for the above position. Salary £1,000 to £1,200 per annum. Applicants should give full particulars as to age, qualifications and experience, and should forward copies of recent testimonials. Full information regarding this position may be obtained from the office of this *Journal*. Applications should be forwarded immediately to the undersigned.—J. H. Chapman, Secretary, P.O. Box 39, Invercargill, New Zealand.

Have you read the notice at top of page 13 ?

SOUTH CANTERBURY HOSPITAL BOARD
Timaru, New Zealand
Practice in Radiology
PART-TIME RADIOLOGIST

Applications by airmail closing with the undersigned on March 31, 1948, are invited for the position of part time Radiologist to the Timaru Public Hospital with the right of private practice. Competent full time Radiographer employed. Salary at the rate of £800 N.Z. per annum with four weeks annual leave. In addition successful applicant will have option of operating a private Hospital Radiology practice on the following basis: A guaranteed fee of £200 per annum plus half the net profits which last year were £360. There are good prospects in this practice. In any case the Hospital Board guarantees a total annual income of not less than £1,200 N.Z. per annum. Applicants to state age, married or single, qualifications, previous experience and to enclose not more than three copies only of recent testimonials. Also approximate date could take up duties. New 5 roomed house, modern conveniences, available for appointee at moderate rental. Further particulars may be obtained from the office of the High Commissioner for New Zealand, 415, Strand, London.—H. G. Naylor, Secretary to Board, P.O. Box 88, Timaru, New Zealand.

BOROUGH OF ACCRINGTON
MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners for the appointment of Medical Officer of Health to the Borough of Accrington in accordance with the provisions of the Sanitary Officers (Outside London) Regulations, 1935. The person appointed will be required to carry out the usual duties pertaining to the office of Medical Officer of Health and will be in charge of the Corporation's Maternity and Child Welfare Service. It is expected that he will also be appointed Divisional School Medical Officer of Health to the No. 11 Divisional Executive of the Lancashire County Education Authority. The inclusive salary has been fixed in accordance with the Modification of the Interim Revision of the Askwith Memorandum and will be at the rate of £1,100 per annum (including cost-of-living bonus). The post is subject to the Local Government Superannuation Act, 1937. It is anticipated that for the purposes of the National Health Service Act, 1946, the person appointed will also become an Officer of the Lancashire County Council as from July 5, 1948. Forms of application and full particulars of the duties and conditions of appointment may be obtained from the undernamed, to whom the completed form of application should be returned not later than Tuesday, March 23, 1948. —P. D. Wadsworth, Town Clerk, Town Hall, Accrington.

BOROUGH OF BARKING
Public Health Department
ASSISTANT DENTAL OFFICER

Applications are invited from registered dental surgeons for the appointment of an additional Assistant Dental Officer. Salary scale £650 by £25 to £750 per annum, plus cost-of-living bonus. The commencing salary will be fixed having regard to the experience and qualifications of the successful candidate. Particulars of duties and application forms can be obtained from the Medical Officer of Health, Town Hall, Barking, Essex, and must be returned to the undersigned not later than March 22, 1948.—E. R. Farr, Town Clerk, Town Hall, Barking, Essex.

CORPORATION OF GLASGOW
Public Health Department
HAWKHEAD MENTAL HOSPITAL
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the above (B1) post; salary scale—£500 by £50 to £600 per annum, plus residential emoluments valued at £150 per annum. The hospital is a teaching hospital and possesses full facilities for research. Suitably qualified R practitioners holding B1 posts (if eligible for H.M. Forces), or B2 posts, are invited to apply. Applications, with the names of two referees, should be made to the undersigned not later than March 20, 1948.—William Kerr, Town Clerk, City Chambers, Glasgow.

CITY OF LIVERPOOL
Thoracic Surgical Unit (Liverpool Area)
BROADGREEN HOSPITAL
Edge Lane Drive, Liverpool, 14
RESIDENT MEDICAL OFFICERS (B2)

Applications, including those from R practitioners holding A posts, are invited for the posts (two) of Resident Medical Officers, male or female, for work in the Thoracic Surgical Unit. For R practitioners the appointments are limited to six months The duties will be mainly medical. The appointments offer excellent opportunities for acquiring a knowledge of the medical and surgical aspects of diseases of the chest. The Director of the Unit is Mr. H. Morriston Davies. Salary will be at the rate of £250 per annum in each case, together with residential emoluments. Applications should be sent to the undersigned so as to be received not later than Monday, March 15, 1948.—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool.

BUCKS COUNTY COUNCIL
TINDAL GENERAL HOSPITAL, Aylesbury
(Acut General Hospital—125 beds; 5 residents)

Applications are invited from suitably qualified male practitioners for the following appointments, which fall vacant on April 30, 1948:—

RESIDENT SURGICAL OFFICER (B1). Salary £455, rising annually by £25 to £555 per annum. Applicants should preferably, but not necessarily, hold the Fellowship of one of the Royal Colleges of Surgeons. Consideration may in special circumstances be given to the commencing salary being above the minimum of the grade. The appointment is for one year in the first instance. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces.

HOUSE SURGEON (B2). Salary £250 per annum. R practitioners holding A posts may apply.

HOUSE PHYSICIAN (A). Salary £200 per annum. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.

All three posts carry full residential emoluments. The two surgical posts are recognized under the regulations for the F.R.C.S.(Eng.). The B2 and A appointments are for a period of six months. Applications, stating date free to commence duty, together with copies of two recent testimonials, should be submitted to the Medical Superintendent by March 22, 1948.

CITY OF LIVERPOOL
CLEAVER SANATORIUM
Oldfield Road, Heswall (220 beds)
DEPUTY MEDICAL SUPERINTENDENT (B1)

Applications are invited for the appointment of full-time Resident Deputy Medical Superintendent (B1) from suitably qualified R practitioners holding B2 appointments and practitioners released from the Services. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected for military service. Applicants should have had experience in the treatment of tuberculosis. The person appointed will be required to assist the Medical Superintendent in the administration of the Sanatorium, training of nurses, etc. and will deputise for him when required. Salary will be at the rate of £600 per annum, together with cost-of-living bonus, and residential emoluments valued at £130 per annum. The appointment will be subject to the Standing Orders of the City Council and determinable by three calendar months' notice on either side. Any fees in connexion with the appointment will be handed over to the City Council. Applications, stating age, qualifications (with dates), experience and details of present and previous appointments, together with copies of recent testimonials, should be endorsed "Deputy Medical Superintendent," and sent to the undersigned not later than Saturday, March 13, 1948.—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool.

CITY OF LIVERPOOL
CITY HOSPITAL FAZAKERLEY ISOLATION
Lower Lane, Liverpool, 9
Resident ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the above appointment, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of twelve months. Previous hospital experience is desirable. The salary is at the rate of £250 per annum, together with cost-of-living bonus and full residential emoluments. All fees received in connexion with the appointment to be handed over to the City Council. The appointment will be subject to the Standing Orders of the City Council and will be determinable by one month's notice on either side. Applications, stating whether R practitioner, age, qualifications with dates, experience and details of present and previous appointments together with copies of recent testimonials, should be endorsed, "R.A.M.O. City Hospital Fazakerley," and sent to the undersigned not later than 10 a.m. on Saturday, March 13, 1948.—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool, 2.

CITY OF LEEDS
ST. JAMES'S HOSPITAL

Applications are invited from registered medical practitioners (male and female) for the following appointments, vacant April 8, 1948:—

HOUSE SURGEON (B2).

OBSTETRIC HOUSE SURGEON (B2). Two appointments.

Six-monthly appointments. Salary £200 per annum, plus bonus and full residential emoluments. R practitioners holding A posts may apply.

HOUSE PHYSICIAN (A). Six appointments.

HOUSE PHYSICIAN (A) (Children).

HOUSE SURGEON (A). Two appointments.

HOUSE SURGEON (A) (Facio-Maxillary).

Six-monthly appointments. Salary £150 per annum, plus bonus and full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be forwarded to the undersigned as soon as possible.—I. G. Davies, Medical Officer of Health, School Medical Officer, Public Health Department (Hospitals Administration Section), 12, Market Buildings, Vicar Lane, Leeds, 1.

CITY OF NOTTINGHAM
PAEDIATRICIAN

Applications are invited for the appointment of Paediatrician. The appointment will be a joint one between the City of Nottingham Health and Education Departments (including Paediatric Wards at the City Hospital), the Nottingham Children's Hospital, and the Hospital for Women and the General Hospital, Nottingham, and the applicant appointed may be called into consultation at other hospitals or departments in the City. Applicants should be physicians with wide experience of Paediatrics, should hold higher qualifications, and be prepared to engage solely in the practice of the speciality Salary at the rate of £1,500 per annum will be offered in the first instance and there will be limited opportunity for private consultative practice. The terms and conditions of the appointment will be reviewed at the commencement of the National Health Service. Applications, together with copies of not more than three testimonials and the names of two referees, to be sent to the undersigned on or before March 20, 1948.—J. E. Richards, Town Clerk, The Guildhall, Nottingham.

CITY OF NOTTINGHAM
Mental Health Service
MAPPERLEY HOSPITAL
JUNIOR ASSISTANT PHYSICIAN

Applications are invited for the post of Junior Assistant Physician to Mapperley Hospital. Candidates should be in possession of a D.P.M., and have had experience in modern methods of psychiatric treatment. Salary £1,000 per annum, non-resident. Plans for a house are in an advanced stage of approval, and the salary would then be £800 per annum with emoluments consisting of unfurnished house with light, fuel and laundry valued for the purposes of the 1909 Asylum Officers' Superannuation Act at £200. Opportunity will be available for experience in out-patient adult and child psychiatry and mental deficiency work. The successful candidate will be expected to take up duty on May 1, 1948. Suitably qualified R practitioners holding B1 appointments and ineligible for H.M. Forces are invited to apply. Applications should be forwarded to the Medical Officer of Mental Health, Mapperley Hospital, Nottingham, by March 20, 1948.

CITY OF BIRMINGHAM PUBLIC HEALTH DEPARTMENT
WOMEN MEDICAL OFFICERS
HOLIDAY LOCUMS

Applications are invited for the temporary appointment of three whole-time medical officers to take holiday duty during the summer months. One commencing on April 19, 1948, and the others commencing on May 16, 1948. The appointments are non-resident, and the salary offered is at the rate of £13 10s. per week. The successful applicants will be expected to remain, if required, for a period of six months. Application forms may be obtained from the Medical Officer of Health, Council House, Birmingham, 3, and completed forms should be returned to him, together with copies of three testimonials, not later than March 13, 1948.

CITY OF BIRMINGHAM
Public Health Department
ASSISTANT TUBERCULOSIS OFFICER
Anti-Tuberculosis Centre

Applications are invited for the whole-time non-resident appointment of Assistant Tuberculosis Officer. Candidates should have had considerable experience of tuberculosis work and of the general duties of a tuberculosis dispensary. Salary £675 by £25 to £875 per annum, plus cost-of-living bonus. The appointment will be subject to the passing of a medical examination, to the Local Government Superannuation Act 1937, to the Widows and Orphans Pension Scheme (if applicable) and to one month's notice on either side. Applications should be addressed to the Medical Officer of Health, Public Health Department, The Council House, Congreve Street, Birmingham, 3, not later than March 18, 1948.

CITY OF BIRMINGHAM
MONYHULL COLONY FOR MENTAL DEFECTIVES AND RESIDENTIAL SPECIAL SCHOOL
King's Heath, Birmingham, 14
RESIDENT JUNIOR ASSISTANT MEDICAL OFFICER (B1)

Salary £455 by £25 to £555 per annum, plus war bonus, with full residential emoluments and £50 per annum to holder of D.P.M. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Appointment subject to Asylums and Certified Institutions (Officers' Pensions) Act, 1918, and successful candidate required to pass medical examination. Applications, stating age, present appointment, experience, and qualifications, with names of three referees to C. J. C. Earl, Medical Superintendent.

CITY OF BIRMINGHAM
Public Health (Tuberculosis) Department
RESIDENT MEDICAL OFFICER

Medical Officer (resident) required for locum tenens duty for a period of six months at Yardley Green Road Sanatorium and the Anti-Tuberculosis Centre. Experience in tuberculosis work necessary Salary £14 14s. per week, plus board and residence. Apply Dr. J. E. Geddes, Chief Clinical Tuberculosis Officer, 151 Great Charles Street, Birmingham, 3.

POOLE JOINT SANATORIUM BOARD
POOLE SANATORIUM (315 beds)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the above appointment. Preference will be given to candidates who have previous experience in the treatment of Tuberculosis. The salary is £472 10s. rising by £25 per annum to £572 10s. plus emoluments valued at £150 per annum. The Sanatorium is a modern one with facilities for the diagnosis and treatment of the disease including major thoracic surgery. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Applications, stating age, qualifications and experience, with copies of three recent testimonials, should be sent to the Medical Superintendent, Poole Sanatorium, Nunthorpe, near Middlesborough.

CITY OF COVENTRY
Health Department
SENIOR ASSISTANT MEDICAL OFFICER
for Maternity and Child Welfare

Applications are invited from registered women medical practitioners for the vacant post of Senior Assistant Medical Officer for Maternity and Child Welfare. Candidates should hold the D.P.H. or equivalent, and have had considerable administrative experience in all branches of Maternity and Child Welfare work. The possession of either the D.R.C.O.G. or the D.C.H. would be considered an advantage. The officer appointed will be responsible to the Medical Officer of Health for the administration of the Maternity and Child Welfare Service of the Department, but may be required to carry out such other duties of the Department as the Medical Officer of Health may direct. The salary for the post will be £900 per annum rising by three annual increments of £50 and one of £37 10s. to £1,087 10s., plus cost-of-living bonus at present £48 2s. This salary is now under consideration in the light of Ministry of Health Circular 12/48. A car allowance is also paid in accordance with the Council's scale. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination and to contribute to the superannuation fund. Applications, supported by copies of two recent testimonials, should be sent to the undersigned not later than Saturday, March 13, 1948.—T. M. Clayton, Medical Officer of Health, The Council House, Coventry.

CITY OF STOKE-ON-TRENT
CITY MATERNITY HOSPITAL
MEDICAL OFFICER

Applications are invited from registered medical practitioners (male or female), with obstetrical experience and preferably a higher diploma in obstetrics, for the position of Resident Medical Officer at the City Maternity Hospital, Hartshill (46 beds, Part II Training School, C.M.B.). The commencing salary will be £500 per annum, rising by annual increments of £25 to £700 per annum plus emoluments valued at £150 per annum and bonus. The person appointed will be attached to the staff of the City General Hospital, Stoke-on-Trent, under the Consultant Obstetrician and Medical Superintendent. The duties include attendance at certain Ante-Natal and Infant Welfare Clinics in the City. Further particulars may be obtained from Dr. C. Gordon Lewis, Medical Superintendent of the City General and City Maternity Hospitals, Stoke-on-Trent. Applications should be forwarded as soon as possible to the undersigned.—Harry Taylor, Town Clerk.

CITY OF ABERDEEN
Public Health Department
ASSISTANT BACTERIOLOGIST
in the Municipal Laboratories

Applications are invited from qualified medical practitioners for the appointment of Assistant Bacteriologist in the Municipal Laboratories at the City Hospital. Applicants must have had good practical experience in bacteriology and some experience in clinical pathology. The salary scale is £750 rising by annual increments of £26 to £900 together with current cost-of-living bonus, commencing at £90 per annum. The post is superannuable. Applications should be submitted to Dr. Smith, The Laboratory, City Hospital, Aberdeen, on or before March 10, 1948.—J. C. Rennie, Town Clerk, Town House, Aberdeen.

COUNTY BOROUGH OF SUNDERLAND
CHERRY KNOWLE (E.M.S.) HOSPITAL
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the above appointment. R practitioners holding A posts may apply, when the appointment will be restricted to six months' duration. Salary will be at the rate of £200 per annum with full residential emoluments valued at £100 per annum, and cost-of-living bonus of £29 19s. 7d. per annum. The selected applicant will be required to pass a medical examination, and the appointment will be determinable by one month's notice given in writing at any time by either party to the other of them. Applications must be addressed to the undersigned, endorsed on cover "House Surgeon" (B2), Cherry Knowle (E.M.S.) Hospital," and be delivered at my office as soon as possible.—C. S. McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY BOROUGH OF SUNDERLAND
GENERAL HOSPITAL
DEPUTY MEDICAL SUPERINTENDENT
(Including duties in the Public Assistance Institution)

Applications are invited from registered medical practitioners holding B1 appointments (if ineligible for H.M. Forces), or members of H.M. Forces who have held posts within the senior establishment and who are due for early release, for the appointment of Deputy Medical Superintendent, General Hospital, and Assistant Medical Officer to attached Highfield Public Assistance Institution. Applicants must possess a higher degree in medicine, and must have had considerable experience since qualification, including experience in the care of chronic sick. The person appointed will be required to assist the Medical Superintendent in the administration of the hospital, training of nurses, etc., to assist the Medical Superintendent in the medical care of patients in Highfield Institution, including chronic sick and cases coming under the Lunacy Acts; and to deputize for the Medical Superintendent when required. The salary will be at the rate of £606 per annum, rising by increments of £30 every two years to a maximum of £690 per annum, plus appropriate cost-of-living bonus (at present £29 19s. 7d. per annum if resident, £59 19s. 3d. if non-resident), together with full board and residential emoluments valued for superannuation purposes at £135 per annum. As there are no married quarters, the appointment of a married man would be "non-resident" but the above-mentioned cash salary would be increased by £135 per annum. The appointment will be subject to the rules and regulations from time to time adopted by the Council, and any fees received for work within the scope of the engagement or earned within normal working time must be paid over to the Borough Treasurer, unless given specific permission by the Council to retain them. The appointment is superannuated, is subject to passing a medical examination satisfactorily, and is determinable by three months' notice on either side. Applications, stating age, qualifications (with dates) and details of previous appointments and experience, together with copies of three recent testimonials, should reach the undersigned not later than March 20, 1948. Canvassing, directly or indirectly, until after the first selection of candidates will disqualify.—G. S. McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY OF BRECON
DISTRICT MEDICAL OFFICER OF HEALTH
for the Southern Combined District of Breconshire

Applications are invited from duly qualified medical practitioners for the appointment of District Medical Officer of Health for the Southern Combined District of Breconshire, comprising the Urban District of Brynmawr, and the Rural Districts of Crickhowell, Vaynor and Penderyn and Ystradgynlais. (Acreage: 109,065. Population: 29,235 approximately). Applicants must be registered in the *Medical Register* as the holder of a Diploma in Sanitary Science, Public Health, or State Medicine, and must not be over 45 years of age at the date of application. The person appointed will be required to perform all the duties prescribed for a Medical Officer of Health in Regulation 17 of the Sanitary Officers (Outside London) Regulations, 1935, and to devote the whole of his time to the duties of his office and must not engage in private practice as a medical practitioner. The person appointed will be required to reside in the Southern Combined Area of Breconshire. Salary £1,040 per annum, plus cost-of-living bonus at present amounting to £60 per annum, together with an allowance of £100 per annum for travelling, subsistence, and provisions of office accommodation. Clerical assistance will be provided by the Local Authorities concerned. The appointment is subject to the approval of the Minister of Health, is governed as regards tenure by Section 110 of the Local Government Act, 1933, and is pensionable under the provisions of the Local Government Superannuation Act, 1937. The person appointed will be required to give at least one month's notice before resigning his appointment. Applications, giving age, medical qualifications, and previous experience (if any) together with copies of three recent testimonials, must be received by the undersigned not later than March 13, 1948.—C. M. S. Wells, Clerk of the Breconshire County Council, County Hall, Brecon.

COUNTY BOROUGH OF CARLISLE
CITY MATERNITY HOSPITAL AND
CITY GENERAL HOSPITAL
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from practitioners with at least six months' hospital experience, including R practitioners holding A posts, for the post of Resident Medical Officer (B2) in the City Maternity Hospital. The hospital is recognized for instruction of medical students in obstetrics and as a training school for midwives and there is scope for preparation for higher diplomas. The person appointed will also be responsible for duties in the adjacent General Hospital. The salary offered is at the rate of £200 per annum and the post will normally be held for six months. Applications stating age, nationality, medical school, date of qualification, appointments held and experience, together with copies of not more than three testimonials or names for reference purposes, to be lodged with the Medical Officer of Health, 22, Fisher Street, Carlisle, as soon as possible.—H. D. A Robertson, Town Clerk.

COUNTY OF WARWICK
CONSULTING PAEDIATRICIAN

Applications are invited for the appointment of a Consulting Paediatrician in connexion with the hospital services of the Warwickshire County Council. The appointment will be made in consultation with the Birmingham Regional Hospital Board. The person appointed will be required regularly to visit the hospitals under the Council's administration, and also certain voluntary hospitals in the County in the event of the Council entering into an arrangement with such hospitals in connexion with their paediatric services. The appointment is a whole-time one and private practice will not be permitted. Candidates should possess a recognized higher qualification in medicine and have special interest and experience in paediatrics. The salary will be within the range of £1,200 to £1,600 per annum, plus a cost-of-living bonus: the present rate of bonus is 10% on the first £1,000 and 5% on the remainder. The commencing salary will be fixed having regard to the qualifications and experience of the successful candidate. Travelling expenses will also be payable in accordance with the Council's scale. The appointment is on the permanent establishment and will be subject to the Local Government Superannuation Act, 1937, and the person appointed will be required to pass a medical examination. Applications stating age, qualifications and experience, together with copies of three recent testimonials (or names of referees), should be sent to H. J Kotch, Shire Hall, Warwick, from whom further particulars may be obtained. Closing date for applications, March 23, 1948.—L. Edgar Stephens, Clerk of the Council, Shire Hall Warwick.

COUNTY OF WARWICK
SOLIHULL HOSPITAL (200 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female) for the appointment of Resident Medical Officer (B1), vacant March 31. The appointment will be limited to a period of one year and the salary is at the rate of £350 per annum, plus cost-of-living bonus, together with the usual residential emoluments. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. or have completed their term of military service. Applications, on forms obtainable from H. J Kotch Shire Hall, Warwick, should be returned to him as early as possible.

COUNTY COUNCIL OF CLACKMANNAN
Public Health Department
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of Assistant Medical Officer of Health for the County of Clackmannan. Applicants must be duly qualified medical practitioners and must possess the Diploma in Public Health or equivalent qualification. Duties will be of a general nature and will embrace the Infectious Diseases Hospital, but will be mainly in connexion with medical inspection and treatment of school children. The salary will be at the rate of £675 rising by £25 annually to a maximum of £875, with placing according to qualifications and experience, together with appropriate J.I.C. war bonus and car allowance. The post is a superannuated one and the successful applicant as a condition of appointment, will be required to pass a medical examination. Further information as to duties and conditions of service may be had from the County Medical Officer, Public Health Department, Bedford Place, Alloa. Applications along with copies of three recent testimonials should be lodged with the County Clerk, County Buildings, Alloa, not later than March 20, 1948

COUNTY BOROUGH OF SMETHWICK
ST. CHAD'S HOSPITAL
Hagley Road, Birmingham, 16
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Surgical Officer (B1). Applicants should have held house appointments and have had considerable surgical experience; preference will be given to candidates holding the Diploma of F.R.C.S. The salary will be at the rate of £550 per annum, together with full board, residence and laundry at the hospital. St Chad's Hospital has 147 beds and admits general medical, surgical and maternity cases. Suitably qualified R practitioners holding B2 appointments also those holding B1 posts and ineligible for H M Forces, are invited to apply. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination. Forms of application may be obtained from the Medical Superintendent, St. Chad's Hospital, Hagley Road Birmingham, 16, to whom applications endorsed "R.S.O." and accompanied by copies of two recent testimonials should be delivered as early as possible Canvassing, directly or indirectly, will disqualify.—E. L. Twycross, Town Clerk, Council House Smethwick, 40.

Have you read the notice at top of page 13 ?

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COUNTY BOROUGH OF WARRINGTON
WARRINGTON GENERAL HOSPITAL
(340 beds)
SENIOR Resident OBSTETRICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) for the post of Senior Resident Obstetrical Officer (B1). Salary £455 per annum, rising by annual increments of £25 to £555 per annum, plus emoluments. There are five other Medical Officers in residence. Candidates must have held recognized resident appointments in obstetrics and gynaecology, and should preferably hold a higher degree or Diploma in these subjects.

There are approximately 38 maternity beds and 20 gynaecological beds, and excellent opportunities are afforded for practical and operative experience. The hospital deals with most of the abnormal midwifery cases over a large area. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications, stating date available to commence duties, to be sent forthwith to Stuart F. Allison, Medical Officer of Health, Health Department, Sankey Street, Warrington.

COUNTY BOROUGH OF WARRINGTON
WARRINGTON GENERAL HOSPITAL
(340 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B2). Salary £225 per annum, together with board, residence and laundry. There are five other Medical Officers in residence. Good opportunity for experience in midwifery, medicine and surgery. R practitioners who now hold A posts may apply, when the appointment will be limited to six months, otherwise will not exceed one year. Applications, stating date available to commence duties, to be sent forthwith to Stuart F. Allison, Medical Officer of Health, Health Department, Sankey Street, Warrington.

COUNTY OF DENBIGH
WREXHAM EMERGENCY (COUNTY GENERAL) HOSPITAL (225 beds)
HOUSE SURGEON (A) (Male)
(General and Genito-urinary)

Applications are invited for the post of House Surgeon (A) male (General and Genito-urinary) from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts appointment will be for a period of six months, otherwise it will be for a period not exceeding twelve months. Salary £300 per annum rising by one increment of £50 to a maximum of £350 per annum after six months' satisfactory service, plus temporary cost-of-living bonus, with full residential emoluments. Applications to be sent immediately to Dr. H. Arwel Thomas, County Medical Officer of Health, 16, Grosvenor Road, Wrexham, Denbighshire.

COUNTY BOROUGH OF BIRKENHEAD
Department of the Medical Officer of Health
BIRKENHEAD MUNICIPAL HOSPITAL
PATHOLOGIST (Non-Resident)

Applications are invited from specialists, who have served in H.M. Forces, for the above appointment to this hospital containing 560 beds. The appointment, which is full-time, will be made in accordance with Circular 202/46 of the Ministry of Health, and will be limited to the interim period pending the establishment of the National Health Service. The salary will be £1,000 per annum, plus non-residential emoluments valued at £100. Applications, giving full particulars of experience in Pathology, should be sent to the undersigned as soon as possible. Any further particulars concerning the appointment may be obtained from the Medical Superintendent of the Hospital.—Dr. F. G. Foster, M.D., D.P.H., Medical Officer of Health, 9, Hamilton Square, Birkenhead.

COUNTY BOROUGH OF WALSALL
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners (male or female) for the above appointment. The commencing salary will be £675 per annum, rising by annual increments of £25 to a maximum of £875 per annum, plus existing war bonus. The duties are principally associated with the School Medical Service, but include such other duties as the Medical Officer of Health may direct. The possession of the Diploma in Public Health or its equivalent will be considered an advantage. The person appointed will be required to devote the whole of his/her time to the duties of the office. The appointment is subject to three months' notice on either side, to the passing of a medical examination and to the provisions of the Local Government Superannuation Act, 1937. Applications, on a form to be obtained from the undersigned, stating age, qualifications and experience, together with copies of three recent testimonials, should be sent to me not later than March 13, 1948.—James A. M. Clark, Medical Officer of Health, Health Department, Council House, Walsall.

COUNTY BOROUGH OF SUNDERLAND
GENERAL HOSPITAL
HOUSE SURGEON (A)
(Including duties in the Public Assistant Institution)

Applications are invited from registered medical practitioners, including those within three months of qualification, for the appointment of House Surgeon (A) of the General Hospital (including duties in attached Public Assistance Institution). If held by a practitioner who is liable under the National Service Acts the appointment will be for six months otherwise renewable at the end of that time. Salary at the rate of £200 per annum, with full residential emoluments valued for superannuation purposes at £135, plus bonus, at present £29 19s. 7d. The appointment will be subject to the rules and regulations from time to time adopted by the Council, and any fees received for work within the scope of the engagement or earned within normal working time must be paid over to the Borough Treasurer, unless given specific permission by the Council to retain them. The appointment is superannuated, is subject to passing a medical examination satisfactorily, and is determinable by one month's notice on either side. Applications, stating age, qualifications (with dates) and details of previous appointments and experience together with copies of not more than three recent testimonials, should reach the undersigned not later than March 20, 1948.—G. S. McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY OF WARWICK
WARWICK HOSPITAL (440 beds)
EAR, NOSE AND THROAT REGISTRAR (B1)

Required (post now vacant). Applicants should have had previous experience in Ear, Nose and Throat surgery, and in the first instance the appointment is for a period of twelve months. The department is a well equipped unit of 40 beds and is recognized as a Class A E.N.T. Centre under the Emergency Hospital Scheme. Salary £500 per annum, plus cost-of-living bonus. Residential accommodation will be provided at the hospital or a living out allowance of £100 per annum in lieu. Suitably qualified R practitioners holding B2 appointments, those holding B1 and ineligible for H.M. Forces, also practitioners who have completed their term of military service, are invited to apply. The Warwick Hospital is approved for the Postgraduate Education of Medical Officers on release from H.M. Forces. Forms of application, obtainable from H. J. Kotch, Shire Hall, Warwick, to whom they should be returned as early as possible. Further particulars may be obtained from the Medical Superintendent of the hospital (telephone: Warwick 760).

COUNTY OF SALOP
ASSISTANT TUBERCULOSIS OFFICER

Applications are invited for the appointment of Assistant Tuberculosis Officer on the staff of the County Medical Officer of Health. The selected applicant will be required to reside in the house provided at Shirlett Sanatorium, which is administered by the Shropshire Association for the Prevention of Consumption, and will be seconded to the Association for part-time service as Resident Medical Officer, the remainder of his duties being concerned with clinical work outside the Sanatorium in the County Council's Tuberculosis Service. The appointment will rank for superannuation purposes as whole-time service under the Salop County Council and will be subject to the Local Government Superannuation Act, 1937, and to a medical examination. The salary for the appointment will be according to qualifications and experience within the scale £500 by £25 to £650 plus bonus, together with emoluments valued at £250 per annum on a full residential basis, the apportionment as between cash and emoluments being subject to adjustment in the case of a married man. Further particulars may be obtained from the undersigned, to whom applications should be sent before March 20, 1948.—William Taylor, County Medical Officer, College Hill House, Shrewsbury.

EAST SUSSEX COUNTY COUNCIL
SOUTHLANDS HOSPITAL, Shoreham-by-Sea
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Candidates should have had experience in operative surgery and be capable of dealing with routine emergency work. Salary £500 to £600 per annum according to experience. Cost-of-living bonus will be payable in addition to salary, in accordance with the scale approved by the County Council from time to time, the present rate being in the case of resident staff, 11s. 6d. per week. Full residential emoluments will be provided. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate to be successful must pass a medical examination. The appointment will be full-time and subject to (a) one month's notice on either side and (b) such conditions of service as may from time to time be approved on behalf of the County Council. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Application forms should be obtained from and returned as soon as possible to the Medical Superintendent, Southlands Hospital, Shoreham-by-Sea.—H. S. Martin, Clerk of the County Council, County Hall, Lewes.

COUNTY OF NORTHUMERLAND
ST. GEORGE'S MENTAL HOSPITAL, Morpeth
Resident ASSISTANT MEDICAL OFFICER (B1)

The Visiting Committee of the Northumberland Mental Hospital invite applications from registered medical practitioners (male or female) for the appointment of Resident Assistant Medical Officer at the above hospital. The salary will be £472 10s. a year, rising by annual increments of £25 to £572 10s a year, plus a variable cost-of-living bonus (at present £30 1s. 4d. a year) and full residential emoluments valued for superannuation purposes at £150 a year. Previous psychiatric experience is not essential as all facilities for training are available at the hospital, but the above salary will be increased by £50 a year should the successful candidate possess a Diploma in Psychological Medicine, and if the practitioner appointed does not already possess the Diploma he or she will be expected to obtain it within three years. Full particulars of the terms of appointment and forms of application may be obtained from the undersigned, to whom all applications must be sent not later than March 27, 1948.—E. P. Harvey, Clerk of the Visiting Committee County Hall, Newcastle-upon-Tyne, 1.

COUNTY BOROUGH OF ROTHERHAM
MUNICIPAL GENERAL HOSPITAL
Resident, ASSISTANT MEDICAL OFFICER (A)

Applications are invited from fully registered medical practitioners (including practitioners within three months of qualification and who are liable for service under the National Service Acts), for the above appointment. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, together with full residential emoluments and a temporary cost-of-living bonus in accordance with the Council's scale. Forms of application may be obtained from the Medical Superintendent, Municipal General Hospital, Moorgate, Rotherham, and must be returned to the undersigned, endorsed "Resident Assistant Medical Officer," as soon as possible.—John S. Wall, Town Clerk, Municipal Offices, Rotherham.

CUMBERLAND COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER

The County Council invite applications for the post of Assistant County Medical Officer, salary within the range £700 by £50 to £850 according to qualifications and experience, plus cost-of-living bonus (£60). Travelling and subsistence allowances on the County scale for the time being in force. Applicants must be registered medical practitioners holding the Diploma in Public Health, or corresponding qualification. Experience in the School Health Service, Maternity and Child Welfare and Tuberculosis will be a recommendation. Further particulars and forms of application may be obtained from the County Medical Officer, 11, Portland Square, Carlisle, to whom applications should be submitted before March 25, 1948.—G. N. C. Swift, Clerk of the County Council.

GUILDFORD RURAL, HAMBLEDON RURAL and HASLEMERE URBAN DISTRICT COUNCIL
WHOLE-TIME ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of a whole-time Assistant Medical Officer in the Public Health Department. The duties include Diphtheria Immunisation, control of Infectious Diseases and such other duties as the Councils, or the Medical Officer of Health, may require to be undertaken. The use of a car is essential, an appropriate travelling allowance being paid. The appointment is terminable by three months' notice on either side, is subject to the provisions of the Local Government Superannuation Act, 1937, to a satisfactory medical examination and to the regulations governing officers of the Councils (the National Scheme of conditions of service has been adopted by the Councils). The salary attached to the post is £675 per annum, rising by annual increments of £25 to £875 per annum. Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the Medical Officer of Health, Millmead House, Guildford, to arrive not later than Saturday, March 27, 1948.—E. W. Sellings, Clerk to the Guildford Rural District Council, Millmead House, Guildford.

MID-WALES COUNTIES MENTAL HOSPITAL
Talgarth, Brecon
MEDICAL SUPERINTENDENT

The Visiting Committee invite applications for the post of Medical Superintendent of this Hospital (403 beds). Salary commencing £1,000 rising by annual increments of £50 to £1,200 per annum with, in addition, the following emoluments valued for Superannuation purposes at £220 per annum: Partly furnished house, laundry, coal and light, garden produce, milk and the privilege of purchasing from the hospital stores at contract prices. A war bonus of £39 17s. 4d. is also payable. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Candidates must be fully qualified medical practitioners. They should have had extensive experience in the practice of psychological medicine, including resident appointments in Mental Hospitals. Applications, stating experience and posts held with dates, to be sent to the undersigned not later than April 10, 1948.—G. Lewis, Clerk to the Visiting Committee.

LANCASHIRE COUNTY COUNCIL
CHIEF ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

Applications are invited for the above appointment. Applicants, who must possess a Degree or Diploma in State Medicine or Public Health, should have a sound knowledge of clinical medicine and practical experience in public health administration. The range of the salary is £1,300 per annum, rising by annual increments of £50 to £1,400 per annum, plus cost-of-living bonus. When making the appointment, the Committee may take into consideration the candidate's present salary. The appointment is subject to medical examination and is superannuable. Application forms may be obtained from the County Medical Officer of Health, County Offices, Preston, to whom applications should be returned not later than Monday, March 22, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE SURGEON (B2)

Applications are invited for the above appointment from registered medical practitioners, male and female, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to a period of six months. Otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, March 22, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

MANCHESTER CORPORATION
WITHINGTON HOSPITAL
(Adult general) (1,150 beds)
ORTHOPAEDIC HOUSE OFFICER (B1)

Applications are invited from registered medical practitioners (male or female), including those in H.M. Forces, for the position of Medical Officer responsible for the Orthopaedic work of the above hospital. The person appointed would act under the direction of the Visiting Consultant Orthopaedic Surgeon, and would be responsible for both in-patients and out-patients. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. This appointment is limited in tenure to a maximum period of one year's duration. The basic salary for the appointment is £430 per annum with board, residence and laundry in addition valued at £150 per annum subject to the Manchester Corporation conditions of service. Full information and forms of application may be obtained from the Medical Officer of Health, Hospitals Administration Section, P.O. Box 399, Town Hall, Manchester, 2, and applications for the post must be received by him not later than March 5, 1948. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

MANCHESTER CORPORATION
WITHINGTON HOSPITAL
(Adult general) (1,150 beds)
HOUSE OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the above-mentioned appointment, including those within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months; otherwise it will be for a period of twelve months. The duties of the post are mainly medical. The basic salary is £230 per annum with board, residence and laundry in addition, subject to the Manchester Corporation conditions of service. Applications stating the full name, age (giving date of birth), nationality, professional qualifications (with dates), particulars of present appointment and past hospital appointments are to be addressed to the Medical Superintendent, Withington Hospital, West Didsbury, Manchester, 20, as soon as possible. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL, Enfield, Middlesex
TWO Resident SENIOR HOUSE SURGEONS (B2)
LOCUM TENENS SENIOR RADIOLOGIST

(a) Two Senior House Surgeons (B2 Resident) required. Registered medical practitioners including R practitioners now holding A posts. Salary £250 per annum, plus any temporary bonus (now £30 per annum, cash). Board, lodging, laundry. Six months' appointment. Whole-time general surgical duties under supervision of Medical Director. Posts vacant April 1, 1948, and April 9, 1948, respectively. **(b) Locum Tenens Senior Radiologist** from March 15 to 27, inclusive; full-time, non-resident post. Salary £13 13s. per week, plus non-resident allowance of £2 2s. per week. Applications (no forms) to Medical Director of Hospital, (a) by March 17, 1948; (b) immediately (quoting D.687 B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
HILLINGDON COUNTY HOSPITAL
near Uxbridge, Middlesex

(a) **CASUALTY OFFICER (B2) (male)** required. Registered medical practitioners who have held house appointments, and had good all-round experience (including R practitioners holding A posts). Salary £350 per annum. Whole-time duties under Medical Director include casualties and admissions to hospital and such other duties as may be required. Vacant, April 1.

(b) **SENIOR HOUSE OFFICER (B2) (Resident, male)** for obstetric duties. Previous obstetric experience desirable but not essential. Vacant end of March.

(c) **SENIOR HOUSE OFFICER (B2) (Anaesthetist, Resident, male).** Whole-time duties such as Council may require, mainly in Anaesthetics under supervision of Medical Director. Previous experience in Anaesthetics essential. Post vacant middle of March. (b) and (c) registered medical practitioners who now hold A posts. Salary £250 per annum.

All salaries plus any temporary bonus (now £30 per annum cash). Board, lodging, laundry. Six to twelve months' appointment (except for R practitioners), subject to medical examination. Applications (no forms) to Medical Director of Hospital by March 15, 1948 (quoting D.690, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth
SURGEON (for Orthopaedic and Traumatic Unit)

Higher surgical qualification. General scope of duties arranged by Medical Director, may include teaching. Inclusive salary £1,200 (plus any temporary bonus, now £60 per annum) by £100 to £1,800 per annum, on proof of outstanding achievement increments of £50 up to £2,200 may be granted. Any fees received to be paid to County Council. Whole-time, non-resident, established, pensionable, subject to medical examination. Required to live near hospital and undertake to act as Deputy Medical Director for a period if called upon. Further details from Medical Director. Applications (no forms) to undersigned by March 13, with copies of up to two recent testimonials and referees (quoting D.686, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
NORTH MIDDLESEX COUNTY HOSPITAL
Edmonton, N.18
CASUALTY OFFICER (B1)

Casualty Officer (B1) required at North Middlesex County Hospital, Edmonton, N.18, for casualties and hospital admissions, etc. Good all-round experience. R practitioners holding B2 posts eligible; those holding B1 posts ineligible unless rejected for H.M. Forces. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash). Board, lodging and laundry. Six months' appointment. Vacant April 1. Duty hours 10 a.m. to 6 p.m. daily, Saturday afternoon and Sunday free. Application to Medical Director of Hospital by March 10 (quoting D.688, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL, Edgware, Mddx.
RESIDENT ANAESTHETIST (B1)

Resident Anaesthetist (B1) required at Redhill County Hospital, Edgware, Middlesex. Special experience in administering anaesthetics and have held resident appointments in general hospitals essential. Whole-time duties such as Council may require under Medical Director and Senior Anaesthetist. Salary £400 per annum, plus any temporary bonus (now £30 per annum, cash). Board, lodging, laundry. Appointment, one year, subject to medical examination. Vacant immediately. R practitioners holding B1 posts ineligible unless rejected for H.M. Forces. Application (no forms) to Medical Director of Hospital by March 18, 1948 (quoting D.727 B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

HERTFORDSHIRE COUNTY COUNCIL
HEMPSTEAD HOUSE BASE HOSPITAL
Hemel Hempstead
RESIDENT OBSTETRIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male or female, including R practitioners holding A posts, for the post of Resident Obstetric House Surgeon (B2) for the Maternity Unit consisting of 30 maternity beds and 12 antenatal beds. The salary will be at the rate of £250 per annum, and the appointment is for six months. Applications should be sent to the Medical Superintendent to reach him not later than March 20, 1948. Testimonials should not be sent, but applications should give full particulars of the candidate together with the names of two persons to whom medical reference can be made.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), now vacant. Salary £175 per annum, plus residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications to E. Barber, Secretary.

NORFOLK COUNTY COUNCIL
LITTLE PLUMSTEAD HALL AND HECKINGHAM INSTITUTION
(Colony for Mental Defectives)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) from duly registered practitioners. Salary £472 10s. per annum rising by £25 to £572 10s. with emoluments consisting of board, lodging, laundry and attendance, valued for Superannuation purposes at £150, plus appropriate bonus; if holding the D.P.M. an additional £50 per annum will be paid. The appointment is subject to the Asylums and Certified Institutions Officers Pension Act, 1918. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C.. The selected applicant will reside at the Heckingham Institution (200 beds) and if possessing a motor vehicle will be paid appropriate mileage allowance at the Council's scales. In the event of a married man being appointed, a small house is available at the Institution. Further particulars may be obtained from the Medical Superintendent, Little Plumstead Hall, Norwich. Applications, with copies of recent testimonials should be sent to H. Oswald Brown, Clerk of the Council, Thorpe Road, Norwich, to arrive not later than Saturday, March 27, 1948.

SURREY COUNTY COUNCIL
ST. LUKE'S HOSPITAL, Guildford (450 beds)
REGISTRAR (B1)
for X-Ray Therapy and Radium Unit

Applications, including those from suitably qualified practitioners serving with H.M. Forces, are invited for the above appointment. A wide range of experience in the practical treatment of malignant diseases will be afforded. Preference will be given to candidates holding Diploma in Radiotherapy. The unit has approximately 60 beds. The commencing salary will be according to qualifications and experience on the scale £550 by £50 to £700 per annum inclusive, plus full residential emoluments, valued at £150 per annum, or cash in lieu. The appointment is temporary but is subject to the Local Government Superannuation Act, 1937. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have completed a period of service with H.M. Forces, or have been rejected for such service. Information concerning the appointment may be obtained from the Medical Superintendent of the Hospital to whom application by letter should be sent by March 29, 1948.

SURREY COUNTY COUNCIL
NETHERNE HOSPITAL FOR MENTAL AND NERVOUS DISEASES, Coulsdon, Surrey
TWO HOUSE PHYSICIANS (B2)

Two House Physicians (B2) required at Netherne Hospital for Mental and Nervous Diseases, Coulsdon, Surrey. Applicants (including R practitioners holding A posts) must have held house appointments in a general hospital. The teaching associated with the posts will enable the successful applicants to become acquainted with all the modern forms of mental treatment and to gain some knowledge of the neuroses and psychoses. There are opportunities for promotion with a view to future specialisation. The salary will be between £350 and £450 per annum (depending on the length of qualification) and all found. The appointment is for a period of six months which may be renewed for one further period (except in the case of R practitioners). Applications, to be sent to the Medical Superintendent, Netherne Hospital, Coulsdon, together with the copies of two testimonials, within a fortnight from the date of appearance of this advertisement.

WORCESTERSHIRE COUNTY COUNCIL
Senior ADMINISTRATIVE MEDICAL OFFICER for Maternity and Child Welfare

Applications are invited from duly qualified medical women, holding the Diploma in Public Health, for the above-mentioned new appointment. The appointed officer will act under the general direction of the County Medical Officer and will be engaged in the main on administrative duties although some clinical work will be included. The appointment will be terminable by three months' notice by either party. The salary will be at the rate of £975, rising by £50 biennially to £1,162 10s. per annum, with cost-of-living bonus. The appointment will be superannuable and will be subject to a satisfactory medical examination. The successful applicant will be required to reside in or near Worcester and should be in possession of and be able to drive a car, for which a travelling allowance in accordance with the Council's scale will be paid. Applications on forms to be obtained from the County Medical Officer, County Buildings, Worcester, should be submitted with not more than three recent references not later than March 24, 1948.—W. R. Scurfield, Clerk of the Council, Shirehall, Worcester. (Q76)

Have you read the notice at top of page 13?

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WORCESTERSHIRE COUNTY COUNCIL
Mental Health Services
Senior ADMINISTRATIVE MEDICAL OFFICER

Applications are invited from duly qualified medical practitioners, holding a Diploma in Psychological Medicine, who have had extensive experience of mental illness, particularly in children, for the above mentioned appointment. The holding of a certificate of recognized training in Child Psychiatry is desirable. The officer appointed will act under the general direction of the County Medical Officer (who is also School Medical Officer) and will be required to undertake certain clinical duties and to advise the appropriate sub-Committees on the Mental Health Services, and to give medical direction to the team of workers employed on these duties. The appointment will be terminable by three months' notice by either party. The salary will be at the rate of £1,200 per annum with cost-of-living bonus. The appointment will be superannuable and will be subject to a satisfactory medical examination. The successful applicant will be required to reside in or near Worcester and should be in possession of and be able to drive a car, for which a travelling allowance in accordance with the Council's scale will be paid. Applications on forms to be obtained from the County Medical Officer, County Buildings, Worcester, should be submitted with not more than three recent references not later than March 24, 1948.—W. R. Scurfield, Clerk of the Council, Shirehall, Worcester. (Q75).

ADDENBROOKE'S HOSPITAL, Cambridge
HONORARY SURGEON
to the Gynaecological and Obstetrical Department

The General Committee propose to appoint an Honorary Surgeon to the Gynaecological and Obstetrical Department to fill a vacancy which will occur on December 31, 1948, and invite applications for the position. The person appointed will be required to take up duties on January 1, 1949. An honorarium at the rate of £750 per annum is at present attached to the post. Applications for this appointment, supported by copies of testimonials, should be submitted to the undersigned by April 14, 1948. Twenty copies of the application and testimonials should be sent for the use of the Selection and Advisory Committee. Personal canvass of the Committee is expressly forbidden.—J. A. Beardsall, Secretary-Superintendent.

ALTRINCHAM GENERAL HOSPITAL
PATHOLOGIST

Applications are invited for post of Pathologist. Appointment is intended to be full-time, but daily attendance amounting to not less than six half-day sessions weekly would be considered. Applicants must be exclusively engaged in the practice of pathology, and experience in all branches of pathology desirable. Post non-resident with a salary of £750 to £1,000 per annum. Successful candidate will be encouraged to engage in private practice, for which there is considerable scope, and this will not be limited to patients in the private wards. He will be expected to undertake such work in the hospital laboratory, a proportion of the private fees being retained by the hospital. Applications, giving the names of two referees, should be sent by March 13, 1948, to the General Superintendent and Secretary.

BOROUGH GENERAL HOSPITAL
SHIRLEY WARREN, Southampton
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from medical practitioners for appointment as Junior Resident Medical Officer, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months otherwise twelve months. Salary is at the rate of £260 per annum, with full residential emoluments. Applications should be addressed to the undersigned.—H. C. Maurice Williams, Medical Officer of Health.

BELGRAVE HOSPITAL FOR CHILDREN
1, Clapham Road, S.W.9
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (B2), including R practitioners who hold A posts. Appointment for six months, commencing March 24, 1948. Salary £150 per annum with full residential emoluments. Demobilised medical officers may apply for the higher rate of salary under the Government Scheme, for Postgraduate Education. Applications should reach the undersigned immediately.—A. L. Fell, Secretary.

BEDFORD COUNTY HOSPITAL
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners F.R.C.S. (male) for the post of Resident Surgical Officer (B1) vacant immediately, including R practitioners who now hold B2 posts. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £500 per annum with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BURY INFIRMARY, Lancashire (159 beds)
HOUSE SURGEON (A) (Gynaecology and Obstetrics) and HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (Gynaecology and Obstetrics) (A) and House Physician (A), which posts will become vacant early in March, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by practitioners who are liable under the National Service Acts the appointments will be for six months, otherwise renewable. Salary at the rate of £200 per annum in each instance, with full residential emoluments. Applications to the undersigned as soon as possible.—H. Wilkinson, Superintendent.

BRADFORD CITY SANATORIUM, Grassington
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B1) at Grassington Sanatorium. Salary scale in accordance with the Askwith Memorandum, plus full residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. This appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Form of application may be obtained from the Medical Officer of Health, Town Hall, Bradford, and should be returned to him as soon as possible.—W. H. Leathem, Town Clerk, Town Hall, Bradford.

BRENTWOOD MENTAL HOSPITAL
Brentwood, Essex
HOUSE PHYSICIAN (B2)

Applications, including those from R practitioners holding A posts, are invited for the post of Resident House Physician (B2) at this hospital. The appointment affords excellent opportunities for gaining experience in modern methods of psychiatric treatment. Applicants should have held the post of House Surgeon. There is no accommodation for females or for a married man. Salary £300 per annum for the six months and £350 per annum for a second six months, with full residential emoluments. For R practitioners the appointment is limited to six months. Applications, stating age, experience etc., with names of three referees, to the Medical Superintendent by March 20, 1948

BECKENHAM HOSPITAL, Beckenham, Kent
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A), including practitioners within three months of qualification who are liable for service under the National Service Acts, to commence duty immediately. If held by an R practitioner appointment will be for a period of six months, otherwise it will be renewable, at the discretion of the hospital, for a further period of six months. Salary is at the rate of £150 per annum, with full residential emoluments. Applications to be forwarded to the undersigned as soon as possible.—Gordon Easto, Secretary.

BRISTOL EYE HOSPITAL
RESIDENT JUNIOR OPHTHALMIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for the post of Resident Junior Ophthalmic House Surgeon (B2), vacant May 1, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. The salary is at the rate of £150 to £175 per annum, according to experience of applicant, with full residential emoluments. Applications should be sent to the undersigned by March 27.—D. M. Baber, Secretary and House Governor.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £225 per annum, plus full residential emoluments. Applications should be forwarded as soon as possible to C. E. Lowndes, Secretary.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for this appointment, vacant March 27, 1948. Salary is at the rate of £225 per annum with full residential emoluments. Practitioners within three months of qualification may also apply when the appointment will be for six months. Applications should be sent immediately to Arthur L. Bourne, Secretary-Superintendent

BATH AND WESSEX CHILDREN'S ORTHOPAEDIC HOSPITAL, Combe Park, Bath
THIRD ORTHOPAEDIC SURGEON

Applications are invited for the appointment of a Third Orthopaedic Surgeon under Ministry of Health Circular 202/46. Applications should reach the Secretary not later than March 16.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)

Applications are invited from registered medical practitioners for the following posts for the period ending July 31 :—

TWO HOUSE SURGEONS (A) to the Ear, Nose and Throat Department.

ONE HOUSE SURGEON (A) to the Radio-Therapy Department. Salary in each case at the rate of £70 per annum with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Applications should be sent to the undersigned at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM ACCIDENT HOSPITAL AND REHABILITATION CENTRE
Bath Row, Birmingham, 15
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A) to become vacant in March, including practitioners within three months of qualification who are liable to service under the National Service Acts. Appointment will be for six months. Salary is at the rate of £200 per annum with full residential emoluments.—W. George Spencer, Secretary.

CITY HOSPITAL, Chester
RESIDENT OBSTETRICIAN AND GYNAECOLOGIST

Applications are invited for the above post. Applicants must hold a higher qualification and be competent to undertake all branches of the work without supervision. The post has been approved by the Ministry of Health under Circular 202/1946. The salary offered is £1,000 rising to £1,100 per annum (including emoluments if taken) commencing salary to be fixed according to experience and qualifications. If the successful applicant is married, it is expected that an unfurnished house will be available adjacent to the hospital, for which a rent will be charged. If the successful applicant is single, full residential emoluments valued at £200 a year will be provided and the cash salary adjusted accordingly. Applications, together with the names of three referees should be sent to the Medical Officer of Health, Town Hall, Chester, by Saturday, March 20, 1948. Canvassing will disqualify and relationship to members of the Council or Senior Officials must be disclosed.—G. Burkinshaw, Town Clerk, Town Hall, Chester.

COVENTRY AND WARWICKSHIRE HOSPITAL

Applications are invited for the following positions (male or female) :—

HOUSE SURGEON (B2) to the Gynaecological and Obstetric Dept., vacant April 30, 1948.

HOUSE SURGEON (B2) to the General Surgical Depts., vacant April 30, 1948.

HOUSE SURGEON (B2) to the Fracture and Orthopaedic Dept., vacant April 23, 1948.

HOUSE SURGEON (B2) combining Ear, Nose and Throat duties, vacant April 13, 1948.

HOUSE PHYSICIAN (B2), vacant April 1, 1948.

R practitioners who hold A posts are invited to apply. Each appointment is for six months. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth, Cornwall
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Physician (A), vacant April 1, 1948. Salary at the rate of £200 per annum, with the usual residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications should be addressed to J. C. Field, Secretary-Superintendent.

CHRISTIE HOSPITAL AND HOLT RADIUM INSTITUTE, Manchester, 20
TWO HONORARY ASSISTANT SURGEONS

The Board of Management propose to appoint two Honorary Assistant Surgeons and invite applications from registered medical practitioners holding a higher surgical qualification. Applications (20 copies), stating age, qualifications and details of experience together with the names of three referees, should be sent not later than March 20, 1948, to the undersigned from whom further particulars may be obtained.—A. H. Keates, Superintendent.

COUNTY MENTAL HOSPITAL
Lancaster (3,000 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the post of House Physician (B2). Salary £300 per annum, with full residential emoluments. The appointment will be limited to six months but may be extended to twelve months unless held by an R practitioner. Previous general hospital experience desirable. The persons appointed will work under the direction of Senior Psychiatrists. Apply Medical Superintendent.

CRICHTON ROYAL MENTAL HOSPITAL
Dumfries
ASSISTANT PSYCHIATRIST (B1)

Applications are invited from registered medical practitioners for the post of Assistant Psychiatrist (B1). Commencing salary £555 by £25 to £655 per annum according to experience, plus full residential emoluments valued at £150 per annum. An additional £50 per annum if holding D.P.M. R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces may apply. Forms of application to be obtained from the Physician Superintendent, to whom they should be returned with two copies of recent testimonials.

COVENTRY AND WARWICKSHIRE HOSPITAL
RESIDENT SURGICAL REGISTRAR (B1)

Applications are invited for the post of Resident Surgical Registrar (B1), vacant about May 20, 1948. Candidates must hold the Diploma F.R.C.S. and should have had previous surgical experience and have held hospital house appointments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months in the first instance; salary at the rate of £500 per annum with full residential emoluments. Applications should be addressed to the undersigned.—S. Cecil Hill, House Governor and Secretary.

COUNTY INFIRMARY, Carmarthen
VISITING ANAESTHETIST

Applications are invited for the post of Visiting Anaesthetist from registered medical practitioners holding the Diploma in Anaesthetics. Remuneration will be at the rate of £5 5s. per session and the successful candidate will be expected to reside in Carmarthen or the immediate neighbourhood. Further details of the appointment can be obtained from the undersigned. Applications in writing must be received not later than March 31, 1948.—A. W. Youngs, Chief Administrative Officer.

CHESTER ROYAL INFIRMARY (225 beds)
HOUSE SURGEON (B2)
for the Gynaecological and Ear, Nose and Throat Departments

House Surgeon (B2) required for the Gynaecological and Ear, Nose and Throat Departments. To commence duties on April 14. R practitioners who hold A posts may apply when posts will be limited to six months. Salary £200 per annum, with full residential emoluments. Applications to be sent to the General Superintendent and Secretary.

CHESTER ROYAL INFIRMARY
RESIDENT ANAESTHETIST (B2)

Resident Anaesthetist (B2) required. To commence as soon as possible. R practitioners holding A posts are invited when post will be limited to six months. Salary £300 per annum with full residential emoluments. Applications to be sent to the General Superintendent and Secretary.

CITY GENERAL HOSPITAL, Sheffield
(Recognized for F.R.C.S., England)
ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male) for the appointment of Assistant Medical Officer (B2). The post now vacant is a surgical one, and the Medical Officer will act as Casualty Officer and House Surgeon to the Orthopaedic Surgeon. R practitioners who now hold A posts may apply, when appointment will be limited to six months, otherwise it will be for a period of twelve months. The salary is at the rate of £300 per annum, plus bonus, with full residential emoluments. Applications should be sent to the Medical Superintendent, City General Hospital, Sheffield, 5, as soon as possible.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL (215 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A). R practitioners within three months of qualification and liable for service under the National Service Acts may apply, in which case the appointment will be for six months, otherwise renewable. Salary £175 per annum with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

CHELMSFORD AND ESSEX HOSPITAL
London Road, Chelmsford (170 beds)
HONORARY PATHOLOGIST

Applications are invited for the post of an Honorary Pathologist. The present acting pathologist is an applicant for the post. Applications to be sent to the undersigned.—R. G. Morrish, House Governor and Secretary.

CORBETT HOSPITAL, Stourbridge, Worcestershire
(106 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for the appointment of a House Surgeon (B2) to become vacant shortly, including R practitioners who now hold A posts. The appointment will be for a period of six months. Salary will be at the rate of £200 per annum with full residential emoluments.—W. G. H. Weston, House Governor and Secretary

DUMFRIES AND GALLOWAY SANATORIUM
Lochmaben, Dumfriesshire
SECOND ASSISTANT RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the above post. Salary for a B2 practitioner at the rate of £350 per annum with full residential emoluments. Previous sanatorium experience not essential. The appointment is for six months but may be extended to one year. Applications should be sent as soon as possible to the Medical Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification, who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the above appointment, vacant March 28, or earlier by arrangement if necessary. Suitably qualified R practitioners may apply. Salary at the rate of £150 per annum, including full residential emoluments. The appointment will be for a period of six months.—G. W. Beckwith, Secretary-Superintendent.

DREADNOUGHT SEAMEN'S HOSPITAL
Greenwich, S.E.10
ANAESTHETIST

Applications are invited for the appointment of Anaesthetist, now vacant, for attendance on Monday afternoons and not less than one additional attendance each week. Honorarium based on £250 per annum for one attendance weekly. Applications, supported by the names of three referees, to be sent on or before March 13, 1948, to the undersigned.—F. A. Lyon, Administrator and Secretary.

DAVID LEWIS COLONY
Warford, Alderley Edge, near Manchester
RESIDENT MEDICAL OFFICER

Applications are invited for the post of Resident Medical Officer (male or female) at the above Epileptic Colony. Salary £325 per annum, with full residential emoluments. The appointment should be combined with research or other postgraduate work. Applications should be sent to the Medical Director.

WATERLOO AND DISTRICT GENERAL HOSPITAL, Liverpool, 22 (51 beds)
HONORARY PHYSICIAN

Applications are invited for appointment as Honorary Physician to the above Hospital. Candidates for this appointment should be Members of the Royal College of Physicians or possess similar qualifications. Applications should be lodged as soon as possible with the undersigned.—G. Lawson McGregor, Secretary Superintendent.

Have you read the notice at top of page 13 ?

ABSTRACTS OF WORLD MEDICINE

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Have you read the notice at top of page 13 ?

EAST SUFFOLK AND IPSWICH HOSPITAL
(369 beds)
RESIDENT ANAESTHETIST AND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners liable to service under the National Service Acts and within three months of qualification for the post of Resident Anaesthetist and Casualty Officer (A). The casualty duties are from 9 a.m. to 1 p.m. only. The post is vacant March 21, 1948. Appointment for six months. Salary at rate of £250 per annum with full residential emoluments. —Arthur Griffiths, Secretary, The Hospital, Ipswich.

EVELINA HOSPITAL FOR SICK CHILDREN
Southwark Bridge Road, London, S.E.1
HOUSE SURGEON (B2)

There is an immediate vacancy for the post of House Surgeon (B2). The duty for the first two months will be in the Casualty Out-patient Department. The post is tenable for a period of six months at a salary of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply. Applications should be sent to the undersigned at once.—W. H. Sidnell, House Governor.

ELIZABETH GARRETT ANDERSON HOSPITAL
Euston Road, N.W.1
ASSISTANT ANAESTHETIST

Applications are invited from registered medical women for the post of Assistant Anaesthetist. Remuneration at the rate of 2½ to 4 guineas per session. Applicants must hold Diploma in Anaesthetics. Duties to commence mid-April. Applications should be sent to the Secretary by March 16.

ESSEX COUNTY HOSPITAL, Colchester (201 beds)
CASUALTY OFFICER & HOUSE SURGEON (A)
to the Obstetric and Gynaecological Departments

Applications are invited for the post of Casualty Officer and House Surgeon (A) to the Obstetric and Gynaecological Departments, including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointment will be for six months, salary £170 per annum and residential emoluments. Applications should be forwarded to the House Governor.

GLOUCESTERSHIRE ROYAL INFIRMARY
VOLUNTARY HOSPITAL (250 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), which will become vacant on April 1, 1948. The appointment is limited to a period of one year in the first instance. The salary would be at the rate of £350 per annum, with full residential emoluments. If the successful candidate is accepted under the Postgraduate Scheme, the salary will be at the rate of £550 per annum, resident. The position is a responsible one and offers considerable experience in general surgery. Candidates should be capable of performing emergency operations and preference will be given to applicants holding higher surgical qualifications. Suitably qualified R practitioners holding B2 posts are invited to apply. Those holding B1 posts cannot be considered unless ineligible for H.M. Forces. Applications should be sent to C. J. Adams, House Governor and Secretary, Royal Infirmary, Gloucester.

GENERAL HOSPITAL, Nottingham
(589 beds, including "The Cedars" Branch Hospital)
RESIDENT ORTHOPAEDIC AND FRACTURE OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic and Fracture Officer (B1). Applicants should have had previous experience in Fracture and Orthopaedic work. The Orthopaedic Department serves a large industrial district and the post offers exceptional experience in traumatic surgery. The appointment will be for a period of one year in the first instance. Duties to commence on April 18. Salary at the rate of £400 per annum, with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and rejected by the R.A.M.C., may apply. Applications to be forwarded as soon as possible to Henry M. Stanley, House Governor and Secretary.

GRANTHAM AND KESTEVEN GENERAL HOSPITAL, Manthorpe Road, Grantham, Lincs.
(125 beds—Medical, Surgical and Maternity; busy Out-Patient Departments)
SENIOR RESIDENT HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident House Surgeon (B1), becoming vacant on May 1, 1948. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Fellowship of one of the Royal Colleges or who are reading for a Fellowship. Suitably qualified R practitioners holding B2 appointments or B1 appointments if rejected for H.M. Forces are invited to apply. Salary will be at the rate of £450 per annum, plus furnished apartments, board and laundry at the hospital. Applications should be sent to the undersigned.—John E. Ray, House Governor and Sec.

GUY'S HOSPITAL
(Ophthalmological Department)
CHIEF CLINICAL ASSISTANT AND REGISTRAR (two vacancies)

Applications are invited for the post of Chief Clinical Assistant and Registrar (2 vacancies). Duties to commence immediately. Appointment will be until September 30, 1948, in the first instance. Honorarium to be at the rate of £275 per annum, for attendance on two sessions per week. Forms of application are obtainable from the Dean, Guy's Hospital Medical School, London Bridge, S.E.1, and should be forwarded with the names of three referees at once.

GREAT YARMOUTH AND GORLESTON HOSPITALS
HOUSE SURGEONS (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) (male), now vacant, including practitioners within three months of qualifications, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £250 per annum, with full residential emoluments. Applications should be sent to John S. Egerton, Secretary-Superintendent, immediately.

GUEST HOSPITAL, Dudley (153 beds)

Applications are invited from registered medical practitioners, including R practitioners who hold A appointments, for the following resident appointments. Full residential emoluments apply to both posts which are tenable for six months:—

HOUSE SURGEON (B2), £200 per annum, now vacant.

RESIDENT ANAESTHETIST (B2), £200 per annum, now vacant. (Successful candidate may be called upon to undertake other medical duties.) —H. Raymond Hurst, House Governor and Secretary.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty on April 1, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150 with full residential emoluments.

HOUSE SURGEON (A) required to commence duty on March 18, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

HULL ROYAL INFIRMARY

Applications are invited for the following posts (male):—

FIRST HOUSE SURGEON (B2), vacant now.
HOUSE PHYSICIAN (B2) at Sutton Branch.
HOUSE SURGEON (B2), Sutton Branch.

Both posts vacant April. Suitably qualified R practitioners who now hold A posts may apply.

CASUALTY OFFICER (A), vacant April. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.

Salary for each of the above posts £200 per annum, with full residential emoluments. The appointments will be for six months in the first instance (limited to six months if R practitioners are appointed), but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST, Brompton, S.W.3
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female), including suitably qualified R practitioners who now hold B2 posts for the appointment of Resident Surgical Officer (B1). Applicants must have held a resident hospital appointment, and R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. The appointment is for six months, commencing April 1, 1948. Salary at the rate of £300 per annum, with board and residence, and an additional £50 per annum for services in connexion with paying patients. Applications, accompanied by copies of one or more recent testimonials, should reach the undersigned not later than Saturday, March 13, 1948.—F. G. Rouray, House Governor.

INVERNESS DISTRICT MENTAL HOSPITAL
JUNIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment as Junior Assistant Medical Officer (B1). Salary at the rate of £490 per annum, with board, lodging and laundry. Suitably qualified R practitioners holding B2 and those holding B1 appointments (if ineligible for H.M. Forces) are invited to apply. The appointment is subject to the Asylums' Officers' Superannuation Act, 1909. Applications to be sent to the Medical Superintendent.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)

Immediate applications are invited for the following posts:—

RESIDENT JUNIOR HOUSE SURGEON (A), in charge of Casualty, Ear, Nose and Throat, and Fracture Department. Salary £200 per annum

HOUSE PHYSICIAN (A). Salary £200 per annum.

Practitioners within three months of qualification and liable to service under the National Service Acts are invited to apply.

The appointments are for six months. Applications should be sent to T. W. Upton, Secretary.

HEREFORDSHIRE GENERAL HOSPITAL
Hereford (154 beds)
RESIDENT SURGICAL OFFICER (B1)

Immediate applications are invited from medical practitioners (male) for the post of Resident Surgical Officer (B1). Applicants should have held house appointments and have had surgical experience. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £250 per annum, with full residential emoluments. The appointment is for twelve months, and applications should be sent to the undersigned.—T. W. Upton, Secretary.

HULL ROYAL INFIRMARY
RADIOLOGIST

Applications are invited from medical practitioners holding a Diploma in Radiology for the post of whole-time, non-resident Radiologist (Diagnosis). Salary £1,000 per annum. The appointment will be in accordance with the Ministry of Health Circular 202/46, and in the first instance will be limited to the interim period pending the establishment of the National Health Service. Applications, accompanied by three testimonials, or the names of three referees, should be submitted to the undersigned as soon as possible.—R. J. Carless, House Governor.

HARROGATE AND DISTRICT GENERAL HOSPITAL (272 beds)
(Recognized by the R.C.S. for final F.R.C.S. examination requirements)

Applications are invited from registered medical practitioners for the following appointment:—

RESIDENT ANAESTHETIST AND CASUALTY OFFICER (A), vacant April 14, 1948.

Practitioners within three months of qualification may apply. If held by an R practitioner the appointment will be for six months. Salary at the rate of £150 per annum with full residential emoluments. Applications immediately to the House Governor.

HOSPITAL OF ST. JOHN AND ST. ELIZABETH
60, Grove End Road, N.W.8
SURGEON-IN-CHARGE
of the Department for Diseases of the Ear, Nose and Throat

Applications are invited for the post of Surgeon in charge of the Department for Diseases of the Ear, Nose and Throat. Candidates must be Fellows of one of the Royal Colleges of Surgeons. Twenty-five copies of the application should be sent to the undersigned on or before March 23, 1948. Testimonials are not required but the names of three persons willing to act as referees should be furnished.—F. Dudley Hobbs, M.A., Secretary.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
CASUALTY SURGICAL OFFICER (B2)
at the Out-patient Dept.

Applications are invited from registered medical practitioners (male and female), including R practitioners who hold A posts, for the resident post of Casualty Surgical Officer (B2) at the Out-patient Department, Bayham Street, Camden Town, N.W.1, vacant now, tenable for six months. Salary £200 per annum with board, lodging and laundry. Applications on the prescribed form, with copies of three recent testimonials, to be returned to the undersigned at once.—Kenneth A. F. Miles, House Governor.

HOUNSLOW HOSPITAL, Middlesex
PAEDIATRIC PHYSICIAN

The Board of Management invites applications for the post of Paediatric Physician to the Hospital. Applications, together with the names of three referees should be sent on or before March 20, 1948, to the Secretary-Superintendent, from whom further particulars may be obtained.

KING EDWARD MEMORIAL HOSPITAL, Ealing
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners including practitioners within three months of qualification and liable under the National Service Acts for the appointment of House Surgeon (A) to the Second Surgeon and Ear, Nose and Throat Surgeons, to become vacant on April 17, 1948. Six months appointment. Salary at the rate of £175 per annum with full residential emoluments. Applications together with copies of two recent testimonials should be sent to the undersigned by April 5, 1948.—R. A. Mickelwright, House Governor.

KING GEORGE HOSPITAL, Ilford
CLINICAL ASSISTANT (to the Orthopaedic Dept.)

There is a vacancy for a Clinical Assistant to the Orthopaedic Department for two sessions weekly in the Out-Patient Department; fee 3 guineas per session is payable. Applications should be addressed to the undersigned not later than March 31.—G. Austin Hepworth, Secretary and Superintendent.

KENT COUNTY MENTAL HOSPITAL
Chartham, near Canterbury
Whole-Time Assistant MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Whole-time Assistant Medical Officer (B1) at the above hospital. Salary £472 10s., rising by £25 to £572 10s. per annum (plus cost-of-living war addition) and, for a single man, full residential emoluments valued at £209 per annum. Temporary accommodation is available for a married man when a cash payment of £209 will be made in lieu of the emoluments and a rental of £50 per annum will be charged for an unfurnished flat. An additional £50 per annum will be paid to holders of the D.P.M. Laboratory experience though not essential will be an advantage. The appointment will be subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications, accompanied by copies of three recent testimonials, must be sent to the Medical Superintendent by March 20, 1948.

KING EDWARD MEMORIAL HOSPITAL, Ealing
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant on April 1, 1948, and applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding Diploma of F.R.C.S. Salary at the rate of £450 per annum with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also R practitioners holding B1 appointments and rejected by the R.A.M.C., may apply. Applications, together with copies of two recent testimonials, should be sent to the undersigned by March 13, 1948.—R. A. Mickelwright, House Governor.

KING EDWARD MEMORIAL HOSPITAL, Ealing
HOUSE SURGEON (A)
to the Orthopaedic and Fracture Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A) to the Orthopaedic and Fracture Department, vacant now Six months' appointment. Salary at the rate of £175 per annum with full residential emoluments. Applications together with copies of two recent testimonials should be sent to the undersigned immediately.—R. A. Mickelwright, House Governor.

LONDON HOSPITAL, Whitechapel, E.1
JUNIOR FIRST ASSISTANT (Resident)
to the Gynaecological and Obstetric Department

There is a vacancy for the post of Junior First Assistant (Resident) to the Gynaecological and Obstetric department. Preference will be given to candidates who either hold a higher qualification in surgery or have had previous obstetric experience. Salary £400 per annum rising by £50 to £500, but should the candidate be eligible under the Ministry of Health Postgraduate Training Scheme he will be entitled to salary in accordance with that Scheme. The post is for one year renewable annually for two further periods of one year. Six copies of applications and of two or more testimonials should be sent to the House Governor and must arrive not later than March 15, 1948.—H. Brierley, House Governor.

LYMINGTON AND DISTRICT HOSPITAL
Hampshire (107 beds)
HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Appointment for six months. Salary £175 per annum, full residential emoluments. Applications immediately to N. P. Wood, Secretary.

LOWESTOFT AND NORTH SUFFOLK HOSPITAL (108 beds)
TWO HOUSE SURGEONS (A)
(one Senior and the other Junior)

Applications are invited immediately from registered medical practitioners (male or female) for the appointment of two House Surgeons (A)—one Senior and the other Junior—to fill vacancies on April 1 and May 1 next respectively. Salary for the Senior post at the rate of £250 per annum, and for the Junior post at the rate of £200 per annum, and in each case with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications to be sent to the Honorary Medical Superintendent.

LEEDS PUBLIC DISPENSARY AND HOSPITAL
North Street, Leeds, 2

Applications are invited from registered medical practitioners (male or female) for the following posts, including practitioners within three months of qualification who are liable for service under the National Service Acts. Appointments for six months. Salary in each case £175 per annum with full residential emoluments.

HOUSE PHYSICIAN (A), vacant March 30.
HOUSE SURGEON (A) to E.N.T. and Eye Dept., vacant March 30.
CASUALTY OFFICER (A), vacant April 10.

Applications to be addressed to Charles F. J. Maury, Secretary and Superintendent.

LUTON AND DUNSTABLE HOSPITAL
Luton (214 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners for the above post to become vacant on March 13, including R practitioners who hold A posts. If held by an R practitioner the appointment will be limited to six months. This post is recognized for the D.A. Salary £250 per annum with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—R. E. Lingard, Secretary.

LUTON CHILDREN'S HOSPITAL
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2), vacant mid-April, 1948. The salary is at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be for six months, otherwise renewable for further six months. Applications should be submitted by March 25, 1948.—Bart. Miller, House Governor.

LIVERPOOL AND DISTRICT HOSPITAL FOR DISEASES OF THE HEART
34, Oxford Street, Liverpool, 7
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Physician (A) to commence immediately. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Appointment will be for a period of six months, salary at the rate of £100 per annum, with full residential emoluments. Facilities for M.D. thesis. Applications to the Secretary.

LINCOLN COUNTY HOSPITAL
RESIDENT ANAESTHETIST (B2)

Applications are invited for the post of Resident Anaesthetist (B2), including R practitioners who hold A posts. If held by an R practitioner the post will be limited to six months. The successful candidate will be called upon to undertake some duties as a Casualty Officer. The hospital is recognized as a qualifying hospital for the Diploma of Anaesthetics. Salary at the rate of £250 per annum plus residential emoluments. Applications should be sent immediately to the Secretary-Superintendent.

LONDON CHEST HOSPITAL, E.2
ASSISTANT CARDIOLOGIST

The Board of Management invite applications for the post of Assistant Cardiologist. Candidates must be members of the Royal College of Physicians of England. Applications should be sent to the undersigned (from whom further particulars may be obtained) to arrive by March 20.—Thomas Brown, Secretary.

LONDON CHEST HOSPITAL, E.2
HOUSE PHYSICIAN (B2) (Male)

House Physician (B2) (male) required April 1, 1948. Salary at the rate of £150 per annum, residence and laundry provided. R practitioners holding A posts may apply. Six months' appointment. Applications should be sent by March 24, 1948, to the Secretary.

LONDON CHEST HOSPITAL, E.2
HOUSE PHYSICIAN (B2) (Male)
for the Country Branch, Arlesey, Beds

House Physician (B2) male required, April 1, 1948, for the Country Branch, Arlesey, Beds. Salary at the rate of £150 per annum, residence and laundry provided. R practitioners holding A posts may apply. Six months' appointment. Applications should be sent by March 24, 1948, to the Secretary.

MANCHESTER ROYAL INFIRMARY
RESIDENT ANAESTHETIST (B2)

The Board of Management invite applications from registered medical practitioners (male and female) for the above post, now vacant. The appointment is for six months at a salary of £150 per annum, with the usual residential emoluments. R practitioners holding A posts may apply. Applications should be sent to the Chairman of the Medical Board not later than March 17, 1948.—F. J. Cable, General Superintendent and Secretary.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required as soon as possible for busy department. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

MOTHERS' HOSPITAL OF THE SALVATION ARMY, Clapton, E.5 (Maternity—107 beds)
SENIOR RESIDENT MEDICAL OFFICER (B1)

Vacant May 1, 1948. The appointment is for six months and recognized for M.R.C.O.G. Salary £220 per annum with board, residence and laundry. Women practitioners now holding B2 posts may apply. Applications, with testimonials, to be sent to the Secretary-Superintendent as soon as possible

MOTHERS' HOSPITAL OF THE SALVATION ARMY, Clapton, E.5 (Maternity—107 beds)
JUNIOR RESIDENT MEDICAL OFFICER (B2) (Female)

Vacant April 24, 1948. Salary £150 per annum, board, residence and laundry. Appointment for six months and recognized for M.R.C.O.G. Applications as soon as possible to Secretary-Superintendent.

MAIDA VALE HOSPITAL FOR NERVOUS DISEASES, London, W.9
PHYSICIAN
to the Department of Psychological Medicine

Applicants must be Fellows or Members of the Royal College of Physicians of London. Applications with the names of two referees should be addressed to the Secretary, from whom further particulars may be obtained, not later than March 26.

Have you read the notice at top of page 13 ?

THE Medical Defence Union

Established 1885

MUSeum 1337

Annual Subscription £1

MEMBERSHIP EXCEEDS 31,500

Assets exceed £170,000

THE UNION protects, supports, and safeguards the character and interests of registered medical and dental practitioners. Members are fully INDEMNIFIED against actions undertaken on their behalf.

THE COST OF LITIGATION and the damages awarded to successful litigants are steadily rising. The Union's subscription remains at its pre-war figure. Can you afford to remain outside?

PROTECTION is also provided on special terms to medical and dental practitioners resident and practising overseas.

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Sq., London, W.C.1.

Have you read the notice at top of page 13 ?

MANCHESTER NORTHERN HOSPITAL
(General 116 beds)
EAR, NOSE AND THROAT REGISTRAR
to the Out-patient Clinic

The Committee of Management invite applications from qualified medical practitioners for the post of Ear, Nose and Throat Registrar to the Out-patient Clinic. Duties will consist of attending the Honorary Aurist and Laryngologist on Wednesday morning each week, at a fee of £2 2s. per session. Applications to be sent to the Secretary, Mr. J. C. Daniels, 38, Barton Arcade, Manchester, 3, as soon as possible.

NUNEATON GENERAL HOSPITAL
(130 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon to the Casualty, E.N.T. and Ophthalmic Departments, vacant immediately. The appointment is for six months at a salary of £250 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.—H. W. Williams, House Governor and Secretary.

NORTH CAMBRIDGESHIRE HOSPITAL, Wisbech
(65 beds)
Affiliated to Addenbrooke's Hospital, Cambridge
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A), vacant now. Appointment will be for a period of six months. Salary £200—£250 with full residential emoluments. Applications should be sent to the Secretary.

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke-on-Trent (475 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of Resident Anaesthetist (B2), to become vacant shortly, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. The salary is at the rate of £250 per annum, with full residential emoluments. Applications to the House Governor.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, London, N.W.1
HONORARY ASSISTANT DIAGNOSTIC RADIOLOGIST

The Board of Management invite applications for the office of Honorary Assistant Diagnostic Radiologist. Candidates are required to be medical practitioners engaged solely in consulting practice, and to possess a higher Diploma in Medical Radiology. Candidates will be expected to do two or three attendances weekly. Applications, giving full details, with names of three referees, must reach the Secretary and House Governor not later than first post Monday, March 31, 1948.

PRINCE OF WALES'S HOSPITAL, Plymouth
CASUALTY OFFICER (A)
(Ear, Nose and Throat)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (A), with Ear, Nose and Throat, vacant March 17, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL, Plymouth
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male and female, preferably with the D.A., for the appointment of Resident Anaesthetist (B2), including R practitioners who now hold A posts, vacant April 13. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications to reach the undersigned as soon as possible.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
HOUSE SURGEON (B2)
to the Urological Department

Applications are invited from registered medical practitioners for the post of House Surgeon (B2) to the Urological Department, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £250 per annum with the usual residential allowances. Application should be made as soon as possible to the Superintendent, Royal Infirmary, Preston.

OLDHAM ROYAL INFIRMARY
FIRST ASSISTANT TO THE ORTHOPAEDIC AND ACCIDENT SERVICE
(Whole-time non-resident)

Applications are invited for the post of First Assistant to the Orthopaedic and Accident Service. Applicants must have specialized in Orthopaedics and Fracture work and hold the qualification of F.R.C.S.(England) or a special qualification in Orthopaedics. The person appointed will be expected to devote the whole of his time to the duties of the office. The commencing salary will be at the rate of £750 to £1,000 per annum according to experience. Applications, which should contain full particulars of experience, and be accompanied by copies of three testimonials, should be forwarded to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OXFORD EYE HOSPITAL
(In association with the Royal Berkshire Hospital, Reading)
OPHTHALMIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, with some previous experience, for the appointment of Ophthalmic House Surgeon (B2), vacant April 1. The appointment is for six months at the Oxford Eye Hospital, followed by six months at the Royal Berkshire Hospital, and the successful candidate will then be eligible for appointment as Senior Resident Officer (B1) at the Oxford Eye Hospital for six months. Salary commences at £200 per annum with full residential emoluments. Applications should be sent to C. F. Share, Secretary.

ROYAL EYE AND EAR HOSPITAL, Bradford
(Voluntary Hospital, 102 beds)
RESIDENT AURAL HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male), including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of Resident Aural House Surgeon (B2), to take up duty as soon as possible. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. This post offers exceptional opportunity for training in all branches of E.N.T. work and the hospital is recognized by the R.C.S. for the D.L.O. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent immediately to E. S. Heap, Sec. Supt.

POPLAR HOSPITAL, E.14
HOUSE PHYSICIAN (B2)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointments of House Physician (B2) and House Surgeon and Casualty Officer (A) for a period of six months at a salary at the rate of £200 and £150 per annum respectively, with full residential emoluments. Practitioners within three months of qualification and R practitioners who hold A posts are invited to apply. Applications should be sent to the undersigned as soon as possible.—D. H. Lindsay, House Governor and Secretary.

PORT TALBOT AND DISTRICT GENERAL HOSPITAL (85 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male and female), including R practitioners who now hold A posts, for the post of Resident Medical Officer (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £400 per annum with full residential emoluments. Applications should be forwarded as soon as possible to Hon. Secretary, Medical Committee, Port Talbot and District General Hospital, Port Talbot, Glam.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ASSISTANT PATHOLOGIST (A)

Applications are invited from registered medical practitioners (male) for the appointment of Resident Assistant Pathologist (A). Salary at the rate of £150 per annum with full residential emoluments. Previous experience in Pathology not necessary. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications, stating present post, should be sent immediately to H. E. Ryan, House Governor.

ROTHERHAM HOSPITAL
Doncaster Gate, Rotherham
General Voluntary Hospital (150 beds)
SECOND CASUALTY OFFICER (A)

Salary £225 per annum, with full residential emoluments. Applications are invited from registered medical practitioners, male or female, for the above appointment which will become vacant immediately. Practitioners within three months of qualification and liable to service under the National Service Acts may also apply, when the appointment will be for six months. Applications should be sent at once to the Secretary-Superintendent.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Anaesthetist (B2), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. R practitioners who now hold A posts may apply when the appointment will be limited to six months. Applications, stating present post, immediately to H. E. Ryan, House Governor.

ROYAL DEVON AND EXETER HOSPITAL
Exeter
(324 beds, 7 Resident Medical Staff Employed)
HOUSE SURGEON (A)
Ear, Nose and Throat Department

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A) Ear, Nose and Throat Department, and to act as Casualty Officer during mornings, non-resident, becoming vacant March 20 next, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary is at the rate of £300 per annum. Applications, with copies of two recent testimonials, should be sent to the undersigned by first post, Wednesday, March 10, 1948.

HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (B2), becoming vacant April 1 next, including R practitioners who now hold A posts. The appointment is for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications, with copies of two recent testimonials, should reach the undersigned by first post, Tuesday, March 16, 1948.—L. Parkhouse, Secretary and Manager.

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road, London, S.W.3
PART-TIME SURGICAL REGISTRAR

Applications are invited for the post of Part-time Surgical Registrar. Candidates must be duly qualified and registered under the Medical Act and engaged in consulting practice only. Preference will be given to those holding the Diploma F.R.C.S. (Eng.). The appointment will be for one year, subject to re-election for a maximum of three years. Remuneration will be at the rate of £500 per annum, and the successful candidate will be required to attend a minimum of five half-days per week. A copy of the rules and further information may be obtained from the Secretary. Applications to be made on a form which will be supplied by the Secretary, accompanied by copies of not more than three recent testimonials to be sent to the Secretary not later than the first post on Wednesday, March 10, 1948.—Victor H. Pinkham, Secretary.

ROYAL FREE HOSPITAL
Gray's Inn Road, W.C.1
PHYSICIAN IN TRAINING
to the Unit of Rheumatology

A Physician-in-Training is to be appointed to the Unit of Rheumatology, for a period of one year. Candidates should be graduates of a recognized University and hold the Diploma of M.R.C.P. Applications are also invited from ex-Service practitioners. Duties will be in connexion with the In-patient Unit (40 beds) at Lawn Road, Hampstead and the Arthritis Clinic at the main hospital. Salary will depend on experience but will not be less than £500 per annum. The successful applicant will not be debarred from general Medicine but will be expected to make a study of the Medical Locomotor Disorders his career. Applications, with photograph and names of two referees to whom reference may be made, should be sent by March 17 to R. G. Heppell, House Governor.

PARK PREWETT MENTAL HOSPITAL
Basingstoke, Hants
DEPUTY MEDICAL SUPERINTENDENT

Applications are invited for the above appointment. Candidates must have considerable experience in Psychiatry, including both in-patient and out-patient work. The salary will be £1,100 per annum plus emoluments valued at £109 19s. 4d. consisting of house, rates, water, fuel and light. The salary may be reviewed following the Report of the Committee now considering the salaries of Medical Officers. Bonus in addition at present £49 16s. 8d. Applications should be made on a form to be obtained from the Medical Superintendent, Park Prewett Mental Hospital, Basingstoke, and returned not later than March 15, 1948.

ROYAL GWENT HOSPITAL
Newport, Mon. (255 beds)
HOUSE SURGEON (B2 or A)
Fracture and Orthopaedic Department

Applications are invited from registered medical practitioners (male or female), including R practitioners holding A posts and practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of House Surgeon (B2 or A) to the Fracture and Orthopaedic Department, vacant now. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £210 (B2) or £175 (A) per annum, with residential emoluments. Applications to T. A. Jones, Secretary-Superintendent.

ROYAL BERKSHIRE HOSPITAL, Reading
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A) as from March 6, 1948. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor

ROYAL BERKSHIRE HOSPITAL, Reading
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners (male) for the following appointment: Casualty Officer (A) to become vacant immediately. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL VICTORIA INFIRMARY
Newcastle-upon-Tyne and
KING'S COLLEGE, UNIVERSITY OF DURHAM
TEMPORARY FIRST ASSISTANT
to the Gynaecological Department

Applications are invited from registered medical practitioners for the appointment of First Assistant to the Gynaecological Department of the Royal Victoria Infirmary. The post is whole-time and the successful candidate will be responsible for carrying out such duties, clinical and teaching, as may be allocated to him by the Head of the Department. There will be ample opportunity for clinical experience in out-patient and in-patient work, with responsibility for clinical emergency duty. Applicants should possess a higher surgical qualification. The appointment is for six months from April 1, 1948. The inclusive salary is at the rate of £1,000 per annum, non-resident. Applications, giving age, nationality, experience and qualifications, with the names and addresses of three referees, should be sent to the undersigned within two weeks of the date of appearance of this advertisement.—G. R. Hanson, Registrar of King's College.

ROYAL LANCASTER INFIRMARY
Lancaster (226 beds)
SENIOR HOUSE SURGEON (B1)

This post is recognised by the Royal College of Surgeons of England. Applications are invited from male registered medical practitioners for the post of Senior House Surgeon (B1), vacant April 1, 1948 Salary £325 per annum with full residential emoluments. Suitably qualified R practitioners who now hold B2 posts may apply. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H M Forces. Applications should be sent to the undersigned.—F. A. Milnes, Superintendent-Secretary.

ROYAL INFIRMARY AND CHILDREN'S HOSPITAL, Sunderland (382 beds)
DIRECTOR OF PATHOLOGICAL DEPT.

Applications are invited from medical practitioners. Wide practical experience of Pathology desirable. Salary £1,750, rising by annual increments of £50 to £2,000 per annum. The holder will be required to devote his whole time and attention to the department, but limited private practice will be allowed. Applications, with names of three referees, should be forwarded as soon as possible to F. Dagnall, House Governor and Secretary, Royal Infirmary, Sunderland.

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL
Stanmore, Middlesex
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2). Duties to commence April 1. Salary at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to be addressed to the House Governor, at 234, Great Portland Street, London, W.1, by March 17.

ROYAL NORTHERN HOSPITAL, Holloway, N.7
HOUSE SURGEON AND CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon and Casualty Officer (B2) to become vacant on April 8 1948, for a period of six months. R practitioners holding A posts may apply. Salary and emoluments £150 per annum with board residence and laundry. Applications should be sent to the undersigned not later than March 12, 1948.—Gilbert G. Panter, Secretary.

ROCHDALE INFIRMARY,
PATHOLOGIST

The Board of Management invites applications for the appointment of Pathologist. Salary is at the rate of £900 per annum, plus private fees, guaranteed up to £100 by the Committee. Applications for the appointment should be made immediately to the undersigned, from whom further information regarding the appointment may be obtained.—W. Wynn, Infirmary Office.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM
(Whole-time Temporary Assistant Medical Officer of Health (male).)

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
March 2, 1948. Secretary.

ROYAL HOSPITAL, Wolverhampton (500 beds)
(Incorporated under Royal Charter)
HONORARY RADIOTHERAPIST

The Board of Management invites applications for the post of Honorary Radiotherapist at the Royal Hospital, Wolverhampton. Applicants must have had special experience in Radiotherapy, and confine themselves to Consulting Practice. The remuneration for this post will be a subject for arrangement between the successful applicant and the Board of Management, and will be based on the experience of the successful candidate, but will not be less than £1,000 per annum. The Royal Hospital, Wolverhampton, is an associated Hospital of the University of Birmingham. Applications must be received on or before April 1, 1948, and should be sent to W Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton
(Incorporated under Royal Charter)
(500 beds—General Hospital Branch 310 beds)
SENIOR RESIDENT ANAESTHETIST (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident Anaesthetist (B1), vacant now. The Royal Hospital is an associated hospital of the University of Birmingham. The salary is at the rate of £400 per annum with full residential emoluments, or according to experience and qualifications. The appointment will be for a period of six months.—W. Cockburn, House Governor.

ROYAL VICTORIA AND WEST HANTS HOSPITAL, Bournemouth (374 beds)

Applications are invited immediately for the following appointment:

CASUALTY OFFICER (B2)

R practitioners holding A posts may apply. Salary £250 per annum with full residential emoluments, appointment to be for a period of six months. Applications, stating whether married or single, should be sent to the undersigned within seven days of publication.—Gordon M. Saul, Secretary.

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury
JUNIOR HOUSE SURGEON (A)

Applications are invited from male registered medical practitioners for the post of Junior House Surgeon (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Appointment will be for six months and duties include Casualty, E.N.T. and Orthopaedic work. Salary at the rate of £200 per annum, together with full residential emoluments. Post now vacant. Applications should be sent immediately to the Secretary-Superintendent.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), now vacant. Salary £150 per annum, with full residential emoluments Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months; otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A Stanley Brunt, General Superintendent and Secretary.

ROYAL ALEXANDRA HOSPITAL FOR SICK CHILDREN, Brighton (126 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2), to commence duties on April 1, including R practitioners who hold A appointments. Salary at the rate of £200 per annum, with full residential emoluments. The hospital is recognized for the D.C.H. Diploma and M.D. Examination, Branch 1. Six months appointment. Applications to be sent to the undersigned on or before March 15.—Percy F. Spooner, Secretary-Superintendent.

ROYAL CORNWALL INFIRMARY, Truro
JUNIOR HOUSE PHYSICIAN (A)

Applications are invited from registered practitioners (male and female) for this appointment, vacant on March 23, 1948, for six months, combining duties as House Surgeon to the Ear, Nose and Throat Departments, including practitioners within three months of qualification who are liable to service under the National Service Acts. Salary at the rate of £200 per annum with residential emoluments. Applications to the Secretary-Superintendent.

ROYAL CORNWALL INFIRMARY, Truro
ORTHOPAEDIC AND CASUALTY HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for this appointment, vacant April 1 next, including R practitioners now holding A posts. If an R practitioner the appointment will be limited to six months Salary at the rate of £200 per annum with residential emoluments. Applications with copies of testimonials to the Secretary-Superintendent.

ROYAL HOSPITAL, Wolverhampton
(500 beds)
(Incorporated under Royal Charter)
(General Branch 310 beds)

Applications are invited from registered medical practitioners for the following appointments:

SENIOR PATHOLOGIST at a salary of £1,100 to £1,400 per annum according to experience, resident or non-resident; £100 in lieu of subsistence if non-resident.

JUNIOR ASSISTANT PATHOLOGIST. Resident at a commencing salary of £650 to £1,000 per annum according to experience.

The laboratory is recognized for the purpose of the D.C.P. of the University of London. Applications, accompanied by copies of two recent testimonials, must be received on or before March 31, and should be sent to W. Cockburn, House Gov.

ROYAL PORTSMOUTH HOSPITAL, Portsmouth
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male, including R practitioners holding A posts, for appointment as House Surgeon (B2). Salary at rate of £225 per annum with full residential emoluments. Six months' appointment. Applications to be sent immediately to G. A. Hughes, Secretary.

(Continued on page 30)

Have you read the notice at top of page 13?

THE MEDICAL PROTECTION SOCIETY LIMITED
Founded 1892. Assets exceed £100,000.
Members receive advice and assistance in all matters affecting the practice of their profession and are afforded COMPLETE INDEMNITY against costs and damages in cases undertaken on their behalf.
Subscription £1. No entrance fee to those joining within twelve months of registration. Entrance fee, 10/-.
Full Particulars from the Secretary, VICTORY HOUSE, LEICESTER SQUARE, W.C.2. Gerrard 4553 and 4814.

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

DO PLEASE WRITE ADVERTISEMENTS CLEARLY. NAME AND ADDRESS SHOULD BE IN BLOCK LETTERS.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To **all other** advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d., or 30 words 22s.; and 3s. 6d. for each six words *or less* thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion. 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO is used the charges are: 18 words, 25s. (minimum), or 24 words, 31s.; or 30 words, 37s.; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To **ALL** advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2)

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.
Telephone: Euston 2111.
Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 13.

PERSONAL

ADOPTION OF CHILDREN.—To overcome the risk inherent in privately-arranged adoptions, the Church of England Children's Society, which is a registered Adoption Society, is ready at all times to help those wishing to offer a child for adoption, and who deserve such assistance.—Church of England Children's Society, Old Town Hall, Kennington, S.E.11.

ONE THOUSAND POUNDS for a Short Story. Full details in the Sunday Dispatch.

CAPT. R.A.M.C. ABOUT TO BE DEMOBBED requires urgently House to rent or buy, London area. Reply, stating terms and date of availability, to Box 9005, B.M.J.

ENGLISH DOCTOR, AGED 44, WITH WIDE experience of surgical, general and administrative practice having an exceptionally good record in the Indian Medical Service desires to settle in his own country. An Industrial Appointment preferred but would consider purchasing sound Practice or Partnership in pleasant surroundings (capital available).—Box 9091, B.M.J.

FOR AN ENJOYABLE SWISS HOLIDAY join one of the following proposed parties: May 6 to 20, Lugano and Lucerne; June 16 to 30, Pontresina in Engadine; June 30 to July 14, Zermatt; Aug. 5 to 19, Lauterbrunnen (for Murren, Wengen and Jungfrau Joch) and Kiental; Aug. 17 to 31, Kiental and Saas-Fee; Sept. 1 to 15, Oberhofen (on Thun Lake) and Wengen; Sept. 1 to 11, Bernese Oberland Walking Party; Dec. to Jan., Winter Sports at Saas-Fee. Also **DEVONSHIRE OVER EASTER:** Torquay Party, March 24 to 31. Good Hotel. Write C.T.U. (Estd. 1913, Dr. C. F. Fothergill), Chorley Wood, Herts. (Phone Chorley Wood 24.)

PROFESSIONAL GENTLEMAN WITH LARGE centrally heated house with delightful garden in Kensington is prepared to Receive Elderly Lady or Gentleman requiring a good Home where medical care would be optional.—Box 9092, B.M.J.

SOUTH KENSINGTON. WELL APPOINTED FURNISHED FLAT, suitable semi-invalid. Nursing assistance available.—Box 8780, B.M.J.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

ELI LILLY AND COMPANY LIMITED DESIRE to announce that owing to the termination of their lease on the premises at 2, 3, and 4, Dean Street, London, W.1, they are Vacating these Offices on March 24, 1948. All future correspondence should be addressed to Basingstoke.

EX-I.M.S. OFFICERS, CANADIAN.—Retired Canadian officers of the Indian Medical Service, in or passing through the U.K., are advised to contact the Senior Canadian Air Force Liaison Officer, 11, Hill Street, London, W.1, regarding employment in Canada with the Royal Canadian Air Force.

ROYAL UNITED KINGDOM BENEFICENT ASSOCIATION grants ANNUITIES without regard to religious denomination to gentlefolk of both sexes who are over 40 years of age, incapacitated from earning a livelihood, and whose total means do not exceed £120 per annum. Annuitants elected by votes of subscribers, or appointed by the committee. Subscriptions and legacies gratefully received. Full particulars from General Secretary, R.U.K.B.A., Dept. H., 13, Bedford Street, Strand, W.C.2.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

APPLICATIONS ARE INVITED for the post of LECTURER IN CLINICAL TROPICAL MEDICINE AT THE LONDON SCHOOL OF HYGIENE AND TROPICAL MEDICINE. The duties of the post will include participation in teaching and in research on tropical diseases. Applicants should hold a higher qualification in medicine and should have special experience in the diagnosis, treatment and investigation of tropical diseases. The salary of the post is £1,000 per annum. There is an additional grant of £250 per annum from a Research Fund. Applications, together with three copies of recent testimonials, should be sent by April 30, 1948, to: The Assistant Dean, London School of Hygiene and Tropical Medicine, Keppel Street (Gower Street), London, W.C.1.

DICKINSON SCHOLARSHIPS. Travelling Scholarship Medicine £300.—Applications are invited for the **TRAVELLING SCHOLARSHIP IN MEDICINE,** value £300, tenable for one year. Candidates must be graduates of any University who have taken their full course of instruction in Medicine and Surgery at the University of Manchester and at the Manchester Royal Infirmary. Copies of the regulations governing the Scholarship may be obtained from the undersigned, to whom six copies of application should be sent not later than April 15, 1948.—F. J. Cable, Secretary to the Dickinson Scholarship Trustees

QUEEN'S UNIVERSITY OF BELFAST. TUTORSHIPS IN OBSTETRICS.—The Senate intends to proceed to the appointment of two Tutorships in Obstetrics, a Senior Tutorship having a salary of £400 per annum, and a Junior Tutorship having a salary of £300 per annum, both inclusive of board and lodging in the Royal Maternity Hospital, in which hospital the successful applicants will be required to reside. Further details of these appointments may be obtained from the Secretary. Closing date for applications, May 31, 1948.—G. R Cowie, Secretary.

NEWFOUNDLAND.—Required for the medical staff of large paper manufacturing company operating at Grand Falls, Newfoundland, **TWO YOUNG UNMARRIED DOCTORS** with good qualifications and some general experience, to work under Company's Chief Medical Officer. Work would include medical attendance to employees working in Company's mills, logging camps and depots. Salary $4,200 (£1,050) per annum with free board and lodging and transportation from U.K. Apply in first instance to Box 9024, B.M.J., when further information will be given to suitable applicants having necessary qualifications and experience.

BEIT MEMORIAL FELLOWSHIPS FOR MEDICAL RESEARCH.—Notice is hereby given that an **ELECTION of JUNIOR FELLOWS** to begin work on October 1 will take place in July, 1948. Junior Fellowships are normally of the annual value of £600 for three years, but candidates younger than those usually elected or whose promise for Medical Research must be judged mainly on work outside that field, may be awarded a lower rate of £500 for the first two years. Candidates are asked to state whether they would be unable to accept this lower rate. Candidates must have taken a degree in a faculty of a University in the British Empire or a Medical Diploma registrable in the United Kingdom. Election to Junior Fellowships are rarely made above the age of thirty-five years. The Trustees are desirous of furthering research in Mental Diseases and in the general allotment of Fellowships will give some preference to a candidate proposing research on approved lines in that subject. Applications from candidates must be received by May 14. It is necessary for candidates to submit evidence that they can be given accommodation in the departments where they propose to work, which must be either in Great Britain or Ireland. Forms of Application and all information may be obtained by letter only, addressed to: Dr. A. N. Drury, C.B.E., F.R.S., Secretary, Beit Memorial Fellowships for Medical Research, Lister Institute, Chelsea Bridge Road, London, S.W.1. For Overseas candidates, forms of application may be obtained from: The Secretary, South African Medical Council, P.O. Box 205, Pretoria, South Africa. The Secretary, Universities Commission, Box 4061, G.P.O., Sydney, Australia. The Department of Health, Wellington, New Zealand. The Canadian Medical Association, 184, College Street, Toronto, Canada.

EXAMINING SURGEONS: FACTORIES ACT, 1937. The following appointments as Examining Surgeons under the Factories Act, 1937, are vacant: Brownhills, in the County of Stafford; Elland, in the County of York. Applications, which should be received not later than March 20, 1948, should be sent to the Chief Inspector of Factories, 8, St. James's Square, London, S.W.1.

CHARING CROSS HOSPITAL MEDICAL SCHOOL, 62, Chandos Place, London, W.C.2.—Applications are invited immediately for the post of **LECTURER IN ORGANIC CHEMISTRY.** Scale of salary £550 to £850 per annum. Further details and forms of application may be obtained from the Secretary.

NUFFIELD FOUNDATION TRAVELLING FELLOWSHIP SCHEME IN MEDICINE OPEN TO MEDICAL MEN AND WOMEN WHO ARE NATIONALS OF NEW ZEALAND.—The Nuffield Foundation is offering in 1948 and in the subsequent six years two Fellowships a year in Medicine to men or women who are nationals of New Zealand and hold a New Zealand medical qualification. The Fellowships are of one year's duration and are tenable in the United Kingdom only. They are intended for persons in any field of medicine or surgery whose ultimate aim is to return to New Zealand and take up an academic appointment in medical teaching or research. The selection of applicants for Fellowships is to be made by a medical committee in New Zealand. Applications from New Zealanders now resident in Great Britain should be forwarded to the Secretary, Nuffield Foundation, 12 and 13, Mecklenburgh Square, London, W.C.1, from whom application forms and particulars may be obtained. Applications for Fellowships to be taken up on October 1, 1948, must be received by April 1, 1948.—L. Farrer-Brown, Secretary.

UNIVERSITY OF SHEFFIELD.—Applications are invited for a post of **LECTURER IN ANATOMY,** to begin duties on October 1, 1948. Salary £550 rising by £25 every year to £650: if the appointment is then renewed £700 fixed. Commencing salary according to qualifications and experience, with superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. Applications (four copies), together with the names and addresses of referees, and, if desired, copies of testimonials, should reach the undersigned (from whom further particulars may be obtained) not later than March 27, 1948.—A. W. Chapman, Registrar.

ROYAL FREE HOSPITAL AND ROYAL FREE HOSPITAL SCHOOL OF MEDICINE, Gray's Inn Road, W.C.1. JUNIOR LECTURER IN THE DEPARTMENT OF PATHOLOGY.—Applications are invited from registered medical practitioners for the above appointment now vacant. Experience in **Chemical Pathology** is essential. Salary £500 by £25 to £700 with superannuation. Seven copies of the application, stating qualifications, age and experience, together with seven copies of three recent testimonials, should be sent to the House Governor not later than March 15, 1948.

UNIVERSITY OF LONDON.—The Senate invite applications for the **CHAIR OF PHYSIOLOGY,** tenable at London Hospital Medical College (salary not less than £1,500). Applications must be received not later than April 21, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

ROYAL FREE HOSPITAL AND ROYAL FREE HOSPITAL SCHOOL OF MEDICINE, Gray's Inn Road, W.C.1.—JUNIOR LECTURER in the Department of Pathology. Applications are invited from registered medical practitioners for the above appointment vacant. Experience in **Bacteriology** is essential. Salary £500 by £25 to £700 with Superannuation. Seven copies of the application stating qualifications, age and experience together with seven copies of three recent testimonials should be sent to the House Governor not later than March 15, 1948.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN CHILD HEALTH.—The University Court will shortly proceed to the appointment of a full-time Lecturer in Child Health at a salary of £500 to £600, or £600 to £750, or £750 to £900, placing according to qualifications and experience, with F.S.S.U. and children's allowance. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than March 27, 1948.—H. J. Butchart, Secretary, The University, Aberdeen

UNIVERSITY OF ABERDEEN. LECTURESHIP IN BACTERIOLOGY.—Applications are invited for the post of Lecturer in the Department of Bacteriology. Salary £600 to £750 according to qualifications and experience. Persons desirous of being considered for the office should be graduates in medicine and have experience of general hospital bacteriology. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than March 27, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H C ORRIN. F R C S, Surgeons' Hall, Edinburgh

ANAESTHETICS. April 12 to 30. Royal Cancer Hospital. First week, Part I; second and third weeks, Part II. Candidates may attend either or both Parts.—Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

COACHING FOR MEMBERSHIP. M.B., M.D. and D.C.H. Individual tuition. Evenings and weekends, by honrs. grad. Lond. M.D., M.R.C.P., D.C.H.—Box 9043, B.M.J.

EXPERIENCED COACHING IN PHYSIOLOGY, Pathology and Medicine by M.D., M.R.C.P., B.Sc. (Physiol.), all exams.—Box 8577, B.M.J.

PRIVATE COACHING FINAL F.R.C.S. CLINICAL material available.—Box 9049, B.M.J.

INSTITUTE OF OPHTHALMOLOGY. Moorfields, Westminster and Central Eye Hospital, Judd Street, W.C.1.—New Term begins in March. The D.O.M.S. Course will begin on March 1, 1948. For further particulars apply to the Academic Secretary of the Institute of Ophthalmology, Judd Street, W.C.1, or to the Dean, Robert C. Davenport, F.R.C.S.

POSTGRADUATE STUDY. Diploma in Anaesthetics; Diploma in Psychological Medicine; Diploma in Ophthalmology; Diploma in Radiology; Diploma in Laryngology; Diploma in Child Health; F.R.C.S.Eng. and all Surgical Examinations; M.R.C.P.Lond. and all Medical Examinations; M.D. Thesis of all Universities; Courses for all Qualifying Examinations. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested. Address: Secretary, Medical Correspondence College, 19, Welbeck St., London, W.1.

POSTAL COACHING for all Medical Examinations. Examination Successes, 1901-47: M D.Lond., 454; M.B., B.S.Lond., Final, 436; F R.C.S.Eng., Primary, 411; F.R.C.S.Eng., Final, 308; M.R.C.P. Lond., 427; M.R.C.S., L.R C.P., Final, 891; D.A. (1936-47), 143; F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

RHEUMATIC DISEASES. March 19, 20, and 21. Friday afternoon, and all day Saturday and Sunday. Rheumatic Unit, St. Stephen's Hospital.—Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

SOCIETY OF APOTHECARIES OF LONDON.—Surgery: April 12, May 10, June 14. Medicine and Pathology: April 19, May 18, June 21. Midwifery: April 20, May 18, June 22. Mastery of Midwifery: May and November. Diploma in Industrial Health: July and December. For regulations apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

SOCIETY OF APOTHECARIES OF LONDON.—DIPLOMA IN INDUSTRIAL HEALTH.—The next Examination will begin on Monday, July 5, 1948. The following Examination will be held in December, 1948. For regulations, apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

The Council invite applications for the following Annual Examinerships:

FOR THE FELLOWSHIP

	No. to be elected	*No. who seek re-election*
*Anatomy	4	4
*Applied Physiology and Pathology	4	3
FOR THE LICENCE IN DENTAL SURGERY		
Board of Examiners in Dental Surgery (Surgical Section)	6	6
Examiners must be Fellows of the College, and will be required to examine in General Anatomy and Physiology, and in Surgery, Medicine, Bacteriology and Pathology		
Associate Examiners (who must be engaged in teaching students the properties of dental materials and practical dental mechanics)	2	2
Associate Examiners (one teacher of General Anatomy)	1	1
Associate Examiners (one teacher of Physiology)	1	1
UNDER THE EXAMINING BOARD IN ENGLAND		
Elementary Biology	4	4
*Anatomy	3	2
*Physiology	2	1
†Midwifery	4	3
Pathology	4	2
Public Health	2	2
Tropical Medicine and Surgery	1	1
Ophthalmic Medicine and Surgery (Part I)	2	2
Ophthalmic Medicine and Surgery (Part II)	1	0
Psychological Medicine	1	1
Laryngology and Otology	2	2
Medical Radio-diagnosis	2	2
Medical Radiotherapy	2	1
Anaesthetics	2	2
Child Health	2	2
Physical Medicine	4	4
Industrial Health	2	2

* Candidates must hold a medical qualification registrable in this country.
† Candidates must be Fellows or Members of the College.

Forms of Application can be obtained from the Assistant Secretary, and these must be completed and returned by Tuesday, March 30, 1948.

March 6, 1948.
Lincoln's Inn Fields, W.C.2.

W. F. DAVIS,
Assistant Secretary.

UNIVERSITY OF GLASGOW

ADMISSIONS—SESSION 1948–49

Notice is hereby given, that the number of applicants who may be admitted to the following Faculties is limited:

Faculty of Medicine. Faculty of Science. Faculty of Engineering.

Notice is also given, that owing to the return of ex-Service men and women, and for other reasons, it may be necessary to impose a limitation on admissions to the Faculty of Arts.

All who intend to enter the University for the first time in October, 1948, must obtain from the undersigned forms of application for admission, which should be returned as follows:

	Forms available	*To be returned* *Not earlier than*	*Not later than*
Faculty of Arts (including Education, Music, Social Study, and Public Administration)	Feb. 29, 1948	May 1, 1948	May 31, 1948
Faculty of Medicine	Mar. 31, 1948	May 15, 1948	May 31, 1948
Faculty of Science	Feb. 29, 1948	May 1, 1948	May 31, 1948
Faculty of Engineering	Feb. 29, 1948	Mar. 1, 1948	May 31, 1948

Students whose courses have been interrupted by war service, but who are now free to resume study, should make application on the prescribed form, which may also be obtained from the undersigned.

Applicants who wish to have a form sent by post should enclose a stamped addressed envelope.

ROBT. T. HUTCHESON, Registrar.

SOUTH EASTERN HOSPITAL FOR CHILDREN, London, S.E.26.—POSTGRADUATE TEACHING will recommence on May 1. Details of the Summer Course and application forms can be obtained from the Director of Postgraduate Studies, South Eastern Hospital, Sydenham, S.E.26.

THE ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE.—THE CERTIFICATE AND THE DIPLOMA IN PUBLIC HEALTH AND THE DIPLOMA IN INDUSTRIAL HEALTH.—The next **COURSE OF INSTRUCTION** for the Certificate in Public Health (C.P.H.) will commence on Tuesday, March 23, 1948, for the Preliminary Examination of the Conjoint Board of the Royal Colleges of Physicians and Surgeons. The Courses, both for the Certificate and for the Diploma in Public Health, can be taken either whole- or part-time. A Course of Instruction, part-time or whole-time, is also provided for the Diploma in Industrial Health. Part I is the same as, and commences concurrently with, the C.P.H. Course. Those already holding a Certificate in Public Health are exempt from that part. A Course for Part II (D.I.H.) commences in July, 1948. Prospectuses, enrolment forms, and full details of both may be obtained from the Secretary, 28, Portland Place, W.1. (Telephone: LANgham 2731-2).

UNIVERSITY OF LEEDS POSTGRADUATE COMMITTEE.—A REFRESHER COURSE for General Practitioners is being arranged by Leeds University during the two weeks commencing Monday, May 24. The fee for the course will be 10 guineas (or 5 guineas for one week). Schemes of financial assistance are available under which both the fee and travelling, subsistence and locum tenens allowances will, subject to certain conditions, be repaid to:—(a) demobilised general practitioners within one year of release from the Forces; and (b) doctors engaged in practice under the National Health Insurance Acts. Applications for places in the course, and for particulars of the financial assistance available, should be made to the Senior Administrative Officer, School of Medicine, Leeds, 2, it being stated whether the applicant falls into Class (a) or Class (b), or proposes attending at his own expense.

THE COMBINED HOSPITALS POSTGRADUATE SCHOOL OF OBSTETRICS AND GYNAECOLOGY. ROYAL NORTHERN AND CITY OF LONDON MATERNITY HOSPITALS (OBSTETRICS); SOHO AND SAMARITAN HOSPITALS (GYNAECOLOGY).—A Course of training for M.R.C.O.G., M.D., etc. is being given by Prof. F. J. Browne and the Staffs of the above hospitals. Next term begins April 13. Details from Prof F. J. Browne, Hospital for Women, Soho Square, London, W.1

UNIVERSITY OF BRISTOL. POSTGRADUATE COURSE IN CHILD HEALTH.—The University has under consideration the organization of a whole-time **COURSE IN CHILD HEALTH** covering a period of three months and commencing in October, 1948. The Course would be under the direction of Professor Neale of the Department of Child Health in co-operation with the Departments of Preventive Medicine, Medicine, Surgery, Pathology, etc. It would include lectures, demonstrations, ward rounds and visits to clinics and ancillary institutions. The course would be limited to a maximum of twelve students. The fee for the course would be 20 guineas. Applications should be made to, and further details may be obtained from, the Director of Medical Postgraduate Studies, University of Bristol.

UNIVERSITY OF BRISTOL.—A Course for the DIPLOMA IN PHYSICAL MEDICINE (Part I) of the R.C.P. and S.Eng. will commence in September, 1948, at Bristol University. The Course will extend over a period of five months. It will consist of set lectures and practical work in Physics, arranged to comply with requirements for the diploma, and also a short course of revisionary lectures in Anatomy and Physiology, together with advice on literature to be read. Access to the dissecting rooms and laboratories will be provided. In addition, arrangements are being made for attendance at clinics and in the wards and physiotherapy departments of hospitals both at Bath and Bristol for those wishing at the same time to study for Part II of the Diploma. The fee for the Course will be £25. Applications should be made to, and further details obtained from, the Director of Medical Postgraduate Studies, University of Bristol.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

BASIC SCIENCES

A three months' course in Applied Anatomy, Physiology, Pathology, Bacteriology and Biochemistry will begin on July 5, 1948. This course is suitable for postgraduates wishing to take the Primary Fellowship examination. The number attending will be limited to 40. Fee 30 guineas.

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment. 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Basic Sciences, Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

UNIVERSITY OF BRISTOL.—A Course for the **DIPLOMA IN PUBLIC HEALTH** of the University will commence in October, 1948. The Course is divided into two parts. The Preliminary Course for the Certificate (C.P.H.) occupies the first term of ten weeks, the Final Course for the Diploma (D.P.H.) occupies the Spring and Summer terms. The syllabus complies with the rules of the General Medical Council. The Course includes lectures, tutorial classes, laboratory demonstrations and practical classes. Special visits to representative institutions and factories are arranged as part of the course. Instruction is under the direction of a Medical Officer of Health and attendance in the practice of a hospital for infectious diseases can be arranged. The following members of the University staff take part in the instruction: Dr. K. E. Cooper in Bacteriology, Professor J. E. Harris in Zoology, Medical Entomology and Parasitology, Dr. W. Hobson in Preventive Medicine, Professor R. H. Parry, Medical Officer of Health for Bristol, in Public Health Administration and Law, and Professor W. Hamilton Whyte in Social Economics and Statistics. The fee for the Course is: Part I (C.P.H.), £21; Part II (D.P.H.), £31 10s. Further details may be obtained from, and applications should be sent to, the Director of Medical Postgraduate Studies, University of Bristol.

UNIVERSITY OF GLASGOW. POSTGRADUATE MEDICAL EDUCATION COMMITTEE. REFRESHER COURSES FOR GENERAL PRACTITIONERS.—The tenth Course for General Practitioners will be held from May 17 to May 29, 1948. The Course will comprise ten lectures and approximately sixty hours devoted to clinical demonstrations and ward visits. The fee for the Course will be 10 guineas. Schemes for financial assistance are available under which the cost of both the fee and of travelling and subsistence allowances will subject to certain conditions, be repaid to: (a), demobilized general practitioners within one year of release from the Forces, and (b) doctors engaged in practice under the National Health Insurance Acts. Since the numbers will be restricted, both Service and civilian practitioners wishing to attend should make early application to the Director of Postgraduate Medical Education, The University, Glasgow, W.2, from whom further information may be obtained.

UNIVERSITY OF BRISTOL.—A Course for Part I of the University **DIPLOMA IN PSYCHOLOGICAL MEDICINE (D.P.M.)**, provided sufficient applications are received, will commence in September, 1948, and will cover a period of 10 weeks. It will embody lectures and demonstrations in special Anatomy and Physiology, Electro-Encephalography and Psychology. The fee for the course will be 15 guineas. Further details can be obtained from, and applications should be sent to, the Director of Medical Postgraduate Studies, University of Bristol.

UNIVERSITY OF BRISTOL.—Courses of instruction for the **DIPLOMAS IN MEDICAL DIAGNOSTIC RADIOLOGY (D.M.R.D.)** and **THERAPEUTIC RADIOLOGY (D.M.R.T.)** of the University will commence in October, 1948. The Diagnostic Course will cover a period of 18 months and the Therapeutic Course a period of two years of whole-time study. The fee for either course is 50 guineas and the Diploma examination fee is 10 guineas. Copies of the Diploma Regulations and further details may be obtained from, and applications should be sent to, the Director of Medical Postgraduate Studies, University of Bristol.

UNIVERSITY OF BIRMINGHAM. DIPLOMA IN PUBLIC HEALTH.—The next **COURSE OF INSTRUCTION** for the **CERTIFICATE and DIPLOMA IN PUBLIC HEALTH** of the University of Birmingham will begin in October 1948. Candidates eligible for admission are registered medical practitioners who have been qualified for not less than two years. Since arrangements include provision for special instruction for candidates who wish to work in the fields of Child Health, Industrial Health, or Tuberculosis, as well as in Public Health Practice, the numbers are limited to approximately twenty. A syllabus giving details of courses, admission, fees, etc., and forms of application, may be obtained from the Dean, The Medical School, Hospitals Centre, Birmingham, 15.

UNIVERSITY OF MANCHESTER. DIPLOMA IN BACTERIOLOGY.—The Course for the Diploma in Bacteriology will commence in October, 1948. This is a full-time postgraduate course extending over one academic session and is intended for those who desire training for Bacteriological work in connexion with medicine or other branches of science. Enquiries should be addressed to Professor H. B. Maitland, Department of Bacteriology, York Place, Manchester, 13.

LECTURES

EMPIRE RHEUMATISM COUNCIL

The Spring Week-end Course will be held at THE APOTHECARIES' HALL, BLACKFRIARS LANE, QUEEN VICTORIA STREET, E.C.4 (Blackfriars Tube Station), on Friday, Saturday, and Sunday, March 12, 13, and 14, 1948.

LECTURES

FRIDAY, MARCH 12		
4.30–5.30 p.m.	Introductory Lecture	PROFESSOR L. S. P. DAVIDSON, F.R.C.P., F.R.S.E.
5.30–6.30 p.m.	Gout	G. D. KERSLEY, ESQ., F.R.C.P.
SATURDAY, MARCH 13		
10–11 a.m.	Osteoarthritis	ERNEST FLETCHER, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Spondylitis	W. S. TEGNER, ESQ., M.R.C.P.
2–3 p.m.	Juvenile Rheumatism and Still's Disease	R. E. BONHAM-CARTER, ESQ., M.R.C.P.
3–4 p.m.	Non-Articular Rheumatism and Sciatica	W. S. C. COPEMAN, ESQ., O.B.E., F.R.C.P.
4 p.m.	Tea	
4.30–5.30 p.m.	Rheumatoid Arthritis	OSWALD SAVAGE, ESQ., O.B.E., M.R.C.P.
SUNDAY, MARCH 14		
10–11 a.m.	Physical Treatment in the Rheumatic Diseases	H. A. BURT, ESQ., M.R.C.P.
11.15 a.m.–12.15 p.m.	Orthopaedic Aspects of the Rheumatic Diseases	W. D. COLTART, ESQ., F.R.C.S.

The fee for the course will be One Guinea, limited to 100 entries, to be received with remittance, at least one week before, by the General Secretary, Empire Rheumatism Council, Tavistock House (N), Tavistock Square, W.C.1.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES IN SURGERY. MARCH–APRIL, 1948

The following Lectures in Surgery will be delivered at the College in Lincoln's Inn Fields, London, W.C.2 at 5 p.m. on each day:

Tues. 16	MR. A. J. GARDHAM	Surgery of Malignant Disease of the Pharynx
Wed. 17	PROFESSOR LAMBERT ROGERS	Surgery of the Spinal Cord
Thurs. 18	MR. RODNEY MAINGOT	Surgery of Peptic Ulcer
Fri. 19	MR. A. DICKSON WRIGHT	Varicose Veins and Ulcers
Mon. 22	SIR REGINALD WATSON-JONES	Fractures of the Spine
Tues. 23	MR. M. F. NICHOLLS	Surgery of the Urethra and Bladder
Wed. 24	MR. A. HEDLEY WHYTE	Surgery of the Rectum
Thurs. 25	MR. T. TWISTINGTON HIGGINS	Urinary Obstruction in Childhood
Tues. 30	MR. R. M. HANDFIELD-JONES	Some less usual examples of acute Intestinal Obstruction
Wed. 31	PROFESSOR G. GREY TURNER	Surgery of the Spleen
Thurs. 1	SIR HENEAGE OGILVIE	Scrotal Swellings
Fri. 2	MR. R. SCOTT MASON	Surgery of the Duodenum

The fee for the whole Course is £5 5s., or 10s. for one Lecture.

Fellows and Members, and Fellows and Licentiates in Dental Surgery, of the College will be admitted to the whole course on payment of a fee of £3 3s., or to one Lecture on the payment of 7s. 6d.

Applications, accompanied by a cheque for £5 5s. or £3 3s., should be sent to the Secretary, Postgraduate Education Committee, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

Closing date not later than Friday, March 12, 1948.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES IN ANAESTHESIA—APRIL, 1948

The following Lectures in Anaesthesia will be delivered at the College in Lincoln's Inn Fields, London, W.C.2, at 6.15 p.m. on each day:

Mon. 5	DR. JOAN MILLAR	Anaesthesia for Thoracic Surgery
Tues. 6	DR. GEOFFREY ORGANE	Endotracheal Anaesthesia and Anaesthesia for Maxillo-Facial Surgery
Wed. 7	DR. J. K. HASLER	Pre-anaesthetic Treatment
Thurs. 8	DR. HERBERT H. PINKERTON	Anaesthesia for Urological Surgery
Fri. 9	DR. STANLEY ROWBOTHAM	Regional Analgesia
Mon. 12	DR. W. S. MCCONNELL	Anaesthesia for Dental Surgery
Tues. 13	DR. FRANKIS EVANS	Anaesthesia for Rectal Surgery
Wed. 14	DR. HOWARD BRUCE WILSON	Anaesthesia for Children
Thurs. 15	DR. JOHN BEARD	Post-anaesthetic Treatment
Fri. 16	DR. WILLIAM W. MUSHIN	Applied Anatomy
Mon. 19	PROFESSOR D. T. HARRIS	Physiology of Respiration
Tues. 20	DR. KATHERINE LLOYD-WILLIAMS	Anaesthesia in Obstetrics

The fee for the whole Course is £5 5s. or 10s. for one Lecture.

Fellows and Members, and Fellows and Licentiates in Dental Surgery, of the College will be admitted to the whole Course on payment of a fee of £3 3s. or to one Lecture on the payment of 7s. 6d.

Applications, accompanied by a cheque for £5 5s., or £3 3s., should be sent to the Secretary, Postgraduate Education Committee, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

ROYAL EYE HOSPITAL,
St. George's Circus, S.E.1

LECTURES—SPRING TERM, 1948

LAURENCE-HOLTHOUSE MEMORIAL LECTURES

PHYSIOLOGY OF THE EYE

Dr. DAVID SLOME, M.A., M.B., Ph.D., and Dr. C. A. KEELE, M.D., M.R.C.P. *FRIDAYS*—April 16, 23, 30; May 7, 14, 21, 28; June 4, 11, 18, 25; July 2—at 5.30 p.m.

MALCOLM McHARDY MEMORIAL LECTURES

ANATOMY OF THE EYE AND ORBIT

Professor THOMAS NICOL, M.D., D.Sc., F.R.C.S.(Ed.) *MONDAYS*—May 10, 24, 31; June 7, 14, 21, 28; July 5—at 5.30 p.m.

ARTHUR D. GRIFFITH MEMORIAL LECTURES

OPTICS

Mr. J. F. P. DELLER, M.A., B.Sc. *MONDAYS*—March 15, 22; April 5, 12, 19, 26; May 3 and *WEDNESDAY*, May 12—at 5.30 p.m.

INTRODUCTORY LECTURES IN OPHTHALMOLOGY

Mr. L. H. Savin, M.D., M.S., M.R.C.P., F.R.C.S. *WEDNESDAYS*—March 24, 31; April 7, 14, 21, 28—at 5 p.m.

OPHTHALMIC NEUROLOGY

Mr. L. H. SAVIN, M.D., M.S., M.R.C.P., F.R.C.S. *WEDNESDAYS*—May 26; June 9, 23; July 7—at 5 p.m.

CURRENT PROBLEMS IN OPHTHALMOLOGY

Professor ARNOLD SORSBY, M.D., F.R.C.S. PENICILLIN—*THURSDAY*, May 27. GENETICS—*THURSDAYS* June 3 and 10. DETACHMENT OF THE RETINA—*THURSDAY*, July 1—at 5 p.m.

OPERATIVE SURGERY

Mr. B. W. RYCROFT, O.B.E., M.D., F.R.C.S. *WEDNESDAYS*—May 5, 19; June 2, 16, 30; July 14—at 5 p.m.

ASSOCIATION OF EYE DISEASE WITH AFFECTIONS OF THE NOSE

Mr. T. M. TYRRELL, B.A., M.B., F.R.C.S. *TUESDAYS*—March 16, 23, 30—at 5 p.m.

PATHOLOGY

Miss J. M. DOLLAR, M.S., F.R.C.S. *THURSDAYS*—April 8, 15, 22, 29; May 13, 20—at 5.30 p.m.

MEDICAL OPHTHALMOLOGY

Mr. A. J. CAMERON, M.B., F.R.C.S.E. *FRIDAYS*—March 12, 19; April 2, 9—at 5 p.m.

SCIENCE AND ART OF REFRACTION

Dr. T. H. WHITTINGTON, M.D., M.R.C.P. *TUESDAYS*—April 6, 13, 20, 27; May 4, 11—at 5 p.m.

CONTACT LENSES

Dr. C. G. KAY SHARP, M.D. Wednesday, March 17, at 5 p.m.

PRACTICAL COURSES

PATHOLOGY AND BACTERIOLOGY

Miss M. SAVORY, M.B., F.R.C.S.E. and Dr. A. C. CUNLIFFE, M.D. *TUESDAYS*—April 27; May 4, 11, 18, 25; June 1—at 4 p.m.

REFRACTION

A practical course will be arranged in conjunction with the lectures by Dr. T. H. WHITTINGTON.

OPERATIVE SURGERY

Miss J. M. DOLLAR, M.S., F.R.C.S., and Miss MARY SAVORY, M.B., F.R.C.S.E. By arrangement.

The Lectures are open to both postgraduate and undergraduate students. For the practical courses a fee of £5 5s. will be charged for each subject.

Those wishing to attend any of the Lectures, or the Classes, are requested to obtain tickets of admission for their specific subjects from the Secretary of the Medical School.

B. W. RYCROFT, O.B.E., M.D., F.R.C.S.,
Dean.

ASSISTANTSHIPS

VACANT

Wanted. Lady Assistant, London, N.1. Salary not less than £780 per annum; free furnished quarters, attendance, and part fuel and light. No midwifery.—Box 9051, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2

Wanted, Newcastle-upon-Tyne, Assistant, male or female, better working and middle-class practice. Work very light, might suit someone studying for higher qualifications. Car owner preferred.—Box 9093, B.M.J.

Wanted. Single Male Assistant for mixed country practice. Wye Valley. Car available. Dispenser kept.—Box 9050, B.M.J.

Wanted immediately, young Irish Assistant. Midland town. Outdoor. Salary £700. Permanent prospect good.—Box 9071, B.M.J.

Wanted. Reliable energetic Outdoor Male Assistant for mixed practice in Staffs. town. Salary by arrangement according to experience. Suit single man as no house available at the moment.—Box 9083, B.M.J.

Wanted. Assistant, preferably single. Industrial practice Essex. Own car essential.—Box 9072, B.M.J.

Wanted immediately. Experienced Assistant required. Essex London suburb. Salary £700 per annum.—Box 9073, B.M.J.

Wanted. Assistant for general practice, Walvis Bay, South West Africa. Newly qualified bachelor preferred. £45 per month with board and travelling expenses. Sea passage arranged almost immediately. Further particulars by air mail from Dr. McConnell, District Surgeon, Walvis Bay, South West Africa.

Wanted, young, single, Indoor Assistant, mixed village practice, 2 miles from large town on N.E. Coast. Good prospects for suitable applicant. Car owner preferred.—Box 9006, B.M.J.

Male, Christian Doctor wanted soon, as Assistant with View, in four-handed industrial general practice, South London riverside borough. Good opportunities for work amongst youth. Accommodation available.—Box 8738, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments.—Write A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool 1.

WANTED

Wanted, by experienced medical practitioner, Part or Whole-time Assistantship, or other Medical Work, in Tunbridge Wells area. Highest references. Own car.—Box 9009, B.M.J.

Wanted. Assistantship by practitioner with own car. Hospital, G.P. and midwifery experience. Outdoor. Preferably London or 30 miles radius.—Box 9086, B.M.J.

Wanted. Assistantship by experienced man with or without View, keen on midwifery. Over two years in recent G.P. appointment, age 33 years. Own car, single. Irish M.B. Excellent references.—Box 9090, B.M.J.

Wanted, Assistantship by M.B., Ch.B., 1947, in Bristol area. Aged 38, married, two children. G.P. experience. Wife M.B., Ch.B., prepared to help with surgeries later.—Box 9094, B.M.J.

Wanted, Assistantship with or without View, by ex-R.N.V.R., 31, married. Own car. Accommodation essential.—Box 9007, B.M.J.

Assistantship with View, wanted now by M.B., B.Ch., B.Sc., Ex-S/Ldr. R.A.F.V.R. 3½ years' hospital appointments. G.P. experience as locum and overseas. Competent surgical emergencies and experienced anaesthetist, 28, English, married, one child. Unfurnished accommodation, garden essential. New car April. North West England, South Wales, part country and with hospital appointments preferred. Own capital.—Box 9074, B.M.J.

Assistantship with View by April to equal share or succession required now by experienced ex-principal in congenial town, Scotland, North England.—Box 9010, B.M.J.

Assistantship wanted, View permanency, by experienced Scottish woman graduate, interested antenatal, midwifery. Scotland preferred.—Box 8709, B.M.J.

British Doctor, married, no family, experienced G.P., wishes Furnished of Unfurnished Accommodation in Exchange Services. Doing postgraduate course.—Box 9097, B.M.J.

Doctor (Bachelor) doing postgraduate work requires Part-time Assistantship in London area.—Box 9095, B.M.J.

Morning Surgeries. Postgraduate available for 2 to 3 morning surgeries weekly, London.—Box 9052, B.M.J.

Postgraduate Student with previous G.P. experience available for Evening Surgeries, or Night Calls in return for Accommodation.—Box 9084, B.M.J.

Southern England. Part-time Work required by London M.B., B.S. Ex-R.A.M.C., aged 28, married. Available April.—Box 9085, B.M.J.

Sheffield, young married woman, M.D., ex-R.A.M.C., requires Part-time G.P. Work in Sheffield.—Box 9008, B.M.J.

Woman Doctor, well qualified, experienced Hospital, Public Health, General Practice. Available for temporary or Permanent Post, London or near. Own car.—Box 9096, B.M.J.

LOCUMS

VACANT

Wanted, Co. Durham, Locum, March 24 to April 5, 14 guineas weekly, all found. Car provided or allowance.—Box 9025, B.M.J.

Wanted, Locum for 8 to 10 weeks, commencing approximately March 20. Own car essential. No accommodation for family.—Apply Dr. Heydon, 72, Five Mile Drive, Oxford. Tel: 59098 evenings.

Wanted, Locum with possible View Partnership, mixed practice, some midwifery, Hampshire Urban District, March 15 for some weeks. 14 guineas week.—Box 9026, B.M.J.

Wanted for occasional Short Locums, being "on call," etc., doctor resident W.9 or W.2 (further if car). Particulars to Box 9098, B.M.J.

Wanted, reliable and experienced Locums for town and country practices. State full particulars. —British Medical Bureau, 33, Cross Street, Manchester, 2.

Locum for three weeks commencing April 7, hospitality, to wife if required. No midwifery.—Box 9013, B.M.J.

St. Andrew's Hospital, Thorpe, Norwich. Resident Locum Tenens for one month in May, with possibility of extension. Mental hospital experience desirable. Salary twelve to fifteen guineas weekly, plus the usual emoluments.—Apply to Medical Superintendent

AVAILABLE

Available: M.B., B.Ch., B.A.O., hospital, G.P. experience, do Locums, Assistantship or Surgeries, Stoke-on-Trent area. Free middle of March.—Box 9014, B.M.J.

Experienced G.P., aged 49, qualified 1939, having sold own practice, desires Locum Work anywhere. Short or long periods. British. Own car. Wife available if convenient.—Allcock, Crowhurst, Sussex, 'phone 11.

G.P. woman, 40. On Locums exclusively for twelve months. Accustomed to taking over. Own car, free April 6 to June 6, July 9 to 23, August 14 to 28.—Box 9054, B.M.J.

Locums available: Reliable doctor, own car, with hospitality for wife. Easter and first week April. Vicinity Sutton, Surrey. Moderate terms.—Box 9053, B.M.J.

PARTNERSHIPS

OFFERED

Leicester. One Half Share in practice of £8,000. Panel 2,400.—Box P9029, B.M.J.

North-West London. Half Share worth £1,000 per annum. Unique private cash practice. Scope young man. Two years' purchase.—Box P9028, B.M.J.

No Capital Required. 1/3 share offered free in well established practice in Birmingham. Indian or African preferred.—Box P9055, B.M.J.

Partner wanted in woman's practice, Essex suburb. Freehold house available.—Box P9027, B.M.J.

Required, Third Partner for Third Share, old established practice, desirable county town 35 miles south of London Panel 3,000, gross receipts about £4,200. Keen, healthy, well-qualified physician, experienced general practice, aged 35 to 40 preferred. Central Surgery. Premium £3,000.—Box P9030, B.M.J.

1/3 Share and early Succession. £4,000, old established Practice, residential district, Merseyside. Panel 1,500. Suit man with higher qualifications or much experience. Modern house for sale.—Box P9099, B.M.J.

WANTED

Wanted by woman M.B., B.Ch., D.P.H., 1941, 29 years, Partnership, preliminary Assistantship if required. Good hospital and G.P. experience. Interested midwifery Married, no family. House to rent if possible or purchase. Own car and furniture. Keen worker, England or Scotland. All replies answered.—Box P9034, B.M.J.

Wanted, Partnership or Short Assistantship with View to Partnership by M.R.C.S., L.R.C.P (Bart's) 1943, British, 29, married, two children, ex-R.A.M.C., own car and furniture. Extensive hospital and some G.P. experience. Income £1,500 or over. Country town or semi-rural preferred.—Box P9057, B.M.J.

Wanted by woman M.B., D.P.H. (1941), 29 years, Partnership after Preliminary Assistantship. Good hospital and G.P. experience. Own car. House to rent. Keen worker.—Box P9015, B.M.J.

Wanted, April, Partnership, England, producing £2,000, by M.B., Ch.B. Aberdeen, 27, married, two years hospital, two years G.P. experience. House to rent. Own car.—Box P8741, B.M.J.

Wanted by woman M.B., D.P.H., Partnership, preferably 25 miles radius Coventry. Experienced hospital and G.P. Unfurnished accommodation required.—Box P9033, B.M.J.

Lady doctor, aged 36, single, 7 years' G.P. experience in present job, seeks Partnership London or Suburb. Experienced in Birth Control.—Box P9058, B.M.J.

Partnership wanted by experienced G.P., married, aged 32, ex-R.A.M.C., St. George's Hospital. Share, £1,500 upwards. Reply in strict confidence to Box P8769, B.M.J.

Midlands. Half Share solidly established Practice. Panel 4,000. Certified tax returns 1945-48 £4,200, £5,300, £6,500. Receptionist. Assistant employed but optional. Furnished flat over surgeries and car available Large income, congenial work. £5,000 including half share, car and furniture.—Box P8783, B.M.J.

Partnership, or Practice wanted in Newcastle-upon-Tyne by experienced G.P. Capital available. —Box P9032, B.M.J

Woman doctor, single, aged 36, capable and well experienced, desires Partnership or Practice in Southern England, Kent or Surrey preferred. Own car and furniture.—Box P9056, B.M.J.

Somerset, Wilts, or neighbouring. Active young practitioner, much general and hospital experience eagerly seeks Partnership. Willing purchase house to open branch surgery. Capital available.—Box P9031, B.M.J.

MEDICAL POSTS

VACANT

Wanted, by Medical Group in Central Canada (Ontario) an Eye, Ear, Nose and Throat Surgeon. Apply, stating age, training, experience, references, with recent photograph to Box 9020, B.M.J.

Bacteriologist required, with Honours Science degree in Bacteriology, for Pathology Department, Royal Northern Infirmary, Inverness, to work under the direction of the Pathologist. Salary £500 per annum, rising by yearly increments of £25 to £650, with a possibility of a further increase to £750. Applications, with testimonials or names and addresses of two referees, should reach the Medical Superintendent by March 20.

China: Friends Service Unit requires two Doctors for service with voluntary pacifist unit in China. Usual maintenance expenses provided. Particulars from, and applications to, General Secretary, Friends Service Council, Friends House, Euston Road, London, N.W.1.

Electrocardiograph Technician required by Middlesex County Council at Hillingdon County Hospital, near Uxbridge, Middlesex. Previous experience in this work and in the care of equipment is essential. Knowledge of photography an advantage. Salary £285 by £15 to £330 per annum, plus any temporary bonus (now £60 per annum). Established, subject to medical exam. Whole-time duties such as Council may require, under supervision of Medical Director. Applications, stating age, nationality, qualifications, etc. to Medical Director of Hospital by March 20. No forms. (Quoting D.726. B.M.J.)

Lister Institute of Preventive Medicine, Elstree, Herts. Assistant Bacteriologist required in Vaccine Lymph Dept. Facilities for research. Salary £650 to £800 (F.S.S.U.) according to age and experience. Application by letter stating age, qualifications and experience with names of two referees to Bacteriologist-in-charge.

Resident Psychiatrist required in Nursing Home run for group of analytical Psychologists. Married quarters available with full board. Appointment includes two weekly Out-patient Clinic sessions. Emoluments approx. £700 per annum.—Apply Dr. Partridge, Lympstone Grange, Devon.

WANTED

Medical practitioner holding D.P.H. (Cantab) desires Medical Post, Assistantship, Locums. Well qualified, experienced Public Health, general practice. Army service. London area preferred.—Write, Dr. Bulsara, 34, Elgin Avenue, Kenton, Middlesex.

PRACTICES

FOR SALE

Country Practice, Yorks and Lincs border, average receipts last three years £4,105. Panel patients 2,560 at 1½ years' purchase. Modern house with five bedrooms, 3 garages, orchard, tennis court, etc., valued £4,000. Branch surgery house to rent. Would suit principal and assistant or two partners. Reason for sale, one partner specializing and the other going abroad.—Apply Reynolds & Branson, Ltd., Leeds. (Medical Agency).

Durham Coast. Well established Mixed Practice. Panel 3,500 units, good club, appointments, midwifery. Gross income £5,000 per annum. Also good house with large garden and garage for two cars, apart from surgeries. Suit two partners or principal with Assistant. Good reason for disposal. —Box P9075, B.M.J.

Excellent Practice and House for Sale. Panel over 3,000. Total income £3,500. 1½ years' purchase. Pleasant West London area.—Box P9087, B.M.J.

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Freehold, Sixteen rooms, 4 lavatories, double bathroom, garage and outbuildings. Sanding on 15,000 sq. ft. land. 50 ft. frontage opposite Lewisham hospital and Municipal buildings. Main Road. Water and electric light in every room. All decorated in cream and brown. Fully furnished with modern pre-war furniture of best quality. Carpet in all rooms. The complete home, lock, stock and barrel. Present owner going abroad (vacant possession £10,000). Also Vauxhall 10, 1939 saloon £450. Phone Lee Green 3972.

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Nursing Home run like first-class private house. Resident medical man and wife. Certificated nurses. Rest cures, neurasthenics and convalescents (not certified, malignant nor tubercular). Guests also received. Lounge hall, large dining room, lovely drawing room. Own poultry. Very private garden. Beautiful country. Shops 4 minutes. London 40 minutes. Very comfortable. Quiet. Good catering and cooking Consultants and other medicals can visit their own patients.—C. F. Fothergill, M.B., B.Ch., "Hensol," Chorley Wood, Herts. (Phone: Chorley Wood 24).

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APPOINTMENTS

(Continued from page 23)

Have you read the notice at top of page 13 ?

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Doncaster Gate, Rotherham
CONSULTANT GYNAECOLOGIST

Applications are invited from registered medical practitioners for the above post. Applicants must have the qualification M.R.C.O.G., and a higher qualification in surgery will be considered an advantage. Salary £1,000 per annum. The person appointed will be allowed to engage in private consultant practice Applications to be sent as soon as possible to the Secretary-Superintendent.

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Doncaster Gate, Rotherham
(General Voluntary Hospital)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the post of Resident Surgical Officer (B1), vacant on March 20, 1948. This is the senior resident appointment of the hospital, and preference will be given to candidates holding a higher qualification in surgery or studying to obtain one. Applications from R practitioners who hold B1 appointments cannot be considered unless they are in ligible for H.M. Forces. Salary according to qualifications and experience, but not less than £400 per annum to commence, with full residential emoluments. Applications to be sent forthwith to the Secretary-Superintendent.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL

Applications are invited from registered medical practitioners, male or female, for the following appointments in the Department of Neuro-Surgery:

(a) **CLINICAL ASSISTANT.** Salary rate £350 per annum resident.

(b) **FIRST ASSISTANT.** Salary rate £550 per annum resident.

The appointments, in the first instance, are for twelve months and renewable for a further twelve months. Applications to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

SOUTHAMPTON CHILDREN'S HOSPITAL
(63 beds)
SECOND RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Second Resident Medical Officer (B2) for the post becoming vacant early in March. Salary is at the rate of £150 per annum with full residential emoluments. R practitioners holding A posts may apply when appointment will be limited to six months. Special preference will be given to those intending to specialize in Paediatrics. The Hospital is recognised by the Conjoint Board for the Diploma in Child Health Applications should be sent to the undersigned immediately.—Ella K. Matthews, Secretary.

STOCKTON AND THORNABY HOSPITAL
Stockton-on-Tees (135 beds, 3 Residents)
HOUSE PHYSICIAN alternating CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the above post becoming vacant April 1, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts, when appointment will be for a period of six months. Salary £200 per annum with full residential emoluments Applications should be sent to the undersigned as soon as possible.—J. Wilkinson, Secretary-Superintendent.

ST. MARK'S HOSPITAL FOR DISEASES OF THE RECTUM AND COLON
City Road, London, E.C.1
CLINICAL ASSISTANTSHIPS
in the Out-patients' Department

Applications are invited for Clinical Assistantships in the Out-Patients' Department on Monday and Wednesday afternoons, and Saturday mornings. The appointments are for three months in the first instance, commencing April 1 next, and a fee of three guineas is payable on appointment. Applications to be sent to the Secretary, from whom further particulars may be obtained, not later than March 13.

SAINT MARY'S HOSPITALS, Manchester
GYNAECOLOGICAL HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of Gynaecological House Surgeon (A), for a period of six months. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Salary at the rate of £75 per annum with full residential emoluments. Applications to be sent to the undersigned immediately.—A. R. Wise, General Superintendent.

SOUTHAMPTON CHILDREN'S HOSPITAL
Winchester Road, Shirley
HONORARY CHILD PSYCHIATRIST

The Board of Management invite applications for the appointment to the Honorary Medical Staff of a Child Psychiatrist. Applications should be sent to the undersigned not later than March 12.—Ella K. Matthews, Secretary.

SALFORD ROYAL HOSPITAL (256 beds)
RESIDENT ANAESTHETIST (B2)

Salary £175 per annum, plus full residential emoluments. R practitioners who hold A posts may apply. Appointment for six months. Applications should be made at once on a special form obtainable from the undersigned, accompanied by copies of three testimonials.—H. B. Shelswell, General Superintendent and Secretary.

SALISBURY GENERAL INFIRMARY (270 beds)
RESIDENT ANAESTHETIST (B2)

Resident Anaesthetist (B2), vacant March 15 R practitioners holding A appointments are invited to apply. Appointment for six months. Salary £200 per annum, full residential emoluments. Applications should be sent to the Superintendent and Secretary immediately.

SALISBURY GENERAL INFIRMARY (270 beds)
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the appointment of Resident House Surgeon (B2). Salary at the rate of £200 per annum, with full residential emoluments. The appointment will be for a period of six months. It is desirable that the successful applicant should commence duties on April 1, 1948. Applications should be sent as soon as possible to Superintendent and Secretary.

SOUTH LONDON HOSPITAL FOR WOMEN
Clapham Common, S.W.4
HOUSE SURGEON (A)

Applications are invited from registered women medical practitioners for the appointment of House Surgeon (A) (now vacant). The appointment will be for a period of six months. Salary is at the rate of £150 per annum with full residential emoluments. Applications should reach the Secretary at the Hospital as soon as possible.

SOUTHEND-ON-SEA GENERAL HOSPITAL
HOUSE PHYSICIAN (B2)

Applications are invited from male practitioners for the post of House Physician (B2), vacant April 1. This post recognised for D.C.H. Salary will be at the rate of £200 per annum with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to reach the undersigned by March 17.—John Williams, House Governor and Secretary.

SOUTHEND-ON-SEA GENERAL HOSPITAL
JUNIOR CASUALTY OFFICER (B2)

Applications are invited for the post of Junior Casualty Officer (B2), now vacant. Salary will be at the rate of £200 per annum with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to reach the undersigned immediately.—John Williams, House Govenor and Secretary.

SOUTHEND-ON-SEA GENERAL HOSPITAL
GYNAECOLOGICAL HOUSE SURGEON (B2)

Applications are invited for the post of Gynaecological House Surgeon (B2), now vacant. Salary will be at the rate of £200 per annum with full residential emoluments. R practitioners holding A posts may apply when the appointment will be limited to six months. Applications to reach the undersigned immediately.—John Williams, House Governor and Secretary.

ST. MARK'S HOSPITAL FOR DISEASES OF THE RECTUM AND COLON
City Road, London, E.C.1
CLINICAL ASSISTANT
in the X-ray Department

Applications are invited for a Clinical Assistant in the X-ray Department. The appointment is for three months in the first instance, commencing April 1 next. Applications to be sent to the Secretary, from whom further particulars may be obtained, not later than March 13.

ST. MARY'S HOSPITAL, London, W.2
ASSISTANT ORTHOPAEDIC SURGEON

Applications are invited for the post of Assistant Orthopaedic Surgeon. Candidates must be Fellows of the Royal College of Surgeons of England. The appointment is for a period of five years, at the expiration of which time the holder will be eligible for re-election. Applications (four copies), stating the names of three referees should reach the undersigned by March 20, 1948.—W. Parkes, House Governor.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
Voluntary Hospital—201 beds (5 R.M.O.s.)
SENIOR HOUSE SURGEON (B1)

Applications invited from medical practitioners for above post vacant in April, 1948 Salary £250 per annum with full residential emoluments. Holders of B1 appointments cannot be considered unless ineligible for H.M Forces. Excellent experience in Orthopaedic and General Surgery. Applications to be forwarded to the Superintendent-Secretary as soon as possible.

TILBURY HOSPITAL, Tilbury, Essex
RESIDENT HOUSE PHYSICIAN AND ANAESTHETIST (B1)

Applications are invited for the post of Resident House Physician and Anaesthetist (B1), now vacant. Salary £300 per annum, with full residential emoluments. Suitably qualified R practitioners holding B2 posts, or those holding B1 posts, being eligible for H.M. Forces, may apply. The appointment will be for six months in the first instance. Applications to be sent as soon as possible to the Secretary.

TIVERTON AND DISTRICT HOSPITAL
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A), vacant now, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments. Apply Secretary.

VICTORIA HOSPITAL, Deal
RESIDENT MEDICAL OFFICER (B2)

Applications are invited for the post of Resident Medical Officer (B2) at the above hospital, including R practitioners who hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary £300 per annum with emoluments, and is open to unmarried male applicants.—F. C. Yates, Secretary.

VICTORIA HOSPITAL FOR SICK CHILDREN
Park Street, Hull
ASSISTANT PHYSIOTHERAPIST (Non-resident)

Assistant Physiotherapist required. Non-resident. Salary as per J.N.C. and F.S.S.N. and H.O. Scheme in force. Apply with full particulars to Matron.

VICTORIA HOSPITAL, Worksop, Notts (150 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those in H.M. Forces, for the appointment of Resident Surgical Officer (B1) to become vacant on March 16, 1948. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £350 per annum with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and ineligible for H.M. Forces, may apply. Applications should be sent as early as possible to the Secretary-Superintendent.

VICTORIA CENTRAL HOSPITAL, Wallasey
HOUSE PHYSICIAN (A)

Applications for the above post are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointment will commence on April 1, 1948, and will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned as early as possible.—J. B. Daniels, Acting Secretary-Superintendent.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
Watford, Herts (206 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A), vacant immediately. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be limited to six months. Salary is at the rate of £200 per annum with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M. Maskell, Administrator.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
Watford, Herts (206 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of House Surgeon (B2), vacant March 15. R practitioners who hold A posts may also apply when appointment will be limited to six months. Salary wil be at the rate of £200 per annum with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned.—H. M. Maskell, Administrator.

WALSALL GENERAL HOSPITAL (181 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant April 1. Salary £300 per annum plus full residential emoluments. Applicants should have held house appointments and had surgical experience. Suitably qualified R practitioners holding B2 appointments and those holding B1 and ineligible for H.M. Forces may apply. Applications should be forwarded to the House Governor and Secretary.

WEST CORNWALL HOSPITAL, Penzance
ASSISTANT PATHOLOGIST

Applications are invited from ex-Service Specialists for the above appointment approved by the Ministry of Health under Circular 202/46. The post is a full-time one and private practice is not permitted. Salary is at the rate of £1 000 per annum. The Assistant Pathologist will work under the general direction of the Honorary Pathologist to the Hospital and will be an Assistant Member of the Area Laboratory Staff when this is established. Applications must reach the undersigned not later than March 15, 1948.—K. I. Newell, Secretary-Superintendent.

WEST LONDON HOSPITAL
Hammersmith, W.6 (240 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited for the above appointment to become vacant on April 14, from registered medical practitioners, including R practitioners who now hold A posts. The appointment will be for a period of six months and may be terminated by one month's notice on either side. Salary at the rate of £150 per annum, with the usual residential emoluments. Applications, with particulars of medical school, must reach the undersigned by first post Tuesday, March 9. Please state telephone number (if any).—C. R. Lockhart, Secretary.

WEST CORNWALL HOSPITAL
Penzance (116 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) vacant now. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent to K. I. Newell, Secretary-Superintendent.

WEST KENT GENERAL HOSPITAL
(Incorporated), Maidstone (135 beds)
TWO HOUSE SURGEONS (A or B2)

Applications are invited from registered medical practitioners (male and female) for the appointment of Two House Surgeons (A or B2). Posts vacant March 29 and April 5 respectively. The appointment will be limited to six months. Salary at the rate of £200 per annum with full residential emoluments. Applications should reach the undersigned forthwith.—Edward J. Gregg, House Governor and Secretary.

WESTMORLAND COUNTY HOSPITAL
Kendal (82 beds)
HOUSE SURGEON (B2)

Application are invited from registered medical practitioners for the appointment of House Surgeon (B2), non-resident, to become vacant at end of March. Salary £450 per annum. R practitioners who now hold A posts may apply, when appointment will be limited to six months; otherwise may be extended. Applications should be sent without delay to J. M. Somervell, Hon. Secretary.

WORKINGTON INFIRMARY (capacity 60 beds)
HOUSE SURGEON (B2) (male)

Applications are invited for the appointment of House Surgeon (B2) (male), vacant now, including R practitioners who now hold A posts. If held by an R. practitioner the appointment will be limited to six months. Salary is at the rate of £300 per annum, with full residential emoluments. Applications should be sent immediately to Dr. T. T. Graham, Honorary Medical Secretary.

WEST SUFFOLK GENERAL HOSPITAL
Bury St. Edmunds

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following appointment:—

HOUSE SURGEON (A) with responsibility for E.N.T. and general surgery. Now vacant. Salary £200 per annum. Appointment normally for six months. Applications should be addressed to the Secretary, E. E. Hardwicke, F.H.A.

WOKING VICTORIA HOSPITAL
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of Resident Medical Officer (A), vacant immediately. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply, when the appointment will be limited to six months. Salary £150 with full residential emoluments. Applications to be addressed to the Hon. Secretary.

YORK COUNTY HOSPITAL (222 beds)
HOUSE SURGEON (B2)
mainly Eye, Ear, Nose and Throat Department

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) whose main duties are in the Eye, Ear, Nose and Throat Department (37 beds, with busy Out-patient Clinics), but who will share in the general work of the hospital and in casualty duty, including R practitioners who now hold A posts. If held by an R practitioner appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments. This post is recognized for D.O.M.S. and D.L.O. examinations and becomes vacant on April 1, 1948. Applications to be sent to the undersigned by March 15, 1948.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
RESIDENT ORTHOPAEDIC HOUSE SURGEON AND CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic House Surgeon and Casualty Officer (B1), vacant now. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £350 per annum, with full residential emoluments. Applications should be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (222 beds)
PART-TIME V.D. OFFICER
for the County Hospital and the City of York

Applications are invited for the post of part-time V.D. Officer for the County Hospital and the City of York, vacant April 1. Salary £700 per annum (based on the agreed scale of fees for part-time consultants employed by Public Health Authorities). Private work is permitted. Applicants should produce evidence of special experience in V.D. work. Applications should be made by March 15, to the undersigned.—J. R. Mackrill, Secretary.

GLOUCESTERSHIRE ROYAL INFIRMARY
(250 beds)
ORTHOPAEDIC HOUSE SURGEON (A)
(vacant April 6, 1948)
HOUSE SURGEON (A)
(vacant now)

Applications are invited from registered medical practitioners (male or female), including practitioners within three months of qualification who are liable for National Service under the National Service Acts, for the above posts. The appointments are for six months in the first instance, and the salary in each case is £200 per annum, with full residential emoluments. Applications to C. J. Adams, House Governor and Secretary, Royal Infirmary, Gloucester.

Have you read the notice at top of page 13 ?

HOMES

ST. ANDREW'S HOSPITAL, NORTHAMPTON
For Nervous and Mental Disorders

President: The Most Hon. the MARQUESS OF EXETER, K.G., C.M.G., A.D.C. Medical Supt.: Thomas Tennent, M.D., F.R.C.P., D.P.H., D.P.M. This Registered Hospital is situated in 130 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or who wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in Hospital or in one of the numerous villas in grounds of the various branches can be provided.

WANTAGE HOUSE.—This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped with all the apparatus for the complete investigation and treatment of Mental and Nervous Disorders by the most modern methods; insulin treatment is available for suitable cases. It contains special departments for hydrotherapy by various methods, including Turkish and Russian baths, the prolonged immersion bath, Vichy Douche, Scotch Douche, Electrical baths, Plombières treatment, etc. There is an Operating Theatre, a Dental Surgery, an *X*-ray Room, an Ultra-Violet Apparatus, and a Department for Diathermy and High-frequency Treatment. It also contains laboratories for biochemical, bacteriological, and pathological research. Psychotherapeutic treatment is employed when indicated.

MOULTON PARK.—Two miles from the main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres. Milk, meat, fruit, and vegetables are supplied to the Hospital from the farm, gardens and orchards of Moulton Park. Occupational Therapy is a feature of this branch, and patients are given every facility for occupying themselves in farming, gardening and fruit-growing

BRYN-Y-NEUADD HALL.—The seaside house of St. Andrew's Hospital is beautifully situated in a park of 330 acres at Llanfairfechan amidst the finest scenery in North Wales. On the North-West side of the Estate, a mile of sea-coast forms the boundary. Patients may visit this branch for a short seaside change or for longer periods. The hospital has its own private bathing house on the seashore. There is trout-fishing in the park

At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts (grass and hard courts), croquet grounds, golf courses, and bowling greens. Ladies and gentlemen have their own garden, and facilities are provided for handicrafts such as carpentry, etc

For terms and further particulars apply to the Medical Superintendent (Telephone Nos.: 2356 and 2357 Northampton), who can be seen in London by appointment.

THE COPPICE, NOTTINGHAM
Hospital for Mental Diseases

This Institution is exclusively for the reception of a limited number of Private Patients of both sexes at moderate rates of payment. It is beautifully situated in its own grounds on an eminence a short distance from Nottingham, and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted. Occupational Therapy. Voluntary and Temporary Patients received. Tel: 64117. For terms, etc., apply to the Medical Superintendent.

THE COTSWOLD SANATORIUM

On the Cotswold Hills 7 miles from Cheltenham, Gloucester and Stroud. Equipped for treatment of all forms of TUBERCULOSIS. Terms from 8 guineas per week. Particulars from Secretary, Cotswold Sanatorium, Cranham, Gloucester. 'Phone: Witcombe 2181. 'Grams: Hoffman, Birdlip

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CRICHTON ROYAL, DUMFRIES
For Nervous and Mental Disorders
Vacancies for recent cases only

CASES OF ALCOHOLISM and DRUG ADDICTION admitted. General amenities of highest standard. Every facility for all forms of treatment, including insulin and prefrontal leucotomy. Terms moderate. Physician-Supt., P. K. McCowan, J.P., M.D., F.R.C.P., D.P.M., Barrister at Law. Telephone: Dumfries 1900.

The Psychoneuroses and Neurasthenia

BOWDEN HOUSE
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Diagnostic Week.—All patients are put through a routine series of clinical, pathological and radiological tests, as well as undergoing a session of narco-analysis. For this an inclusive fee of 25 guineas is charged. There is no commitment on either side for further treatment.
Medical Director: H. Crichton-Miller, F.R.C.P.

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HEIGHAM HALL, NORWICH

PRIVATE MENTAL HOME for Nervous and Mental Illness. All types of treatment available. Fees from 5 gns. per week upwards, according to requirements. Vacancies occasionally exist at reduced fees on the recommendation of the patient's own physician. Apply to Dr. J. A. Small.
Telephone: Norwich 20080

WONFORD HOUSE, EXETER

A Registered Hospital for the TREATMENT of MENTAL DISORDERS of the Educated Classes. Cases under certificate, voluntary and temporary patients, received for treatment. Modern methods of treatment available. Terms moderate.—Apply Medical Superintendent. Tel.: Exeter 2642.

NORTHUMBERLAND HOUSE
GREEN LANES, FINSBURY PARK, N.4

A PRIVATE HOSPITAL for the treatment of MENTAL and NERVOUS ILLNESSES. Conveniently situated and easy of access from all parts. Six acres of ground, facing Finsbury Park. Voluntary and Temporary Patients received without certification. E.C.T. Group Psychotherapy. Trained Resident and Visiting Staff. INSULIN COMA UNIT. Telephone: Stamford Hill 7866/7 (2 lines). Telegrams: "Subsidiary, London." For further particulars apply to the Medical Superintendent, Robert M. Riggall, Member, British Psycho-Analytical Society.

PECKHAM HOUSE
116, PECKHAM ROAD, LONDON, S.E.15
Telegrams: "Alleviated, London."
Telephone: Rodney 2641-2642

A Private Mental Hospital for Ladies and Gentlemen suffering from Nervous and Mental Illness, where the amenities of a comfortable home are combined with full investigation and every well-established modern treatment. Terms from 5 guineas weekly. Illustrated Prospectus may be obtained from the Physician-Superintendent.

WYE HOUSE, BUXTON

A Private Hospital for the treatment and care of Nervous and Mental Disorders in both sexes. Voluntary, Temporary, and Certified patients received. Apply to E. Howard Kitching, M.D., M.R.C.P., D.P.M. Tel.: Buxton 130.

LAVERSTOCK HOUSE, nr. SALISBURY, WILTS

Private Mental Home for Certified and Uncertified Ladies and Gentlemen. Lovely house and garden (18 acres). ESTABLISHED 200 YEARS. MODERN TREATMENTS. Illustrated brochure may be obtained from Dr. Horace Hill, M.R.C.P., Physician-Superintendent. Tel.: Salisbury 2612.

BETHLEM ROYAL HOSPITAL
FOR NERVOUS AND MENTAL DISORDERS
MONKS ORCHARD, MONKS ORCHARD ROAD, EDEN PARK, BECKENHAM, KENT
Reg. Tel. Address: Bethlem, Beckenham
Station: Eden Park (Southern Railway)
Telephone: Springpark 1180-1181

President: HER MAJESTY QUEEN MARY. *Vice-President*: Sir George H. WILKINSON, Bart. *Treasurer*: Gerald COKE, Esq. *Physician-Superintendent*: J. G. HAMILTON, Esq., M.D., D.P.M.

This REGISTERED Hospital is situated at Monks Orchard in some 250 acres of park, pleasure and farm grounds. Applications can be considered on behalf of patients of the educated classes in a presumably curable condition.

With a view to early treatment voluntary or uncertified patients are admitted. Patients who can contribute 5 guineas weekly towards the cost of treatment and maintenance may be received as vacancies arise. The Committee will also consider applications for admission at lower rates and in certain cases will be prepared to admit patients free of charge. The comfort of sensitive patients is greatly enhanced by the fact that the majority are given single bedrooms. TREATMENT ON MODERN PRINCIPLES. Every facility for specialized investigation and treatment is provided in the Lord Wakefield of Hythe Science and Treatment Unit, including RADIOLOGICAL and DENTAL DEPARTMENTS, BIOCHEMICAL, PATHOLOGICAL and PSYCHOLOGICAL LABORATORIES. The Medical Staff have access to a panel of Consultants in cases which present unusual symptoms requiring specialized investigation and treatment. Under the direction of qualified officers HELIOTHERAPY, HYDROTHERAPY, and ELECTROTHERAPY are administered in the Physiotherapy Department. SPECIALIZED TREATMENT of various forms is given to suitable cases.

OCCUPATIONAL THERAPY in the form of various Arts and Crafts is actively encouraged from the medical aspect, and under the guidance of a competent instructress this department has proved most effective as a therapeutic factor in all stages of mental illness. The promotion of physical fitness is a prominent item of treatment, and this is enhanced by arrangements for patients to take part in Outdoor and Indoor Sports and Entertainments. ADDITIONAL ACCOMMODATION FOR MALE PATIENTS is now available by reason of completion of war damage repairs. Application should be made to the Physician-Superintendent

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Subscriptions to Publishing Manager,

BRITISH MEDICAL ASSOCIATION, B.M.A. House, Tavistock Square, London, W.C.1

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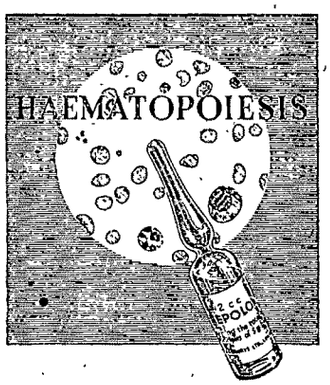

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY MARCH 13 1948

WHERE ARE WE GOING?

MEDICINE IN A PLANNED ECONOMY

BY

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It is a truism to say that the last fifty years have witnessed a revolution in public health. Many diseases we have exterminated, others we have learnt to cure, others again we have learnt to control; puerperal and infant mortality have diminished, the expectation of life has risen, and the standard of personal, domestic, and public hygiene has improved beyond recognition. Our pride in these achievements, however, should not blind us to the other side of the picture—the rapidly mounting cost of the medical services both in money and in man-power. At any time this remarkable paradox would provide a subject of great academic interest; in our present economic plight it becomes a matter of grave national concern.

The expansion of medicine is visible to all. With a population almost at its maximum practitioners have increased in the last twenty years by 50%. Many new hospitals have been built and others enlarged and up-graded. Hospital beds, having reached the figure of 600,000, need to be supplemented by a further 200,000. To the increasing army of nurses has been added a large force of auxiliaries which barely existed a generation ago—radiographers, almoners, dietitians, speech-therapists, laboratory technicians, occupational therapists, orthoptists, hospital physicists, masseuses, physiotherapists, child-guidance workers, clinical photographers, records officers, health visitors, and psychiatric social workers—classes which are being added to almost yearly.

The existence of this increase is of course well known. What is not realized is the acceleration. Figs. 1 and 2 show the rapidly mounting cost per in-patient per week and per out-patient per attendance, respectively, at Addenbrooke's Hospital, Cambridge. The *Hospital Year Book* shows that a similar rise is occurring throughout the country. While it is partly accounted for by the general rise in wages and cost of equipment, it is mainly due to the increase in the amount of work done per patient. In 1897 106 beds were served by four physicians, four surgeons, and two residents; in 1922, with 170 beds, the total staff numbered 16; in 1947, with 315 beds, it numbered over 70 (Fig. 3). These figures, however, grossly underestimate the increase in man-power, for they take no account of the assistance which the staff now receives from the host of auxiliaries or the greatly increased work done by members of the staff compared with that done by their predecessors, who were mainly occupied with general practice. Although there has been some increase in the population this has been offset by the opening of a new hospital in the area and the enlargement and up-grading of others. In spite of this, demand has outstripped supply, for the waiting-list has risen in the last ten years from 228 to over 1,500. The necessity for the increase in staff will be realized from the increase in the work of one department alone. Since 1927 the total pathological examinations have increased 33 times (Fig. 4) and the blood

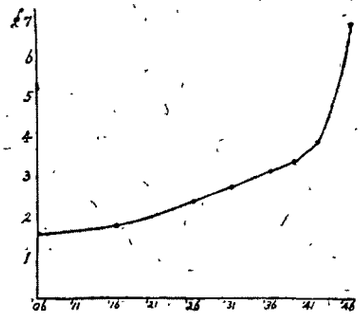

FIG. 1.—Addenbrooke's Hospital. Cost per in-patient per week in pounds.

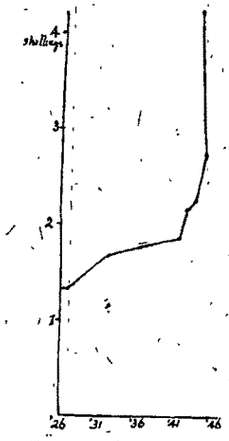

FIG. 2.—Cost per out-patient per attendance in shillings.

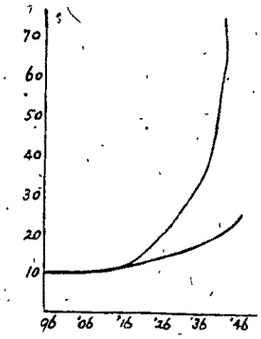

FIG. 3.—Upper curve = medically qualified staff; lower curve = medically qualified staff per 100 beds.

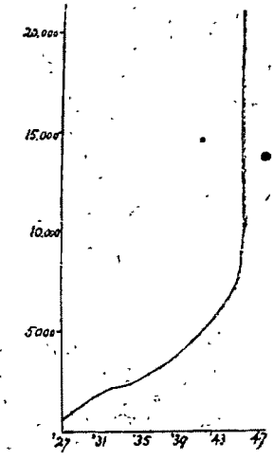

FIG. 4.—Number of pathological examinations.

counts 50 times (Fig. 5). These figures again underestimate the true increase, since examinations have become more complex. Parallel figures could doubtless be produced by other hospitals. Taking the country as a whole we see in Fig. 6 the rise in the numbers on the *Medical Register*. Twenty years ago the annual increase was 600; it is now

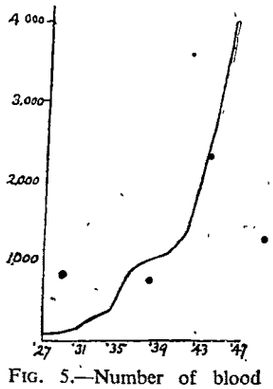

FIG. 5.—Number of blood counts.

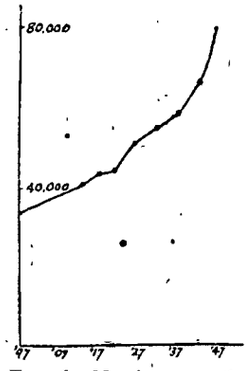

FIG. 6.—Numbers on the *Medical Register*.

over 2,000. In fact, whatever medical activity we plot against time we find the same result: *acceleration towards infinity*.

Can we see any sign of a limit to this trend? There are four directions in which we can look: the stabilization of the population, the repair of past neglect, the improvement in social conditions, and the advancement of science.

Stabilization of Population

Since the figures given above show that the rise is mainly due to the increased medical requirements of each patient it is clear that nothing short of a substantial decline in population could operate as a limiting factor.

Repair of Past Neglect

It may be thought that we are making up for lost time and that stabilization will be reached when we have accomplished this task. This, however, is true only to a limited extent. It is a misreading of history to think that our forerunners were neglectful in providing the necessary requirements. Sixty years ago there was barely any need for hospitals, because domiciliary treatment was as efficient as hospital treatment. If we look back we find this general rule: every new development has appeared as a small increment, and its provision has always been regarded *at the time* as amply sufficient for existing needs and a matter for pride and congratulation. When, in 1915, the Governors of Addenbrooke's Hospital built two small rooms for radiology and electrical treatment combined they described the accommodation as "commodious." To-day a floor-space twelve times as great is considered inadequate. At all times estimation of future requirements can be made only in terms of the leeway to be made up and in the light of the existing state of medicine. The developments which are in store, even in the immediate future, are hidden from us. We know neither the form they will take nor the provision which they will need. All we know is that they are certain to come.

Improvement in Social Conditions

The relation between the standard of living and the incidence of disease is complex in the extreme. In theory we should expect a diminution in disease when the whole population is adequately fed, housed, clothed, and educated. In practice, however, several factors operate powerfully to prevent this happy consummation. In the first place we have to admit our failure to establish any causal relationship between social conditions and most of the major diseases which fill the hospitals. Secondly, as civilization, or at least our conception of it, advances, rational practice becomes complicated by extraneous considerations. There is the threat of litigation and censure, which among its other effects has resulted in the routine *x*-ray examination of even the most trivial injuries. As the man in the street becomes familiar with the many similar tests which are rapidly being added, the threat of litigation will increase. Now that in almost every family there is at least one person who, being a masseuse, speech therapist, orthoptist, or whatnot, is in the best position to speak with authority on medical matters, this threat may reach formidable proportions. Investigations inspired by fear of litigation are inessential by-products of the healing art, imposed upon it by modern society. The threat to economy lies not in the premiums paid, nor in the expenses incurred by the protection societies (which can doubtless look after themselves), but in the enormous expense of examinations made not because of their clinical necessity but from fear of savage penalties. The time has come when we simply cannot afford the wholesale radiography of trifling injuries because one in a million may become the subject of litigation. A situation which should be ours to control has passed into the hands of the lawyers. The courts will have to accept the plea of reasonable care against accusations based on conventional procedures. Moreover, practitioners are increasingly pressed for the performance of investigations which they know to be useless under the circumstances. Refusal is difficult, since any subsequent calamity will, however unjustly, be ascribed to their obduracy. In private practice concessions to prejudice are permissible, since the cost is borne by the patient, but it will be interesting to observe whether, with free medical attention for all, specific methods of investigation will be demanded by patients as a right.

Thirdly, as the standard of living rises people increasingly fail to distinguish between essentials and non-essentials, and tend to judge efficiency by the standard most obvious to them —namely, the fal-lals. I have often heard patients sing the praises of the cottage hospitals (to which they should not have been sent) on account of the homely atmosphere there created. In particular, women value the "dainty teas" in which these institutions specialize. Admission to hospital is coming to be looked upon as a desirable thing in itself, and it is remarkable how this idea has unconsciously crept into common parlance. Recently at a meeting of a friendly society a member, complaining of the long waiting-list for admission to the local hospital, said that several hundred members *wanted* to be admitted. A business man in comfortable circumstances and robust health, speaking of the advantages of the general hospitals over the nursing homes, said he *looked forward* to the time when he could be admitted to a general hospital. At the present time admission to hospital is in many cases essential merely because domestic difficulties make the necessary investigation and treatment impossible to carry out at home. While we may hope that circumstances will improve in course of time, it is to be feared that admission to hospital will meanwhile have become a habit too deeply ingrained to be easily eradicated. If we make hospitals more comfortable than homes in inessentials it will be a sign of regression, not of advance, in civilization; it will be a reversion to the days when our ancestors found in the monastic infirmaries a refuge from the insecurity of their wattle huts. In short, whatever reasons may exist for hoping that a rise in the standard of living will diminish the incidence of disease, there is every reason to fear that it will increase the incidence of treatment.

The Advancement of Science

The most reasonable hope for the diminution of disease may seem to lie in the advancement of science. The astonishing growth in our knowledge about the natural history of disease is, however, no measure of the speed at which we are finding the causes of disease. Medical research is peculiarly obedient to the law of diminishing returns. In the first place, unlike most other sciences, which stretch forth into a boundless ocean, its sphere is very definitely circumscribed. In the last resort it is up against the inevitable; its concern is the postponement of a natural termination, and it is significant that in the new science of geriatrics we are interesting ourselves in the consequences of such postponement. We live in an age of increasingly

medicated survival. Secondly, our most dazzling successes have concerned those noxious agencies which differ biologically from, or are extraneous to, human life rather than those which resemble or are inherent to it. Hence our triumphs have been greater over acute than over chronic ailments. Progress slows up as we come to deal with the weaknesses of the flesh. The discovery of vaccination, though undoubtedly a stroke of genius, was a simple matter suited to the crude state of science then existing. Profound as was its effect upon society, the conquest of smallpox was achieved at a cost which was infinitesimal compared with to-day's expenditure on cancer research. Thirdly, humanitarianism, while being the main inspiration of medical research, at the same time imposes upon it severe limitations. While urging us to the strife it withholds from us the use of the most powerful weapons—wholesale slaughter and breeding from immune strains—which have proved so effective and economical in the hands of the agriculturist. For these reasons medical research has, of all forms of research, the least prospect of reaching its ultimate aim.

If this view appears unwarrantably pessimistic let us appeal to the facts and consider the effects of the fruits of research upon everyday clinical practice. Of the hordes of diagnostic tests in common use very few are, like the identification of the tubercle bacillus in the sputum, discoveries of the cause of disease. By far the greatest number are tests of consequences —tests, that is to say, of the reaction of the body to some infection or disturbance of unknown nature. For the most part these tests, however valuable they may be diagnostically, only determine by-results which are brought to light by scientific and sometimes fortuitous means. They are like the flotsam which, unseen in the roaring torrent but readily visible in the eddying pools, merely indicates that some disaster has occurred nearer the source. These tests have come to be used not merely to confirm a clinical diagnosis and to settle a matter of doubt but also to discover morbid conditions alleged, on grounds however uncertain, to be responsible or associated. Witness the tests required to discover or eliminate foci of infection said to be the cause of fibrositis. They are used to make a diagnosis doubly and even trebly sure, and to prove the absence of any other diseases—a process which multiplies as new diseases, new modifications of diseases, and resemblances between diseases are discovered. We dare not make a diagnosis of neurosis without using all the appropriate tests to eliminate beyond all shadow of doubt the organic diseases which it simulates, and with each test the patient becomes increasingly impressed with the reality of his complaint and prouder of its importance. Moreover, these tests are also employed at frequent intervals to gauge and control treatment, for the therapeutic seas into which we now venture are navigable only by the most vigilant pilotage of the laboratory. The truth is that, at any rate in regard to chronic disease, cure is being more and more outstripped by treatment, and there is no sign that the situation will be reversed.

This prospect, ominous enough in itself, is rendered more ominous by the disturbing fact that advancing knowledge so often obscures rather than clears our vision. For many years radiological examination was held to provide reliable evidence of the existence or absence of a gastric ulcer. But now it is claimed that gastroscopy reveals ulcers invisible to radiology. Here is the result, recorded in the *British Medical Journal* of Aug. 9, 1947 (p. 215), of an experiment in which the same *x*-ray films of the chest were submitted to five radiologists.

> "The number of the full-size celluloid films found positive for tuberculosis varied from 59 to 100; altogether 131 films were described as positive. All five agreed that the film was positive in only 27 cases. Four were in agreement on 17 films, three on 17, two on 23, and in 47 cases only one observer described the film as positive. Further individual comparisons showed that from one-third to one-half of the films described as positive by one reader were negative according to the others. The radiologist with the smallest group of 59 positives had 31, 29, 37, and 14% of his positive films described as negative by the other four. The proportion of another reader's 100 positives labelled negative by the other experts varied from 42 to 50%.
>
> "The failure of the same individual to be consistent in his judgment was even more astonishing than the variation between different radiologists. All the films were assessed for a second time at a later date by the same five readers. The proportion of first positives regarded as negative on second reading by the same expert varied from 7 to 41%, and the proportion of the second positive readings which had been called negative on a first reading ranged from 6 to 19%. The radiologist who had 59 positives originally found an additional 23 on his second assessment, but missed 4 of his own first positives."

This makes depressing reading. We are left with the impression that modern methods, with their mounting cost and complexity, while valuable in establishing a diagnosis already made by simpler means, contribute little to the elimination of doubt and uncertainty. Scientific discoveries hailed on their first appearance as fresh triumphs over Nature lead to disillusion when their limitations are realized. Artificial aids to our senses make the boundary between health and disease vaguer instead of clearer. Does our reliance on them denote a lack of faith in ourselves? Does it mean that, in the words of H. G. Wells, mind is at the end of its tether? It is like the problem of the fens. The more these are drained, the deeper they sink, and the deeper they sink the more they have to be drained, so that a time may come when the cost of drainage exceeds the value of the food grown on them.

If I appear to decry the value of research and to advocate empiricism let me say at once that nothing is further from my intention. There is a world of difference between the discriminating application of research on the one hand and, on the other, the routine performance of its technique by the unskilled and the self-confident interpretation of its results by the inexperienced. If a tree produces too much leaf we can, by ringing the bark, pruning the roots, or other devices, restrain the sap and at the same time direct it to fruit-formation. Economic factors may force us to confine the prolific sap of science, without affecting its source, to the most productive channels. While encouraging genius we must make it clear that medicine is no place for the career-plugging of mediocrity.

The Fetish of Perpetual Expansion

We have unfortunately come to accept expansion as inevitable and unending. Nobody even visualizes a time when our hospitals will be emptied instead of crowded, when the conquest of disease will lead, as it logically should, to the diminution of disease. We go further and seem to assume that such expansion is something desirable in itself. We pride ourselves on the cultivation of virgin soil rather than on the harvest. Consider, for instance, the plans recently envisaged for the development of clinical photography (within certain limits a desirable thing). According to one of its enthusiastic advocates the department of the future must have a medically qualified director, an assistant director, two photographers who must also be trained nurses, a microscopist with additional training in photomicroscopy, a secretary, an instrument mechanic, a nurse, and a porter. Accommodation must consist of one large main studio, 40 by 20 ft. (12.2 by 6.1 metres), three subsidiary studios, 15 by 10 ft. (4.8 by 3 metres), three small studios for the photography of small objects, seven dark- and accessory-rooms, a secretary's office, a filming-room, a director's room, dressing cubicles, linen-cupboards, lavatories, storerooms, and a small surgery. This, we are told, would suffice for the first three years; after that extensions would be necessary. Among the users of the department would be the welfare department, which would wish to "show the return of a healthy glow to the cheeks of a convalescent." A second enthusiast tells us that medical photography must become "a subject in our medical schools on an equality with radiology." A third tells us that the staff will need a lengthy and complete training. Spaciousness, he says, would be necessary in order to counteract "the demoralizing effect of cramped quarters." But, one may ask, were Louis Pasteur, J. J. Thomson, and Gowland Hopkins demoralized by the cellars in which their best work was done?

This is perhaps an extreme case, but it illustrates an attitude of mind from which many of us suffer. Ambition in its most virtuous form impels us to raise ourselves higher from the ground on a pyramid of ever-increasing subordinates and accommodation. We measure our success by the material growth of the things which we create, forgetting meanwhile that in many human activities, such as increase of population and exploitation of new countries, this standard has had to be abandoned. We see limit, either actual or implied, in all directions; in the wide adoption of birth control, in the world shortage of many necessities, in the control of entry to the universities, and in the predetermination of the size of the new satellite towns. We can therefore hardly maintain our faith in the inevitability of perpetual expansion in the one feature of social life whose reduction is essential to the prevention of the reduction of everything else.

The Dependence of Medicine on Economics

The idea that medicine is immune from economic laws is fostered by several factors. First, in a commodity the need for which diminishes the capacity to pay for it the laws of supply and demand cannot operate. The cost of treatment having for the great majority of the population been removed from the sphere of domestic economy and transferred first to charity and later to the State, the consumer is a third party (the doctor) who, acting in the interests of the recipient (the patient), has therefore no interest in economic considerations. Spending all he is given, he appeals for more to the supplier, who is totally incapable of judging the degree of necessity.

Secondly, life is not, as it is sometimes believed, beyond price under all circumstances. Its value increases with the danger which threatens it. When the danger is imminent people are quite unreasonable; when involved in an accident they expect doctors and nurses to appear out of the blue. The great majority of the community have in fact set the value of their lives at a very low figure, for the 4d. or 6d. per week which is the most that can be extracted from them for specialist treatment under the contributory schemes is only a very small fraction of their expenditure on the cinema, football pools, and cigarettes. That the value of life is only relative is easily proved. The appalling toll of road accidents could be reduced to vanishing-point by a decree limiting speed to 10 miles an hour. We do not take this step because it would dislocate our commerce and (let us be candid) curtail our pleasure: we prefer to improve the treatment of the results of accidents.

Thirdly, in the healing art the heart as well as the head plays a part; it cannot be conducted in the matter-of-fact manner with which we cash a cheque at a bank. Patients have strong views of their importance and behave as though the world revolved around them. The public, while granting that the medical labourer is worthy of his hire, believe that under certain circumstances, such as a railway accident, humanitarian must override financial considerations. Humanitarianism is, moreover, mixed with sentiment—a commodity which, however inexpensive and harmless it may appear, may have costly reverberations When food distributors go on strike but graciously make an exception in favour of hospitals they make a bid for sympathy as illogical as it is mawkish For the crocodile tears which they shed for the sick in hospital blind them to the sufferings of the sick in their homes, not to mention those awaiting admission to the hospitals and those recently discharged and in need of special nourishment. They overlook, too, the ill-health consequent upon the deprivation of food of which they are the cause.

The Economic Background

Since we can see no sign of any arrest of this accelerating expansion (let alone any reversal of the process) in stabilization of the population, in repair of past neglect, in improvement of social conditions, or in the advancement of science, and since such expansion is clearly incompatible with a contracting economy, we are forced to conclude that the limit will be determined by the available resources of man-power or cost, or both. The limit in man-power is already evident in the acute shortage of nurses, and shows signs of spreading to other sections. Improvement in the conditions of employment, however desirable, is no solution, for it only increases the cost and probably attracts less suitable entrants. Moreover, the labour market being limited, the shortage can be relieved only at the expense of productive work. As regards the cost, we must bear in mind that with the establishment of the National Health Service the State becomes a single *private* patient—John Bull. But whereas the individual private patient can deny himself the benefits of medical treatment or throw himself upon charity if the cost is beyond his means, John Bull must foot the bill. The question is, How much can he afford to pay? The answer depends upon three stark economic truths.

First, disease cannot be anything but a tax on national prosperity, however much it may benefit sections of the community. Secondly, the available resources, whether national or charitable, are only two—the surplus of agricultural produce and the surplus of exports over imports In this country the first of these has long ceased to exist, and cannot return unless the population is substantially reduced. The absence of the second is now only too painfully apparent, but many still fail to realize that it is something far greater than a sudden and temporary calamity It was predicted by Disraeli in 1847, and in view of the increasing industrialization of other countries it is extremely unlikely that we shall even approach the high-water mark reached on that day fifty years ago when the captains and the kings departed.

The third truth is that the standard of medical treatment is influenced by, and at the same time influences, the general standard of living. This reciprocal relationship arises from the fact that the purpose of medicine, which is the promotion of happiness and prosperity by the subjugation of ill-health, consists of two components, humanitarian and economic. Though these are interwoven in practice we must for our present purposes separate them. The humanitarian component is uppermost in the relief of suffering in the aged and infirm, though the economic component is also present if this relief is accompanied by a reduction in the number of those in attendance upon the recipients and their consequent liberation for productive work. The resources available for the humanitarian component are limited by personal or national income What we can afford to spend may, and often does, fall short of what we should like to spend. This is a hard saying, but we live in a hard world.

Suppose that 100 patients suffer from a rare disease curable only by the use of a drug costing £50,000 per patient and that there is no prospect of this amount being reduced. The £5,000,000 required to save these lives would clearly be beyond the resources of the State, for it could be provided only at a sacrifice which would involve loss of efficiency and therefore loss of health to the whole community As the State could hardly make an exception in favour of one patient no one would be saved. If, however, one patient were a millionaire he could save himself by writing a cheque for the amount. This hypothetical case

may seem fantastic, but it is only an exaggeration of what actually occurs. Recuperation in the South of France can be enjoyed by the few but is denied to the average citizen, although he is glibly promised the finest medical service in the world. Of the rare and refreshing fruit promised by Lloyd George not a single grape has assuaged any parched lips from National Health resources. A medical service provided by the State cannot be as efficient as that which the fortunate few can provide for themselves. In a beleaguered city there is a limit to which the defenders can share their rations with the infirm. If that limit is overstepped by dictates from the heart the defence is imperilled. The fear that we may have reached the danger mark is in the minds of those who now question the wisdom, from the national point of view, of the liberal allowance of milk to sufferers from dyspepsia. In regard to its humanitarian component, then, the standard of a national medical service is limited by the general standard of living. It cannot overstep that limit without adversely affecting national prosperity.

In the economic component the situation is the reverse, for here the standard of medicine directly influences the general standard of living. This component is typified in the youth who submits to the radical cure of hernia in the hope of the financial reward which will ensue from his increased efficiency. The benefit will not be confined to himself but will be felt by the whole community. Personal good becomes merged into national good. This fact indicates the amount which the State can afford to spend on the economic component. It must be less than the value of the improvement which is expected to accrue. It must show a profit in the long if not in the short run. We are often told of the annual loss of labour, expressed in man-hours, due to minor ailments, and the figures are indeed formidable. If this wastage can be reduced by research carried out centrally and capable of cheap application peripherally there is an economic gain. But if we rely on incoordinated and ill-considered peripheral action the result may well be an economic loss. If, for instance, a hospital contemplates the establishment of an auxiliary service devoted to the economic component, the reason must be economically sound. It is not sufficient to say that other (probably larger) hospitals are doing it, nor can the question, "Can we afford to do it?" be met by the fatuous rejoinder, "Can we afford not to do it?" if by this is meant, "Can we countenance the loss of prestige if we don't?" Nor, again, is the step justified if, when established, the department is used because it is there, not because it is really needed. It may be justified in three ways. First, the improvement in treatment must result in an improvement in national efficiency—in the more rapid return of the worker to industry and in a lessening of expenditure on man-power in attendance upon patients after their discharge from hospital. Secondly, the work of the medical staff must be eased so that it can deal with the same number of patients in a shorter time, with the ultimate object of making fewer doctors necessary. Thirdly, research into the causes and treatment of diseases which reduce working capacity must be thereby facilitated. This is admittedly a difficult criterion; it is sufficient here to state that it is applicable to only a few hospitals.

While I fully appreciate that in practice the humanitarian and economic motive cannot be separated, I am convinced that we cannot solve the problems which confront us unless we realize that national prosperity determines the humanitarian component and is largely determined by the economic component. The importance of the economic component is brought home to us only when man-power is short. Always implicit in the work of the military medical services, it is forced upon us for the first time during peace by the stark reality of our plight. We must constantly bear in mind that every person engaged in medicine is a person lost to the production of food and exports. Medicine is now not only a humanitarian profession but also an indirectly productive trade.

Conclusions

If my philosophy appears unduly pessimistic my answer is that economics is notoriously a dismal science and cannot be otherwise when applied to medicine. Those who think that medicine is above economic laws are destined to have their illusion rudely shattered, for a limited and planned economy obviously cannot support a health service expanding with the acceleration which medicine now exhibits. I do not pretend that the suggestions which I have made touch the main problem; still less do I expect them to command universal assent. I shall be content if I have succeeded in stimulating a realization of the situation and the disastrous consequences of ignoring it. I foresee three dangers which are by no means remote. First, money and labour will be spent on trifling ailments to the detriment of those who are seriously ill. There are indeed signs that we have already reached this stage. My realization of this danger will, I hope, absolve me from any charge of displaying in what I have written an unsympathetic view of ill-health. Secondly, individual attention and mature thought will be replaced by routine performance and reflex automatism. Responsibility beyond their capacity will be delegated to subordinates and auxiliaries, with the encouragement of that form of self-confidence which never admits ignorance. The maintenance of a high standard of practice will be greatly imperilled. Thirdly, the threat to freedom of action in our dealings with patients, a threat which we so much dread, may be forced on us not by a thirst for official control but by sheer economic necessity. When limitation becomes imperative, as it certainly will, it is surely preferable that it should be self-imposed by those who have an intimate understanding of the subtleties of clinical medicine rather than enforced by those who have only a bureaucratic acquaintance with it. In the reconstruction of our distracted world the doctor will be called upon to play a vital part, a part transcending the mere technicalities of his profession, a part which will demand, as never before, the fullest exercise of his intellectual qualities and moral influence. We rightly dread any violation by the State of the sanctity of the doctor–patient relationship, but the preservation of this sanctity depends upon the full recognition by doctor and patient alike that individual health and national health cannot be dissociated, and that intelligent but at the same time unselfish regard for his own health is not the least contribution which every citizen must make to national prosperity.

Chiropody, Theory and Practice (3rd edition, Charlesworth and Wiles, 42s.), by Franklin Charlesworth, is already well established as a useful textbook among students and practitioners of chiropody. The issue of a third edition, largely rewritten and extended, shows that it meets a demand which is likely to increase with the growth of the auxiliary medical services, including chiropody, when the Health Service starts. If the new entrants to the profession absorb all the information and carry out the precepts given in this book they will indeed become worthy practitioners, for as its title implies it is a most comprehensive production ranging over anatomy, physiology, surgery, medicine, materia medica, and theoretical and applied chiropody. However, the author has been at some pains to determine that of such vast subjects only those aspects which are of direct interest to the chiropodist have been included. The student will find here just the information he requires to cover his examination syllabus. The medical practitioner who sees and is interested in minor foot disabilities will discover much useful guidance in this volume on the possibilities and limitations of chiropodial treatment. The book is well and clearly illustrated and the production is of a high standard.

THE HEALTH OF 407 NEW STUDENTS

BY

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The publication of three recent reports on the problems of student health indicates a growing interest in this subject. Investigations have been made by the British Medical Students Association and other student bodies (1944), the Social and Preventive Medicine Committee of the Royal College of Physicians (1946), and the Conference on Student Health organized by the Nuffield Foundation (1947). These reports call attention in general terms to the existence of a good deal of ill-health among the student population and point to the need for better facilities for dealing with it. So far, however, little detailed information has been published on the nature and extent of this ill-health.

Voluntary medical examinations for students entering the University of Sheffield were introduced in 1937 and made compulsory for all new students in 1942. The aim of the medical officers who conduct these examinations in the students' first or second term has been to discover any remediable cause of ill-health and to advise them on how to obtain the appropriate treatment.

The present report describes the state of health of a group of 407 students admitted to the University in October, 1946. In addition to the medical data, certain aspects of the students' social environment are discussed in their relation to health.

Methods

The general medical examinations were conducted by a team of medical first assistants, the dental examinations by the dental registrar, and the ophthalmological examinations by the ophthalmological registrars from the Royal Sheffield Infirmary and Hospital. In addition, the woman students had a haemoglobin estimation and the medical and dental students a full-sized chest radiograph. All the students had a private "health interview" with me at the end of the various examinations. At this interview any defect or disorder requiring treatment was discussed and the student was referred to his general practitioner or, sometimes, if he had no doctor in Sheffield, to the out-patient department of the Royal Sheffield Infirmary and Hospital. During the interview a family health history was obtained and questions were asked about the student's lodgings, travel to the University, recreations, work, and sleep.

Classification of Students

In presenting the results the male students have been separated into two groups: 157 students aged 20 years and over, nearly all of whom were ex-Service men, and 153 students under 20. This separation has been effected because the ex-Service group do not constitute a normal student population and have special socio-medical problems, as is shown later. The 97 women students have not been so divided, as only 18 were aged 20 years and over. There were 372 British students, 24 European, and 11 non-European.

In order to discover whether the health of the students was related to their previous social environment the records were also classified according to the father's occupation. The Registrar-General's classification (1944) was adopted—namely, Group I, professional and upper managerial; Group II, lesser professional and managerial, retail proprietors, etc.; Group III, black-coated workers and skilled artisans; Group IV, semi-skilled workers; Group V, unskilled labourers.

Table I shows the constitution of the student group by age, sex, and occupational category of the father. The largest proportion of students (34%) were from Group III.

TABLE I.—*Age, Sex, and Social Groups of the Students*

Social Group (Father's Occupation)	Men Under 20 (153)	Men 20 and Over (157)	Women (97)	All Students (407)
I Professional and upper managerial	15%	10%	19%	14%
II Lesser professional, retail proprietors, etc.	25%	25%	29%	26%
III Black-coated workers and skilled artisans	41%	27%	35%	34%
IV Semi-skilled workers	10%	2%	2%	5%
V. Unskilled labourers	3%	2%	2%	3%
Unclassified	6%	27%	11%	15%
Non-European	—	7%	2%	3%

Only in the men under 20 was there an appreciable proportion (13%) from social Groups IV and V. The women students tended to come from a slightly higher economic stratum than the men.

The Findings Analysed

Table II shows the chief causes of defective health found in the new students.

TABLE II.—*Chief Causes of Defective Health*

Type of Disorder	Men under 20 (153)	Men 20 and Over (157)	Women (97)	All Groups (407)
Dental caries requiring treatment	75%	65%	76%	73%
Defective vision: corrected with glasses or needing correction	36%	39%	35%	37%
Postural and other orthopaedic defects	38%	27%	40%	34%
Minor anxiety states or depression	16%	29%	16%	20%
Nervous breakdown, marked introversion, psychoneurosis, epilepsy, hysteria, schizophrenic	8%	6%	7%	7%
Ear, nose, and throat: chronic nasal obstruction, sinusitis, enlarged or inflamed tonsils, partial deafness, discharging ear	20%	24%	25%	23%
Skin diseases: acne, furunculosis, epidermophytosis, eczema, dermatitis	13%	6%	7%	9%
Pulmonary disease: bronchitis, bronchiectasis, pulmonary fibrosis, asthma, emphysema	6%	4%	3%	4%
Endocrine disorders: enlarged thyroid, hypogonadism, obesity, undescended testicle	6%	2%	6%	5%
Cardiovascular disease:				
Mitral stenosis	2%	1%	1%	1%
Essential hypertension	2%	2%	—	1%
Hypochromic anaemia (under 85% Haldane)			3%	—
Miscellaneous: varicose veins, dyspepsia, migraine, varicocele, hydrocele, hernia	1%	3%	5%	2%

Dental Caries.—This was easily the most common disorder—73% of all the students required treatment for this condition. A smaller proportion of the ex-Service group required treatment—65% compared with 75% and 76% in the other two groups. This did not reflect a lower attack rate of dental caries among the ex-Service group, but a greater amount of previous dental treatment. The attack rate, obtained by adding to the number of students with active dental caries those who had fillings but no caries, was 96% in the men under 20, 98% in the men 20 and over, and 98% in the women. The attack rate of dental

TABLE III.—*Showing the Relationship between the Incidence and Extent of Dental Caries Requiring Treatment and the Social Grouping*

Social Group	No. in Group	Incidence of Active Dental Caries	Average No. of Fillings Needed per Mouth	Average No. of Extractions Needed per Mouth
I	58	59%	1·45	0·09
II	107	74%	2·50	0·20
III	139	72%	2·20	0·34
IV and V	30	83%	3·50	0·87
Unclassified	62	80%	2·60	0·61
Non-European	11	55%	1·34	0

caries did not vary significantly from one social group to another, but both the incidence of untreated caries and the extent of the disease increased in the lower economic groups (Table III). It seems probable that financial considerations had prevented some of the students from the poorer social groups from obtaining dental treatment. The dental condition of the non-Europeans was better than that of any of the other groups.

Visual Defects.—Defective vision was second in order of frequency: 36% of the whole group had myopia, 31% had hypermetropia, and 3% had mixed astigmatism. In 37% (150 students) the defect was such as to require spectacles for its correction. Of these 150 students 100 were already wearing correct spectacles, 40 had incorrect spectacles, and 10 had no spectacles. There was no relationship between the incidence of visual defects and social grouping.

Orthopaedic Defects.—Some orthopaedic defect was present in 34% of the students. Most of these were postural defects of the spine or flat-foot. Their incidence is shown in Table IV. Postural spinal defects were commonest in

TABLE IV.—*Incidence of Different Types of Orthopaedic Deformity*

Orthopaedic Abnormality	Men under 20 (153)	Men 20 and Over (157)	Women (97)	All Students (407)
Minor spinal deformities (scoliosis, kyphosis, lordosis)	22%	12%	15%	16%
Flat-foot	13%	10%	18%	14%
Miscellaneous	10%	7%	19%	12%

the men under 20 and flat-foot was commonest in the women students. Two students had orthopaedic defects requiring operative treatment. Most of the orthopaedic abnormalities found were due to lack of muscle tone and physical development, and could perhaps have been prevented by better previous physical education. They emphasize again the value of adequate and easily available facilities for athletics, sports, and gymnastics as a positive contribution to student health.

Mental Health

In the reports already mentioned attention has been drawn to the frequency with which minor psychological disorders are found among students. The present investigation confirms this. All the assessments of mental health were made by me after interviewing each student. Variations in assessment due to the personal factor were therefore minimized. Some 20% were found to be suffering from minor anxiety states or depression. Table V shows that the incidence of anxiety was remarkably similar in the three main groups of students.

TABLE V.—*Anxiety States and Depression (mostly minor in degree)*

	Men under 20 (153)	Men 20 and Over (147)	Women (95)	All Students (395)
Anxiety states ..	15·0%	16·3%	14·7%	15·4%
Depression	0·7%	12·3%	1·05%	5·05%
Total	15·7%	28·6%	15·75%	20·45%

It is worth while to consider the possible causes of these anxiety states. The occupation of the student is unique in so far as it is probably the only one in which those who follow it are repeatedly subject to formal tests of their fitness to continue the work. Fear of failing to pass these tests of "fitness" provides one of the main psychological stresses to which students are subject. For the present generation, further penalties may be added to examination failure, such as the loss of grants, calling up for national service, and the end of a university career. One of the manifestations of anxiety recorded was the presence of insomnia. This was marked as present if the student lay in bed more than an hour before he went to sleep or if he habitually lay awake in the night for an hour or more—34 (9%) had insomnia of this degree.

A large number (28%) of the students were "only" children, and the proportion of these increased steadily from the higher to the lower economic groups (see Table VI). It would appear that among children from

TABLE VI.—*"Only" Children*

Social Group	No. in Group	Percentage of Only Children
I	52	11·5
II	98	27·5
III	134	34·2
IV and V	30	50·0
Unclassified	53	13·8
Total	367	28·3

poorer families those without brothers and sisters have a better chance of reaching university than those from larger families. This type of student—the only child from a poor family—is especially likely to feel a heavy burden of responsibility and indebtedness towards his family which may add to his anxieties.

The following excerpts from the students' health records briefly illustrate how some of these anxiety states in students can develop.

A. B., aged 18. Father died 10 years ago. Mother goes out to work; one brother and one sister. States he is "worried about getting thrown out" if he fails his exams. Works every evening, including Sundays.

C. D., aged 28. Was in Services for 6½ years. States he has no time for recreation. Suffers from insomnia; takes an hour to get off to sleep. "It's all this studying. It's a strain getting back to work again after all this time in the Army."

E. F., aged 33. No time for recreation. "I'm not letting up on myself: I've got to complete this course. I work on at night till I can't work any more."

Depression was twelve times as common in the ex-Service group as in the other two groups of students. The interviews suggested that the chief cause of the relatively high incidence of depression in the ex-Service group was the difficulty these students experienced in adjusting themselves to civilian life. Many of them had occupied active and important positions in the Forces, and some were not unnaturally dissatisfied with what seemed to them the relatively unimportant role of a university student. Of the ex-Service group 25% were married, and half of these had children. To these responsibilities were added the difficulties associated with finding accommodation for their families in or near the city.

In addition to the cases of mild anxiety states and depression eight students were diagnosed as psychoneurotics, two as hysterics, 14 were markedly introverted, one had had a recent nervous breakdown, one suffered from epilepsy, and two showed evidence of early schizophrenia. Many of the students with the minor anxiety states and depression will probably lose these as they become adapted to university life and succeed in proving to themselves that they are adequate for the tasks before them. It is among the psychoneurotics and schizophrenics that the long-term problems are to be found.

Organic Disorders

Organic defects and disorders have been classed as major if they were considered likely to prevent the student from participating fully in university life, and minor if they were not sufficiently serious to do that.

Some major organic disorder was found in 9%, and in this group pulmonary conditions were the most frequent, accounting for nearly half. Five students had chronic bronchitis, five asthma, four bronchiectasis, four pulmonary fibrosis, and one emphysema. Most of the group stated that their illness had started with a previous attack of pneumonia. They illustrate the chronic invalidity which too often follows this disease. Next in importance came the group with cardiovascular disease. Four students (1%) had mitral stenosis and four had essential hypertension (blood pressure 150/100 or above). It is worth recording that 35 students (9%) had innocent cardiac murmurs and three had persistent albuminuria for which no cause could be found. No case of pulmonary tuberculosis was discovered among the 76 medical and dental students who underwent chest radiography or in the remaining 331 students at the general medical examination.

Among the women students and men under 20 major organic disorders were more common in those from the lower economic groups than in those from the higher groups. The men over 20 were of course a physically selected group. Six of the 19 men under 20 (33%) from social groups IV and V suffered from a major organic disorder, compared with 9% in the whole group of students. Of these six students two had mitral stenosis, one bronchiectasis, two chronic bronchitis, and one asthma.

In 40% a minor organic disorder, excluding dental caries, defective vision, and orthopaedic conditions, was found. These mostly consisted of affections of the ear, nose, and throat, or of the skin. Some 23% suffered from chronic nasal obstruction, sinusitis, enlarged or inflamed tonsils, partial deafness, or discharging ear; 9% had skin conditions such as acne, furunculosis, epidermophytosis, eczema, or dermatitis. These skin conditions occurred twice as often in men under 20 as in the other groups (Table II).

The average haemoglobin value of the 95 women tested was 98.6% (Haldane). Three cases of hypochromic anaemia were found, however, with values of 68, 80, and 84%. After treatment with iron for six to seven weeks these values became normal—102, 96, and 102% respectively.

Examples of minor disorders of the endocrine glands were not uncommon, especially in the younger groups: 6% of the men under 20, 6% of the women, and 2% of the ex-Service group had conditions such as diffuse enlargement of the thyroid, hypogonadism, obesity, or undescended testicle. There appeared to be no relationship between the incidence of minor disorders and social grouping.

Conclusions

A considerable proportion of the 407 students examined had some physical or psychological defect or disorder. Although in most cases these disabilities were not serious, they were sufficient to reduce the efficiency and well-being of many students. The findings indicate that in the development of student health schemes, in addition to medical examinations of new students, provisions for the active medical treatment and supervision of university students need consideration. The high incidence of dental disease and defective vision points to the need for special provisions with regard to these conditions. A medical officer in charge of student health may expect to be frequently consulted by students on account of anxieties often disguised by some physical complaint such as vague pain in the chest. If he is to treat them successfully it is essential that he should be interested in them not only as patients but also as individuals who are developing rapidly and are not infrequently subjected to considerable physical and psychological strain.

The frequency of postural and other orthopaedic defects raises the question of the value of compulsory physical education such as has been introduced for freshmen in at least one British university. Routine haemoglobin estimations on women students followed by treatment of the cases of hypochromic anaemia discovered is a worth-while procedure.

There will probably always be students who enter university with serious and permanent physical handicaps such as mitral stenosis or bronchiectasis. A students' health service and the initial medical examinations should not be used to exclude such students, but rather by advice and careful supervision it should enable them to make the best use of their university career.

Finally, student health centres could become valuable field stations for university departments of social medicine. In them, for example, studies of normal variations in structure and function could be made, and methods developed for the early detection and prevention of disease in the young adult population.

Summary

The results of the compulsory medical examinations of 407 new students are presented.

Dental disease, defective vision, postural faults, and minor psychological disorders were the commonest conditions found.

The various factors contributing to the development of anxiety and depression in students are discussed together with some aspects of the students' social environment.

The need for the further development of student health services to include the provision of medical and dental treatment when required is re-emphasized.

I wish to thank all those whose careful observations and records made this study possible. The general medical examinations were carried out by Drs. R. Bosenberg, F. Flint, R. T. Gaunt, J. F. Goodwin, L. Nancekievill, M. H. Stewart, and W. D. Wallace; the ophthalmic examinations by Drs. W. Ingman, M. W. Paterson, A. Smith, and N. S. Warwick; the dental examinations by Mr. R. Rastall; the radiological examinations by Drs. J. L. Grout and J. Wilkie; and the haemoglobin estimations by Dr. H. J. Barrie. I am indebted to Prof. C. H. Stuart-Harris for helpful suggestions; to the authorities of the University of Sheffield for permission to publish this report; and to Miss B. I. Richardson, who gave valuable assistance in its preparation.

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The second edition of Mr. Harry Hill's *Pasteurisation* (H. K. Lewis, 21s.) is to be welcomed. Most of the faults of the earlier edition have been remedied, and numerous illustrations and figures have been included to clarify the sections on plant design and control. The size of the book has been nearly doubled. There is an interesting description of the Hemming-Howell heating unit for the treatment of milk in churns on the farm, though it would be interesting to know more about the effectiveness of this method under practical working conditions. Like most idealists, the author favours the adoption of the "in-bottle" method of pasteurization, and he forecasts the adaptation of the H.T.S.T. process to the heat treatment of milk in bottles. Whether he is on such safe ground in recommending the increased use of irradiated milk is more doubtful; the possible danger to adults of consuming unlimited quantities of vitamin D is not considered. This book can now be recommended without hesitation to those who want to learn something about the methods of carrying out pasteurization and the subsequent treatment of pasteurized milk. It is, however, alarming to be told in the preface and again on p. 229 that "all methods of pasteurization carried out in this country are not satisfactory." This general condemnation is surely unjustified, and we hope that what the author really means is that not all methods of pasteurization are satisfactory. Perhaps an alteration to this effect might be made in the next edition.

THE RECOGNITION OF TOXICOGENIC BACTERIAL STRAINS IN VITRO

BY

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The detection of toxicogenicity *in vitro* has not in the past proved a practical proposition for routine purposes, and this paper is concerned with a new technique which, it is believed, makes this possible. In diagnostic bacteriology most pathogens are recognized by their cultural and biochemical properties, and are finally characterized by serological study of their antigenic structure. In those groups of organisms which produce disease through the agency of exotoxins the surface antigenic pattern is of little diagnostic use, and final recognition is effected by specific serological neutralization of the toxin in a susceptible experimental animal. Clearly a rapid test is required to bring exotoxin-producing organisms into line with those which can be identified serologically. Technical difficulties have, however, prevented the use of *in vitro* toxicogenicity for diagnostic purposes. The lecithinase action of the alpha toxin of *Clostridium welchii* is an exception to the rule that toxins rarely produce convenient effects *in vitro*. Flocculation of diphtheria toxin with its homologous antitoxin was first demonstrated by Nicolle, Césari, and Debains in 1920 and is widely used for titration of antitoxin (Ramon, 1922), but the procedure in its original form is too complex for routine identification of toxicogenic strains.

Petrie and Steabben (1943) introduced a technique for the identification of the pathogenic clostridia of gas-gangrene in plate cultures. Crude specific antitoxic serum was incorporated in an agar-base medium designed to yield abundant toxin production. After prolonged anaerobic incubation the plates were left at room temperature, and under these conditions a ring of opacity developed around the colonies of a toxicogenic strain in the presence of the homologous antiserum. The zone of opacity was shown by the plate microscope to consist of Liesegang rings, and was accepted as a specific reaction.

The same workers attempted to employ this technique for the recognition of toxicogenic strains of *Corynebacterium diphtheriae*, but the results were unsatisfactory. Repetition of their experiments suggested to me three main reasons for the failure. In the first place, isolated colonies produce only minute amounts of toxin even after prolonged incubation. Secondly, as flocculation occurs only within a narrow zone, and as both toxin and antitoxin excess may inhibit the reaction, it is necessary to adjust the antitoxin content of the plate most carefully; strain variations in toxicogenicity make it very difficult to gauge the antitoxin concentration so as to be within the optimum range. Thirdly—and this is perhaps the most serious difficulty—certain aerobic and anaerobic organisms may produce a zone of opacity around their colonies when grown in serum-agar media. Clearly this non-specific reaction may lead to erroneous interpretation, especially as a number of strains of *C. diphtheriae* produce concentric rings irrespective of whether they are toxicogenic or not. The methods described below were devised to overcome these difficulties and to place in the hands of laboratory workers a technique which it is hoped will find a useful routine application.

The New Technique

In working out this technique three principles have had to be considered: to obtain maximal and rapid toxin production; to produce an antitoxin gradient in the medium so as to give a reaction with varying toxin concentrations; and to provide non-specific serum constituents in sufficient quantity to make the flocculation reaction easily visible. The nutritional and gaseous requirements for rapid toxin production in most toxicogenic organisms are well known. In the case of *C. diphtheriae* a modified Pope's medium was found suitable, whereas for staphylococci a slight modification of Walbum's medium proved satisfactory. Inoculation in the form of a wide streak will yield *pari passu* with increased bulk of growth far more toxin than a single colony. The minimum length of incubation can be determined only by experiment: it is the shortest time which will reveal all virulent strains as toxicogenic.

The required antitoxin gradient can be achieved by the simple method of placing on the surface of the medium a strip of filter paper moistened with commercial antitoxin in suitable dilution. The concentration of antitoxin at any point on the plate is determined by the laws of diffusion

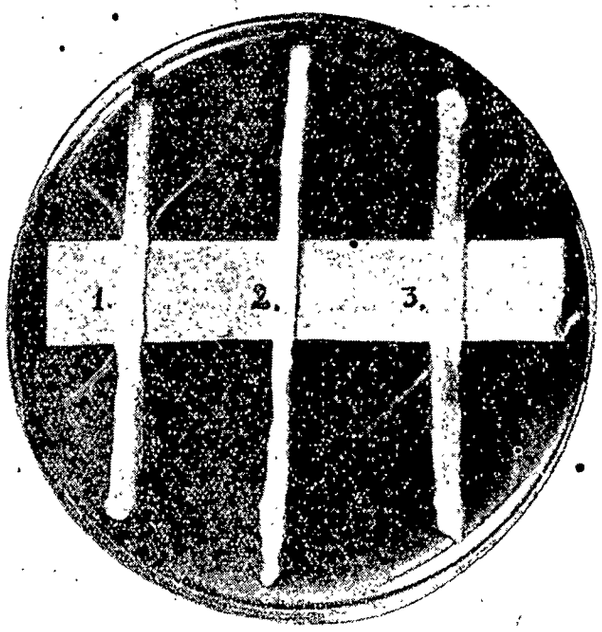

FIG. 1.—Completed test with corynebacteria. Strain 1 = positive control; strain 2 = non-toxicogenic; strain 3 = toxicogenic.

governing this complex system, and varies from a maximum (corresponding to the concentration of the antitoxin used) to a minimum in the part of the plate most remote from the strip. In order to provide non-specific serum constituents in sufficient quantity to make flocculation reaction easily visible it has been found better to incorporate 20% normal horse serum in the medium rather than to rely on the constituents of the crude antitoxic serum, which diffuse at a different rate from the immune globulins.

If the organism to be tested is inoculated in the form of a wide line at right angles to the filter paper the toxin produced by the organism will diffuse out in descending concentrations, just as the antitoxin diffuses from the filter strip. In these circumstances the points of optimum proportions for toxin-antitoxin reaction fall on a continuous line, and the flocculation which occurs along this line provides striking graphic representation of the law of optimal ratios. On each side of the inoculum a white line develops at an angle, so that a toxicogenic strain becomes virtually marked with an arrow-head (Fig. 1).

The principles outlined above have been adapted for the examination of *C. diphtheriae* and staphylococci, and the special procedures for these organisms are detailed below; the technique, however, should be capable of adaptation for any toxicogenic organism—aerobic or anaerobic. Furthermore, it is possible that substances diffusing from bacterial cultures, but not commonly regarded as exotoxins, can also be used for purposes of recognition if suitable antisera are employed.

Method for Examination of C. diphtheriae

Materials.—The medium is prepared by dissolving 4 g. of protose-peptone ("difco"), 0.6 g. of maltose, and 0.14 ml. of lactic acid (*B.P.*) in distilled water. The volume is made up to 100 ml. and the *p*H adjusted to 7.8. A 3% solution of agar in 1% sodium chloride is cleared by filtration through paper pulp and its reaction is adjusted to *p*H 7.8. It is further clarified by treatment with charcoal, and again filtered through pulp. Equal parts of the peptone and agar solutions are mixed together and distributed in 10-ml. quantities, which are sterilized by steaming for 30 minutes on three successive days. The antitoxin used is refined diphtheria antitoxin globulins (Burroughs Wellcome and Co.) diluted with physiological saline to a concentration of 1,000 units per ml. The filter-paper strips are prepared from sheets of good quality filter paper (Postlip 633 was used). This is cut into strips measuring 6 by 1.5 cm. and these are placed in a plugged test-tube and sterilized in the hot-air oven.

Procedure.—Plates are prepared by melting 10 ml. of the medium, adding 2 ml. of sterile normal horse serum, and pouring into 3½-in. (8.75-cm.) Petri dishes. A sterile filter-paper strip is now dipped in diluted antitoxin, and after excess antitoxin has drained off it is laid across the surface of the freshly poured plate and allowed to sink into the medium while it is still fluid. The plate is then dried thoroughly in the incubator and should be used the same day. The organisms to be tested are inoculated by a loop in the form of a wide streak right across the plate. Three or four such streaks are readily accommodated on a single plate, and each set should include a known toxicogenic strain as a positive control. The plate is incubated and examined after 24 and 48 hours.

Results

A positive reaction is denoted by the appearance of fine white lines forming an arrow-head within 1/2 in. (1.25 cm.) of the filter paper and pointing towards it. It makes its appearance after about 22 hours' incubation in some strains, and in its earliest stages has to be sought with a hand lens. It is best seen by reflected light against a dark background. After 48 hours the arrow-head is easily visible to the unaided eye by transmitted light. A completed test is shown in Fig. 1.

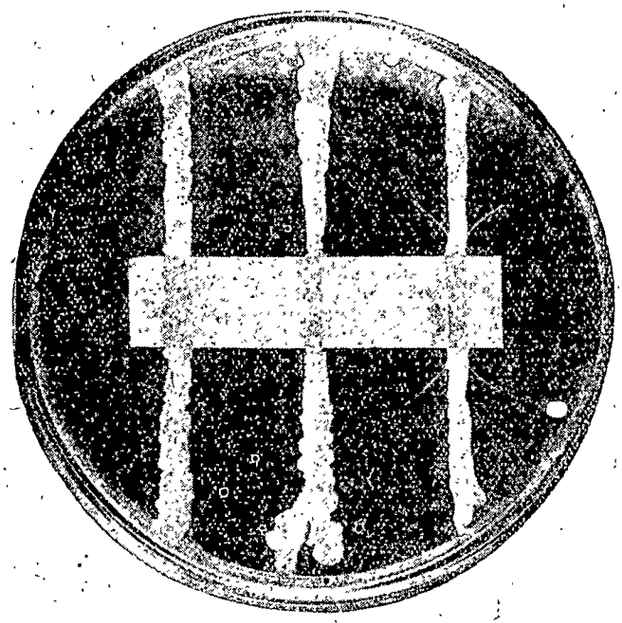

FIG. 2.—Non-specific opacities. The strain on the left shows opacity and arrow-head formation (toxicogenic); the centre strain shows opacity only (non-toxicogenic); the strain on the right shows arrow-head only (positive control).

If the plates are left at room temperature the density of the lines gradually increases, but secondary lines may develop which possibly represent the interaction of bacterial substances diffusing out from the growth with antibodies corresponding to them present in the serum. The presence of such antibodies may be assumed from the fact that the material used for the immunization of animals contains numerous substances in addition to the toxin itself. These secondary lines may appear with both toxicogenic and non-toxicogenic strains, and with the latter might lead to difficulty in interpretation. If, however, the final readings are made directly after 48 hours' incubation no confusion arises from this cause, as several days at room temperature are required to bring out the secondary lines. Even then they are very soft, and their detection usually requires the aid of a lens.

The plate shown in Fig. 2 demonstrates that the opacity produced in serum media by certain strains of corynebacteria is independent of toxin production. The strain on the left shows opacity and the arrow-head denoting toxin production; the strain in the middle shows the opacity but no toxin-antitoxin line. The right-hand strain (the positive control) shows the arrow-head only. On standing at room temperature these opacities lose homogeneity and become distributed in the form of concentric denser and clearer areas resembling Liesegang rings. Clearly the development of rings cannot be accepted as proof that a toxin-antitoxin reaction is taking place.

Results of Tests on 20 Strains of Corynebacteria

Strain No.	Origin and Type of Organism	Animal Virulence Test	*In vitro* Test	
			24 hrs.	48 hrs.
1	W.I. No. 77	Virulent	+	+
2	Diphtheroid, St. Geo. Hosp.	Avirulent	−	−
3	W.I. No. 90	Virulent	+	+
4	L.C.C. 11680, gravis	"	+	+
5	L.C.C. 11674, gravis	"	+	+
6	St. Geo. stock, gravis ..	"	−	+
7	L.C.C. 12224, mitis	Avirulent	−	−
8	L.C.C. 12151, mitis	"	−	−
9	L.C.C. 12494, gravis	Virulent	+	+
10	L.C.C. 12511, gravis	"	−	+
11	L.C.C. 12594, mitis	Avirulent	−	−
12	L.C.C. 12595, mitis	"	−	−
13	L.C.C. 12597, mitis	"	−	−
14	N.C.T.C. 3985, gravis ..	Virulent	−	+
15	N.C.T.C. 3986, gravis ..	"	+	+
16	N.C.T.C. 3988, intermedius ..	"	−	+
17	N.C.T.C. 3989, mitis	"	−	+
18	L.C.C. 12825, mitis	Avirulent	−	−
19	L.C.C. 12826 gravis	Virulent	+	+
20	L.C.C. 12828, mitis	"	+	+

W.I. = Wellcome Institute.
L.C.C. = London County Council, Southern Group Laboratories.
N.C.T.C. = National Collection of Type Cultures.

The accompanying Table shows the results obtained with this test on 20 strains of corynebacteria, all but one of which (No. 2) gave typical morphological and cultural characters of *C. diphtheriae*. Of the 13 virulent strains eight showed a positive reaction in 24 hours, while with the remaining five the reaction became positive only after 48 hours' incubation. None of the seven avirulent strains showed a positive reaction after 48 hours.

Method for Examination of Staphylococci

With the staphylococci ability to form a toxin is clearly not the sole factor determining virulence, since these organisms invade the body. Nevertheless a simple procedure for the detection of toxicogenicity might well prove to be of value for both clinical and experimental purposes. That staphylococcal toxin-antitoxin reaction can be recognized in an agar plate was shown by an accidental observation made in 1944 on a routine plate (Fig. 3). A method similar to the one described for the diphtheria bacilli was devised and tried in a small number of cases.

Materials.—The medium used consists of heart-infusion broth (difco) to which 0.2% potassium acid phosphate (KH_2PO_4) and

0.03% magnesium sulphate ($MgSO_4$) are added. Both salts are used crystalline. The *p*H is adjusted to 6.8, and the broth, which is somewhat yellow, is clarified with charcoal. Agar is now added to a concentration of 1.5% and the medium filtered and clarified in the usual way. It is distributed in 10-ml. quantities in tubes and sterilized in the autoclave. For antitoxin refined staphylococcal antitoxin globulins (Burroughs Wellcome and Co.) are employed, diluted so as to contain 1,000 units per ml.

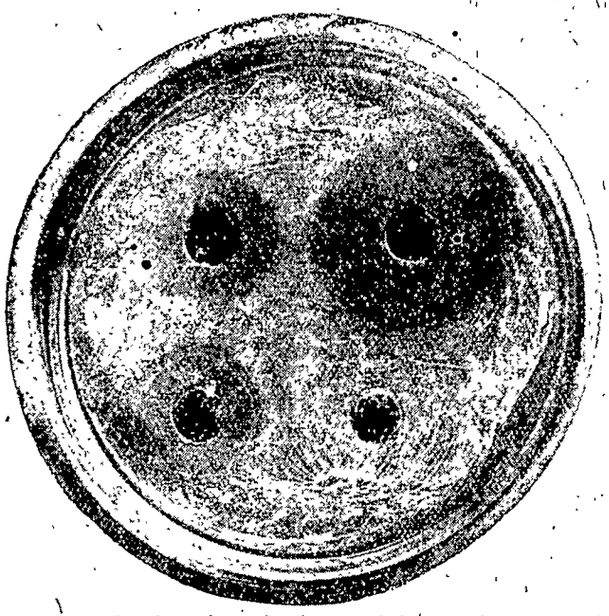

FIG. 3.—Routine plate showing staphylococcal toxin-antitoxin reaction. Plate inoculated with patient's strain of *Staph. aureus*. Upper cups contain penicillin solution (1 and 5 units per ml.); lower cups contain pus from patient's abscess—the left shows presence of penicillin and a ring believed to be a toxin-antitoxin reaction.

Procedure.—This is precisely as in the former method, except that normal horse serum is not incorporated in the medium, as its addition was not found to improve the reaction. Readings are taken with a lens after 48 hours' aerobic incubation. The effect of incubation in an atmosphere of carbon dioxide was not tried.

Results

The lines which form with toxicogenic strains are multiple and are fainter than those formed with *C. diphtheriae*, so that their presence has to be sought with the aid of a hand lens. A typical plate is shown in Fig. 4. The test has been applied to 32 strains of staphylococci. Of these nine were obtained from the fingers or were obviously contaminants on plates, and only one—an *aureus* strain obtained from the hand of a laboratory worker—gave a positive result in 48 hours. Ten strains, being obtained in pure culture from typical staphylococcal lesions, were assumed to be pathogenic, and nine of them gave positive results in 48 hours. The remaining 13 strains were obtained in the course of routine work from various sites and three of them failed to give a positive reaction.

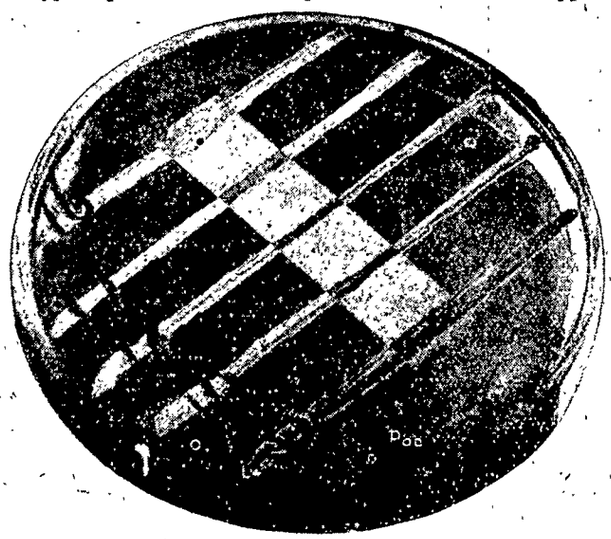

FIG. 4.—Completed test with staphylococci. All strains show multiple line formation.

Discussion

The application of these methods has not yet reached a stage at which detailed discussion of the results would be profitable, and the object of this paper is to present the new *in vitro* technique and to indicate directions along which development is possible.

Clear-cut results have been obtained with a small series of *C. diphtheriae* strains, and they show that there is a high correlation between *in-vitro* toxicogenicity as detected by this test and the so-called "virulence" as detected by the usual guinea-pig test. It is a generally accepted fact that pathogenicity is not a good basis for bacteriological classification, as virulence is not a permanent intrinsic property of a given species. It is, however, precisely this point which is of paramount interest to the medical bacteriologist: to him a non-virulent strain is not a "true" representative of the species, and is indeed the worst nuisance, since its unimportant character is revealed only after lengthy investigations, involving animal experiments. Animal tests have numerous disadvantages in a routine laboratory, and it is hoped that the *in-vitro* test may well prove of practical value on account of its great simplicity and the relatively short time needed to obtain the result.

Once an organism has been assigned to the *Corynebacterium* group on morphological grounds and grown in pure culture the test can be applied without investigating the biochemical properties of the strain and without classification as regards its type, as the specificity of the reaction with diphtheria antitoxin is axiomatic. Theoretically not every toxicogenic strain need be virulent. If this differentiation really does exist between the *in-vitro* and the animal test a larger series of parallel tests should reveal this. As, however, every virulent strain is by definition toxicogenic, from the utilitarian point of view there is no source of error in the test. Clearly, further work is needed to establish whether or not this test can be relied upon to replace the accepted virulence tests in practice.

The results with the staphylococci are less well defined, but here again there is high correlation between a positive test and clinical pathogenicity. In addition to the possible use of the test in clinical bacteriology the procedure may prove to be of value in investigating the diffusible products of staphylococci. The multiplicity of lines developing with the positive strains suggests the presence of several interacting substances and clearly requires further study.

Without substantial modification the same technique can be used for the identification of the anaerobes by means of their specific toxins. The technique should also be capable of wide application to other groups of organisms by investigating diffusible antigenic substances produced by the culture but not usually regarded as exotoxins.

Summary

The principles of a new technique for the *in-vitro* detection of bacterial toxicogenicity are outlined.

Tests utilizing these principles and adapted for examination of *C. diphtheriae* and staphylococci are described.

Results with a small number of strains show a high correlation with the results of animal virulence tests in the case of *C. diphtheriae* and with clinical pathogenicity in the case of staphylococci.

The possibilities of wider application of the technique for both clinical and experimental purposes are discussed.

I wish to express my thanks to Dr. Theo. Crawford for his help in the preparation of this paper, and to Dr. J. E. McCartney for kindly providing some of the *C. diphtheriae* strains used and for carrying out the virulence tests. I wish also to thank Mr. T. W. Shaw for technical help.

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SPERANSKY'S METHOD OF SPINAL PUMPING IN RHEUMATOID ARTHRITIS

A REVIEW OF FOUR CASES

BY

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(From the Rheumatism Department, West London Hospital)

The recent interest shown in Speransky's method of treating rheumatic cases by means of "spinal pumping" make it worth while to report four cases of rheumatoid arthritis which were treated in this way and followed up for a year. Speransky (1935) gave reasons for his belief that the nervous system played an important part in acute and chronic disease. Ponomareff and Tchechkoff (1927) and Jowelew (1930) studied the passage of antibodies through the blood-stream barrier of the spinal cord in rabies and attempted by spinal pumping to break it down.

The operation, which consists in withdrawing and replacing 20 ml. of spinal fluid slowly twenty times, takes about an hour. The spinal fluid in each of our cases was sterile, and laboratory tests showed no abnormality. The only reactions were vomiting in one case and a transient rise of temperature in another. Spinal pumping is not an easy procedure to carry out in cases of active rheumatoid arthritis, for the patients find it difficult and painful to get into a suitable position for lumbar puncture.

Speransky claimed good results with this treatment in malaria and typhus, and also in the rheumatic diseases. He treated 100 cases of "polyarthritis" by spinal pumping, giving intensive salicylate therapy before and after, and found that of 52 patients with their first attack of rheumatic fever 70% appeared to show complete recovery. Of 15 cases of chronic arthritis, 4 were reported recovered, 9 improved, and 2 unchanged.

Later the Gillman brothers (1946) issued an account of their trials of spinal pumping, and interest was reawakened in the subject. They reported good results in 36 cases of subacute rheumatism following rheumatic fever and in 22 cases of chronic arthritis which had failed to respond to gold and physiotherapy. In 12 of these chronic cases there was great improvement, with a return of the sedimentation rate to normal in two weeks; in the remaining 10 the condition was unchanged. After the spinal pumping they noted severe sweating, a rise in skin temperature, and visible dilatation of the peripheral skin capillaries which lasted for 48 hours. Some unpleasant side-effects were encountered, such as severe headache and vomiting, and, in one case with hypertension, death due to multiple cerebral haemorrhages followed the third pumping. After publication of that report it was decided to try spinal pumping in the following cases of rheumatoid arthritis which had failed to respond to more rational methods.

Case 1

A hospital sister aged 54 had had arthritis for a year. It had spread rapidly to her hands, wrists, feet, knees, and elbows in the last six months. She was admitted on June 18, 1946, with clinical rheumatoid arthritis—afebrile. Radiographs revealed generalized decalcification with loss of joint space. A blood examination showed: red cells, 3,850,000; Hb, 70%; white cells, 5,500; differential count normal; W.R. negative; uric acid, 2.6 mg. per 100 ml.; sedimentation rate, 25 mm. in one hour (Westergren), which rose to 40 mm. in the next five weeks. Treatment with "myocrysin," salicylates, 1,000,000 units of penicillin, complete bed-rest, and plasters brought no improvement, and as she was rapidly becoming crippled it was decided to carry out spinal pumping. This was performed on Aug. 1 after a preliminary course of 10 g. of salicylate in 24 hours. The C.S.F. pressure at the onset was 180 mm., and at the end 70 mm. Salicylate, 10 g., was given during the next 24 hours. Five hours after pumping the patient complained of feeling "burning hot, especially in the forearms and feet," though there was no rise in general or skin temperature and no demonstrable capillary dilatation. This lasted for 12 hours. The joints then improved, and in a month the sedimentation rate had dropped to normal and the patient was up, walking, and free from pain. She proceeded to a convalescent home.

In February, 1947, the B.S.R. was 5 mm. In September, 1947, it was 8 mm., and she was doing light work, typing and playing the organ with some difficulty, and having to take three or four "veganin" tablets a week for pain in her wrists and ankles. There was a moderate degree of deformity and crippling, though it was no worse than in August, 1946. She had had no treatment since October, 1946. Radiographs showed no change from August, 1946.

Case 2

A Polish housewife aged 54 had suffered from intermittent arthritis in the knees, wrist, and hands for 20 years. It had been much worse in the last six years, since she had come to England. In spite of physiotherapy and gold injections at the B.R.C.S. Clinic, Peto Place, her condition had got worse. When admitted on Aug. 18, 1947, she was crippled with rheumatoid arthritis and had been unable to walk for two months. The

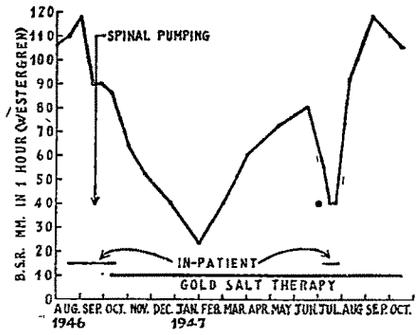

FIG. 1.—The blood sedimentation curve in Case 2.

B.S.R. was 110 mm. in one hour (Westergren); blood uric acid, 2.5 mg. per 100 ml.; Hb, 83%; white cells, 7,200.

Spinal pumping was carried out on Sept. 6. Salicylate was not given before or after. The C.S.F. pressure was 180 mm. After 10 withdrawals the pressure dropped to 35 mm. and the pumping was stopped. A reaction similar to that of Case 1 came on six hours afterwards, with a feeling of heat in forearms and legs lasting 12 hours. She had a general fever of 100° F. (37.8° C.), but no demonstrable capillary dilatation. During the next week the joint condition improved, and four weeks later she was discharged. Fig. 1 shows the course of

her B.S.R. She has been treated as an out-patient with myocrisin. The patient was readmitted on July 7, 1947, for active rheumatoid arthritis. The B.S.R. was 55 mm. Further spinal pumping was tentatively suggested, but was refused. She still has an active rheumatoid arthritis, but is able to get about and do some housework.

Case 3

A housewife aged 48 was admitted on Aug. 30, 1946, for clinically active rheumatoid arthritis with effusions in the knee-joints. The history was of rapid onset of arthritis involving the hands, wrists, elbows, and knees two months before. The temperature was 99° F. (37.2° C.), and the B.S.R. 45 mm. Radiographs of the hands revealed general decalcification and reduction in joint spaces. Blood examination showed: uric acid, 2.8 mg. per 100 ml.: red cells, 4,350,000; Hb, 64%; white cells, 10,000. This patient refused gold treatment and requested to have spinal pumping, as Case 2, whom she knew, had improved so much.

Spinal pumping was carried out on Sept. 19, 1946, 10 g. of salicylate being given before and after. The C.S.F. pressure at the beginning was 180 mm. and at the end 160 mm. This patient had the same feeling of warmth at the periphery as Case 1, but with no demonstrable signs. Forty-eight hours later the joints were much improved, and a week later she had full movement and no pain, but the B.S.R. had risen to 85 mm. Twenty-five days later she was discharged, the B.S.R. being

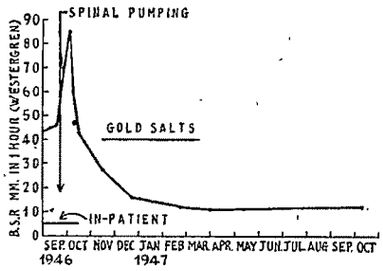

FIG. 2.—The blood sedimentation curve in Case 3.

45 mm. Fig. 2 shows her B.S.R. curve. She attended as an out-patient and had myocrisin till March, 1947, when the B.S.R. was 11 mm. On Oct. 10, 1947, she was doing full housework and had no pain or limitation of movement; the B.S.R. was 12 mm.

Case 4

An engineer aged 40 had for eight months been feeling ill and losing weight, with pain and swelling which started in the left great-toe joint and spread rapidly to the feet, right hip, knees, and right wrist. He had been treated elsewhere with injections of a local analgesic and manipulation of the right hip, but had steadily got worse. On March 21, 1946, he was pale and emaciated, with commencing ulnar deviation of the hands, limited movements of the hands and feet, and much muscle spasm. He had synovitis of the left knee and his ankles were swollen. The B.S.R. was 70/100 in one hour (Westergren); Hb, 73%; white cells, 11,600; blood uric acid, 2.6 mg. per 100 ml.

He was admitted to hospital, and for 10 weeks was treated with rest, plasters, gold, and blood transfusion. There was considerable improvement, but the rheumatoid arthritis was still active and the B.S.R. was 65 mm. As he was very anxious to get back to work he was offered spinal pumping in the hope that it would hasten the improvement. This was carried out on Oct. 1, 1946, after 10 g. of sodium salicylate had been given. Pressure at the beginning was 140 mm. and at the end 210 mm.

The patient was a trained scientist, and he kindly noted his reactions for us:—At operation: "No discomfort and no backache when it was over." First day: "Woke with violent headache and nausea and felt hot all over. Throughout the day experienced quite involuntary movements of the joints—i.e., sudden jerk of knee-joints or ankles or shoulders." Second day: "Still hot and having involuntary joint movements." Third day: "All reaction over." On discharge from hospital two weeks later: "On the whole no marked change." Some joints were less painful, others more so. There was no rise in temperature after the pumping and the B.S.R. was unchanged.

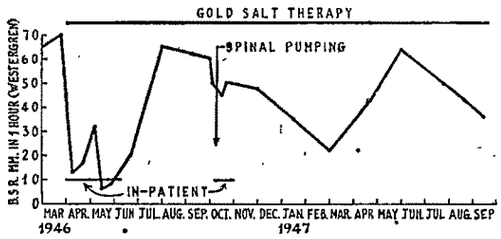

FIG. 3.—The blood sedimentation curve in Case 4.

The patient continued to have gold as an out-patient and steadily improved. He has gained 1 st. (6.35 kg.), is back at work, and is fit enough to swim, though he still has pain in one shoulder, elbow, and wrist. Fig. 3 shows his B.S.R. curve.

Comment

It may be of some interest to include the views of the patients themselves as to the efficacy of this treatment.

Case 1 slowly became quiescent after the pumping and has remained so. We were quite impressed with her improvement at the time, though it was not so dramatic as other writers had recorded, and the disease has remained quiescent. A year later the patient "does not believe the pumping had anything to do with it."

Case 2 still has very active rheumatoid arthritis. When readmitted to hospital a year later a further pumping was tentatively suggested, but she refused.

Case 3 requested this treatment and is convinced that it cured her. Certainly the disease is still inactive a year later, and the small amount of myocrysin (0.14 g.) which she had afterwards is not alone likely to have had this effect.

Case 4, whom we consider the most accurate observer, recorded "no marked change."

Discussion

No conclusions regarding the value of this treatment can be drawn from such a small number of cases. We saw no sign of dramatic improvement such as a return of the B.S.R. to normal in two weeks as recorded by the Gillmans in their 12 cases of chronic arthritis. All our patients described the same type of reaction as that noted by the Gillmans—that is, a subjective feeling of heat coming on a few hours after the operation and lasting up to 48 hours. In three it was most pronounced at the periphery. We were, however, unable to observe any objective sign of this, such as a rise in skin temperature or peripheral or orbital dilatation of vessels. Rheumatoid arthritis is an extremely difficult disease in which to assess the value of any particular treatment, because its natural history shows periods of remission and relapse.

All the cases were under the care of Dr. W. S. C. Copeman, and it is a pleasure to record my indebtedness to him for encouragement in carrying out the treatment and in writing this report.

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According to the October number of the British Red Cross Society's *News Survey*, an American in Washington before the war who acted as a blood donor for the Red Cross was subsequently wounded at Tarawa and was given a transfusion of plasma. On glancing up from his bed to look at the bottle he was astonished to see that its label showed the plasma was his own.

DIVERTICULITIS PRESENTING AS EMPHYSEMATOUS CELLULITIS OF LEG

CLINICAL REPORT ON TWO CASES

BY

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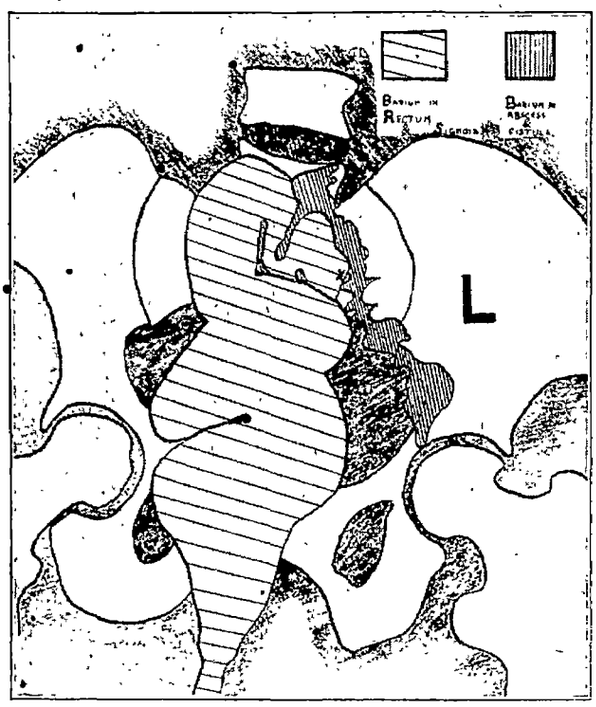
A case of diverticulitis of the large intestine which presented as an emphysematous cellulitis spreading down the leg from the left groin is considered of sufficient general interest to merit recording. This occurred in a patient under observation for another condition. A similar case which occurred in the hospital in 1908 has been recalled by a senior member of the staff and is also recorded.

Case History

Mrs. C., aged 73, was admitted on Nov. 30, 1946, for excision of a rapidly growing tumour of the skin of the lumbar region. This was removed by wide excision down to the lumbar fascia, the exposed area being left to heal by granulation. The tumour was found on section to be a benign neurofibroma. She had never had any gastro-intestinal symptoms. On Jan. 27, 1947, while awaiting skin-grafting, she developed an attack of pyrexia,



Tracing of antero-posterior radiograph of barium enema, showing rectum full of barium. Abscess and fistula leading from it. X marks the site of obstruction.

the temperature reaching 102° F. (38.9° C.) on Jan. 31. The pyrexia was associated with backache, diarrhoea, vomiting, and some difficulty of micturition. By Feb. 4 the temperature had subsided, and thereafter remained subnormal. On Feb. 6 the patient developed a painful, tender, deep-red swelling in the left groin. This was considered to be an inguinal abscess, and as such was being treated expectantly with local heat until it should fluctuate. This did not, however, happen. The swelling developed into a rapidly spreading cellulitis which soon involved the left labium majus, spread laterally almost to the anterior superior iliac spine, limited above by the inguinal ligament, and for a few inches down the anterior aspect of the thigh. The swollen area was crepitant to palpation and covered with bullae containing blood-stained fluid.

On Feb. 8 the swelling was incised under general anaesthesia, with liberation of large quantities of very foul-smelling, frothing sanious pus from the deeper subcutaneous layers. In the course of wide excision of the affected area a track was found leading over the brim of the pelvis, just lateral to the mid-inguinal point, into the pelvic retroperitoneal tissues. A provisional diagnosis of gas-gangrene was made, and, although no clostridia were seen in a direct smear, appropriate specific treatment was started at once. Culture ultimately showed the infection to be due to *Bact. coli* and *Str. faecalis*. No further pyrexia occurred, and the local condition responded rapidly to intensive local and general treatment.

On Feb. 13 the previously defined track became the site of a faecal fistula which persisted intermittently until death. Discharge of pus from the area was controlled with sulphasuxidine and later with phthalyl-sulphathiazole supplemented with riboflavin and nicotinic acid. By March 1 the patient's general condition had improved sufficiently to permit examination by barium enema, on which the radiologist reported as follows: "Barium passed normally through the rectum into the first part of the sigmoid. There was an irregular filling defect past which the barium would not flow. It outlined an irregular fistulous track running down towards the left groin. The film taken after evacuation is suggestive of the presence of diverticula of the colon." The films are unfortunately not good enough for publication, but a tracing from one antero-posterior view is shown in the accompanying illustration. On March 14 a sigmoidoscope was passed to 20 cm. and showed no abnormality.

Owing to the persistence of the fistula and to recurrent attacks of subacute intestinal obstruction a colostomy was considered necessary, and laparotomy was performed on April 11. A large mass was found in the region of the sigmoid attached to the side wall of the pelvis, with several loops of small intestine adherent to it. The gut proximal to these adhesions was dilated and hypertrophied. In attempting to free them from the mass a small abscess was inadvertently opened. Transverse colostomy was performed through a transrectal incision, the abscess being drained through the midline laparotomy wound. The patient died two days later from general peritonitis.

The post-mortem findings were as follows: "The pelvis was almost entirely occupied by a large mass involving the sigmoid colon. Connected with the lumen of the gut were numerous diverticula, which were infected and haemorrhagic. The gut wall in this region was extremely thick, with mucoid or gelatinous deposit producing great deformity of the lumen. About 6 in. (15 cm.) of gut was thus involved, and there was no evidence of carcinoma."

The 1908 Case

In spite of the lapse of time since its occurrence, this case is recorded because of the rarity of the condition and its close similarity to the recent case. The 1908 case was referred to by Barrington and Gardham (1932), but was not fully reported.

Mr. S., a hotel-keeper aged 52, was admitted under Mr. Barker in a moribund condition on June 3, 1908. He came in at 1 a.m., with a diagnosis of intestinal obstruction and emphysematous gangrene of the leg. The patient's doctor supplied a history of moderately severe pain on the left side of the abdomen for two days and reported that "a lump could be felt here, but that nothing could be felt by rectum." The pain was first in the hypochondrium but later in the iliac region. The patient had been unwell for five days. He had had diarrhoea and vomiting but no constipation; he had also suffered greatly from eructations for some time.

On admission he was pale and rather cyanosed. Respiration was 42 a minute. The pulse was rapid and could hardly be felt at the wrist, and the heart sounds were scarcely audible. The abdomen was distended, but the patient said that he was always stout; it was not rigid or tender, and was resonant all over except for some slight impairment in the left flank. The left leg was blotchy and cyanosed in colour, cooler than the right, and the sense of touch with the finger was absent all over it. The pulse in the left dorsalis pedis and femoral arteries could

not be felt, but on the right side they were distinctly palpable. The patient complained of great pain in the left leg, which was partly relieved by elevating the leg and applying leeches.

In the left thigh there was a superficial crepitant sensation resembling surgical emphysema. This was limited sharply above by Poupart's ligament, but, below, the margin was not definite, extending down to the knee in some places. The patient was very restless; the dyspnoea gradually increased, and he died at 4.15 a.m.

The post-mortem report mentions the dark-red colour of the lesion, the large bullae projecting from the surface, and the involvement of the left side of the scrotum. Culture from the leg post-mortem gave several organisms, chiefly *Bact. coli. Bact. aerogenes capsulatus* was not present. "Thrombosis of the veins of the leg had occurred; the muscles of the thigh—iliacus and psoas—were involved in the gaseous necrosis. The intercostal muscles were also involved. The whole of the retroperitoneal tissues on the left side of the abdomen were full of a liquid brownish pus. There was a thick adhesion between the descending colon and the retroperitoneal tissues, and in this there was a recent perforation. In the large intestine there were numerous small pockets of mucous membrane bulging into the peritoneal cavity. There was no obstruction of the large intestine."

A diagnosis of "sacculation of the large gut, stercoral ulceration, perforation, and emphysematous gangrene of the leg" was made.

Summary

Two cases of diverticulitis presenting as emphysematous cellulitis of the leg are described, one in a woman and one in a man. Points of similarity between the cases are set out. In the first case the patient developed the clinical manifestation of the underlying disease while in hospital for another reason; she ultimately died of peritonitis following a therapeutic colostomy, in spite of prolonged and intensive general and local treatment. The second patient was admitted in a moribund condition and died of the immediate and very far advanced sepsis.

Our grateful thanks are due to Mr. A. J. Gardham for encouragement and permission to publish the first case, to Mr. F. J. F. Barrington for references to the second, and to all who have in any way assisted in the preparation of this account.

REFERENCE

Barrington, F. J. K., and Gardham, A. J. (1932). *Clin. J.*, **61**, 337.

RECURRENT RENAL LITHIASIS

BY

A. DICKSON WRIGHT, M.S., F.R.C.S.

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The condition of recurrent renal calculi associated with infection has been a urological bugbear for a very long time, and the apparently satisfactory outcome of the following extreme case seems to render it worthy of record.

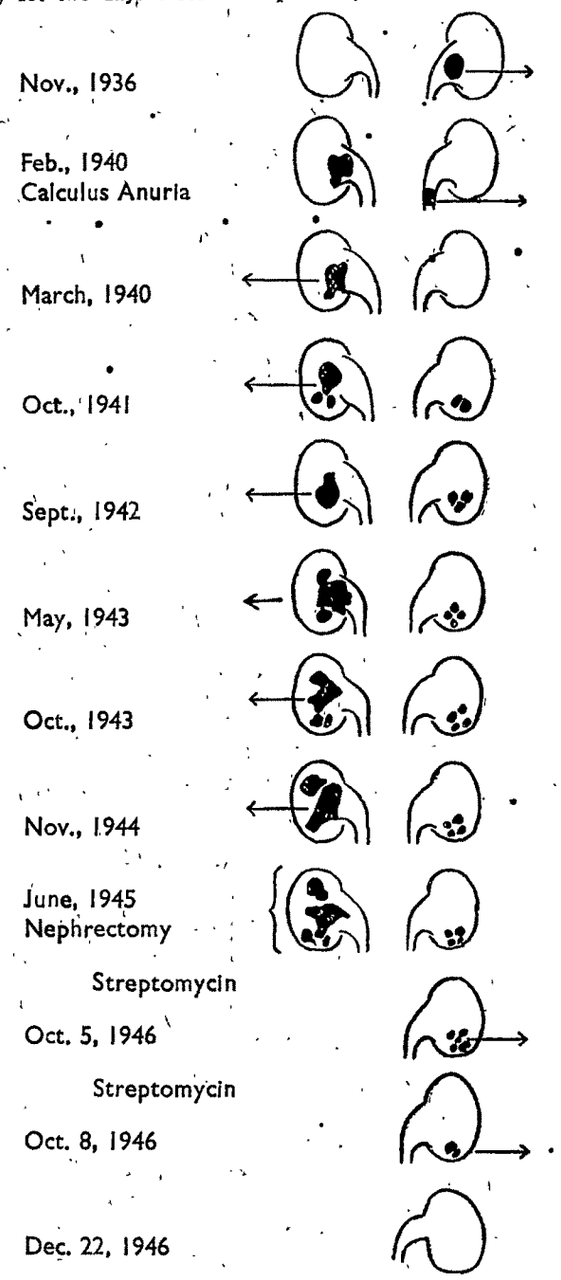
Case History

The first operation was done by the late Girling Ball in 1936, when the patient was aged 24. An oval stone was removed from the pelvis of the left kidney, and infection with *Bacterium coli* was present at this time.

The subsequent ten operations were performed by me during the next ten years, and are summarized diagrammatically. Never during this time was she free from gross pyuria, and *Streptococcus faecalis, Bacillus proteus,* staphylococci, and *Pseudomonas pyocyanea* found company with the *Bact. coli* of the first occasion. The patient suffered much misery from recurrent attacks of renal colic associated with fever together with renal aching nearly all of the time. Naturally every method was used to try to overcome the infection—ketogenic diet, mandelic acid, sulphonamides, penicillin, N.A.B., etc. The stones were always a mixture of phosphates and seemed to be unaffected by reducing calcium intake and drinking large amounts of distilled water. Calcium metabolism was carefully checked and found normal.

After some of the later operations small tubes were left in the infected calices and irrigated continuously for two weeks with various solutions, G1, G2, associated with sulphonamide solutions and penicillin. On two occasions a ureteric catheter was left in the ureter and the irrigating was done through this with a nephrostomy tube for outflow. All these methods were in vain, the infection in every case reappearing before the patient had left the hospital, and the stones rapidly forming soon after.

With the last two operations streptomycin was used systemically for two days before the operation, and the urine for the



first time for ten years became sterile. Four stones were removed, and radiographs taken during the operation with a small oral film inserted into the depths of the wound visualized no stones. A radiograph on the second post-operative day showed two small calculi still present, so the wound was reopened and these were removed by the device of drawing half a small dental wool roll on a silk thread from the pelvis through the diseased inferior calices. Streptomycin was used for seven days in all—1,000,000 units daily in three-hourly doses—and the diseased calices were also irrigated with streptomycin solution—1,000 units per ml.—for seven days after the operation.

Six months later the urine is clear of infection and the kidney of stone, and the patient is free from symptoms.

Medical Memoranda

Central Placenta Praevia with Premature Rupture of Membranes

The following case is of sufficient practical importance to merit publication.

CASE HISTORY

Mrs. A., aged 45 and separated from her husband, had had three normal pregnancies before the age of 30; thereafter she suffered from severe menorrhagia, which was relieved by curettage and removal of a fibroid polyp; hysterectomy had been advised on account of fibroids, but conception temporarily removed her symptoms. Her fourth pregnancy was illegitimate and unwanted, and she was due for confinement on May 19, 1947. Irregular bleeding began in the early months, and there was a severe haemorrhage at 28 weeks; after three weeks in bed there were three more attacks in a fortnight, and she was admitted on April 9 in her 34th week, following her fifth haemorrhage.

On examination she was seen to be somewhat anaemic, the haemoglobin amounting to 62%. The uterus was not contracting and there was no vaginal loss. A foetus equivalent in size to 34 weeks' pregnancy was presenting by vertex (not engaged) and with regular heart sounds. There was no oedema, albuminuria, or rise of blood pressure. Speculum examination of the cervix disclosed no local cause for bleeding.

A provisional diagnosis of placenta praevia was made; a conservative regime was adopted in view of prematurity and the patient confined to bed. Two days later, however, the membranes ruptured, with copious loss of clear liquor, and 48 hours later contractions started. These increased steadily for 20 hours, during which period there was no bleeding, the presenting part remained high, and no pelvic examination was made. Brisk haemorrhage eventually ensued, and preparations were made for vaginal examination under an anaesthetic; but caesarean section was not seriously contemplated, since the foetus was six weeks premature, the membranes three days ruptured, and the placenta presumed to be well away from the os.

Delivery.—Under thiopentone anaesthesia examination showed a soft cervix rather less than half dilated and completely covered by thick placental tissue; the presenting part was high, but was easily palpated through the anterior fornix. Two fingers were passed up between placenta and anterior lip of cervix to re-rupture the membranes and fasten two pairs of Willett forceps on to the foetal scalp; the placenta was pushed back, the head drawn down, and 1 lb. (0.45 kg.) traction weight secured to the forceps handles. Surprisingly little haemorrhage attended these manœuvres, but there was sufficient loss to warrant blood transfusion. Four hours later a stillborn child weighing 4 lb. 13 oz. (2.18 kg.) was delivered. The placenta failed to separate, and after 1½ hours of slight bleeding the patient was again anaesthetized. An attempt at expression was unavailing, and manual removal was undertaken. The placenta was found on the posterior wall, the upper part separating easily; but inferiorly it was densely adherent to the lower segment and cervix, from which it could be clawed off only with great difficulty and much loss of blood. The patient's condition became critical; the lower uterine segment was packed with gauze, and a total of 5 pints (2.84 litres) of blood was given before satisfactory recovery ensued.

DISCUSSION

The pathology of the condition was undoubtedly an imperfect placental development in the lower part of the uterus (partial accreta), with morbid adhesion more or less all round the internal os. Thus the membranes must have bulged round the anterior placental border to rupture at the least-supported spot, while subsequent dilatation of the cervix was considerably hindered and bleeding relatively slight. The practical importance of the rupture of membranes was to give an unwarranted bias against caesarean section and to trust to vaginal delivery. This policy was apparently endorsed by the early freedom from bleeding but heartily condemned by the difficulty and danger of the third stage. The morals that may be drawn are two: every antepartum haemorrhage is a potential caesarean section until the finger has passed through the cervix; and a patient with antepartum haemorrhage may die of postpartum haemorrhage if delivered vaginally.

Acknowledgments are due to Mr. Kenneth MacMillan for his permission to publish.

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Occupational Dermatitis Occurring in Transplanted Skin

The following case of occupational dermatitis occurring in a skin graft to a finger may be of interest to casualty surgeons and to dermatologists—to the former as a complication of their technique, and to the latter as a factor in the aetiology of occupational dermatitis.

CASE REPORT

The patient, a man aged 38, had been employed for some 20 years as a wet grinder of brake drums and other car components. He sustained an injury to the soft tissues of the dorsum of the terminal phalanx of the right ring-finger. Superficially there was loss of skin, nail, and part of the nail bed, and, more deeply, the tendon of extensor digitorum longus was divided and the bone lacerated.

At operation in hospital the damaged tissues were repaired and the lost skin made good by the application of a cross-arm flap from the upper extensor aspect of the left forearm; it was noted that the medial and lateral neurovascular structures were intact. Surgical recovery was uneventful, and six weeks after the date of injury the patient returned to his original job without having been subjected experimentally to the exact working conditions of the job, where his hands were continuously bathed in a dilute solution (varying from 5 to 10%) of washing soda.

Twenty-four hours after starting work a vesicular eruption appeared over the area of the grafted skin, and after attempting to carry on work on the next shift he reported sick. When examined the condition of the graft was noted to be as follows. A whole-skin graft covered the dorsal aspect of the terminal phalanx of the right ring-finger. The graft had taken well, and a definite small sulcus delimited its extent. The whole of the skin-graft area showed a mild erythema, and a few scattered vesicles were seen. The surrounding skin was normal. In addition there were areas of desquamation where vesicles had broken down, showing increased erythema of the underlying tissue layers. The transplanted skin contained hair follicles, and the openings of these were prominent and distended. The whole appearance was compatible with a localized occupational dermatitis due to contact with a mild irritant fluid.

Daily treatment with a simple zinc-and-tar lotion and a gauze dressing was immediately instituted, and arrangements were made for the patient to be placed on dry work. The condition cleared up after one week, and at the time of writing (some four weeks after the man's return to work) he is on a job under dry conditions before being given a further contact trial.

DISCUSSION

This man had never previously shown any reaction to soda solution, with which he had been continuously in contact at work for 20 years. It is presumed, therefore, that the irritating factor was the contact between sensitive skin—i.e., from the upper part of the forearm—and the soda solution, which has both a mild irritant and a macerating action. The skin graft was only six weeks old, and it is probably correct to assume that the blood supply was still inadequate.

The chance of an occupational dermatitis occurring in skin grafts should be borne in mind by surgeons and by medical practitioners when certifying a man as fit to return to his pre-accident job. Industrial medical officers and those in charge of skin clinics should recognize its possibility, and arrange for slow initiation, under supervision, of skin-graft cases in their contact with industrial irritants.

The reaction in this case was to dilute alkaline solution, one of the less common skin irritants met with in industry. The distended condition of the hair follicles following contact indicates that in carrying out skin grafts on the hands of machinists casualty surgeons should consider the possibility of taking skin from a less hairy area than the extensor surface of the forearm, thus reducing the risk of infiltration of the follicles with industrial solutions.

Prosser White (*The Dermatergoses*, 4th ed., 1934, p. 28) states that, "apart from the activity of the irritant and the sensitivity of the nervous system, liability to injury depends upon whether the skin is normal in structure and healthy in function." In the case of transplanted skin it is likely that at six weeks vascularization is still incomplete, and therefore its powers of recuperation from continued low-grade chemical trauma are less than those of normal skin.

C. H. HOSKYN, M.B., B.Chir.

Reviews

ZEST IN OLD AGE

Old Age. Its Compensations and Rewards. By A. L. Vischer. Foreword by Lord Amulree, M.D., F.R.C.P. (Pp. 200; illustrated. 12s. 6d.) London: George Allen and Unwin. 1947.

In the ages of mediaeval Christian faith a "good death" was regarded as the crown of life (not necessarily always of a good life). Nowadays, surely, a healthy old age, with true "ripeness" and preservation of the intellect, has a just claim to be called the crown of an active and well-spent life. Among the many (including some brilliant) medical and philosophical books and essays on old age there is not one, so far as I know, really similar to Dr. Vischer's. Dr. Vischer, who has had exceptional opportunity at Basle for a long and obviously sympathetic study of old persons, gives us the result of his experience and study regarding their physical and psychical peculiarities and infirmities, their mental life, and how best to make them comfortable and happy in the feeling that they are still really playing a useful part in life.

Paediatrics, in spite of considerable opposition, gained recognition as a medical specialty, and now, with the greatly increased proportion of old persons among the public, geriatrics can no longer be denied a place.

When about 20 years of age I once had the privilege of sitting at dinner next to the warm-hearted Sir James Paget. He questioned me on how I spent my holidays, and then he gave me to understand that I was one of those who preferred "change of work" to mere rest or amusing games—I suppose he included the strenuous pursuit of hobbies under "change of work." Change of work doubtless gives a temporary holiday to groups of brain cells—according to the ideas admirably put forward by the late Sir Farquhar Buzzard (1928), quoted with approval by Dr. Vischer (p. 192), and these ideas should be remembered in the management of some of the troubles of late middle age and commencing senescence. Old persons should not be discouraged from making harmless experiments in regard to way of life (including diet), if they find that for a time their vigour and zest in life are thereby increased.

One need scarcely mention that when long periods of continuous physical and mental work become impossible the experience of old persons is often still so useful that they should be recognized as advising or consulting authorities (not "sleeping partners"). For instance, in our medical profession they might often be made active "consultant diagnosticians" to hospitals and institutions where they were formerly on the regular visiting staff.

The clear wording and admirable translation of Dr. Vischer's book should be specially noted, but not the least feature is its wealth of references to sparkling and appropriate epigrammatic sayings and discussions by previous writers of all kinds bearing on a subject which, perhaps next to love and death, offers itself most readily to literary artists. One piece of advice from early mediaeval Christianity (not included in the book) I once stumbled on—namely, the last two lines of a letter by Paulinus, Bishop of Nola, early in the fifth century (eleventh volume of Migne's *Patrologia, series latina,* column 184): "Vive, precor [another version gives "Vive diu"], sed vive Deo : nam vivere mundo Mortis opus ; vera est vivere vita Deo." In the widest possible humanistic spirit I think one should interpret these lines : "Live long the fullest life you can, but live as rightly as you are able to ; for to do wrong is death's work ; to act rightly is the true life to God."

F. PARKES WEBER.

THE GROWING CHILD

The Child from Five to Ten. By Arnold Gesell, M.D., and Frances L. Ilg, M.D. In collaboration with Louise Bates Ames, Ph.D., and Glenna E. Bullis. (Pp. 475. 18s.) London: Hamish Hamilton. 1947.

In this volume, now in its second edition, the authors discuss the same children as in previous volumes—*The First Five Years of Life,* 1940, and *Infant and Child in the Culture of Today,* 1943. The study is chiefly longitudinal through seventeen age levels and ten major fields of behaviour, but cross-sections are summarized for the sake of clarity. The study is clinical rather than statistical and experimental, and the behaviour was observed, so far as possible, in the natural setting of school and home. It must be remembered that a child is growing all the time and not at an even rate in all respects, so that a certain cross-section cannot be regarded as normal for any particular child. Nevertheless, a growth gradient and tendency can be discerned as a general pattern of normality.

The age of 5 to 10 lies between the dramatic years of infancy and adolescence and has so far been rather neglected. The present study shows that it has distinctive and important characteristics peculiar to it. Besides marked physical growth there is a surprising mental advancement which, while showing a general progress towards maturity, may not proceed evenly and may even retrogress from time to time. When large numbers are studied the curve of progress smoothes out, so that the stage reached by the individual in respect of particular activities and skills can be estimated at any age. Thus we may learn how a particular child needs help or encouragement. To bring up a child successfully the parent and teacher need considerateness, a sense of humour or proportion, and a "philosophy of growth"—that is to say, an idea of how the average child develops and what should be looked for at any particular stage. The danger of divided loyalties for the child must be avoided by maintaining a close relationship between parents and teachers.

In the second part of the book the authors describe "behaviour profiles" reached at each successive year from 5 to 10, especially in relation to ten maturity traits and gradients of growth—namely, motor characteristics, personal hygiene, emotional expression, fears and dreams, self and sex, interpersonal relations, play and pastime, school life, ethical sense, philosophic outlook. In the third part they trace the development of these maturity traits through the first ten years of life, though since individual children develop at different rates parents should not be alarmed if theirs has not reached a particular stage at a certain age. From this part of the book, however, it is possible to discover what the average child is likely to be doing at any given stage of development. For example, we can learn how and when a child responds to reason, how his relations with other children change, his interests in sex develop, his conception of God emerges, and so on.

This book will be of great value to parents and teachers, doctors and nurses, and all those concerned with children, for it is interesting to read and useful for reference. Any work done in the Yale clinic of child development, of which Dr. Gesell is the director and Dr. Ilg a prominent member of the staff, is reliable and thorough. A balanced study of childhood is especially important in these days, for "the intrinsic charm and goodness of childhood still constitute the best guarantee of the further perfectibility of mankind."

R. G. GORDON.

POLIOMYELITIS

On the Problem of Poliomyelitis. An Epidemiological Statistical Study. By Bertel S:Son Bertenius. (Pp. 212. No price given.) Lund: Carl Bloms Boktryckeri A.-B. Acta Pathologica et Microbiologica Scandinavica Supplementum LXVIII. 1947.

The author of this publication presents a valuable collection of official statistics and other records of poliomyelitis in many countries, his analysis covering a number of problems. In this review we can only summarize some of his arguments. Large epidemics and an increase in the prevalence of poliomyelitis have been noted only in this century and at first particularly in Sweden, Norway, and the U.S.A. There was a stationary period during the first world war, but in the 1920's the increase was resumed and the population of Iceland, New Zealand, and Australia were affected. Countries with a high incidence of poliomyelitis have low infantile and general mortality rates and a high standard of living. The seasonal incidence has a constant maximum in autumn. Analysis of Swedish and American figures shows that this may be related to climatic conditions, but the reason for it has not yet been elucidated.

The shift in age incidence to older people is contrary to the trend of other infectious diseases in Sweden, which conform to de Rudder's "Law of Age Precession." The shift has occurred to a different extent in different countries and during a high

prevalence in some and a low prevalence in others. Although attack rates in rural districts are often higher than in towns, the reverse has been true in some countries, and Swedish figures show several indications that the attack rate is not inversely related to population density. In Sweden also the case fatality rate is higher in towns than in country districts and highest among people aged 20 to 60 years. These findings lead the author to conclude that immunization by subclinical infections plays no part in determining the incidence of poliomyelitis. He refers to experiments by other workers showing that deficiencies of diet increase the resistance of monkeys and mice to poliomyelitis virus and suggests as a working hypothesis that a predisposition of the individual human being, probably produced by social factors, is a necessary antecedent to acquiring poliomyelitis.

A. M. MCFARLAN.

DIGESTIVE TRACT

An Introduction to Gastro-Enterology. A Clinical Study of the Structure and Functions of the Human Alimentary Tube. By James Dunlop Lickley, M.D. (Pp. 143; 21 illustrations. 8s. 6d.) Bristol: John Wright and Sons, Ltd. 1947.

The author's aim is to present a simplified account of the structure and functions of the gastro-intestinal tract which senior students or recently qualified practitioners may use as an introduction to the study of digestive disorders. He first carefully describes the salient features of the anatomy of the intestines. He then gives a chapter on physiology, though, as he says, this is simplified by the selection of certain details for description and the omission of many others. The author then proceeds to describe and elaborate his main thesis, which is that the signs and symptoms of disease of the digestive tract are mainly produced by the actions of the defence mechanisms by which the intestines deal with abnormal situations. Such a conception takes us from the realm of facts to that of hypothesis. For instance, he considers that the increased resting juice found in pyloric stenosis is necessary "to fill the dilated stomach and so enable the impaired gastric muscles to adjust their grip on the stomach content."

It is, however, by his account of the practical clinical applications of his theory that the author is likely to lead the senior student furthest astray. He classifies diseases of the stomach into acute or chronic, generalized or circumscribed mucositis, myositis, or serositis. Such a division is surely an oversimplification, and he is wise not to keep too closely to this nomenclature. Nevertheless, he succeeds in describing and explaining the pathogenesis of the symptoms of peptic ulcer (chronic circumscribed mucositis) in a very few pages.

The author attempts too much and achieves too little. As a manual of gastro-enterology his book contains too little fact and too much theory; as an exposition of the author's particular thesis it suffers from being too simplified and from an absence of verifiable evidence to support an original conception.

CHRISTOPHER HARDWICK.

FAR AND WIDE

Nothing New Under the Sun. By J. P. Lockhart-Mummery, M.A., F.R.C.S. Illustrations by William Wood. (Pp. 178. 12s. 6d.) London: Andrew Melrose, Ltd. 1947.

Mr. Lockhart-Mummery has drawn on his experience, his travels, and his reading, scientific and otherwise, to produce this attractive little book of essays, which are linked by having in common a scientific or historical background. A random selection from the titles—"Fighting Fish of Siam," "How was Man Evolved?", "Why do Dogs like Bones?", "Hormones," "Quacks and Charlatans," "D.D.T.," "What was the Biggest Explosion?"—gives some indication of the range he covers. The author has an attractive eager style that takes the reader with him in his enthusiasms. He is at his best when considering historical subjects like "The Good Old Days," least satisfactory as an exponent of evolution. The proof reader has missed a few mistakes, such as automatically for anatomically on p. 39, and Chiseldon for Cheselden on p. 124. The book is eminently readable. It is attractively produced, and the woodcuts by William Wood are a delight to look at.

HENEAGE OGILVIE.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

Méthodes Statistiques en Médecine et en Biologie. By E. Morice *et al.* (Pp. 177. 480 francs.) Paris: Masson and Cie 1947

Textbook of statistics for medical workers

Die Prophylaxe des Verbrechens. By Heinrich Meng *et al* (Pp. 568 34 Swiss francs.) Basle: Benno Schwabe and Co. 1948.

A study of the aetiology and prevention of crime

Psychotherapy in Child Guidance. By Gordon Hamilton. (Pp. 340. 22s.) London: Geoffrey Cumberlege. 1947

A study of the social worker's role in psychotherapy

Let's Talk About Your Baby. By H. Kent Tenney, Jr., M.D., F.A.A.P. 3rd ed. (Pp. 115. 8s. 6d.) London: Geoffrey Cumberlege. 1947.

Medical advice in plain language for mothers.

Traite de Médecine. Vol. I. Edited by Prof. A. Lemierre *et al* (Pp. 1,096. 2,200 francs.) Paris: Masson and Cie. 1948.

Textbook of medicine: this volume is first part on infectious diseases

Traité de Médecine. Vol. V. Edited by Prof. A. Lemierre *et al.* (Pp. 1,163. No price.) Paris: Masson and Cie. 1948.

Textbook of medicine: respiratory diseases

Guide to Marriage. By Leslie J. Tizard. (Pp. 173. 7s. 6d.) London: George Allen and Unwin. 1948.

A manual for the layman.

Doctors, Drugs and Steel. By Edward Podolsky, M.D. (Pp. 382 16s.) London: Medical Publications Limited. 1947.

Some recent medical discoveries described for the layman

Lehrbuch der Inneren Sekretion. By F. Verzár. (Pp. 609. 52 Swiss francs.) Liestal: Verlag Ars Medici Lüdin AG 1948

A textbook of endocrinology.

Women and Men. By Amram Scheinfeld. (Pp. 394 15s) London: Chatto and Windus. 1947.

An account of sex differences for the layman.

Fatigue and Impairment in Man. By S. Howard Bartley, Ph.D., and Eloise Chute, M.A. (Pp. 429. $5.50.) New York and London: McGraw-Hill Book Company, Inc. 1947.

An investigation into the bodily and mental aspects of fatigue.

Practical Psychiatry and Mental Hygiene. By Samuel W. Hartwell, M.D. (Pp. 438. $3.75.) New York and London: McGraw-Hill Book Company, Inc. 1947.

A textbook for the student of psychiatry.

Local Government. By Sir Arthur MacNalty, K.C.B. (Pp. 218. 4s. 6d.) London: Methuen. 1948.

A general account of local government in Britain.

Introduction to Carbohydrate Biochemistry. By D. J. Bell, B.Sc., M.A., Ph.D., F.R.I.C. 2nd ed. (Pp. 107. 6s.) London: University Tutorial Press. 1948.

Intended primarily for students of biochemistry.

Endocrine Therapy in General Practice. By E. L. Sevringhaus, M.D., F.A.C.P. 6th ed. (Pp. 264. No price.) London: H. K. Lewis. 1948.

A practical introduction to endocrinology.

A Century of Medical Service. By B. Darwin. (Pp. 47. No price.) Swindon: Great Western Railway Medical Fund Society. 1947.

A history of the G.W.R. Medical Fund Society.

The Oculorotary Muscles. By R. G. Scobee, B.A., M.D. (Pp. 359. 40s.) London: Henry Kimpton. 1947.

An approach to the diagnosis of dysfunction of the external muscles of the eye.

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THE INDEPENDENCE OF MEDICINE

A Special Representative Meeting will be held next week so that the Representative Body may consider the results of the plebiscite and the consequent policy to be adopted. The Council of the B.M.A. at its meeting on Feb. 18 passed a Resolution to be put before the Special Representative Meeting. It is as follows:

> That the Representative Body, reaffirming the whole-hearted desire of the medical profession for a comprehensive health service available to everyone, urges that in the public interest such changes should be made in the Acts of 1946 and 1947 as are necessary to maintain the integrity of medicine and to prevent doctors being turned into State servants, with harmful consequences to patient and doctor alike. The Representative Body therefore expresses the hope that the Government will make it possible for the profession to co-operate by making such changes, and states its view that it is not in the best interests of the public or of medicine for members of the profession to enter the Service until such changes are made.

At its last meeting held before the issue of the plebiscite forms the Representative Body discussed the problems before it in a thoughtful, quiet, but determined manner, thereby showing its sense of responsibility in relation to the present conflict between the medical profession and the Ministry of Health. The in many ways unexpected results of the plebiscite will have heightened their sense of responsibility and at the same time confirmed the confidence of the representatives in the policy they have followed. It was said in the early days of the war, we believe by Mr. Winston Churchill, that it was undesirable to introduce controversial legislation during the period of war stress. But the reformer always seizes upon the atmosphere created by a war to promote those projects which he fervently believes will promote the well-being of the country. It was in 1942 that Sir William Beveridge (as he then was) introduced his Social Security Report. We are not concerned here to argue whether security is an ideal likely to bring out the best from a people who have built up a great and beneficent Empire by boldly accepting the challenge which insecurity offers. It may, however, be noted that the Beveridge Report was published at a moment when Britain was faced with the possibility of overwhelming national disaster. Freedom from fear and from want were things that even the most stout-hearted deeply desired. Assumption "B" of the Beveridge Report carried with it the promise of freedom from disease. The psychological moment was indeed ripe for the reception of Sir William Beveridge's great document, and what Mr. Butler has described as "the new social mosaic" was put together by a Coalition Government. If we are to believe what Socialist spokesmen have said, the pressure for the nationalization of Medicine came from the Labour side of the Coalition, and successive Ministers of Health—Liberal, National, Conservative, and finally Labour—have been busy trying to fit the medical profession into this new mosaic.

The medical profession has for centuries, and with startling success during the past hundred years, laboured to free humanity from disease and to promote the health of the individual. Doctors hardly needed to be told that this was an ideal to be aimed at and were eager to explore ways in which their beneficent activities could be made more effective. The opposition that the medical profession has offered to successive proposals by Ministers of Health belonging to different political parties clears it from any accusation of party political bias. The opposition is directed against the political control and management through a bureaucracy of the art and science of Medicine and against the employment of medical men by a member of His Majesty's Government. Medicine has never claimed immunity from constructive criticism, or that its services to the community are incapable of improvement. Though individual doctors, through human weakness, may have faltered, each generation of medical men has remained faithful to its high ideals and through this has brought Medicine to the present high position it holds. No one has denied the need for the State organization of such communal services as are provided through the Public Health Acts. But to try to fit the care and treatment of the individual patient by the individual doctor into a national framework is a matter of the highest complexity and one which the planners of Medicine are incapable of fully understanding. The sick person must, of course, have confidence in the medical skill of the doctor, and the degree of skill a medical man has depends not only upon himself but upon those responsible for his technical education. As a science Medicine is full of uncertainties, and a good doctor knows its limits. As important to the sick person as the technical skill of the medical man is his quality as a human being coming into one of the closest relationships that exist between human beings. This is something that the planner, thinking along quantitative lines, fails to take into account and is possibly incapable of comprehending.

The results of the plebiscite show the deep-seated doubt all sections of medical men have about the effect upon the quality of Medicine of the State medical service foreshadowed in the National Health Service Act. There are compelling reasons for keeping Medicine independent of the State. If, however, the people of this country through Parliament, in the face of what we consider to be the better judgment of the medical profession, pursue with success the idea that a paternal State should provide every kind of medical service, then the medical profession must at least see that within the State framework the maximum amount of freedom and independence of the medical man is made secure. In its present form the Act does not provide safeguards for this freedom and independence, and if the Government fails to provide them the National Health Service Act will be an inglorious failure.

STUDENT HEALTH

In recent years an increasing number of physicians have been appointed at British universities and colleges to supervise medical health services, yet nowhere in this country is there a comprehensive service operating to the full extent considered appropriate by the university delegates to a recent conference on student health.[1] An important lead was given in 1944 by the Goodenough Report,[2] which recommended that universities should set up student health services, and Cambridge has recently appointed Air Vice-Marshal A. F. Rook for this purpose. In 1946 the Social and Preventive Medicine Committee of the Royal College of Physicians recommended arrangements for medical examination, including chest *x*-ray and annual re-examination during the student's stay at the university, in order to detect physical and mental disabilities and to indicate how advice or treatment should be obtained if necessary. This committee also suggested that arrangements should be made for the medical and nursing care of students who are ill, and drew attention to such matters as diet and lodgings. Though not as yet generally adopted, schemes for the provision of medical treatment are obviously important, but with sickness provided for more attention can be directed to the preservation and promotion of health.

The present position is summarized in the most recent report of the health committee of the National Union of Students. Among 38 universities and university colleges, 57 training colleges, and 33 technical colleges, 42% have no medical examination or certificate at entry, 30% no provision for advice or remedial service, 36% no arrangement for calling a medical practitioner, 39% pay no attention to lodgings, and in 69% there is no examination for tuberculosis. Generally speaking training colleges are better provided for than universities and university colleges; the position in technical colleges is worst. These arrangements as a whole are in marked contrast to those in universities in the United States.

In the U.S.A. student health organizations have benefited by more than twenty years' experience. There the best medical advice in health and sickness has been made available to students, who have in their turn furnished excellent material for the study of normal young adults, particularly as regards standards of measurement and the ranges of normal variation. The Grant study of young men at Harvard is perhaps the best known on this side of the Atlantic, and the rapidly extending literature concerning student health reveals that the interest has shifted from sickness to health. This reorientation of outlook requires a form of training for physicians different in its scope from the traditional one of hospital practice, and it is perhaps noteworthy that in the study of normal personality the terms of psychopathology have often been found less suitable than words in common English usage.

The factors influencing the welfare of students are those of everyday environment and their genetic endowment. They include such items as the quality of teaching, the cost of food and lodgings, hours spent in travel or queues at eating-houses, pressure of examinations, the wish to justify financial grants, hours of study often self-imposed and excessive, the loneliness of isolated digs, and at the present time for ex-Servicemen the problems of readjustment to civil life. Such factors assume major importance because they impinge on young life still hopeful of attaining full physical stature, sexual maturity, and intellectual power. A physician with responsibility for young adults has a rare opportunity to guide, to reassure, or to warn at the first sign of disorder. Given understanding and an outlook appropriately sympathetic he may create an atmosphere in which difficulties can be discussed rationally and thus be more easily dispelled. Measurements of physique or personality made at the first interview serve as a base-line against which future observation during the student's residence takes on new meaning. With this purpose in view, with or without an added stimulus of research, what might be a monotonous routine examination can become a lively and sustaining activity.

We publish this week a survey by Dr. J. Pemberton of the health of 407 new students. Because examination after entry was made obligatory for all students at Sheffield his survey covers a fully representative group, and from the findings it should be possible to plan for the future. A case may be established for routine dental and ophthalmological examination, and the ready availability of an E.N.T. surgeon is clearly desirable. With regard to mental health, Pemberton found 20% of students were suffering from minor anxiety states or depression. This proportion corresponds with that found by other workers in this field[3] and its importance lies in that the majority may be relieved by relatively simple measures, as for example the adjustment of financial grants, or more simply opportunity for discussion and advice. Even more serious psychological disturbances are not uncommon, as the high wastage rate among students who start but fail to stay the course suggests. Though Pemberton reports no example of attempted or successful suicide, such occurrences are frequent enough to constitute a special problem in which community responsibility is deeply concerned. In addition, in the words of the report to the Royal College of Physicians, "the development of a psychosis in a student already embarked on his University career may prove for all concerned a major tragedy, which could have been foreseen and perhaps prevented." Its detection is no less important than the early signs of pulmonary tuberculosis. In view of the foregoing remarks the question of the value of routine psychiatric interview may be raised. Experience to date is limited, but at one well-known university in the U.S.A. mental hygiene examinations were instituted as part of the routine health examination of all first-year students. They were, however, discontinued after four years as it was found that students wanting psychiatric help would seek it, whereas those who did not would not be coerced. Results failed to justify the additional organization, work, and cost.

If it is the purpose of university education to encourage the fullest and best use of all human attributes, then

[1] Nuffield Foundation, Student Health Conference, 1947, Oxford.
[2] *Report of Inter-departmental Committee on Medical Schools*, 1944, London: H.M.S.O.
[3] Parnell, R. W., *Lancet*, 1947, 2, 939.

physical and social development should come second only to the cardinal and traditional aim of intellectual development. Many students reach the university to-day with great intellectual achievement to their credit but possessing neither physical nor social maturity. Facilities to develop in both these directions are necessary, not so much for the star performers in any field, who have little difficulty in following their bent, but mainly to foster the powers and enjoyment of the remaining majority. Preliminary surveys suggest that only a small minority balance their studies with regular outdoor activity. For example, it is probable that many students are unable to swim fifty yards, yet even a young person with severe kyphosis and unfitted for most sports may overcome his handicap by learning to swim on his back. Physical exercise need not be limited to the usual field games but may well include mountaineering, dancing, ski-ing, canoeing, beagling, and other activities according to individual taste. It is not generally realized that where compulsory physical education for first-year students has been in force the university authorities have had no easy task in providing facilities for so wide a variety of recreations.

The question of making routine health examinations compulsory, and also physical recreation, has been closely argued. In most universities on the Continent and in the U.S.A. obligatory examination is fully accepted. Some medical officers in charge of student health services in this country may feel that they could be more effective if medical examinations were compulsory. Medical examination of school-children is accepted by nearly all parents as a necessary and useful adjunct to education. Though not exactly compulsory, under the Education Act of 1944 parents can be induced in certain circumstances to allow their children to be examined. Students attending a university are no doubt supposed to be old enough to know what is good for them, and in any case it is one of the primary functions of education to develop a sense of responsibility in young people. It can be said, however, that where medical examination has been made compulsory at a university little if any harm has followed. Student health services, to develop satisfactorily, should have that voluntary spirit which seeks and finds the answer to individual needs.

RHEUMATOID ARTHRITIS—A NEUROLOGICAL DISEASE?

The cause of rheumatoid arthritis remains unknown. Since the disease was differentiated from other forms of arthritis in the nineteenth century many causes have been suggested,[1] and a number of eminent observers have looked with suspicion at the central nervous system. Charcot[2] and Pierre-Marre were impressed by the bilateral symmetry and centripetal spread of the disease. Weir-Mitchell produced a neurotrophic hypothesis. More recently Speransky in the U.S.S.R. has suggested that the disease is a specific nervous distrophy, and interest has been aroused in the technique of "spinal pumping" which was first advocated by him. Elsewhere in this issue Savage describes this method of treatment and reports on the results obtained in four cases of rheumatoid arthritis. Obviously with such a small series nothing conclusive can be said, but it seems unlikely that completely successful results will be frequent.

Of the three ways—psychological, autonomic, and neurological—in which the central nervous system might be involved in the development of the disease the neurological features have received considerable attention in recent months. They include the paresis and atrophy which affect the muscles of the extremities, and the trophic changes associated with disease of the autonomic system. Sundelin[3] believes the symptoms indicate that both the central and autonomic nervous systems are involved. He examined the cerebrospinal fluid from 141 patients, and the only abnormality he discovered was a change in the protein level. In 41% there was either a rise in globulin or an alteration in the A.G. quotient, sometimes associated with a rise in total protein. These findings were not connected with the duration, severity, or activity of the disease, nor with the previous administration of gold salts.

Alteration in the cerebrospinal fluid proteins may be related to the cause or to the effects of the disease, and Sundelin refrains from drawing any debatable conclusions. In rheumatoid arthritis it is not unusual to find an abnormal blood-protein value, with alteration of the A.G. ratio and a rise in globulin level. The empirical tests of liver function may be positive, and these probably depend upon a rise in globulins. The cerebrospinal fluid changes may be only a part of a general alteration in protein levels, possibly depending on the position of globulins in the immune response. Combined observations on cerebrospinal fluid and blood would help to clarify this point.

The muscle paresis and atrophy which Sundelin claims to be neurological features might be related primarily to the altered muscle histology. In rheumatoid arthritis muscle biopsy nearly always reveals focal accumulations of lymphocytes, plasma cells, and eosinophil cells around the nerves and in the endo- and perimysium.[4] If rheumatoid arthritis is a neurological disease, then the C.S.F. findings of Sundelin would suggest a degeneration rather than an infection of the central nervous system.

CERVICAL INTERVERTEBRAL DISK LESIONS

Lesions of the intervertebral disk, with protrusion of some of its substance into the spinal canal, is now a well-recognized cause of lumbo-sacral sciatica. The cervical region of the spine has many anatomical and mechanical features in common with the lumbar region. There is, however, the important difference in the cervical region that the intraspinal neural structures, which here include the spinal cord, are relatively more fixed and the nerve roots have a more direct passage through their intervertebral foramina. In the cervical region there are numerous causes for pain referred to the neck, shoulder, and arm. Kristoff and Odom[1] have studied twenty cases of ruptured cervical intervertebral disk. This type of case was first described by Stookey in 1928 as one of compression due to extraneural cervical chordomas, but it is only in the last few years that much has been written on the subject.

Kristoff and Odom believe that in all probability such lesions are traumatic in origin. Rupture of a cervical intervertebral disk results in some of its substance extruding into the spinal canal, generally causing root compression. Where these protrusions are large the case may be complicated by spinal cord compression. Pain and paraesthesia are of radicular distribution. When the sixth cervical root is compressed by the fifth intervertebral disk the area of distribution will be the radial side of the forearm, thumb,

1 Copeman, W. S. C., *Proc. R. Soc. Med.*, 1947, 40, 329.
2 *Arch. Physiol.*, 1868, 1, 161.
3 *Amer. J. Med.*, 1947, 2, 579.
4 Gibson, H. J., *et al.*, *Ann. rheum. Dis.*, 1946, 5, 131.

Arch. Surg., 1947, 54, 287.

and index finger, associated with weakness mainly of the deltoid and biceps muscles and a diminished biceps reflex. A rupture of the sixth disk with involvement of the seventh cervical nerve root will cause pain and paraesthesia on the extensor side of the forearm, the dorsum of the hand, and one or all of the three middle fingers, associated with weakness chiefly of the triceps muscle and a diminished triceps reflex. These are the two segments most commonly involved. A reliable sign is to hyperextend, flex, and bend the head towards the side of pain—manœuvres which aggravate it and the paraesthesia. Radiologically, degenerative changes in an intervertebral disk may be recognized, but their absence by no means rules out the possibility of a disk lesion.

The common conditions which may cause difficulty in diagnosis are cervical arthritis, scalenus anticus syndrome, laminal fractures, cervical ribs, subdeltoid bursitis, brachial neuritis, Pancoast's tumour, and cervical radiculitis. In the cases with larger protrusions the need for exploration is clearer because of the signs of spinal cord tumour. Here the pain in the neck or shoulders will be overshadowed by neurological changes in the upper limb. The operative procedure in the neck is somewhat similar to that for the lumbar region, but there is of course a bigger element of risk. The authors note that, while both the subjective complaints and the defensive signs will be banished by removal of the protruding portion of disk, disappearance of the neuro-pathological signs depends upon the duration of root compression Furthermore they state that in cases of cord compression recovery may be neither spectacular nor always complete. They give a very clear exposition of this subject, the limits of which seem to be more clearly marked than in the comparable condition in the lumbo-sacral area.

ALUMINIUM PNEUMOCONIOSIS

Powdered aluminium has been very widely used during the past decade in ordnance factories and in making paints, and many thousands of workers have been exposed to dust in working aluminium alloys. The health of the workers in these industries has been generally satisfactory. Crombie and his colleagues[1] in Canada, and Hunter and his co-workers[2] in England, have been unable to demonstrate radiologically any changes in the lungs. This is only to be expected because of the low atomic weight of aluminium. Since Denny, Robson, and Irwin[3,4] suggested that the inhalation of powdered metallic aluminium might prevent the development and progression of silicosis large numbers of miners in Canada, the United States, Australia, and Cornwall have received the treatment. These men have all been under careful observation, and up to the present no adverse effects have been recorded.

Despite this experience Goralewski,[5-8] in Germany, has repeatedly described a disease attributed to aluminium dust. The powder was made at Guntherstahl by the Pyro process. It was stamped, but a minimum of either ceresine or petroleum-jelly substitute was used to lubricate the powder in the stamping machines—not more than 0.01% appeared in the final product. The aluminium powder, which was 98% metallic aluminium, contained about four milliards of particles per gramme of dust—97.5% of the particles being less than 5 μ in diameter—and many of the factories were blown up because an explosive concentration of aluminium dust was reached. Seven hundred workers were examined, and many complained of dry cough with pain on breathing, shortness of breath, poor appetite, and gnawing abdominal pain. Spontaneous pneumothorax occurred in four workers. Blood counts revealed a relative lymphocytosis with an eosinophilia up to 10%. The sedimentation rate was within normal limits in 78% of the cases, and the vital capacity was decreased in 27 out of 125 men examined. Radiographs showed focal shadows in the apical region with an increase of normal bronchial markings in the upper and middle thirds of the lung, giving a reticular appearance which at a later stage tended to increase and become confluent. There was always marked emphysema at the bases. The development of the illness was rapid, often within three months of starting work. It appeared to bear no relation to the length of exposure to aluminium. Histological examination of the lung of a patient who died revealed coarse, branching, hyaline collagenous fibres which enclosed phagocytes containing fine and coarsely granular particles distinguished by their jagged outline from carbon particles. A similar picture was produced in animal experiments by Jötten and Eickhoff.[9]

Shaver and Riddell[10] have now recorded an identical disease from the Niagara region of Canada in workers manufacturing corundum—an aluminium oxide abrasive of great hardness. Bauxite, iron, and coke are treated in electric furnaces. They are ground and intimately mixed in metal pots 6 ft. high and 6 ft. in diameter; large carbon electrodes are then lowered to the surface of the mix, which is fused at 2,000° C. The resultant dense white fumes contain considerable quantities of alumina and silica together with small quantities of many other substances all in a very fine state of division. Three hundred and forty-four men were employed in connexion with the furnaces, and in 23 of these *x*-ray examination revealed well-established changes in the lungs. There were also 12 early and 13 doubtful cases. There have been 7 deaths, and 8 of the workers have had bilateral spontaneous pneumothorax. Dyspnoea was the outstanding symptom. Cough with white frothy sputum, substernal discomfort, weakness, and fatigue were also noted. The attacks of dyspnoea and pain were often sudden. Signs of disease in the chest were variable and depended on the presence or absence of pneumothorax. Limited chest expansion and impaired percussion note were most commonly observed; rales and rhonchi were variable. Tachycardia and cyanosis were marked features. *X*-ray examination revealed extensive fibrosis with areas of gross emphysema. At necropsy emphysematous blebs and bullae were found on the surface of the lung, the substance of which was invaded by dense tissue of a fibrous character. Microscopically the chief features were extensive fibrous tissue formation and extreme emphysema. The fibrosis was not nodular. The result of ashing three lungs was:

	Ash of Dry Weight	Silica of Dry Weight	Silica in Ash	Alumina in Ash
	%	%	%	%
1	5·87	1·49	25·3	Not obtained
2	7·22	1·80	24·9	45·63
3	9·66	2·95	30·5	32·08

Jager and Jager[11] observed that while aluminium powder is highly resistant to aerial oxidation it is freely soluble in sodium chloride solution, giving sodium aluminate and aluminium chloride in equilibrium. A colloidal aluminium hydroxide complex results if the sodium and chloride ions are allowed to diffuse away, and if protein is also present

1 *Canad. med. Ass. J.*, 1944, 50, 318.
2 *Brit. J. Industr. Med.*, 1944, 1, 159.
3 *Canad. med. Ass. J.*, 1939, 40, 213.
4 *Industr. Med.*, 1939, 8, 133.
5 *Arch. Gewerbepath. Gewerbehyg.*, 1939, 9, 676.
6 Ibid., 1940, 10, 384.
7 Ibid., 1941, 11, 106.
8 *Dtsch. Tuberkbl.*, 1943, 17, 3.
9 *Arch. Hyg. Berl.*, 1942, 127, 344.
10 *J. Industr. Hyg.*, 1947, 29, 145.
11 *Arch. Gewerbepath. Gewerbehyg.*, 1941, 11, 117
12 *Beitr. klin. Tuberk.*, 1942, 97, 688.
13 Perry, K. M. A., *Thorax*, 1947, 2, 91.

it is co-precipitated round the partly dissolved aluminium particles. Jager and Jager think that this complex caused the lung changes in the German workers. Koelsch,[12] however, believed that mechanical factors were responsible, and that the disease was a consequence of the unsatisfactory ventilation of workrooms resulting from the black-out. The suggestion has also been made that the lubricant might have been a cause of the condition,[13] but this seems improbable since only minimal amounts were used. Canadian investigators think that the disease may be a form of silicosis caused by vaporized silica, but this also seems unlikely. There can be little doubt that the disease described in Germany and that in Canada are one and the same, and while silica was present in the Canadian manufacturing process it certainly was not in the German. The exact aetiology of the condition therefore remains a mystery, but it now seems probable that aluminium in certain physical states is capable of producing a pneumoconiosis.

RESECTION OF TUBERCULOUS LUNG TISSUE

In 1891 Tuffier successfully removed an indurated tuberculous area from the upper lobe of the lung, his patient surviving for seven years. Since then sporadic reports of similar operations have appeared, but until the last decade the successes were outnumbered by the failures, most of which were due to the great technical difficulties. With the rapid advance of thoracic surgery in the past few years many of these difficulties have been overcome, and thoracic surgeons, particularly in the U.S.A., are reporting an increasing number of successful pulmonary resections for tuberculosis.

Overholt and others,[1] in an important communication, record 88 resections with a follow-up ranging from 2 to 12 years. Their indications for operation were varied, the commonest being extensive, predominantly unilateral disease. Many patients had spreading caseous-pneumonic lesions or large cavities at the time of operation. Resection was also undertaken for bronchiectasis and suppuration complicating phthisis, and after unsatisfactory thoracoplasty. Tuberculous bronchial stenosis was present in many instances. Lobectomy was performed in 34 patients, with 7 deaths, the most important complication being a spread of the disease into the remaining lobes. Of 58 patients who had pneumonectomy 24 died, and again spread of tuberculosis into the remaining lung accounted for many of these deaths. Other complications were tuberculous empyema and ulceration of the severed bronchus. Against this somewhat grim picture must be set the fact that 12 patients with lobectomy and 24 with pneumonectomy are reported to be well and working; also in many of these patients the risk of operation was a desperate one. In a more recent paper Bailey[2] reports the results of 80 pulmonary resections for tuberculosis. His mortality for lobectomy was 8 out of 32 cases, and for pneumonectomy 15 out of 41. Seven segmental resections were performed without a death. Like Overholt he advocates the routine use of thoracoplasty after pneumonectomy in tuberculous patients to close the residual space—a procedure which makes the operation more severe. Both these authors stress the importance of surgical and anaesthetic technique in the prevention of complications, and it is clear that these operations should be undertaken only by a skilled thoracic surgeon working with a trained team.

When considering the indications for pulmonary resection we must not forget that in tuberculosis we are dealing with a widespread infection of which the lung lesions are, in Sir Robert Philip's words, "a late visceral manifestation." In carcinoma of the bronchus or bronchiectasis radical removal may be achieved, but in tuberculosis the most that can be expected is that the removal of some of the major foci may enable the patient's resistance to overcome the less obvious lesions. It is not surprising that such a severe procedure may sometimes have the opposite effect and exacerbate latent disease elsewhere. Nevertheless, this operation offers a possibility of improvement in a few types of pulmonary tuberculosis in which the prognosis has hitherto been almost hopeless. These include suppuration distal to a tuberculous bronchial stenosis, basal disease unaffected by simpler methods of treatment, large tension cavities, and a few instances of acute unilateral caseous disease.

[1] *Amer. Rev. Tuberc.*, 1947, **55**, 198.
[2] *J. thorac. Surg.*, 1947, **16**, 328.

THE ACTION OF BOTULINUM TOXIN

There are few poisons so potent as botulinum toxin. According to Guyton and MacDonald[1] a pure crystalline preparation would probably prove fatal to man in a dose of a quarter of a millionth of a gramme. These workers have recently thrown light upon the site and mode of action of the toxin, their technique being designed to produce complete paralysis either of a single muscle or of the whole animal. The gastrocnemius of a guinea-pig could be paralysed by the local injection of toxin, general paralysis and death of the animal being prevented by systemic administration of antitoxin two days later. In the other method systemically poisoned and completely paralysed rabbits were kept alive by artificial respiration and vasoconstrictor drugs for the duration of the observations, which consisted in measurement of action potentials and responses of the muscles to various stimuli. The experiments were made with type A toxin.

There was no evidence that botulinum toxin acted on the nerve trunks, and the paralysed muscles responded to direct stimulation in the same way as denervated muscles. The site of action is therefore in the terminal nerve fibrils or, as Bishop and Bronfenbrenner[2] suggest, at the myoneural junction. Oscilloscopic measurements of the delay in conduction, recorded by Guyton and MacDonald, support the theory that the myoneural junction is affected, and histological examination shows swelling of the end-plates and dissolution of the granules of Kühne. Neostigmine fails to avert paralysis due to botulinum toxin, and the completely paralysed muscles still respond to acetylcholine. In these respects the action of the toxin differs from that of curare. It seems probable that in botulinum poisoning acetylcholine is not produced at the end-plate or, from the evidence of other experiments, at the endings of the vagus nerve. The toxin also causes peripheral circulatory failure. It does not pass the blood-brain barrier, so that symptoms referable to the central nervous system are not observed. It has a molecular weight of about 1,000,000, and its properties suggest that it may be a destructive enzyme.

It is of interest to note that antitoxin given two days after the subcutaneous injection of a lethal dose of toxin saved the lives of guinea-pigs even after some symptoms of intoxication were present. Once poisoning of nerve endings has occurred antitoxin cannot restore the damaged end-plate. Observation of local paralysis in guinea-pigs showed that recovery of muscular contraction and action potential was almost complete in one year. From the nature of the damage and the prolonged time to recovery noted in the experimental animals improvements in the treatment of botulism in man are unlikely, and hope seems to lie mainly in the early use of multivalent antitoxin in large doses.

[1] *Arch. Neurol. Psychiat.*, Chicago, 1947, **57**, 578.
[2] *Amer. J. Physiol.*, 1936, **117**, 393.

TUBERCULOSIS IN THE BRITISH ZONE OF GERMANY

REPORT OF AN INQUIRY

The Foreign Office published on Tuesday, March 9, a report[1] prepared by the Medical Research Council at the suggestion of the Ministry of Health on certain aspects of the tuberculosis problem in the British Zone of Germany. The authors of the report are Dr. M. Daniels and Dr. P. D'Arcy Hart.

The report points out that death rates form the most reliable basis for judging tuberculosis trends. Annual death rates are best, but over the comparatively short post-war period six-monthly figures may justifiably be used provided that a first half-year is not compared with a second half-year, since the death rates from tuberculosis are normally higher in the first half of the year. During the post-war period the death rate from pulmonary tuberculosis in Hamburg has declined, while in the three Laender the figures show little evidence of change. The death rate from non-pulmonary tuberculosis has also declined slightly in Hamburg, remained stationary in Schleswig-Holstein, and increased somewhat in the other two Laender. The relevant figures for the Zone as a whole are as follows:

Tuberculosis Mortality, 1946–7, in British Zone as a Whole

Half-years	Population	Deaths		Crude Annual Death Rates per 100,000		
		Pulm. Tb.	Other Tb.	Pulm. Tb.	Other Tb.	Tb. All Forms
1946 I ..	21,891,000	6,823	891	62	8	70
II ..	22,902,000	5,083	801	44	7	51
1947 I ..	22,868,000	6,966	1,096	61	10	71

Clearly, while no fall in tuberculosis mortality has taken place, there are no signs of any alarming increase. These figures should also be considered in relation to the rates existing before and during the war. The 1946 death rates are higher than the pre-war rates, but the main rises occurred during the war period. Indeed, in Hamburg and part of Nordrhein-Westfalen the war rise appears to have been checked in 1945. Death rates in the British Zone are very similar to those in the United States Zonal Regions, which in 1946–7 ranged from 49 for Bavaria to 91 for Bremen. The crude death rate from all forms of tuberculosis in Bremen should be compared with the Hamburg figures of 101 in 1945 and 85 in 1946. The corresponding figures for London in the same two years were 87 and 70. The rates for Hamburg in fact are considerably less than those obtaining in Glasgow and Liverpool, and in Paris, Warsaw, and Rome.

The proportionate tuberculosis mortality, the number of deaths which occurred from this disease expressed as a percentage of annual deaths from all causes, also confirms the view that tuberculosis does not figure more largely among health problems in the British Zone of Germany than in Great Britain. The figure for England and Wales for 1945 was 4.8% as against 4.2% in Niedersachsen and 4.5% in Schleswig-Holstein in 1946. The figure of 5.7% in Hamburg in 1946 may be compared with the 1945 figures for London 5.5% or for Manchester 6.4%.

Registration and Notification

In the British Zone there are two methods of reporting deaths, and in certain small towns and country districts lay people can complete death certificates. Attention is drawn to the difference in Schleswig-Holstein between the uncorrected total of 2,746 registered tuberculosis deaths in 1946 and the corresponding "verified" total of 1,655. Where medical certification is compulsory the figures of registered deaths are regarded as a fairly correct measure of tuberculosis mortality. Apart from this method of registration of a death, deaths from tuberculosis must be notified by the medical practitioner directly to the health police of the Health Department. This is not always done, however, and the total notifications of deaths from tuberculosis tend to be less than death registrations even in the large towns.

[1] *Tuberculosis in the British Zone of Germany*, 1948. London: H.M.S.O. 6d. net.

Four suggestions are put forward for improving the value of the mortality figures supplied to Regional Public Health Branches. (1) Tuberculosis death figures (pulmonary and non-pulmonary) should be supplied quarterly instead of weekly as at present. (2) These quarterly figures should be derived from registered deaths and so stated, the figures being "officially verified" where this procedure is necessary. (3) Tuberculosis death registration figures should be accompanied by figures for deaths from all causes, so that proportionate tuberculosis mortality figures can easily be calculated. (4) The German Land authorities should be persuaded "to make medical certification a prerequisite of burial throughout their territories."

Tuberculosis Morbidity

The fact that tuberculosis mortality rose during the war but has altered very little since then and that the present rates are not disturbing when considered in relation to those in Britain and other countries was not disputed by the German authorities. All of them emphasized, however, the considerable increase in morbidity in the past year. The report points out that since 1925 there has been in fairly general vogue in Germany a classification of cases of pulmonary tuberculosis requiring care into three groups: (*a*) infectious tuberculosis of the lungs with bacilli discovered; (*b*) infectious tuberculosis of the lungs with no bacilli discovered; and (*c*) non-infectious but active tuberculosis of the lungs. The recent remarkable rise in practitioners' case notifications is simply explained, and the report confirms the suggestion made in our columns that the rise was almost entirely due to a change in the methods of notification (*Journal*, Feb. 28, p. 424). Until 1938 doctors notified cases in group (*a*) only. From December, 1938, to September, 1946, doctors notified cases in groups (*a*) and (*b*) only. Since September, 1946, practitioners have notified cases in groups (*a*), (*b*), and (*c*). The recent steep rise in pulmonary tuberculosis case notification rates represents therefore largely a "paper increase." The recent extension of notifications has gone far beyond the original intention of bringing in fresh categories of cases of tuberculosis so as to give a more accurate picture, and has allowed the notification of many equivocal cases that would not be notified in British practice. It is shown too that a wide definition was being variously interpreted by different authorities and by different physicians. An incentive to exploit the definition now permitted is provided by the entitlement of dispensary-approved cases to extra rations. For these and other reasons which are set out at length the two investigators concluded: "We must state categorically that we attach no significance whatever to statistics of pulmonary case notifications as an index of current tuberculosis trends in the British Zone."

These objections do not apply with the same force to the regular returns made by tuberculosis dispensaries to the Land Health Departments. All three categories are again included, and under (*c*) there were notified doubtful active cases, children whose radiographs merely showed "enlarged hilar shadows," and even clinically normal infants with positive tuberculin reactions. On the other hand, these dispensary registration figures are based on specialist opinions and the pulmonary cases are subdivided at source into categories (*a*), (*b*), *and* (*c*) so that the numbers may be considered in each category. An analysis of the dispensary statistics of new cases registered over a number of years in Hamburg, Hannover Province, and Schleswig-Holstein shows no marked increase since the end of the war in the more serious forms of pulmonary tuberculosis —(*a*) and (*b*)—but a considerable rise in the registration of those earlier or lesser forms represented by group (*c*). There has also been a recent rise in new non-pulmonary cases of tuberculosis.

At the end of 1946 there were 200,000 cases on the tuberculosis dispensary registers of the British Zone. The report points out that at the end of 1946 there were 244,000 definite cases of tuberculosis on the tuberculosis dispensary registers of England and Wales, with a population nearly twice as large. The British total, however, is based on criteria which would exclude the German category (*c*) in which there were 122,000 of the British Zone cases. To improve the dispensary figures it is again suggested that case figures should be supplied quarterly, that they should comprise only cases newly seen at, and registered on, the books of the tuberculosis dispensaries,

and that they should be tabulated under the customary groups. These returns should contain only definite cases and should exclude suspects, contacts, and otherwise normal tuberculin-positive children. A survey of the findings after mass radiography in three areas also suggests that the incidence of tuberculosis is not notably high.

Hospital Accommodation

It is customary to assess the degree of adequacy of in-patient accommodation for tuberculosis by the ratio of the beds available to the annual number of deaths from the disease. This rate for the Zone as a whole is 2.2 and should be compared with 1.3 for England and Wales. It also compares favourably with the rates obtaining anywhere in Europe, excepting Scandinavia.

Detailed comparison of the arrangements in Lancashire, a county with an advanced anti-tuberculosis service, bears out the finding that "on no count, therefore, is the British Zone worse off than this country as to institutional accommodation; and on the most reliable basis of ratio of beds to annual deaths, it is considerably better."

Two further points are made in the report on the Zone. The fact that tuberculosis mortality increased more among males than among females during the war is ascribed partly to a selective factor—healthy young men were enlisted and the statistics relate, therefore, to the remaining male population—and partly to the greater strain of wartime conditions borne by males. The increase in the mortality from non-pulmonary tuberculosis and in the incidence of new cases is probably due to a failure of efficient pasteurization. Much of the pasteurization plant was damaged during the war and it has since then been subject to general deterioration and reduced efficiency. Fuel shortages have also made pasteurization difficult.

Tuberculosis in Berlin

Although the main study was in the British Zone the position in Berlin was also investigated. The increase in tuberculosis mortality during the war was much greater in Berlin than in the Zone. The present level of mortality is also much higher and constitutes a grave problem, even though the mortality from non-pulmonary tuberculosis is at present stationary and the mortality from pulmonary tuberculosis appears to be declining. Institutional provision for the tuberculous in Berlin at a rate of 0.7 beds per annual tuberculosis death is much inferior to that of the British Zone. The actual number of cases of "active" tuberculosis on the dispensary registers in Berlin in August, 1947, was 79,331 in a population of 3.2 millions. It was made up of 11,694 cases in group (*a*); 9,893 in group (*b*); 49,673 in group (*c*); and 8,071 non-pulmonary cases. Even allowing for the questionable significance of group (*c*) this total is two and a half times the corresponding pre-war total incidence and is much higher than that in the Zone.

This is an important report and one which should be carefully studied. It amply confirms the statement made in our leading article (Nov. 30, 1946, p. 821) that "available figures do not bear out alarmist reports of the incidence of this disease in the British Zone." The detailed survey and the tables and graphs fully support the general discussion which is here summarized, and confirm a final statement made by the authors:

"We must refer here to the regrettable fact that German officials (some non-medical) have repeatedly during the past year issued to Allied journalists and other visitors misleading and sometimes even false information regarding the tuberculosis situation in Germany. These statements have had the effect of putting tuberculosis in Germany unjustifiably on the level of a sensational news item. Moreover, since it is generally known that tuberculosis figures are a sensitive index of social conditions, sweeping conclusions as to these conditions have been drawn from erroneous data."

The head of the U.S. Federal Security Administration, Mr. Oscar Ewing, estimates that in 1960 the U.S.A. will need from 15,000 to 30,000 more doctors than will be available, and he recommends the establishment of Government financed scholarships for the training of medical men, dentists, nurses, and public-health staff. He said that Congress ought to use Federal resources if necessary to overcome shortages.

WORLD HEALTH ORGANIZATION

INTERIM COMMISSION

The Interim Commission of the World Health Organization met in Geneva from Jan. 22 to Feb. 7, under the chairmanship of Dr. Andrija Stampar, president of the Yugoslav Academy of Sciences and Arts. In the course of this session the Interim Commission approved a report on its activities which will be submitted to the World Health Assembly meeting at the Palais des Nations in Geneva on June 24. It is generally expected that the Interim Commission, which has bridged so ably the unexpectedly long gap between its creation at the International Health Conference in New York in 1946 and the first meeting of the World Health Assembly, will be formally dissolved within one or two months of the adjournment of the Assembly.

The Interim Commission drafted the agenda for the Assembly, which will have to select a Director-General for W.H.O., and also examined proposals relating to the permanent site and the 1949 budget for W.H.O. A number of nations have already declared their preference, and so far Geneva heads the list, with New York, Paris, Washington, and London as alternative suggestions. The proposed 1949 budget amounts to $6,367,995, which is more than twice the Interim Commission's budget for the first year of its work. Of this sum, over $1,000,000 will be set aside for the provision of fellowships, medical literature, teaching equipment, and emergency medical supplies.

Proposed Programme

The following are among the major recommendations of the fifth session of the Interim Commission, and will in due course be submitted to the World Health Assembly:

Medical co-operation with accredited governmental and non-governmental agencies should be continued. It was recommended, therefore, that the Assembly adopt the draft agreements drawn up by the Interim Commission with several United Nations Specialized Agencies. These agreements provide that the W.H.O. shall serve in an advisory capacity in the fields of public health and State medicine with the following organizations: the International Civil Service Advisory Board, the U.N. Social Commission, the U.N. Scientific Conference for the Conservation and Utilization of Resources, I.L.O., U.N.E.S.C.O., and F.A.O. Collaboration between W.H.O., I.C., and F.A.O. on nutrition projects has already started.

The Interim Commission, which is collaborating with the International Children's Emergency Fund, will continue to advise the I.C.E.F. on the programme for immunization of 15 million people against tuberculosis to be undertaken by 200 expert medical teams within the next eighteen months. At the fifth session Interim Commission help was requested by the I.C.E.F. in launching an antivenereal campaign among children, pregnant women, and nursing mothers through mass treatment with penicillin. Continuation of medical guidance by the permanent W.H.O. was recommended in relation to these two programmes.

The Interim Commission recommended continuation and enlargement of the epidemiological service. A more efficient and quicker system of epidemiological notifications will be established.

In addition to these major projects it is hoped that the 1949 budget will provide for further work in connexion with nursing, rural hygiene, alcoholism, and a number of tropical diseases. The need for revision of existing sanitary conventions was debated after Dr. A. T. Shousha Pasha, the Egyptian Under-Secretary of State for Health, had presented his report on the 1947 cholera outbreak in Egypt. Several countries took measures to prevent the spread of cholera far exceeding the provisions of the international conventions. The Governments concerned will be asked to explain the scientific grounds on which such action was based.

The Interim Commission also recommended the continuance of work on biological standardization and unification of pharmacopoeias. The creation of an international influenza centre is now well under way, and it is suggested that W.H.O. should press forward also the campaigns against important communicable diseases and for the promotion of child health. Malaria and tuberculosis are the two diseases given "top priority" in the list of Interim Commission recommendations, and the large-scale application of penicillin in the treatment of early syphilis is also proposed.

At the final meeting Dr. Stampar paid tribute to the work of the Interim Commission over the past twenty months and said

that "never in his experience had he worked with a more co-operative and internationally minded group of people." He referred also to the unbroken record of unanimity in decisions made by the Interim Commission.

THE HUMAN APPROACH

METROPOLITAN COUNTIES BRANCH LECTURE

Another lecture in the series which the Metropolitan Counties Branch has arranged for senior students and newly qualified practitioners in the London area was delivered in the Great Hall of the Association on March 2 by Dr. Henry Yellowlees, whose subject was "The Human Approach." Dr. R. W. Cockshut, chairman of the Branch Council, presided.

Dr. Yellowlees began by contrasting the scientific and the human approach. The scientific method, he said, was by far the best yet evolved for the solution of certain kinds of problems, but there remained a vast number and variety of problems in which the scientific method could lead only to an incomplete solution or offer no solution at all. Properly used, the scientific method never led to an erroneous conclusion, because it was wisely agnostic. In everything outside pure mathematics scientific conclusions were tentative and incomplete. Science was always right, so far as it went, but there were other methods of approach which transcended it. Science was never inaccurate, but it was often pathetically inadequate.

The preclinical subjects were peculiarly suited for approach by the scientific method. Things like the sphenoid bone and the cranial nerves simply had to be learned and learned well, and that was that. But then came the clinical period and a crowd of problems which the scientific method unaided could not solve. The student passed suddenly from the laboratory and the dissecting-room to the hospital ward and the out-patient department. He was invited to deal with minds and personalities. This was called clinical material, but it did something which the specimens in the laboratories never did, it "answered back." He wondered how many of them could say that before they entered on their clinical period they had received any helpful and practical instruction on how to understand and deal with those qualities in their patients which chiefly distinguished them from the beasts of the field.

Limitations of the Scientific Approach

It had often been pointed out, Dr. Yellowlees continued, that the trend of modern medical practice and teaching was increasingly towards laboratory procedure and tests. Much of this was inevitable, and the accuracy and helpfulness of the information were not to be disputed. Its chief drawback was that the student might come to feel that the hospital physician had only to acquaint himself with the relationship of a mass of typed reports from the pathologist, the haematologist, the radiologist, the biochemist, and finally to pronounce a diagnosis largely based on their collective significance. The student was led to think that any personal investigation of the patient should be withheld so long as one single secretion or function remained untested by the experts of the clinical laboratory or the special departments, while the patient himself perambulated wearily from department to department like a "passed to you" memorandum in a Government office. This was a continuation of the scientific approach which had served the student excellently in his earlier subjects but failed him now.

The student got little help from his teachers. They had seen the human body separated out into little regions, each with its guardian angel in the shape of its appropriate specialist. It might be said that this was the time for the teachers in psychological medicine to get busy and set things right. Generally, he agreed; but at the present day the teaching of psychological medicine was lopsided and inadequate. True, psychological medicine could put up a good case for the defence. Teachers, students, doctors, the general public, all tended to sheer away from the whole subject of psychological medicine with dislike and distrust. This feeling was based on ignorance, and the ignorance was closely bound up with fear and shame, camouflaged of course, but thereby making itself only the more obvious. What would one think of a person whose funniest stories concerned the patients in a cancer hospital, or who screamed with laughter at the helpless gropings of a blind man? Yet jests about the "loony bin" remained a characteristic English sport. No brutality was intended; nevertheless he could think of only two types of establishment, apart from the mental hospital, which had analogous alternative names—the prison and the brothel.

General medicine looked with dislike and distrust on a specialty which might help it to a viewpoint it could not reach unaided. Some, indeed, called for a closer union between general and psychological medicine, but he felt with regard to much of this that the scripture was appropriate: "This people honoureth me with their lips but their heart is far from me." Exhaustive examinations were made of the lungs, the circulatory system, the digestive tract of the patient, and treatment was carried out, without a word being said about the psychological factor from start to finish, or any suggestion that it mattered in the slightest whether the patient was happy or miserable, clever or stupid, married or single, Briton or Hottentot. But every now and then the patient ceased to act like a machine and behaved not according to plan, and then they tried out the old fallacy of excluding the organic factor. As someone had said, it was not of much use talking about psychosomatic medicine if all that one did was to give an airy wave of the hand to *Psyche* as one passed along for a heart-to-heart talk in a quiet corner with *Soma*.

A Unique Specialty

At the same time Dr. Yellowlees admitted that the psychiatrist very often made "shockingly poor use" of such chances as he got, usually because he was attending too much to his own scientific problem to the exclusion of the human one. He was by no means blameless for the fact that his specialty had become a "public joke." Psychiatry, of course, had its scientific problems like all branches of medicine, and it was only fair to say that it had solved many of them brilliantly during the last twenty years. With the possible exception of anaesthetics, no branch of medicine could point to anything like the record of startling and revolutionary achievements. But psychological medicine had gone the same materialistic and mechanical way as general medicine, with less excuse and with even more tragic results. At present it was the most scientific and least human of all the specialties.

Psychological medicine was unique among the specialties. It was not only a specialty in its own right but also an essential constituent part—not a mere handmaid or hanger-on or poor relation—of all medicine. But as taught to-day it did more to illustrate the differences between itself and general medicine than to emphasize their essential unity. Generation after generation of medical students were allowed to pass through the schools without having heard the human approach to the patient so much as mentioned. "What is the use of cramming the student with the details of every medical and surgical and psychiatric procedure if he does not then know how to say 'Good morning' properly to a nervous patient?" Of course the scientific study of every branch of medicine was absolutely essential. The patients would take scientific skill for granted, but what they really wanted, whether they knew it or not, was someone who, in addition to knowing his work, could give them confidence, patience, courage, and hope. "The great majority of our patients, in their hearts, whatever they may say and do, expect us to be to them 'like the shadow of a great rock in a weary land.'"

At the annual general meeting of the Scottish Council for Health Education held on Feb. 20 at Aberdeen it was reported that public interest in health education throughout Scotland was noticeably on the increase. During 1947 a total of 252 meetings were held in Scotland, attracting an attendance of 64,483 persons—eight of them with an attendance of 14,900 being held in Edinburgh, where the Corporation organizes and finances a winter series of film-and-lecture meetings. The Council's full-time medical lecturer, Dr. Kenneth I. E. Macleod, has addressed 212 meetings in six months. Visits to schools are a regular part of his daily itinerary, but he also gives talks to youth clubs, industrial workers, and women's organizations. All the 55 major local authorities in Scotland now support the Council.

TOWARDS THE IDEAL HOME

Until March 25 some corrective for present depressions will be afforded by the Ideal Home Exhibition at Olympia, most conspicuously in the official exhibit in which the Ministries of Health, Education, Food, and Labour and National Service have combined. They have concentrated on a demonstration by tableaux, photographs, and poster displays of the services directed towards the welfare of the child from the intra-uterine to the adolescent phase. The child of to-day is to be sympathized with in some respects, but he has only to look across a hundred years to the dark age of the industrial revolution to thank his stars that he was not born then, at all events in a working-class environment. A plaster figure of a child working in a coal mine, and the suggestion of child labour in factories and mills, of starvation and neglect in workhouses, of flogging and ugly and unhealthy conditions in schools, of under-nourishment and overcrowding in the home, are contrasted with present-day conditions. These include health services for expectant and nursing mothers and young children, maternity grants, family allowances, and supplementary rations. There are school medical services and school meals, and the juvenile employment service, which endeavours to ensure that the adolescent enters an occupation for which he is fitted and for which he has some preference. The work of the special schools for blind, crippled, and delicate children and of the nursery schools is also exhibited. Statistics attractively presented bear out the same story, showing the reduction of infant and maternal mortality. One chart illustrates the milestones in the children's health service from 1862, when health visiting began.

In another exhibit the Ministry of Health depicts the housing achievements of the nation since the end of the war. The first 200,000 permanent houses have been finished and are occupied in various parts of the country, and models are shown of concrete, brick, or aluminium dwellings—three-bedroomed houses for the average family. Among other exhibits which catch the eye is a pavilion where the National Gas Council, by means of domestic interiors and life-size models, shows the uses of the newly nationalized product in what it calls the seven ages of woman. One of the tableaux shows the young woman entering upon her career as a hospital nurse and discovering to what extent gas and its by-products (drugs, dyes, plastics, disinfectants) enter into the hospital service; then we have the housewife with her enamel cooker thermostatically controlled, her refrigerator, and other equipment for the labour-saving kitchen, and finally the old dame with the comfort of her gas-coke fire. Not to be outdone by its older rival, the electrical industry shows its fluorescent light-fittings for the home, together with some ingenious space-heating equipment.

DAYLIGHT VERSUS ARTIFICIAL LIGHTING

The Illuminating Engineering Society staged an amusing, if sometimes inconsequent, debate recently on the proposition that artificial lighting is an adequate substitute for natural lighting. The proposer, a lighting engineer, claimed boldly that artificial light is not merely a substitute for daylight but an improvement upon it. If the lighting effect of the sun could be considered in isolation, apart from heat and power, it would be seen to be easily outdone by the fluorescent tube. Moreover, the lighting engineer could provide an adequate and even lighting for the twenty-four hours of the day as against a limited and varying daylight. Another speaker pointed out that an advantage of artificial light was that its colour could be changed, so as to stimulate or to soothe according to the need and the hour of the day, whereas with daylight there was no such control. If artificial light had been first in the field, said yet another speaker, if the fluorescent tube, the splendid product of years of research, had preceded the sun, people would have derided the latter when it at length arose, asking what was the use of so uncertain and wayward a source.

The sun had its defenders. Artificial light, said their spokesman, compared poorly with daylight, whether judged from the psychological, the aesthetic, or the efficiency point of view. The public showed its preference for daylight whenever it was given the chance. The blackout during the war caused much discontent among factory workers, however good the artificial illumination provided, and the discontent was assuaged by the letting in of some natural lighting. The fluorescent tube, these speakers contended, was a hideous thing—a cold bar of light apparently designed by a plumber. How magnificent a thoroughfare was Kingsway, in daylight, and how grotesque at night under its new illumination with fluorescent tubes hung skittishly on concrete pillars. The protagonists of artificial lighting had said that windows were put into buildings, not to give light, but to give a sense of freedom and the opportunity for gazing out; but what array of electric bulbs could rival the light given by the Gothic window of a church or by the Victorian or neo-Georgian window of domestic architecture? One speaker had written to the welfare officers of certain American factories which were lighted only by artificial light, and they had replied that the lighting was liked moderately well, chiefly because it was uniform. But in this country at least people took a poor view of uniformity and found variety stimulating, alike in lighting and in climate. One speaker argued that there was something in the human make-up which demanded change, alternation, rhythm in lighting, and that the same was true even of lower forms of life.

The last word was with the defenders of daylight, one of whom said that on a recent visit to New York he found on the outskirts of the city very tall buildings of many stories still being constructed, but they were well spaced out so as to ensure even for the lower floors an abundance of daylight.

Reports of Societies

INHIBITION OF DENTAL CARIES BY FLUORINE

At a meeting of the Section of Odontology of the Royal Society of Medicine on Feb. 23, with Prof. HUMPHREY HUMPHREYS in the chair, Dr. ROBERT WEAVER, of the Medical Branch, Ministry of Education, read a paper on the inhibition of dental caries by fluorine.

Dr. Weaver said that in the early 'thirties it was suggested that a mottled appearance of tooth enamel was caused by the presence of a substantial amount of fluorine in drinking-water. It was not at that time realized that a very much lower concentration of fluorine than was necessary to produce mottling might inhibit dental caries. During the five years before the war, however, evidence accumulated that the inhibition of caries could be brought about by a concentration of fluorine too low to cause any unsightly mottling. In 1944 Dr. Weaver himself had referred to the low incidence of dental caries in certain areas as being possibly due to fluorine, and the evidence accumulated since then had convinced him that judgment on this point need no longer be in suspense.

Fluorine was by no means a rare element. It was now being used widely for industrial purposes, but there were few communities of any size dependent for water supply on water containing significant amounts. Most fluorine-free waters were soft; well-waters, in which fluorine was more likely to be found, were hard. The fluorine content of the diet, apart from drinking-water, was, generally speaking, low. It was relatively high in fish, perhaps up to 7 parts per million, but was largely concentrated in the bones, which were not eaten. It had been stated that baking-powder might contain a considerable quantity of fluorine.

Dr. Weaver described certain dental investigations in five-year-old and twelve-year-old children in North Shields and South Shields. North Shields water had a fluorine concentration of less than 0.25 part per million, but in South Shields water the concentration was 1.4 parts. The investigation showed that there was a lower incidence of dental caries in South Shields, but the most important lesson to be drawn was that the inhibitory property of fluorine was of rather short duration. At first sight it might seem that caries was inhibited by nearly 50%, but actually the effect was only to postpone the onset of caries for from three to five years. A question which might be put was that if the incidence of dental caries at certain ages in South Shields was so much less than in North Shields, and dental disease was inimical to health, was there any evidence that the South Shields child population was healthier than

that of North Shields? There was no striking difference between the two towns in this respect, and it was evident that only a limited beneficial effect might be expected from fluorine in drinking-water.

Something must be said about the possibility of fluorine doing harm. A good deal had been written about the toxicology of fluorine, in particular that it caused hypercalcification of bone, and that in fluorine districts goitre was specially prevalent, though he had not found this in north-east Durham. There was no doubt that fluorine was a toxic substance and would do harm if taken in considerable quantities, but there was no evidence that, apart from the unsightly appearance of the teeth, there would be any ill effect from the prolonged ingestion of water containing not excessive amounts of fluorine.

Was the effect produced during the pre-eruptive or the post-eruptive life of the teeth? Would the incorporation in the forming enamel of quite a small amount of fluorine render the enamel more resistant to caries? Laboratory experiments had been carried out, but it was doubtful whether reliable conclusions could be drawn from experiments *in vitro*. From an examination of several hundreds of children he had come to the conclusion that it did not matter whether the child's residence in a fluorine area had been long or short—or, to put it in another way, so far as the six-year molars were concerned it did not seem to make any difference at what period the child had come to live in the fluorine area—provided he arrived there before the age of 6. It seemed to be essential that the child should have ingested fluorine for a period, even if only a brief one, before the eruption of the six-year molars. Children over 6 when arriving in the area appeared to derive no benefit at all so far as the protection of their six-year molars was concerned. If the fluorine conveyed any protection in the post-eruptive stage it was only during a short period following eruption. Protection was acquired during the late stage in the pre-eruptive life of the teeth, but the acquirement of such protection just after eruption could not be ruled out.

In some places in the United States and Canada fluorine was being added to drinking-water in order to study the effect on dental caries, but such a method was not one to be adopted without serious consideration, and for his own part he had never suggested that the fluorine content of drinking-water should be raised above one part in a million.

In discussion it was argued that the degree of mottling found when there was a certain amount of fluorine in the drinking-water was conditional upon the state of nutrition of the teeth. This had been shown in investigations in Italy and Morocco. Arab children in Morocco who were badly nourished showed mottling conspicuously, while French children in Morocco who drank the same water had teeth of normal appearance. Dr. Weaver pointed out, however, that there were other factors to be considered. It was not only a question of the amount of fluorine in the water but of the amount of water which was drunk.

PATHOLOGY OF RECTAL CANCER

THIRD LETTSOMIAN LECTURE

In his third and concluding Lettsomian lecture, delivered before the Medical Society of London on March 1, Dr. CUTHBERT DUKES dealt with the special problems of rectal cancer.

The records of St. Mark's Hospital, he said, proved that in rectal cancer biopsy was a trustworthy procedure. Between 1930 and 1945, 2,118 biopsies were carried out preparatory to excision of the rectum; in each case a comparison was made later between the original biopsy diagnosis and the tumour subsequently removed, and in all but 17 cases there was agreement. In 15 of the 17 the biopsy report had been "villous papilloma," whereas operation showed the growth to be carcinoma. These were all examples of a carcinoma developing in a villous papilloma, and it so happened that the biopsy fragment included only the villous portion.

Operation Specimens

Histologically rectal cancers were divided into two varieties: adenocarcinoma and colloid carcinoma, the latter term being used to describe tumours the individual cells of which were distended with mucus, giving a signet-ring appearance. If mucoid material was found only in the lumen of the acini the tumour was described as an adenocarcinoma undergoing mucoid degeneration. Adenocarcinoma was much the commoner of the two varieties, and might be subdivided according to the histological grade of malignancy into low-grade or well-differentiated tumours, average grade, and high-grade or neoplastic tumours. Tumours might be confined to the rectum, or spreading into the peri-rectal tissues. At St. Mark's a classification had been adopted which recognized four stages in the process of the disease: growth limited to the rectum; growth spreading by direct continuity into adjoining structures but not yet giving rise to lymphatic metastases; further spread with lymphatic metastases; and beyond the scope of surgical care. Judging from operation specimens the growth was still at the first stage in about 15% of cases operated on, at the second stage in 35%, and at the third stage in 50%. Success or failure in surgical treatment depended largely on the extent of lymphatic spread, and account should be taken of all possible paths of lymphatic spread when planning any operation.

The lecturer gave an account of the pioneer work of the late Ernest Miles. It was now well established that the first glands to receive metastases in rectal cancer were almost invariably those lying close to the primary tumour. After this the superior haemorrhoidal glands were usually invaded in sequence from below upwards, so that in an advanced case of cancer of the lower third or ampulla, metastases came to form an unbroken chain extending from the regional group of glands to those situated at the point of ligature of the inferior mesenteric vessels. In the upper third of the rectum and recto-sigmoid region the first direction of lymphatic spread was also upwards, and it was rare to find any metastases in glands below the primary tumour, though this might sometimes occur if the upward path of spread had been blocked. Downward spread of this character was exceedingly rare. The follow-up records at St. Mark's showed that prognosis after excision of the rectum depended very much on the extent of the lymphatic involvement. A generalization which it was easy to remember was that patients with more than five metastases rarely lived for five years.

When operation specimens of rectal cancer were dissected evidence of extensions within the haemorrhoidal veins might be found in about 15% of all cases, usually taking the form of a solid cord detectable by palpation and extending only a short distance. In most cases the growth within the veins preserved its continuity with the primary tumour, and was no more than a special form of direct local extension. It was as if the malignant tumour, having found the path of least resistance, had pushed a root-like process along the lumen of the vein. Occasionally a massive permeation of the haemorrhoidal veins accompanied by thrombosis was found. The evidence of venous spread was most often found in anaplastic varieties of carcinoma. It was present in more than 30% of tumours reported as high-grade, but in less than 3% of those of low-grade malignancy. The finding of clumps of cancer cells within one of the haemorrhoidal veins made it more likely—though did not definitely prove—that spread to the liver had occurred. There was no doubt that concealed and unsuspected hepatic metastases accounted for most of the unexplained deaths in the first year or two after excision of the rectum. But hepatic metastases might also lie dormant causing no symptoms for five years or longer.

Choice of Operation

Surgery was still the only form of treatment which offered any hope of permanent cure in rectal cancer. Dr. Dukes discussed the operations in most general use—perineal excision and combined abdomino-perineal excision, with the recent variant, synchronous combined excision, in which two surgeons worked together, one from above and one from below. At the moment there was a revival of interest in all surgical procedures which sought to avoid a permanent colostomy and to preserve the anal sphincter.

In order to decide whether more use could be made of these restorative operations he had reviewed the pathological records of a large series of cases treated by combined excision, trying

to ascertain whether, had all the facts been known, a restorative operation might have been employed instead. Certainly some cases treated by combined excision might have been equally well treated by restorative resection so far as pathological considerations were concerned, but on the other hand pathological lesions were often present which might adversely affect the prospects of cure by restorative procedures. His own view was that the wave of enthusiasm to remove a carcinoma of the rectum or recto-sigmoid by methods which would obviate a colostomy needed to be kept in check. Only experience could show whether this new development of rectal surgery would give as satisfactory results as the older well-tried operative procedures.

End-results of Surgical Treatment

Dr. Dukes proceeded to give the end-results of surgical treatment of rectal cancer as afforded by the records of St. Mark's Hospital. About half the patients who survived the operation of excision of the rectum were alive after five years, a very satisfactory result in view of the fact that the surgeons at the hospital all adopted a bold policy towards rectal cancer and their operability rate was more than 80%. This analysis was based on 716 cases treated by radical excision between 1928 and 1941 inclusive. Only 12 of the 716 cases had not been traced for five years, and these untraced cases were regarded as having died. In these calculations no distinction had been made between deaths due to recurrence and those due to other causes. By making an estimate of patients who might be expected to have died from other causes during the five-year period, and allowing for this, an approximate figure could be arrived at for the number of patients actually "cured," namely, 53.1%. The "cure rate" figure was thus slightly more favourable than the survival rate.

Of the 716 patients, 337, or 47.1%, were alive after five years. Approximately half these patients were treated by the perineal and half by the combined operation. The five-year survival rate of patients in whom the tumour was limited to the rectum was 81.9%, and only 62.3% for those with extra-rectal spread even though no metastases were present. For cases without lymphatic metastases the rate was 68.1%, whereas for those with such metastases it was only 26.2%. The unfavourable effect of lymphatic metastases was demonstrated especially after perineal operations. For patients without lymphatic metastases the difference between the two operations was insignificant, but for those with lymphatic metastases the five-year survival rate after perineal excision was only 17.4%, whereas it was 33.3% after the combined operation. The reason for this was because metastases in the upper haemorrhoidal glands might be removed by a combined though not by a perineal excision.

The histological grading of tumours was also of value in relation to prognosis, though less easy to define. The five-year survival rate worked out approximately at 60% for low-grade, 50% for average grade, and less than 30% for high-grade or anaplastic tumours. Metastases were found with only 18.4% of tumours classified as of low-grade, but with 78.2% of those of high-grade malignancy.

What sort of life did the five-year survivors lead? Dr. Dukes said that recently he had the opportunity of visiting 100 ex-patients from St. Mark's in their homes. All of them had had the operation of excision of the rectum for cancer, some only a few months, others several years, previously. His purpose was to collect information about the management of a colostomy, but he made notes of other matters also. Nearly all the ex-patients were in good health; eight or nine were semi-invalids, only two were bedridden. Most of them were over 60 years of age, and their general health seemed as good as one would expect to find in any similar group of elderly people. Nearly all could do some sort of work, usually household duties; only five complained that they could do nothing, and only one said he wished he were dead. Most of them spoke more of the kindness and help they had received from others than of their own troubles, and all referred with great gratitude to the skill of their surgeons and the solicitude of the nursing staff. He thought it true to say that nearly all these 100 survivors were glad to be alive, and they were less handicapped by colostomy than one would have supposed.

CONSTRICTIVE PERICARDITIS

At a meeting of the Liverpool Medical Institution on Feb. 5, with Mr. BRYAN L. MCFARLAND, vice-president, in the chair, Mr. F. RONALD EDWARDS read a paper on tuberculous pericarditis and constrictive pericarditis.

Mr. Edwards said the object of his paper was to stress the relationship between tuberculosis and constrictive pericarditis. Four cases of subacute tuberculous pericarditis had been operated upon, as had six cases of chronic constrictive pericarditis which he described. In the chronic group there had been a history of pleurisy some five to twenty-five years previously, similar to that in the subacute group. He believed that cases of chronic constrictive pericarditis with calcification were the residuum of a much larger group of cases of so-called cardiac failure, some of which might have been saved by cardiac decompression. The paper was illustrated by a colour film showing the operative technique.

In the discussion which followed Mr. HUGH REID said that he preferred a postero-lateral transpleural approach to the pericardium, removing the eighth rib on the left side. This was simpler to perform, left no defect in the chest wall afterwards, and gave ample access to the ventricles and the apex of the heart. The only objection was a temporary embarrassment of respiration while the patient was being fixed on the table. Mr. Reid then showed one of his cases, a man aged 20 recently operated on at the Royal Infirmary.

Dr. T. CECIL GRAY said that anaesthesia in cases of constrictive pericarditis presented certain problems. These patients always had a poor myocardial reserve. They might also have ascites and some pleural effusion. The margin of safety was extremely small until the pericardium had been released, when the change in the patient's condition was often dramatic. This small margin of safety was well shown by the cyanosis which might occur purely through putting the patient in the lateral position for thoracotomy. Both he and Dr. Halton were very convinced of the real danger of the use of intravenous barbiturates in these cases, but in adequate dilution, for example, 2.5% thiopentone, and in small doses—of the order of 3–4 ml.—they could be used for induction. It was advisable, however, to allow the patient to breathe oxygen both before and throughout the injection. The anaesthesia was then deepened with cyclopropane and oxygen and an endotracheal tube inserted. Anaesthesia was maintained with ether in the closed circuit in preference to cyclopropane, because the latter had often been found to cause severe degrees of cardiac arrhythmia during any dissection around the heart. There was no definite contra-indication to the use of small doses of tubocurarine to aid induction and reduce the amount of anaesthetic required provided that adequate ventilation was maintained with oxygen.

Dr. E. L. RUBIN drew attention to the site of pericardial calcification which most commonly covered the under and anterior surfaces of the right ventricle and most rarely the left auricle. Neither pericardial calcification nor the absence of radiologically visible pulsation necessarily implied constriction and both were occasionally encountered in patients who were without symptoms or other signs. An exaggerated auricular impression on the oesophagus similar to that seen in mitral stenosis was sometimes encountered, due not to enlargement of the left auricle but to thickening of the pericardium.

At the same meeting Dr. GODFREY BAMBER read a paper on some defence mechanisms of the skin.

At a clinical meeting of the Medical Society of the L.C.C. Service held at Hackney Hospital on Feb. 5, Mr. J. Gillies showed cases of various renal anomalies. Dr. Cardno described a case of sixth nerve palsy in a man of 77 following low spinal analgesia with complete recovery in eleven weeks. Mr. Jameson showed four cases of tumours arising in sebaceous glands, two innocent and two malignant, and said that he considered them all examples of "Cock's peculiar tumour."

Local authorities have found it difficult to provide suitable accommodation for midwives, district nurses, and health visitors. A circular from the Ministry of Health asks that the utmost possible assistance may be given to finding suitable accommodation for them.

Correspondence

The Colleges and the Act

SIR,—The crisis which now faces British Medicine calls for high and courageous thought. The plebiscite revealed the unity of the profession, a unity which springs from a complete distrust of the absolute power given to the Minister and the conversion of Medicine into a State monopoly. The profession is convinced that in opposing service it is acting in the interests of freedom and of the public and that it is safeguarding its own precious heritage.

A situation has arisen in which the B.M.A. has had to assume leadership. Certain professional observations are, however, called for. The action of the Presidents of the three Royal Colleges in January, 1947, was a risky one and it failed in its object. It damaged the prestige of the Colleges, endangered relations between consultants and general practitioners, encouraged the Minister, and misled the Press. The B.M.A. represents primarily the general practitioners, and there has never been any doubt about their attitude to the Act. Consultant opinion was not equally well represented on the Negotiating Committee, as the Colleges are represented in their corporate capacities and not by delegation from their Fellows. In the case of the largest College—the Royal College of Surgeons of England, with some 2,600 Fellows—the President and Council did not obtain the direct views of the Fellows, and no meeting of Fellows has been held since Nov. 29, 1946. And in a crisis such as the present one the leaders must derive their moral authority from their Fellows as the B.M.A. does from the Representative Body.

The Presidents had two primary obligations to the profession: first, to make clear the principles upon which the Act was based; and secondly to give their opinion as to the importance they attached to the heritage of freedom in the practice of medicine. They did neither of these. In consequence, consultants were demoralized and slow to realize the implications of an Act which places them at the mercy of a State monopoly.

A forgetfulness of Lord Halifax's maxim that "State business is a cruel Trade: Good-nature is a Bungler in it" is one of the reasons for our present troubles. Coalition governments are maintained by hard bargaining, and in the dark days of the war a hard bargain was struck which pledged social security and implied the nationalization of medicine. The repercussions of that bargain are now evident. Such a bargain explains the similarity of the health policy of all the political parties and the schemes of the successive Health Ministers, and it also explains the unwillingness of the Presidents to give clear leadership to the profession. Doctors are responsible and reasonably well-behaved citizens, and they will not break the law if they do not agree to serve under the Act, since their deepest convictions are that the Act will be disastrous in its effect.

I have never thought the Act capable of amendment which would lead to improved medical services and medical education and yet maintain that freedom which is vital to the practice of medicine. The interests of the public and the interests of the profession both call for the repeal or abandonment of this Act. The objections in principle are to the absolute Ministerial power, the creation of monopoly, and the certainty of political control. The practical objections are also weighty. We shall never trust Mr. Bevan, and it will take many years to restore our confidence in the intentions of any Minister of Health. The Minister and the Act have destroyed our good will, so that if the Act ever operates it will be with the same material resources but with fewer medical men and without the good will and confidence which alone make medicine possible. The sick public will suffer. The capital expenditure envisaged under the Act cannot be incurred, and an economic blizzard may aggravate the disorder of the health services and bring chaos and confusion. If the Act is forced on the community against the expert advice of the doctors, then the Government must accept responsibility.

In the events leading up to the present situation many have made mistakes—the B.M.A., the Royal Colleges, the Government, but especially the politicians, who have exploited the medical services in an endeavour to attract votes. The situation calls for all available political and medical leadership. The abandonment of the present destructive Act will be a first step in construction. Both political theory and grandiose planning will have to be forsaken if they are not to disorganize medical institutions, traditions, and confidence, and if that sense of vocation is to remain in work which is as private and intimate as the care of the sick. In the *Journal* of January 18, 1947 (p. 102), I wrote: "We are members of a free and liberal profession. I want that freedom to continue as one of the freedoms of a democratic community. As healers of the sick we shall continue to give our best if free from State coercion." That is still our faith.—I am, etc.,

London, W.1. REGINALD T. PAYNE.

No Health Centres

SIR,—Mr. Bevan's irresponsibility is glaringly illustrated in a Parliamentary answer he has given me (Feb. 10), which I append (see *Journal* of Feb. 28, p. 421). It is not too much to say that the health services under the N.H.S. Act were to be provided in predominant measure by the machinery of the health centres; a glance at Section 21 of the Act proves this contention. In Mr. Bevan's own words they were to be "the key feature in the general reconstruction of the country's health services." But without any notice to the medical profession, and almost clandestinely, the Minister announced in Circular 3, 1948, on Jan. 14, that because of the building situation provision of health centres must be postponed indefinitely. Still more certain must be the indefinite postponement of any new provision of hospital accommodation, or even any attempt at restoration of the buildings destroyed at the great London hospitals by enemy action.

Circular 3, 1948, gives a further revelation of irresponsibility. In paragraph 5 the Minister shows that he is completely in the dark as to what the health centres should provide, and he proposes to set up a "special committee to gather information" as to the aim to be pursued, and he stresses the need "for intensive research and thought about the design before the new development is launched."

The provision of institutional and specialist treatment was one of the most attractive promises of the Act and indeed perhaps one of the strongest single influences in securing its passage. But the Minister in answer to me on Feb. 10 calmly informed the House that "no immediate substantial increase of the building work under the Act *has ever been promised or regarded as feasible.*" The Act is to be put into operation within the next four months in the total absence of any possibility of fulfilling undertakings whose execution depended on provisions now indefinitely postponed. In a recent broadcast widely reported Dr. Stephen Taylor, M.P. (who constantly assumes the role of mouthpiece for the Minister), gave an "absolute assurance" that the Act would come into operation on July 5 with whatever resources of staffing might then be available, even though these might not cover more than half or even a third of the population, but no suggestion was offered as to how the population not so covered is to obtain medical attention after the elimination of the existing N.H.I. services. It seems clear that the unfortunate patients not included in the half or third covered will be required to pay the full levy, even though they receive none of the benefits or services in respect of which the levy is made.—I am, etc.,

House of Commons. E. GRAHAM-LITTLE.

The Political Perspective

SIR,—As you stated in the first leading article in the *Journal* of Feb. 21 (p. 347) the result of the plebiscite has placed a heavy responsibility on the B.M.A. and especially on the forthcoming Special Representative Meeting on March 17. It is important to realize that this responsibility is of a new order, for the recent debate in Parliament has shown that the issue is now regarded very much as a political one. It is most regrettable that politics and medicine should be so mixed up as to be temporarily identified, and it is also unfortunate that, as stated in the debate, doctors are seldom good politicians. (Perhaps this is because they have learned care in diagnosis, humility in prognosis, and moderation in statement.) In order, therefore, that the matter should be seen in its political background, which should surely be present in the minds of all who

meet on March 17, I should like to recapitulate some recent events which in their sequence and consequence seem to throw some light on the political perspective.

Towards the end of last year it was being rumoured that Britain's place in the Marshall queue might be very low, alarmingly so if the present Socialist policy were to be completed. It was therefore essential to make a bid for a higher place, and this was done by Mr. Attlee's speech on Jan. 3 roundly condemning Communism and emphasizing freedom, thereby pleasing America but disgruntling his left-wing supporters. These needed to be placated if the façade of harmony were to be maintained, so the device, unique in our history, of giving a vote of confidence to a Minister who had not been attacked was devised. The plebiscite was made the occasion for this demonstration of confidence in Mr. Bevan, the leader of the left-wingers, and careful reading of *Hansard* shows how successfully and exactly it was carried out, with a mastery of technique to satisfy Hitler himself.

Parliament was asked to say that it was "satisfied that the conditions under which all the professions concerned are invited to participate are generous and fully in accord with their traditional freedom and dignity"—when in fact the financial conditions for consultants, etc., are unknown, so that apart from a blind faith in Mr. Bevan no one could say whether they will be generous or not, while the regulations which will determine whether the conditions for most doctors are compatible with their "freedom and dignity" are also largely unknown.

Mr. Bevan, having said that "so much misrepresentation has been engaged in by the B.M.A., etc," then went on to misrepresent completely his discussions with the Negotiating Committee for the past year, for no one could gather from his speech that this time the "Negotiating Committee" had no power to negotiate but only to discuss and report back. This misrepresentation obviously convinced many members of the unreasonableness and intransigence of the doctors and coloured the whole debate.

The crowning achievement was of course to represent "the will of Parliament" as supreme not merely in matters of administration but in the sphere of morals and conscience as well (more will be heard of this later). This occurred because most of the members could not discern behind the specific objections of the Negotiating Committee the issue of professional freedom and duty to one's patients.

While doctors are not free from blame in this result, the debate made it clear that this Parliament is not versed in the art of discussing freedom in the dialectic of finance and regulations and was genuinely bewildered by the ostensible purpose of the debate, but it was a brilliant success in soft-soaping Mr. Bevan and his followers and in sweetening the bitter pill they were to swallow the next day when the Government issued the White Paper on the stabilization of wages, etc. All this goes to show how carefully the matter was timed and what importance the Government attached to making the doctors into a whipping-boy to please their extremists. No one can say that it bodes any good for the projected Health Service, either patients or employees, but it does emphasize the extreme seriousness with which we should meet on the 17th and the need to weigh even more carefully than usual what we say and the way we vote.

In the leading article in the *Journal* of Feb. 28 you stress the importance of public opinion, so I trust that this time the proceedings of the S.R.M. will be in public and that speakers will use the opportunity to make crystal clear to the wider public exactly what it is we are fighting for—how easy to say and to intend, but how difficult to do!—for at present public opinion is as confused and ill-informed as was Parliament a few weeks ago. We must emphasize the danger to clinical freedom, development, and research inherent in the Treasury control that the Act lays down for the Service, and show what it may mean for our patients. Enough is already known of some regulations to show what a mockery they may make of Mr. Bevan's promises about clinical freedom and doctor–patient relationship.

One would think that the dangers of a monopoly are already sufficiently known, or at least professed, to need no stressing, but this is not so. In fact most people seem to be unaware that the struggle between the doctors and the Act is really the old attempt to maintain freedom in an ordered service, only this time it will touch every individual in the most intimate parts of their physical, mental, and even moral existence. So far no satisfactory solution of this difficult problem has been found, but few solutions are so obviously bad as that proposed in the Act, which gives almost absolute power to the Minister and trusts that his promises of freedom (which the Treasury has power to nullify) will be kept.

Even if Mr. Bevan does his best, it is obvious that the Act is an instrument ideally formed for a dictator, and if the doctors accept it as it is they will have taken a long step for themselves and for their patients on the road that leads to Prague, or perhaps it will be Helsinki by this time next week. I believe that this is the crucial issue, and if we can make the people see it I have no doubt as to what their opinion will be, and even Parliament may have to admit that "the will of Parliament" ought to express the will of the people, as it certainly ought to seek their good, which is after all what we doctors exist to defend and to serve.—I am, etc.,

Winsford, Cheshire. W. N. LEAK.

The Paternal State

SIR,—Dr. G. C. Pether (Feb. 28, p. 411) has raised the important question of the potentially deleterious effects of undue control by the State and extensive plans for "social security" on the development of the individual personality. It is not altogether true, however, that "psychologists have paid so little attention to the cramping and thwarting of personality" inherent in such trends. On the contrary, there has been for many years among eminent psychologists and psychiatrists a remarkable consensus of opinion as to the psychological significance and dangers of an over-protective and authoritarian "paternal" State, and as to the relationship between emotional and social maturity of the individual and a liberal democratic form of society.

The conclusions reached as early as 1921 by J. C. Flugel in *The Psycho-Analytic Study of the Family* (London) to-day seem as prophetic as they are relevant:

> It is fairly clear that there exists a tendency to resurrect some of the parental attributes and give them a political application by bestowing them upon the State. The world war has taught us the necessity of implicit obedience to the State and its representatives—military and civil; the right of independent thought, action and criticism being to a large extent suspended and the minute details of our lives being subject to order and inspection in much the same way as in our childhood they were subject to the supervision of our parents. Again, modern socialistic thought—especially in its cruder aspects—has produced a state of mind, as a result of which the individual becomes to a large extent absolved from the responsibility for his own education, progress, and maintenance, and for those of his children. The adult individual is thus led to transfer on to the State that attitude of dependence which he originally adopted in relation to his parents. . . . If our conclusions are correct, there is a danger in too wide a ramification of State provision and State control, inasmuch as it is liable to prevent that full development of individual power, initiative and self-reliance which can only be obtained by a high degree of emancipation from the primitive attitude of dependence on the parents.

F. Alexander in *Our Age of Unreason* (1942, Philadelphia) similarly states:

> Democracy must educate its members to emotional maturity if it is to survive, and psychiatry must help to develop educational methods for overcoming infantile dependence and developing responsibility.

O. H. Mowrer (*J. Soc. Psychol.*, 1939, **10**, 121) writes:

> Modern fascism springs from psychological roots which are as old as the human family and which are by no means confined to the populace of those countries in which fascism has gained official status. The danger of emergence and growth of such a political doctrine, with its emphasis upon subservience and blind submission . . . comes, not from propaganda and pressures from outside, but from a country's own internal educational and economic institutions. No one, I believe, can at present point with certainty to the solution of this important problem; but surely encouragement of greater independence and emotional self-sufficiency in children . . . is a step in the right direction.

It would appear then that superficial methods of education designed to mass-produce men and women according to a preconceived "average" pattern, or which would regard all

children as identical or potentially "equal" in their capacities, should be avoided at all cost if we wish to preserve our democratic way of life. On the basis of his study of human constitutional types W. H. Sheldon (*The Varieties of Human Physique*, 1940, New York) was led to the conclusion that "children of different constitutional components probably need different educational influences, just as trees which lean in different directions need to be supported from different angles." This "differential education," as he termed it, necessitates the conception of education as "an effort to discover and develop the peculiar potentialities of the individual, more or less regardless of the immediate social value of the emerging traits. The assumption is that the aim of life is not social adaptation and conformity, but maximum individual development."

Finally, one of the most profound thinkers of modern times and one who has made invaluable contributions to psychiatry, C. G. Jung, in his *Essays on Contemporary Events* (1947, London) has recently written:

> The parental imagos can now be projected on to the State as the universal provider and the authority determining all thinking and willing. . . . The natural development of the soul is no longer replaced by a spiritual order of direction which bridges the centuries and keeps cultural values alive, but by a political directing order which serves the power aim of particular groups and promises the masses economic benefits. In this way the deeply rooted urge of the European towards a patriarchal and hierarchical order finds an apt and concrete expression which corresponds only too well to the instincts of the masses, but which is fixed at such a level as to be in every respect detrimental to culture. . . . It is perhaps a humiliating sign of the spiritual immaturity of European man that he both needs and desires rather a large measure of authority. . . . Anyone who sets out to bring *everything* that wants to grow to the highest pitch of growth would soon find that the weeds, which always flourish best, had shot above his head. I therefore consider it the highest task of psychotherapy to-day to pursue with singleness of purpose the goal of the development of the individual.

It is of course recognized that a basic standard of social and economic security is essential for the emotional maturation of the individual to be possible. But it would seem from all the evidence available that it is only by educating the individual to initiative, self-reliance, and independence, giving him the opportunity to improve his own and his family's condition *through his own efforts*, and insisting that he should, in so far as his capacities permit, take upon himself the burden of his responsibilities as an adult that there can be any hope of giving rise to well-adjusted and mature personalities and a lasting and significant culture. In the face of contemporary events and ideological trends, it would be difficult indeed to find place for any such hope outside the realm of fantasy.—I am, etc.,

London, S.W.3. R. H. AHRENFELDT.

Censorship of Opinion

SIR,—The Council of the Society of Medical Officers of Health at its last meeting discussed the statement in your leading article entitled "Censorship" (Jan. 31, p. 202) that a county medical officer of health recently instructed the public health medical officers on his staff not to take part or vote in a meeting held in their area to discuss the National Health Service Act, and that these officers who were present had to sit in enforced silence. It was the unanimous view of the Society's Council, which includes medical officers of health and departmental medical officers from all types of local authorities, that the procedure mentioned above was neither proper nor permissible for the administrative chief of a public health department, and they wished me to express their disclaimer of any support for this alleged restriction on the freedom of opinion of colleagues.—I am, etc.,

GEORGE F. BUCHAN,
Chairman of Council,
Society of Medical Officers of Health.

London, W.C.1.

The Northern Ireland Act

SIR,—As there appears to be some misconception concerning the provisions of the Northern Ireland Health Service Act in respect of the sale of medical practices, may I through your columns make it clear that the Act contains in Section 7 the same prohibition as the English Act against the sale of medical practices on the part of doctors who take service under the scheme. The Act also contains provisions for the compensation of doctors who come into the scheme on the appointed day and thus lose the right to sell the goodwill of their practices. These provisions have been inserted in agreement with the representatives of the medical profession in Northern Ireland, the negotiations having been conducted with the Northern Ireland Branch of the British Medical Association.—I am, etc.,

London, S.W.1. W. BROOKE PURDON.

*** It may be useful to summarize the main features of the Northern Ireland Act. The hospitals will not lose their endowments; there is a right of appeal to the courts; the capitation method of remunerating general practitioners is laid down in the Act; there are no penal clauses; there is no negative direction of control. The doctors agreed to the abolition of buying and selling on the understanding that if this provision were removed from the English Act a similar course would be taken in Northern Ireland.—ED., *B.M.J.*

The Fight for Freedom

SIR,—It was with a deep and sincere feeling of elation that I read the letter by Dr. A. C. E. Breach (Feb. 28, p. 412). I fully agree with him that the medical profession is surely now the last and only hope of true freedom. We must be ready and willing to fight, not just for ourselves against a dangerous Parliamentary Act, but we now have to regard ourselves as "commandoes of the public." If we fail in our fight, and we can only fail through cowardice and personal greed, we will be regarded by the public as a "very poor lot," whereas if we are the first in this country to take up our positions against tyranny not only will we ourselves feel happy in doing what is our honourable duty, but truly it may be said many years hence, "The doctors showed the British people strength, honour, and the road of the way back to greatness, and the British people took that road, and when they eventually rested they were indeed great."—I am, etc.,

Liverpool. A. E. BERNSTIEN.

Association of Rural General Practitioners

SIR,—I should like to support Dr. O. F. Conoley's letter (Feb. 7, p. 273) on rural mileage and practice expenses under any new Service. Living five miles from the nearest small town and eleven from any big town, one is forced to keep two cars. As both are nine years old they take turns in being repaired. Up till now, private practice has paid for purchase and upkeep; panel mileage allowance has covered merely tax and insurance of one car, therefore panel patients are almost entirely subsidized by private ones.

Something should be done about the initial two-mile limit before payment of any allowance. Ten roads radiate from my village. I can easily do forty miles in any morning, seeing ten panel patients at the two-mile limit on each road, and get precisely nothing for my travelling expenses. When private practice no longer exists that is just what will happen.—I am, etc.,

Kemerton, Glos. D. M. WILKINSON.

Radical Alteration Required

SIR,—It is time for a wider recognition of the fact that the present National Health Service Act is not directed to medical reform but to political ends and to bureaucratic expediency. For if the Government had been actuated solely by the desire to improve the medical services of the country another and more effective plan, easier to draft and to apply, and less subversive of the good features of English medicine, would have been produced. Men of good will, in whatever Party they may be found, should combine with the profession (which alone has so far shown good will) to urge upon the Government the desirability of a radical alteration of the Act. Nothing less will secure a contented profession and, through it, a satisfied public. For it is upon the freedom of medicine that many of the advances in the past have been built, and there is no reason to suppose that the revolution in progress at present will effect any change in that respect.

Failing the complete redrafting of the Act, which was passed by a Parliament inadequately advised by the profession, there are certain amendments which, if made, could go a long way to preserving the freedom which we, as doctors, regard as essential.

1. A previous letter in the *Journal* has shown the way in which the objectionable "universal basic salary" could be made harmless by converting it into an expenses allowance.

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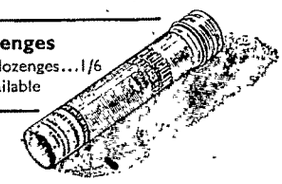

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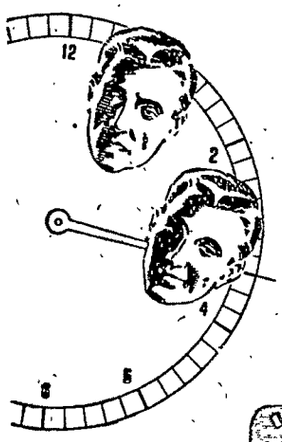

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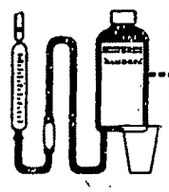

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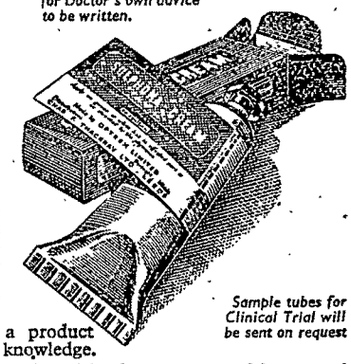

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2. The ban on the sale and purchase of practices could easily be replaced by a State power to buy practices, or shares in practices, at their market value when vacancies occur. By this means there would be no bar to the entry into practice of any man who could not afford to purchase one, for the State would buy his practice for him and install him as the tenant. The transfer of goodwill of practices to the State would thus be a gradual process instead of the upheaval that the Act demands. This method would also remove the offensive "big stick" of the restrictions on payment of compensation with which the present Minister hopes to bludgeon the profession into acceptance.

3. Mr. Bevan is in error in saying that the recent law allowing the right to sue the Crown will provide all the appeal against a Ministerial decision of dismissal that the profession could require. Mr. Bevan in the House made great play with the fact that the doctor would have the right of appeal against *unlawful* dismissal. Maybe, but the profession requires the right of appeal against *unfair* dismissal.

4. The right of the profession to put its elected representatives upon all the governing bodies of the Service could well be conceded without harm to Ministerial control and with enormous advantage to the Service. As at present planned, the Service will be run by the Minister, the Civil Servant, the administrative medical officer, and the local authority; the last person to have any power will be the doctor, who actually does the work.

—I am, etc.,

Portsmouth. NIGEL CRIDLAND.

Some Alternative Suggestions

SIR,—In your leading article of Feb. 28 (p. 397) you state: "The medical profession and the Minister of Health have one important end in common and that is to provide an efficient medical service for the people of this country." You then continue to write about the adjustments necessary to the Act in its present form. These two statements are irreconcilable, as no adjustments of the Act can possibly improve the service of medicine to the public, although they may mitigate several potential dangers. The Act as it now stands sets out to do two things. One is to provide a "free" service, and the other is to control the profession. I cannot believe that there was any intention to try and improve the service of medicine or it would surely have shown itself somewhere. Yet if a great reform of this kind is initiated it should have as its basis an aspiration to improvement in all its spheres.

What are the hindrances which are holding back the profession? They are first the fact that all G.P.s are grossly overworked and cannot give the time they would like to each patient, and secondly that out-patient and in-patient accommodation in hospitals is seriously inadequate. The latter is a question of building and of nurses rather than of medical staffing and cannot be solved in the immediate future, but could be alleviated if the former were rectified. If G.P.s' surgeries were not so crowded, then it is possible that fewer cases would find their way to the out-patient department. If G.P.s' rounds were not so rushed, then they would feel more able to cope with minor serious medical cases which otherwise would be sent into hospital.

It would therefore seem that if G.P.s' practices could be limited in size, then most of the hindrances to an efficient service would be dissolved. The number of G.P.s is approximately 20,500 and the population about 48,000,000—i.e., about 2,146 per doctor. A practice of this size should be managed efficiently and without overworking the doctor. In order to limit practices to this size it would be necessary to leave out of the scheme a certain percentage of the population, because there are the less densely populated country districts with relatively small practices, and elderly and semi-retired doctors who would not attempt to see as many patients. The obvious solution would seem to be to leave out the upper-income groups, many of whom would not in any case take advantage of the Service—say, all those with incomes above £1,000 a year. The remainder of the population would therefore come under the Health Scheme and obtain free doctoring, but as the upper income groups will have to pay for the scheme then it is only just and proper that they should obtain certain benefits from it.

These criteria could be satisfied by limiting doctors' practices either by a generous capitation fee, such as 25s. to 27s. 6d. per head with a number not to exceed 2,750, or by a staggered capitation fee, such as 30s. per head for the first 1,000, 20s. for the next 500, 15s. up to 2,000, and any further patients at 7s. 6d. per head. Confinements, mileage, and the very much reduced amount of private practice would ensure standards approximating to those recommended by the Spens Report. Those with incomes above the limit should be helped by free pathological and radiological investigations, which should be available to all G.P.s without reference to the out-patient department of the hospital.

Consultants and specialists would therefore carry on with a reduced private practice, which would entail that they should be remunerated for their hospital services. State aid to the voluntary hospitals is essential if they are to survive in this present era. If consultants and specialists were paid on a case basis, then they should not only be able to maintain their present rate of income but possibly manage to reduce their fees for private work, thereby increasing that work which otherwise would accumulate in the hospital departments.

Such a scheme would seem to have distinct advantages—namely: (1) It should provide a fillip to medicine by enabling the G.P. to work well without overworking; (2) it would satisfy all income groups of the public; (3) it would dilute State control by enabling a G.P. to leave the Service if he is unhappy and still be able to scratch a living outside; (4) it would help a young doctor, as his first patients would be the most remunerative and he would also benefit from the redistribution from the present bulky practices.

It does mean, of course, a new Act; and various other issues are not mentioned such as the buying and selling of practices. This custom, however, need not be insisted on, as there is no threat to the doctors' freedom. If it is to go it should be compensated for in the same way as other nationalization schemes—that is to say, by immediate reimbursement in the form of Government securities.

The scheme approximates to one produced by the Planning Committee of the B.M.A., and one possible reason it has not been elaborated may have been the desire to try for a 100% service. At the moment this ideal does not appear feasible owing to the amount of control apparently required by the State. If that control is the real object of the Government then obviously this scheme now suggested would meet with short shrift, *but* it will show that there is a scheme which could be worked efficiently—giving a better service immediately and one which could be extended as hospital accommodation is increased and health centres built.—I am, etc.,

Plymouth. S. M. DAVIDSON.

Stand Firm on Four Points

SIR,—The general public are beginning to realize that there must be something in the doctors' case, and the Press seems to think that the next move is up to the B.M.A. There are symptoms that we are expected to yield some concessions; indeed Drs. A. S. Hatch and F. H. Hunnard suggest (Feb. 28, p. 408) that we should yield on buying and selling practices and on appeal to the courts. I hope they will read and study the letter from Dr. J. Arthur Gorsky (p. 410), and also C. K. Allen's book *Law and Orders*. If they do, I feel confident that they will modify their views.

Unless we stand firm on all our four main points—for they are all interrelated—and if we yield on even one, our whole position will be turned and our freedom gone. So many people here and abroad are watching the situation and looking to us to show once again that the people of this country can be easily led but cannot be coerced. After all, when we agree to work the Act if our four main points are guaranteed we are still making great concessions and accepting much in the Act which is against B.M.A. policy and which we heartily dislike. To mention only a few, there is the undemocratic set-up of our representation on various boards and councils, the power of the Minister to suppress reports, his taking over of the hospitals, his proposed introduction of the full service when neither the necessary personnel nor the buildings exist to make its operation to the satisfaction of the public a reasonable proposition.—I am, etc.,

Southport, Lancs. R. R. M. PORTER.

The Basic Salary

SIR,—Having now in no uncertain voice expressed our opinion of the new Health Act, we may safely, I think, venture on some constructive criticism with a view to attaining a workable compromise. Among other things I think we should take a new look at the basic salary. As at present envisaged it is a mere bond of servitude and has rightly been turned down as unworthy of a great profession for whom freedom is vital.

But need it be so? Why should it not become a reward for good service and incentive to better work? Instead of being a fixed sum it could be varied so that the man with experience would have a larger amount than the recently qualified, the man with a higher degree would be rewarded accordingly, and the

man in a difficult and sparsely populated area would be compensated in proportion. By increasing, say, every five years, it would give promotion in the Service. The man with higher degrees does not necessarily become of consultant status but should certainly be given some acknowledgment. In other words the basic salary, instead of making for mediocrity, could encourage progress and good work. Provided, therefore, that we can be assured that the basic salary does not lead to a whole-time State service, there seems to be much to be said for it, and we should not lightly turn it down without due consideration.—I am, etc.,

Askern, nr. Doncaster. JOHN MALLOCH.

Inequality of Income

SIR,—Almost every letter in the *Journal* is concerned with the moral issues involved in the N.H.S., but its financial clauses are left largely uncriticized. Splendid and laudable that it should be so! But most of us have to earn our living and must meet our obligations. In studying this less exalted point of view, I have been impressed by the fact that financial injustice of the first magnitude appears to be inherent in the scheme as it is now proposed. Equality of remuneration, an equal charge for every patient on the doctor's list, will surely result in a grave inequality in the net receipts of practice. Thus, Dr. A works in a poor neighbourhood with "overheads" between £100 and £200 a year, his patients expecting a very few minutes of his time at each attendance (the N.H.I. has taught them to be content with that). But Dr. B, in better-class practice, may find his "overheads" three or four times as costly, while those who consult him will demand their quarter of an hour. A will do well; B will go bankrupt, unless he negatively directs himself to squat in A's fruitful field.

I raised this point at a meeting of a medical (or medico-political?) society which does not see eye to eye with the B.M.A. and was told that the matter would be of no importance in the Best of all Possible Worlds which is on its way. Dr. B would find cheap accommodation in a neighbouring slum, and if he wasted much time on individual patients others could soon be found who would not.—I am, etc.,

London, W.1. G. LAUGHTON SCOTT.

The Political Aspect

SIR,—In view of the fact that the Northern Ireland Parliament readily compromised with the doctors there, conceding the more important of their requirements, and that no prominence has been given to this in any section of the Press irrespective of its political colour, it would appear as though neither the Socialist Party, the Opposition, nor Mr. Bevan really wish the matter settled. This impression is strengthened by the recent debate in the House of Commons, which apart from a certain "entertainment value" was in no way helpful.

Should this controversy reach its logical and inevitable conclusion it would in no way damage the Opposition, while the Socialist Party might find it less embarrassing to postpone the enforcement of the Act, putting the responsibility for this on the medical profession, than having to explain to "organized labour" that the additional reduction in their pay packets is for future benefits, which cannot be provided at present. As for Mr. Bevan's motives, we have here a clever and ambitious man—but perhaps my imagination is too fertile.—I am, etc.,

Wallingford, Berks. GEO. MCMULLAN.

Doctors who Might

SIR,—The plebiscite is completed, the considered desires of the Minister and of the profession are known, and the popular cry appears to be "let battle commence." But nothing could be more unwise than to engage forces without estimating the numerical strength of the enemy. Mr. Bevan states that he is determined to commence the Service on July 5, and the question is, Has he enough to do it; how many are on his side? Let us then consider how many Mr. Bevan can call upon. These fall into four groups, the last two of which have not received sufficient attention from the B.M.A.

(1) There are those doctors who are revealed by the plebiscite as willing to join the Service.

(2) There are those doctors outside England who are not revealed by the plebiscite but are more than willing to join the Service.

The numerical strengths of these first two groups are not difficult to estimate and are sufficiently appreciated by all.

(3) There is the potential "Fifth Column" in our midst. Among those sincerely determined to refuse service under the Act there is a large group of young doctors who for financial reasons are open to economic coercion, a weapon not unknown to a certain type of politician. For example, of the thousands of doctors released from the Forces very few are earning their living at present. While under normal conditions the majority would have been absorbed into general practice, very few have been able to do so because practitioners have been naturally disinclined to accept partners owing to uncertainties based upon the proposed Service. As a result thousands of young doctors are "studying for higher degrees" and are being paid for doing so by various bodies such as the Postgraduate Federation. It is within the power of the Government to stop such payments, and these doctors wonder how long they can hold out without any money. Some have written to the various authorities requesting assurance that they will not be dismissed on July 5, but thanks to the Minister such assurance cannot be given. These doctors inadvertently constitute a potential fifth column: they number thousands. While some are determined not to join even if they have to temporarily give up medicine and work on farms, others openly admit that against their consciences they will be forced to join the Service unless some financial aid is assured them. It is probable that Mr. Bevan is well aware of the existence of the potential fifth column and of its value to his cause, and it is more than possible that its existence is not entirely accidental. The B.M.A. should now turn its attention to the danger and ensure that such doctors will not join the enemy through economic coercion.

(4) There is the public. All doctors agree that the wish of the people is paramount. Mr. Bevan states that he represents the wish of the people, but in point of fact the people have never been consulted. Furthermore, they have been misled by the politicians who have repeatedly told them they will have a "free service," and even this elementary falsehood is naturally accepted by the man-in-the-street, who is always anxious for something for nothing. By a series of equally misleading statements Mr. Bevan has got many of the public on his side. If, however, the public were told the truth about the Service they would think otherwise, and since all doctors wish to do what the public desires (in contradistinction to what Mr. Bevan says they desire) there the duty of the B.M.A. is clearly twofold. First, the B.M.A. should tell the public the truth about the projected Service. Secondly, they should then ascertain the considered wishes of the people by a survey of mass opinion and make the result known to everybody. If the public is with us it should silence Mr. Bevan. If it is against us the "battle" is over before the first shot is fired.

—I am etc.,

Sutton Green, Surrey. JAMES T. HAROLD.

Ownership

SIR,—Judging by recent letters in the *B.M.J.* much confusion still exists on the all-important question of ownership of practice. One could safely say that if there was any general factor responsible for the majority "No" vote it was fear of a salaried State service with its attendant loss of freedom, and if this assumption is correct then it is imperative that the profession is emphatic in retaining ownership. It will clarify the cause if we consider it from various points of view.

The Government.—Socialist criteria for the necessity of nationalization are briefly (*a*) inefficiency, (*b*) exploitation. What increase of efficiency is to be expected by reason of buying out practice, and who is being exploited by the sale and purchase of practice? Many sincere Socialists have stated that the usual criteria simply do not apply to the practice of medicine. Why then does the Government risk wrecking the scheme on this point? It is because (and this applies to any government whatever its politics) the Treasury must call the tune through control of certification, etc.; it must have a tidy scheme. The Minister recognizes much more clearly than many doctors that if we accept compensation we must accept control. His reasoning on this point is logical and fair.

The Public and Press.—I am of the opinion that the public are not the slightest bit concerned about the financial transactions in the Act, and rightly so, but I am quite certain that if we go to the public and Press in sincerity of purpose and, most important of all, in unity we will have their support. The result of the plebiscite has won us tremendous support, and therefore let us make it quite clear why we voted.

The Profession.—Of the minority that voted "Yes" I have nothing to say, but there are many in the profession who state that they are against the Act in every way but they cannot afford

to lose compensation. It is beyond my simple understanding to appreciate that people exist who imagine they can accept compensation and still continue to enjoy the freedom of medicine as at present. The price of compensation is control—a fair bargain if we accept it. It would be better if these "wafflers" stated outright that compensation relieved their moral fears and voted "Yes" to the Act now. If the Minister wins his battle of nerves it can only be through this section of the profession. Can anyone seriously doubt who will eventually win if 80% of the profession say "No"? We can scarcely expect the public to support this "have our cake and eat it" policy of this section of the profession. I cannot think of nor have I read of any substitute for the ownership of practice that can safeguard us, and it is for the profession to face this issue of compensation or control now lest we lose the confidence of our patients and the key to our freedom.—I am, etc.,

Sheffield. ANDREW STEPHEN.

Protection of Doctor and Patient

SIR,—The profession, having denounced in no uncertain manner in the plebiscite the N.H.S. Act as at present constituted, it appears to me to be very desirable that they should formulate conditions under which they would be willing to participate in a scheme, the granting of such conditions being considered as a *sine qua non* by the profession before acceptance.

I enumerate below what in the light of 28 years' experience appear to me to be very necessary conditions for the protection both of patient and doctor in any State scheme.

(1) The right of a doctor to retain the goodwill of his own practice and to dispose of it as he thinks fit.

(2) No outside interference with the doctor-patient relationship.

(3) The right of any patient to change his or her doctor, and the right of any doctor to have a patient removed from his list.

(4) No increase in free certification beyond the limits imposed in the present N.H.I. regulations.

(5) The retention by practitioners of their present panel lists after July, and the addition to these lists of patients desiring to join the State scheme. This is a most important provision in order to maintain continuity of income for the doctor, who otherwise will suffer serious financial loss whether he participates or not.

(6) The right of any patient to be treated privately by their own or any other doctor if they so desire it, with adequate safeguards.

(7) The right of a doctor to appeal to an independent tribunal in case of dismissal from the Service.

There may be other very necessary conditions of service which may occur to others, but those enumerated above appear essential conditions to me.—I am, etc.,

Atherton, Manchester. K. V. DEAKIN.

Concessions

SIR,—We, three interested general practitioners, have followed the present Health Service controversy as far as we are able both in the medical and lay press. We are puzzled by one point. The Minister claims persistently and emphatically to have made concessions to the profession. We can only list two: (1) the granting of private beds in hospitals to the consultants; (2) the setting up of a legal commission on partnerships. Of these two moves the first is suspect as an attempt to split the ranks of the profession; the second was only made after all negotiation had broken down. This can hardly rank as an effort of conciliation, but rather as a propaganda point for Parliament and the public.

Are we wrong in believing that all the alterations suggested by the B.M.A. have been granted by the Ulster Parliament and incorporated in an otherwise identical health service in that country? If this be correct surely it is a point that could be made widely public. It would show that at least one body of responsible people consider our suggestions reasonable.—We are, etc.,

IDA M. WILL.
J. H. FRANCIS.
Nottingham. R. A FURNISS.

*** Right of appeal to the Supreme Court, absence of powers of direction, and remuneration by capitation fee only are all incorporated in the Northern Ireland Act. The Bill was discussed in a leading article in our issue of Sept. 20, 1947 (p. 459).—ED., *B.M.J.*

Retain Goodwill

SIR—Notwithstanding the plebiscite results, I view the present situation with grave apprehension. The most disquieting aspect is the negative attitude of the Conservative Press and Party. They both seem to have overlooked the fundamental differences between ourselves and Mr. Bevan and to consider that a little give and take on both sides will settle the matter. My own gravest fear has been that the Minister would say to us: "You are now asking for three major concessions; I am prepared to grant you two if you will meet me on the third. You shall have no basic salary, you shall have an appeal to the courts, and I shall buy your practices." To my horror a letter in *The Times* from our respected leader Lord Horder appeared to me to lead up to the same solution. Lord Horder laid far too much stress on the appeal to the courts and basic salary, and scarcely any on the purchase and sale of practices. Possibly as a consultant he does not fully realize what ownership of our practices means to us G.P.s.

Obviously somebody will have to give way on some points before July 5, and my own opinion is that we should be wise as a profession to concentrate on the one issue of retention of the goodwill of our practices. If we give way on this one point we shall have lost the battle and opened the gates for totalitarianism and even eventual Communism. I regard the issue as a battle between Hippocrates and Marx.

The B.M.A. has done wonderfully well in conducting this campaign, but the real battle is only just beginning. Against us we have all the forces of the Left deployed with cunning and craft, which may well divide our ranks unless we can stand firmly together. From careful observations I personally suspect that there are quite a few chicken-hearted doctors who may "rat" on us, not because they like the Act but because they fear financial sanctions from Whitehall. If we accept the absence of appeal to the courts and the basic salary we may not get our ideal, but we shall still be owners of our own practices, "master of our soul and captain of our fate." As somebody has got to compromise, let us instruct our B.M.A. representatives to fight to the bitter end to retain our own practices but to be prepared to give way on the other two points.

We can expect no help from the Conservative Party on this issue. They are themselves tainted with the virus of bureaucratic control, and if we fail to agree on this one issue we shall, as I personally view the situation, have lost the fight and signed ourselves up for serfdom, a fate which we shall richly deserve as an educated and liberal profession, because we have not the excuse of ignorance. A study of European (particularly German) history during the last decade shows clearly how a State medical service is the essential step towards securing full control of the workers; it also helps one to realize why Mr. Bevan is so keen to get our practices.

To summarize: the State Service is coming anyhow; if we can retain our ownership of our practices we can retain our independence and try and make the best of it. If we give in on this one point we are sunk and lost for ever; no regrets afterwards will be of any avail. Let us not then bother too much about public and political opinion. We as a profession have expressed our honest sincere opinion of the Act, and we are the only people on this earth who know how to run a successful medical service for Great Britain—it happens to be our own special job. We shall never unite on all three basic principles; let us throw overboard the two that don't matter *vitally* and stick to the third one, which means professional life or death.—I am, etc.,

Holcombe Rogus, Somerset. JOHN V. MAINPRISE.

The French System

SIR,—It is with some trepidation that I enter the arena of the N.H.S. controversy. It is unfortunate, if inevitable, that the translation of our principles into practical issues should revolve around ways and means of remuneration. I feel the solution does not rest with capitation fee (with or without basic salary) but with remuneration per item of service. I believe we could with advantage study the system which works satisfactorily in France to-day. As far as the general practitioner is concerned this is in outline how the system works.

Agreements are made between the regional medical unions and the regional social security headquarters concerning minimum fees for various items of service—consultation at surgery, domiciliary

visit (day, night, Sundays), and minor operations. The patient pays his doctor, who initials a receipt provided by the social security organization. The fee is later refunded minus 20%.

The advantages of this system are many and amply compensate the slightly more complicated administrative machine which is needed. (*a*) The patient has complete freedom to choose or change his doctor. (*b*) The doctor-patient relationship is preserved, as the State enters into a contract with the patient and not with the doctor. (*c*) The doctor is not called out for trivial complaints, as the patient must pay out of his own pocket one-fifth of the fee. (*d*) The more experienced doctor or the older physician may raise his fees (within accepted limits) to lessen the burden of his practice.

This system works well, and I have no doubt a similar system could be devised to meet our needs.—I am, etc.,

London, N.W.3 J. DELAFRESNAYE.

Implement the Plebiscite

SIR,—At a local general meeting of the profession convened on March 7 to consider the resolutions proposed by the B.M.A. Council at the next Special Representative Meeting I proposed the following resolution, supported by one of my seniors:

That after consideration of the plebiscite result the Representative Body recommends the profession not to take any action to implement the Health Acts of 1946 and 1947 until they have been amended to meet the demands of the profession.

While it was received sympathetically, it was rejected. The first resolution of the Council was passed by a large majority, a minority not voting.

I would like to know how the Council and the supporters of their first resolution defend it in the light of what we have learnt about the Health Acts. We know that they are a political measure, the main purpose of which is to centralize the control of certification in the hands of the Government, that they are the last link in a chain being forged, not by any one political party, which will have as its effect the delimitation of individual freedom. We know that the Government is determined to carry out its policy. We know that our previous effort to meet the Government has given us nothing, not even the sympathy of the public. We know that we have an overwhelming majority in the profession who disapprove of the Acts. I would suggest that a mandate placed in the hands of the B.M.A. Council is the logical consequence of such a position.

"Criticism" that such a resolution as mine is derived from aggressive tendencies may well be a description of psychoanalytical fact, and in that it is mere description—it is not to the point. The B.M.A. is a democratic institution, where it is for the members to make clear to the Council what is to be the policy of that Association. The first resolution of the Council is not a statement of policy but merely a hope and an opinion. At this meeting the Council were not given any line of policy to enact the results of the plebiscite.

Especially as there are at least a minority who share these views I venture to record them, and would like the Council and their supporters to take this matter up and explain the idea behind their first resolution. Failure to implement the plebiscite will result in the disintegration of our majority if the profession have voted with decision to maintain one of the last bastions of freedom.—I am, etc.,

Hull. GEORGE H. BLAIR.

Benefits for Doctors' Wives

SIR,—I have read with interest and some sympathy of the formation of a League of Doctors' Wives. I feel, however, that having made public its activities in the national press the League may lay itself open to charges of misrepresentation of facts if it paints a picture of unrelieved gloom, and so I wish to draw attention to a few shafts of light in the form of State concessions that we have enjoyed up till now and which we may surely expect will continue after the appointed day.

(*a*) Throughout the war period my maid of military age was allowed to remain in our service with the reasonable proviso that she played her part in civil defence (in her case, joining a fire-watching party). (*b*) Income tax allowance is granted for that part of her services employed in connexion with the practice. (*c*) Doctors have been permitted to use their cars for recreation (subject to reasonable conditions) and their wives can enjoy with them this great advantage.—I am, etc.,

GLADYS M. WOOLF.

Symmetrical Gangrene in the African

SIR,—We have read with great interest Dr. M. Gelfand's excellent article on symmetrical gangrene in the African (June 14, 1947, p. 847). The possibility arises that the disease may have a similar aetiology to the epidemic thrombophlebitis described by us[1] in the East African Command during the War. The following are points of resemblance:

1. Dr. Gelfand's six patients were seen during the same period as our cases in Kenya and Somaliland.
2. The age and sex incidence was similar (he only saw the disease in males, usually between the ages of 20 and 35).
3. Oedema preceded the gangrene in all his cases. Many of our patients suffered from oedema without evident thrombophlebitis, although the pathology of these and of the cases of obvious phlebitis was undoubtedly identical.
4. Two of our patients developed gangrene of the lower limb, arterial thrombosis being found at operation. Both cases presented as thrombophlebitis with oedema, which was later complicated by arteritis.
5. Most of our cases were preceded by venepuncture. One of Dr. Gelfand's patients had received injections of quinine for cerebral malaria, but the route of administration is not stated. The Wassermann reaction was positive in two of his cases. It is possible that these patients may have received anti-syphilitic treatment at some previous date.

The symmetrical character of Dr. Gelfand's cases is not incompatible with our theory, for 29% of our cases of thrombophlebitis involved both lower limbs. Had arteritis been a more frequent complication it is likely that gangrene would have been bilateral in a similar ratio. Is it not possible that mild thrombophlebitis was more widespread in Southern Rhodesia than appeared from hospital admission? An African in civilian life would probably fail to report for treatment of a mild, perhaps transient, attack of oedema of the leg. It would be surprising if a disease which was attacking so many East African troops in Kenya and Somaliland did not affect a proportion of Africans in civilian life. Fisher and Lendrum[2] describe tropical primary phlebitis in the neighbouring territory of Northern Rhodesia.—We are, etc.,

A. D. CHARTERS.
London, W.1 P. E. C. MANSON-BAHR.

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1 *Lancet*, 1946, 2, 333.
2 Ibid., 1946, 2, 438.

Exo-erythrocytic Forms of Malaria Parasite

SIR,—In the paper on the "Pre-erythrocytic Stage of Mammalian Malaria" by Drs. H. E. Shortt, P. C. C. Garnham, and B. Malamos (Jan. 31, p. 192) it is stated that the curtain on the gap in the cycle of events was lifted in the case of avian malaria by James and Tate in 1937, when they described the exo-erythrocytic cycle in *Plasmodium gallinaceum*. Such description had been preceded by the discovery of Raffaele of the unpigmented stages in canaries of *Plasmodium relictum*.

In the first paper of S. P. James and P. Tate (*Parasitology*, 1938, 30, 128) it is stated that "Raffaele was the first to recognize that in *P. elongatum* there is a definite schizogonic cycle of development in cells of the reticulo-endothelial system in addition to the cycle in erythrocytes. Raffaele also demonstrated (*Riv. Malariol.*, 1936, 15, 318) that schizogony takes place in leucocytes or endothelial cells after heavy inoculation of canaries with sporozoites of *P. relictum*. . . . Unpublished work of one of us has confirmed Raffaele's results, that endothelial schizogony of *P. relictum* occurs in canaries which have been inoculated with sporozoites." Raffaele has also shown that the exo-erythrocytic forms appear only towards the 6th and 7th day after the inoculation of sporozoites. So the priority of Raffaele's discovery in avian malaria cannot be questioned, and no less incorrect is the statement in the annotation at p. 204 of the same issue of the *Journal* in which none of the names of the researchers in this field have been omitted with the exception of Raffaele's name.

The statement in the annotation that "evidence of a convincing nature is at last brought forward that the cycle of development of the malarial parasites in mammals is exactly analogous to that occurring in birds" comes many years late, as Raffaele had already described (1937–40) bodies belonging to the exo-erythrocytic cycle in man. The authors of the paper dismiss too easily the importance

of Raffaele's findings by saying that they have not been confirmed or received any support. But it is just that negative assumption that needs support, a support that would exact a long painstaking work as was Raffaele's work.

I am sure that your readers may be surprised in learning from Davey that to succeed in finding these forms, with the same difficulties that one meets in finding them in a six-days-old chick, it would be necessary to inoculate in the human the contents of 50,000 infected salivary glands. All malariologists who took the trouble of looking at Raffaele's smears have not hesitated in considering them as belonging to the exo-erythrocytic stage. I think that the authors' findings in the monkey is a confirmation of Raffaele's work on man. By the way, owing to the authority of Raffaele in that field his observations should have been accepted.

Before finishing this letter I feel the need of reminding your readers of the high intellectual merit of James in the discovery of the exo-erythrocytic stage. Considering all the proofs against Schaudinn's theory he postulated the necessity of a new stage between the sporozoite and the infection of the red blood cells. This working hypothesis was published in its completeness by Ruge (*Dtsch. med. Wschr.*, 1936, **62**, 1869) and has been proved true by successive work. I am glad to give homage to the memory of James as the malariologist to whom the experimental malaria owes the most interesting clinical results.—I am, etc.,

Istituto di Malariologia Ettore Marchiafava, Rome. G. BASTIANELLI.

Swine Erysipelas Infection in Man

SIR,—I am interested in the concluding statement made by the president of the Section of Comparative Medicine of the Royal Society of Medicine (Feb. 28, p. 404) in which he asked whether the susceptibility of man to swine erysipelas might not be much higher than was commonly thought. Personally, I have found it comparatively common—its incidence twice as frequent as erysipelas in my practice. I meet at least two cases of the cutaneous type and sometimes as many as five of these cases in a year. I must have seen about fifty cases or more during the past eighteen years.

It is variously known as erysipeloid, crab cellulitis, or reticular lymphangitis. There is almost always a history of a scratch or minor cut from a meat bone or a skinning or butcher's knife. The infection has occurred in my cases among butchers, gamekeepers, cooks, farmers, who have been skinning dead sheep found on the hill, and not infrequently in housewives. A few have occurred from fish-bone scratches.

The condition has a seasonal incidence from August to February. It usually occurs on the finger, commencing as a purple patch, which extends over the finger, clearing in the centre and working towards the tip and the palm. There it commonly proceeds to travel down a neighbouring finger to its tip. It has a slowly spreading, sharply defined, purple, raised narrow margin. It is itchy and hot, but never really painful. On one occasion only have I seen a mild lymphangitis to the middle of the forearm. It resolved spontaneously with splinting of the parts. Suppuration never occurs. The erysipeloid undergoes spontaneous cure in about three weeks in most cases.

Until two years ago I treated these cases with 10% ichthyol ointment applied every two days on lint, knowing that it would at least do no harm. I have never seen a case relapse with this treatment although relapse is said to be common. I do not claim that the ichthyol had any particular effect on the infection, but some method of treatment had to be given to satisfy the patient. Lately I treated two cases with 200,000 units of penicillin night and morning, but abandoned it in both cases after five days as no improvement occurred. This autumn I was fortunate in having an elderly housewife with the condition, whose daughter, a nurse, administered 50,000 units of penicillin three-hourly for seven days. This case was less than a week old and too early to undergo spontaneous cure. After four days of penicillin treatment the lesion had completely disappeared, and no recurrence took place. It is obvious that ordinary massive dosage night and morning is insufficient, but 400,000 units daily by three-hourly injections effects cure in some cases. Higher dosage might of course be necessary in others.

I feel sure that swine erysipelas occurs much more frequently in man in rural areas than is commonly supposed.—I am, etc.,

Bridgend, Isle of Islay, Argyll. CAMPBELL M. MCINTYRE.

Rarer Manifestations of Herpes Zoster

SIR,—The very interesting article on this subject by Dr. T. Parkinson (Jan. 3, p. 8) is bound to recall other unusual cases of herpes zoster. I remember to have seen a sequence of cases a few years ago which struck me already at the time as extraordinary but gained even more significance after reading his article.

The first case was that of an elderly man, patient A, who was admitted to hospital with herpes zoster of typical thoracic distribution. A few days later patient B was admitted for an amputation of his toes. While recovering from it he used to visit patient A in his room. About three weeks after his admission he developed a left facial palsy which took about one year before it had disappeared entirely. Patient A was admitted again several months later for post-herpetic pain and mental depression. At that time patient C, who was being treated for a diaphragmatic hernia with ulceration, visited him on several occasions. After about a fortnight he developed a herpes zoster of typical abdominal distribution. Somewhat about the same time patient D was recovering from a haemorrhoidectomy. He too visited patient A now and then. Soon after his discharge he consulted me for a paralysis of the long thoracic nerve which had affected the serratus anterior muscle and the posterior portion of the deltoid.

These four cases are interesting inasmuch as two of them apparently were examples of "zoster sine herpete." They further seem to point to a carrier state in herpes zoster which possibly was present in patient A.

The relationship between herpes zoster and varicella was exemplified lately to me when I saw a man suffering from herpes zoster and his wife getting an attack of varicella about three weeks later.

Finally it is worth recording the case of a 6-year-old boy who had been under radium treatment for sarcoma after abdominal exploration and came to see me for a herpes zoster with a distribution corresponding with L5.—I am, etc.,

Gatton, Australia. E. GUTHANER.

Treatment of Subacute Bacterial Endocarditis

SIR,—I agree with much that Dr. Florence M. E. Davies (Feb. 14, p. 317) and Mr. B. Waters (Feb. 28, p. 416) have written on this subject. Nevertheless I do feel that the importance of infected teeth, apical granuloma, and possibly tonsils as potential sources of bacterial leakage leading to relapse has not been emphasized.

Therefore may I add that I have shown elsewhere (*Lancet*, 1947, **2**, 807) that penicillin-sensitive organisms can thrive in a dead tooth pulp in a subject receiving massive doses of penicillin.—I am, etc.,

Liverpool. JOHN HALLAM.

Breast-feeding in Erythroblastosis Foetalis

SIR,—The practice of weaning infants with haemolytic disease because the mother's milk contains antibodies has been based on circumstantial evidence and speculation on the possible harm that might result to the baby rather than on scientific proof. The question of breast-feeding erythroblastic babies is of such importance that an authoritative opinion based upon actual investigation should be welcome. Dr. I. A. B. Cathie's observations (Oct. 25, 1947, p. 650) that there is no experimental evidence to prove that Rh antibodies are demonstrably absorbed into the blood stream by way of the alimentary canal and the conclusion that weaning of such infants is not justified are therefore of great interest. It is also interesting to note that at the Hospital for Sick Children, Great Ormond Street, London, it has been the practice to breast-feed such children whenever this can be done, irrespective of the antibody content of the breast milk, and that their clinical progress has not suggested any relationship between the antibodies in the milk and the duration of the haemolytic process.

I wish to make the following comments on these observations. The finding that Rh antibodies are not readily destroyed by the gastric secretion of infants is significant, as it shows that they remain potent and may yet be absorbed from the alimentary canal. There is a fundamental difference between absorption through the placenta and from the alimentary canal. In the former, on entry into the foetal circulation the antibodies come into direct contact with the

foetal red cells which possess the specific antigen in the greatest concentration, and it is probable that most of the antibodies are specifically fixed to the red cells. Indeed the red cells may be said to constitute the first line of defence against the antibodies. In the latter, on the other hand, the antibodies have to pass through the liver, the cells of which have been shown by Boorman and Dodd (1943) to contain the Rh antigen, though not to the same extent as the erythrocytes. Is it possible that the antibodies are absorbed by the hepatic cells? If this view is correct it would seem reasonable to suppose that the antibodies can gain entrance into the circulation only after the liver cells have been more or less saturated with them.

What causes the lag in the recovery in the blood state of erythroblastic babies? Is it the haemolytic process or the hypoplasia of bone marrow, or both? The pathology of the haemolytic process in the infant may be compared with that of cases of blood transfusion from high-titre group O donors. Yet though the degree of haemolysis as judged by the fall in haemoglobin and red cell count may be severe it is but rarely attended with haemoglobinuria or evidence of renal damage such as oliguria and nitrogen retention. This is so even when Rh-positive blood has been used for transfusion. Clinically the jaundice may be minimal or there may be an increase if it was previously present. A rapidly increasing pallor is a common feature. These clinical findings suggest that the anaemia is probably also due to poor red cell regeneration rather than entirely to haemolysis.

It is well known that in animals physiological absorption of maternal antibodies via the alimentary canal is quite possible. The observations by Kerr and Robertson (1946) are of special interest in this connexion. Working with *Trichomonas foetus* antigen on cows these workers have shown that the antibodies against *Tr. foetus* present in the whey of colostrum can be absorbed by the newborn calf from the first feed after birth—and be demonstrable within 2 hours after the feed. If the calf had been fed on boiled milk for 24 hours the antibody present in the colostrum is not absorbed. This shows that the conditions in the alimentary canal which permit the passage of the antibodies disappear within the first 24 hours. These workers have also shown that *Tr. foetus* antibodies in serum can be absorbed via the alimentary canal into the blood stream in the newborn calf, though it is much less easily assimilated than from colostrum.

In this respect newborn calves and newborn babies appear to differ from each other. Parsons (1946) attributes this difference in mechanism "to the variation in placental structure; in women the placenta is thin, the blood actually bathing the chorionic villi and thus rendering the transference easy, whereas in the cow it is thick." Several layers of tissue are interposed between the maternal and foetal circulations.

In spite of the lack of proof of antibody absorption by the mouth using the present methods, there is no reason why the experimental evidence in favour of absorption should not be advantageously applied to clinical medicine. As colostrum contains a higher concentration of Rh antibodies than breast milk it would only serve as an additional precaution if colostrum feeding is specially interdicted, though breast-feeding may be allowed as is the practice at the Hospital for Sick Children.—I am, etc.,

Madras, India. K. S. RANGANATHAN.

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Kerr, W. R., and Robertson, M. (1946). *J. comp. Path. Therap.*, 56, 101.
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Natural Position for Childbirth

SIR,—Dr. Kathleen Vaughan's letter (Jan. 31, p. 222) draws attention once more to the natural position for childbirth. Most of us must have had cases where a woman has delivered herself in this position. Nearly all women who are blessed by or who suffer from precipitate labour give birth when standing or squatting, often perhaps imagining that nothing more than movement of the bowels is taking place—that at any rate has been my experience. The most impressive demonstration that I have witnessed of the efficacy of the squatting position occurred in 1921. I had been called to a confinement at a lonely farmhouse, I believe the woman's eighth. My first visit was before 9 a.m. I called several times during the day and no progress was evident. She repeatedly proclaimed that she could never have the baby "on the bed," she must "get down to it." I called at 9 p.m. and found little or no change though the nurse appeared to be working hard with her in the left lateral position. She pleaded with me to let her "squat," and so at my suggestion a horrified nurse spread a clean sheet on the floor, the patient squatted as illustrated by Dr. Vaughan, and in a few minutes the child was born easily and without damage to the perineum.

It has been my habit in forceps delivery to have the patient in the lithotomy position. This appears to me to be the easiest and most convenient position, especially when working with little or no skilled assistance, the thighs being held flexed on the abdomen by an "obstetric helper"—a strip of webbing passing behind the patient's neck and fastened just above each knee. In this position one has the nearest approach to natural squatting.

In her instructive and interesting book Dr. Vaughan puts forth convincing arguments for more natural, and therefore more rational, habits of living, feeding, and methods of delivering—or allowing the woman to deliver herself—in the attempt to reduce maternal and neonatal deaths. She points out that sepsis figures largely in the Ministry of Health reports. This I think is very largely determined by the mother's diet and her resistance to infection. One of the worst cases of puerperal infection I attended, with pelvic abscess and peritonitis, occurred after the birth of a puny child with no manipulation or interference of any kind. This woman confessed to me afterwards that she had not carried out instructions for dieting or taking vitamins, but had starved herself to produce a small child and have an easy time. She had a very small baby—and nearly died.

Not only is our management of pregnancies and confinements becoming more and more "scientific" and artificial, but so is the care of the newborn babe. We hear a great deal of clinics, baby weighing, and dried milk, but very little of breast-feeding. That seems to be going out of fashion. Is the modern mother, well supplied with vitamins and priority milk, incapable of producing the proper food for her baby? On booking a case in the third month of pregnancy I was once asked, "And what is the best artificial food for the baby"? Recently I spent an hour in a news theatre where a modern British hospital was depicted with its up-to-the-minute maternity block, and flashed on the screen was a picture of a lusty baby vigorously sucking at his bottle. A far prettier and more suitable "shot" would have been a happy and contented mother with her baby at the breast. I recently met an Australian woman who had had two children in nursing homes in England. She said she was always a "slow beginner" with her milk, but after the third or fourth day always had an abundant supply; but she had to plead with her doctor and the staff at the homes not to put her babies on to artificial food before she had had a real try to feed them herself.

Doubtless a great number of stillbirths and neonatal deaths are due to disproportion and the consequent difficulties in delivery, but how many of these babies are weaklings due to deficiencies in the mother's diet? Especially before the days of the expectant mothers' priorities the percentage may have been high. This together with artificial feeding, pulmonary infections, and tight wrapping—as I have previously urged—may account for many neonatal deaths. It is said that 50% of babies swaddled in the seventeenth century died in their first year. Even now, when expectant mothers receive priority foods, many of them may suffer from undernourishment, as they are unlikely to take the special supply of extras themselves if they have young children, who naturally become the beneficiaries.

I regret that Dr. Vaughan's *Safe Childbirth*, and Dr. G. Dick Read's *Revelation of Childbirth* were not available at the beginning of my career instead of at the end. I strongly recommend all who practise midwifery to study both these excellent books.—I am, etc.,

Huddersfield. S. H. WADDY.

Peptic Ulceration

SIR,—With Mr. V. J. Kinsella's desire to apply Occam's Razor to clinico-pathological interpretations (Feb. 14, p. 318) I have full sympathy. He cites in analogy the chronic ulcer of the leg, an instance I have used for many years in this very connexion, but surely the production of pain in the peripheral nervous system has a mechanism different from that in the viscera? The middle term obtrudes itself without undue multiplication of the entities, particularly if we exclude for the purpose of this discussion extra-gastric causes such as pancreatic erosion. The interposition of the food relationship of ulcer pain inevitably introduces gastric function as a middle term; the implication of the secretion as a cause is negatived by a large number of considerations such as the absence of reaction to pure acidifiers and alkalizers (HCl and NaOH), and the persistence of the same pain after the onset of a generalized obstructive mucosal gastritis with total achylia.

In carcinoma of the stomach the difficulty of explaining pain in the presence of achlorhydria was for long thought to be over-

come by introducing the element of infiltration; unfortunately for this view, in leather-bottle stomach with almost universal infiltration pain is at a minimum. The rigid fibrosis of carcinoma precludes the distension essential to the genesis of muscular visceral pain. Again the accompanying inflammatory cellulitis provides the explanation—recession or removal of the infective factor in stomach cancer by oral cleansing, gastric lavage, short circuit, etc., mitigates or relieves the pain entirely (incidentally also, as is too little known, the achylia). Hence the paradoxes that a man's best help in getting an early diagnosis of carcinoma of the stomach is to have a filthy mouth, and conversely, that in the edentulous carcinoma of the stomach is peculiarly latent. Pathology is one and indivisible, the most potent cause of fluctuations in symptoms throughout clinical medicine is the ebb and flow of inflammatory oedema.

But now Mr. Kinsella introduces the question of pain and haematemesis. Is this a Greek gift or a very subtle emphasis of the case I have outlined? Haemorrhage from "peptic" ulceration may be a slow trickle (the basis of the occult blood test) from the circumulcerous inflamed mucosa—gastroscopists will agree the origin is not granulation tissue in the ulcer floor—or brisk, or severe. Brisk, always recoverable, bleedings occur from erosions (the old "acute" ulcers), occurring indiscriminately as regards site. They are small, heal rapidly, and are never followed by chronic ulcer. They involve only the mucous and submucous coats, opening comparatively small vessels, and not holding them open and non-retractable by chronic fibrosis and oedema, and *uncommonly involve the gastric musculature.* In these erosions pain is but a transient, often absent, feature.

In chronic ulceration brisk haemorrhage may arise from erosions in concomitant gastritis (with clinical features as in the preceding instance), or from the opening of large extramural vessels by an exacerbation of devitalization and digestion. Rigidity of the surroundings prevents "natural" arrest of bleeding. Pain precedes and accompanies the bleeding, and its persistence indicates progression of necrosis and inflammatory reaction. Traditionally such cases have been treated by either complete prohibition of intake or merely sips of water—such a regime leads quickly to a total cessation of gastric function, motor or secretory. Hence the age-old fasting treatment gives as rapid a recession of ulcer symptoms as any of the most elaborate drug and diet treatments, particularly if stimulation of gastric peristalsis by iced water and the epigastric ice-bag is precluded. In fine, the treatment of haemorrhage is that best calculated to diminish ulcer symptoms; persistence of pain, as noted in the Goulstonian Lecture, is of bad prognosis, indicating despite such treatment an extension of the ulceration. That the clot in the floor of the ulcer prevents the deadly HCl from getting at and stinging the ulcer is most difficult to believe from any *a priori* chemical consideration; muscular atony from acute anaemia of haemorrhage is at least a credible accessory factor.

The haemorrhage-pain clinical features of ulceration offer therefore no contradiction but rather a substantiation of the cellulitis-myogenous view of gastric pain in ulcer and carcinoma. My original letter was a challenge to the radiologists in their claim to demonstrate healing of "peptic" ulcers; with them must now be included the physicians in the indictment that they fail to correlate morbid anatomy with the signs and symptoms of gastric disease.—I am, etc.,

London, W.1. C. JENNINGS MARSHALL.

Oral Intubation and the Davis Gag

SIR,—I must thank Dr. I. W. Magill (Feb. 28, p. 417) for his observation on the tongue plate for the Boyle-Davis gag, which I described in the *Journal* of Feb. 7 (p. 267)—needless to say I claim no originality for the device, the principles of which must have occurred to every E.N.T. surgeon. I cannot agree, however, that intubation is not advisable for tonsil operations, though it is far from essential. As he admits that it is suitable for the more difficult and lengthy operation of cleft palate, however, I cannot see why it is not, to say the least, preferable for even short cases. After all it is a simple matter to put in a tube, and the increased safety and control of anaesthesia (on both patient and surgeon) are surely adequate compensation for cutting the hourly production rate in children down to five or six dissections.

He puts emphasis on the ability of the surgeon and the anaesthetist. Is the anaesthetist justified in assuming that the surgeon is "capable," by which I presume he means the operation is relatively rapid and avascular? These are optimum conditions—I feel it is safer policy to prepare for the worst.—I am, etc.,

Darlington. J. S. C. MONRO.

The Danger of Intubation under Trichlorethylene

SIR,—Dr. Gordon Ostlere has recently published two articles in the *Journal* concerning the use of trichlorethylene (April 5, 1947, p. 448, and Jan. 31, p. 195). The first dealt chiefly with the use of curare in "poor-risk patients." It certainly confirmed my own belief and experience in the wide range and usefulness of trichlorethylene especially when used in combination with curare for such cases. In the second article the toxic effects as shown by cardiac arrhythmias are mentioned and Dr. Ostlere points out that trichlorethylene should not be used in the presence of an existing cardiac irregularity, and that it should be replaced by ether where an irregularity occurs and persists with trichlorethylene.

Several fatalities have occurred when this drug has been used, but one cannot always blame the drug directly—in fact it is probably safer to lay the blame in most cases partly to the technique used and/or partly to some concealed or unobserved condition of the patient which may even have been unassessable. I am unable to present any technical details regarding recorded fatalities with this drug, but I would like to mention two cases in my own experience.

Case 1.—A man aged 49—poor colour and rather wasted—was suffering from right renal calculus. B.P. 160/100. Blood urea normal. Left kidney normal. Heart and lungs, n.a.d. It was proposed to perform a right nephrectomy. "Omnopon," gr. 1/3 (22 mg.), and scopolamine, gr. 1/150 (0.43 mg.), were given and he arrived in the theatre more than usually drowsy. 0.4 g. thiopentone was then administered followed by gas-oxygen and trichlorethylene. Respiration soon answered to carbon dioxide stimulation and blind intubation performed at the first attempt. There was immediate reflex spasm and breath-holding, the breath being held at the expiration of a pronounced cough. In an attempt to relieve the spasm I administered curare 15 mg. and oxygen under pressure. I hoped that the incision might prove a stimulus to the respiratory centre, but almost immediately after the incision had been made the heart ceased to beat. Remedial measures were instituted and the heart eventually restarted by massage by an incision through the diaphragm. Voluntary respiration returned very slowly and then more rapidly, changing later to Cheyne-Stokes respiration. He was then removed to the ward and transferred to an "iron lung," being taken out at intervals. Always there was a return to Cheyne-Stokes respiration. He died thirty-six hours after the incision without regaining consciousness. Post-mortem examination showed marked atheroma of aorta and a hypertensive thick-walled heart. The coronary arteries were pipestem in character and so narrowed by atheroma that their lumina were invisible. The cerebral arteries were of similar calibre. Death was therefore due to cardiac failure as a result of the coronary atheroma and essential hypertension

There is little doubt that this patient had not long in this world, but I feel he would have died more peacefully and in his home had a deeper plane of anaesthesia been used for the period of intubation.

Case 2.—A well-built young man, over 6 feet tall, was to have a gland excised in his neck. Exactly the same induction technique was used. Breath-holding occurred following intubation, but the pulse remained full and regular. Here I felt it was justifiable to administer curare. I gave him 10 mg. curare, but this time kept the patient in the anaesthetizing room. A gradual relaxation of spasm occurred and a return to normal respiration so that the operation was continued successfully under gas-oxygen and trichlorethylene.

These two cases I think emphasize sufficiently the danger of intubating some patients under too light an anaesthetic, and such cases should be brought out into the open.

Some anaesthetists advise using a cocaine spray before all cases requiring intubation. I would say this is unnecessary as a routine and only serves to upset a number of patients. Some prefer to intubate whenever possible through the mouth. Where relaxation is not required and the patient is well built and possesses a full upper and lower set of teeth the nasal route is often to be preferred. And finally a discussion in this journal has recently been taking place concerning the technique of Dr. Bourne, of intubating under almost maximum doses of thiopentone and curare.

We have therefore two extremes—very light, and very deep. In view of possible dangers I consider it unsafe to make intubation under trichlorethylene a routine technique unless the larynx has been well cocainized. Rather would I suggest that laryngoscopy should be performed and a tube introduced under cyclopropane or ether, and then possibly a change made to trichlorethylene as soon as the curare has been given or the patient has settled

down in a suitable "plane." For direct nasal intubation when relaxation is not required I consider that ether should be used to subdue the laryngeal reflex. If this is contraindicated, as in a toxic thyroid, heavier premedication and a systematic spraying with cocaine should be carried out.

Although we may be fully aware of the great value of both trichlorethylene and curare we should be careful lest we misabuse them by going to extremes with both—that is to use trichlorethylene where the laryngeal and other reflexes are not subdued, and to use curare to take the patient far beyond the plane necessary for the immediate process of intubation. This of course in no way infers that trichlorethylene is not an otherwise excellent agent when administered, following a thiopentone induction, with an abundance of oxygen using the semi-closed method with a facepiece, for a wide range of cases which do not provoke strong reflex disturbances in the respiratory and cardiac centres. An injection of atropine or scopolamine should always precede a trichlorethylene administration.—I am, etc.,

Bristol. W. M. MAIDLOW.

Trichlorethylene in General Anaesthesia

SIR,—Although fully appreciative of Dr. Gordon Ostlere's review of the position of trichlorethylene in general anaesthesia (Jan. 31, p. 195), I do not believe that the role of this agent has been fully evaluated as yet, nor the signs of anaesthesia obtained with it fully explained. The somewhat meagre literature on this subject always appears remarkably restrained and undecisive, and I should like to make a few personal observations.

It seems certain that trichlorethylene can be a most useful addition to the armamentarium of the anaesthetist provided that it is used with care and judgment. It is also true to say that it can, when improperly used, produce many unpleasant, embarrassing, and even menacing side-effects. Trichlorethylene, in any concentration, has some effect on respiratory function. In low concentration this effect is minimal and need cause no disturbance to patient, surgeon, or anaesthetist. With higher concentrations several effects may be produced. Tachypnoea is commonly the first sign, the respirations being shallow as well as frequent. This may lead to the appearance of cyanosis, or actual respiratory arrest may occur. It has been stated that this increased respiratory rate is due to a direct sensitization of the pulmonary inflator and deflator receptors. The impulses are said to pass by way of the vagus nerves, and the giving of atropine in full dosage before the administration of trichlorethylene may, on theoretical grounds alone, render marked tachypnoea less likely to occur. Another explanation to be considered is that the lung bases become filled with the heavy and relatively non-volatile vapour of trichlorethylene, thus reducing the available lung capacity and leading to anoxic anoxaemia. The respiratory rate and depth is also influenced by the nature and severity of the surgical stimuli, as with all anaesthetics when used in the lighter planes of anaesthesia.

The characteristic and comparatively well-defined signs of anaesthesia attendant on an ether anaesthesia are notably lacking or confused when trichlorethylene is used. The pupils are inconstant in size and show frequent changes during the administration, although a dilated pupil is suspicious of overdosage. The eyeball is usually more or less mobile, tending to fix slightly off the central position. Slight twitching movements of the eyelids and face muscles are seen occasionally, and athetoid movements of the fingers are not uncommon. It seems that the effect of trichlorethylene on muscle tone has not yet been fully elucidated. That it has a definite tendency to produce an increase in tone, which may be the cause of the above effects, including that of the eyeball muscles, is possible.

I observed the following disturbing phenomenon recently. A healthy young adult male was undergoing operation for hydrocele. Induction of anaesthesia was by means of 17 ml. of 5% soluble thiopentone solution and maintenance was by gas-oxygen (80:20%) supplemented by trichlorethylene. On mobilization of the testis convulsive diaphragmatic movements started, and these continued at intervals, separated by a series of about four normal respirations. These jerky abdominal movements would be described as "hiccup" in the conscious subject and they continued for about 15 minutes, during which time all attempts to abolish them failed completely. The trichlorethylene was cut out of circuit and ether was added, without result. The oxygen was increased to 35%, and 5% carbon dioxide was added for a few breaths, again without apparent effect. The "hiccup" finally ceased after the inhalation of about a dozen breaths of air at the conclusion of the operation. It is probable that this picture was produced by the action of reflexes from the site of operation, these reflexes not being obtunded during a smooth trichlorethylene anaesthesia. This operation is, no doubt, one of many where trichlorethylene as an anaesthetic is *not* indicated.

Cardiac arrhythmias occurring during trichlorethylene anaesthesia consist usually of extrasystoles which may progress to pulsus bigeminus as with cyclopropane. These usually disappear on lowering the anaesthetic concentration and seldom cause further anxiety. The vapour of trichlorethylene is slightly irritant and may cause coughing or laryngeal stridor if increased too rapidly, although these effects are rare in comparison with those seen with ether. The pharyngeal and laryngeal reflexes are obtunded quickly, and a pharyngeal airway is tolerated early.

Cases suitable for trichlorethylene anaesthesia must be selected carefully and premedicated sufficiently at the proper time. The fact must be faced that trichlorethylene cannot replace ether in any case where deep narcosis is necessary or where any degree of true muscular relaxation is desirable. The concentrations of trichlorethylene necessary for the induction of surgical anaesthesia are very much higher than those required for maintenance, as Dr. Ostlere states, and these high concentrations are frequently the cause of the side-effects which rightly incite suspicion in the mind of the administrator as to the safety of this agent.

Trichlorethylene finds a place in modern anaesthetic practice as an agent for maintaining surgical anaesthesia induced by another agent, preferably thiopentone. It is doubtful if it finds an equal place in the induction and maintenance of surgical anaesthesia per se. The administration of trichlorethylene for maintenance is different from that of ether in that a much closer watch must be kept on the patient for signs of overdosage, and the amount of trichlorethylene must be kept down to the absolute minimum.

It seems that the best results are obtained when gas-oxygen-trichlorethylene is used for maintenance following a thiopentone induction. In these cases the respirations frequently remain shallow and only slightly increased in rate, and the anaesthetic concentration can be kept minimal. The pushing of trichlorethylene results in rapid, shallow breathing with jerky diaphragmatic movement and noisy "blowing" respirations, perhaps accompanied by laryngeal stridor, cardiac arrhythmias, and cyanosis with dilated pupils. This picture is not one of smooth anaesthesia and it is rarely, if ever, seen when trichlorethylene is used following induction to surgical anaesthetic depth with thiopentone. It is desirable to give sufficient thiopentone to produce satisfactory surgical anaesthesia for the particular operation before maintaining the anaesthesia with gas-oxygen-trichlorethylene. In this way all the advantages of trichlorethylene anaesthesia are obtainable without the side-effects attendant on the high concentrations necessary for both induction and maintenance of anaesthesia by this agent alone.

I believe that the pharmacology and clinical uses of trichlorethylene will bear further investigation, but such investigation must be accompanied by clinical impressions from as many sources as possible. It is with this object in view that I note the above observations.—I am, etc.,

Huddersfield. RONALD A. MILLAR.

POINTS FROM LETTERS

Some Modifications

Dr. EMRYS D. OWEN (Neath, Glam.) writes: "Failure to solve the present position will discredit both parties and cause a severe loss to the medical profession. I suggest that the present planks in the B.M.A. platform be abandoned and the following substituted: (1) To establish the chance of a successful appeal to the courts the conditions under which a complaint against a doctor could be presented to the Local Executive Committee and Tribunal should be rigidly delineated. The regulations governing the conduct of both patient and doctor should be strictly codified by a committee of practitioners. These would exclude any possible victimization on political grounds. Dismissal from the Service should give the doctor an automatic right to one year's income in lieu of notice (see precedent recently in another service). As a corollary a doctor should be expected to give one year's notice of retirement, during which he could have a say in the election of his successor and introduce him to the practice. (2) Basic salary: the present offer should be accepted, but the successor to the panel conference should be formed into a trade union within the B.M.A. necessitating a special annual subscription ready to defend our position, using a modified strike weapon such as refusal of certificates if necessary. (3) Claim the right to elect a proportion of medical members of all

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committees under the Act, retaining our present position with regard to Local Executive Committees. I consider this to be of paramount importance, as it would prevent the election of some of the Minister's stooges. A compromise on the above lines would possibly enable us to enter the Service happily.

The Issue is Freedom

Dr. H. A. FAWCETT (Guildford, Surrey) writes: The issue *now* is no more nor less than freedom (reasonable and proper) versus power dictatorship (with a clear political and partisan bias), whether vested in one person or a small clique, in the name of a meaningless, abstract ideology called the "State." And although, at the moment, it appears chiefly to affect doctors, it is already (and will be increasingly) the vital concern of everyone, not only in these once blessed isles but all over the world. I do not think that this tremendous issue, now in its first (and maybe its last) great test here, is sufficiently or widely enough realized even in our own profession, and certainly not by the public in general; nor the fact that we as a body are given the privilege and opportunity of leading this first "crusade" against this insidious and growing evil. Moreover, we have a strength and justification (without in any way neglecting our professional duties or causing that suffering and loss inseparable from ordinary industrial disputes and strikes) almost unique, which, if properly exercised in unity, must not only win its narrower and more domestic battle but kindle a torch of hope and encouragement to all who still value legitimate freedom and elementary individual rights. Moreover, once lost, this splendid chance may never come again—not anyway in peace and in order. . . .

Disciplined Use of Liberty

Dr. K. W. TODD (Croydon, Surrey) writes: We have now to tell the nation what we stand for. We want freedom, but we must convince our fellow countrymen that we mean to make right use of it. We want freedom to improve our health work, freedom to distribute ourselves with regard not to wealth but to usefulness. Can we not publish a plan for that disciplined use of liberty which has always been the backbone of the profession and of democracy?

Appeal to the Nation

Dr. E. H. STRANGE (Rushden, Herts) writes: Our best line for presenting our case is to appeal to the nation, showing that we are marked out for State control . . . because we are necessary agents in the complete State enslavement of the working classes. "Direction of labour" would be ineffective if the loop-hole of physical incapacity is not guarded by controlled State agents. It is useless to rely upon the political opponents of the present Government. The Conservative Party and the Conservative Press are deeply inbred with the modern notion of power politics, the omnipotent and omnicompetent State, and they do not understand wherein an honourable profession differs from a corps of salaried technicians.

Unpaid Civil Servants

A DOCTOR'S WIFE writes: It strikes me that the main practical factor which will decide whether or not Mr. Bevan's health plan will work is the general practitioner's wife. Should she be unwilling to accept the status of unpaid Civil Servant, neither Mr. Bevan nor his numerous but possibly uninformed supporters in the House of Commons will be able to make their own plan work by July 5 of this year. . . . Fortunately the time has not yet arrived in England when politicians can interfere in the private lives of the individual to the extent of coercing some housewives to use their own homes as surgeries of the State. . . .

Hold Together

Dr. R. E. ARANGO (London, W.2) writes: With regard to the doctors and the National Health Service Act, 1946 . . . what they strongly feel is that with the Act as it stands they are being denied their right to work if they choose to stay out.

The Act indubitably states that doctors have the choice of staying out and remaining in private practice, but that is a hollow and valueless concession, worth no more than the ink it is written in; for in reality although the Act ostensibly does not deny them directly the right to work, yet *indirectly* it forcibly entices the patients away from them towards the "free" Health Service. . . . And then if those who stay out want to sell the goodwill of what remains of their practice, there will be nobody to buy, for the younger doctors will have tended to choose the line of least resistance and entered the Health Service to become eventually State medical slaves. If doctors do not hold together and let the Act be stillborn until a good one be conceived, the price to pay by those who still love and choose freedom and dignity will be but ruin and starvation in their loved profession. . . .

Treatment of Prickly Heat

Dr. A. C. BRYSON (St. Mawes, Cornwall) writes: The interesting correspondence on this subject prompts me to give my experience. Some thirty years ago Dr. Harston, of Hong Kong, published a book on the treatment of subtropical diseases of children. In this he advocated the use of perchloride of mercury for this complaint —the prescription being aq. colongniensis ʒii made up to ʒx with lotio hydrarg. perchlor. 1:2,000. This was put up in a sprinkler-top bottle with directions to dab freely affected parts and allow to dry. I regret that I cannot give the date of publication as my library was confiscated by the Japanese when I was interned on Dec. 8, 1941.

In the very distressing cases complicated by secondary infection with pyogenic organisms in the scalp and frontal region, irritated by the band of the topee, treatment twice daily with a thick lather of mercurial soap, such as "afridol," and left to dry for five minutes has seldom failed to give complete relief in two days.

Oxygen Cylinders

Dr. REX BINNING (Hove, Sussex) writes: I am prompted by a recent experience to draw attention to the dangerous and widespread practice of covering the oxygen cylinders used in hospitals and nursing homes with a bag, which is tied round the shoulders of the cylinder and so completely obscures the distinguishing marks painted thereon.

I asked for a cylinder of oxygen and was given a cylinder containing oxygen 93% and carbon dioxide 7%. Fortunately I had taken the precaution of pulling the cover down from the shoulders of the cylinder and thus observed the white and green band, and no harm was done. The British Oxygen Company and Mr. Charles King have gone to considerable trouble by the institution of non-interchangeable couplings to prevent the wrong cylinder being used on anaesthetic machines. It is a pity that their efforts should be completely nullified by theatre sisters and others continuing a practice for which there can be scant justification.

Herpes Zoster and Chicken-pox

Dr. HOWEL LEWIS (Swansea) writes: The letter by Dr. C. C. H. Chavasse on the above subject (Feb. 14, p. 318) reminds me of two cases in the converse order that I saw recently. A woman brought her young daughter to my surgery one evening with obvious chicken-pox. A week later the mother again saw me. She had developed a moderate attack of intercostal herpes zoster from which she has not yet recovered. It would be interesting to know if this sequence occurs very often. Roxburgh states that it is ten times less common.

Incidentally, how would one allay a severe post-herpetic neuralgia of the cervico-occipital type in an old man of 72? The popular anodynes have been used; a course of pituitary extract (B.P.) was given during the acute stage, and the usual analgesics in various combinations have been used to no effect, not to mention electro-therapy at the local hospital.

Natives of the Tropics

Dr. R. E. ARANGO (London, W.2) writes: Dr. L. Everard Napier states (Feb. 14, p. 317) that during his 26 years in India he referred to the natives of India as the "indigenous inhabitants," but why he did not call them by the simpler terms of "the people" or "the inhabitants" beats me. The only explanation I can conceive is that the foreign rulers of India considered themselves to be *the people* or *the inhabitants* that really mattered, and as they (the foreign Britishers) could not very well call the immense multitude around them "foreigners," so they in disdain called them "natives." It is to such a terminology that the people of India have been justly averse and sensitively prejudiced. . . .

*** This correspondence is now closed.—ED., *B.M.J.*

Injection of Diabetic's Skin

Dr. T. S. L. JONES (Whitehaven, Cumberland) writes: The routine preparation of the skin for a hypodermic injection is by swabbing the area with spirit in one form or another. Now a normal person's skin is soft and pliable and offers slight resistance to a hypodermic needle—no more resistance than one would encounter by plunging the needle into a pat of butter. Consequently a hypodermic injection should be almost painless.

The skin of the diabetic, thanks to its daily anointing with spirit, is not a normal skin. It is almost as tough as leather and consequently a hypodermic injection into the tough skin of the diabetic can be a very painful process, broken needles being not uncommon, and periodically the patient has to seek a new area of skin which has not been toughened.

My plea is for the abolition of the tyranny of surgical spirit, and in substitution I would suggest ordinary cleanliness as achieved by the use of soap and water. I instruct my own diabetic patients to bathe the part with soapy water and dry with a towel, instead of swabbing with spirit, and they have all been grateful for my suggestion. Over a period of many months I have not encountered one instance of an injection site becoming infected, perhaps because the skin is in a healthy condition and not dehydrated.

In my own general practice I have not used spirit for a long time when giving a hypodermic injection.

Obituary

R. V. SOLLY, M.D., M.R.C.P., F.R.C.S.

Dr. Reginald Vaughan Solly died in Exeter on Feb. 19 at the age of 83. His father was Edward Harrison Solly, of Congleton, Cheshire. He was educated at Winchester and St. Thomas's Hospital, qualifying in 1887. After experience as a house-surgeon and as clinical assistant to the Skin Department of St. Thomas's Hospital he became house-surgeon at Bristol General Hospital. He graduated M.B., B.S. in 1888 and proceeded M.D. five years later. He took the F.R.C.S. in 1890 and the M.R.C.P. in 1910. He entered general practice in Exeter in the nineties, but had always been specially interested in pathology, and his enthusiasm led him to become the organizer of a separate pathological department at the Royal Devon and Exeter Hospital. In 1911 he was first to hold the new appointment of pathologist to that hospital. The accommodation allotted to him was inadequate, and subsequently a small laboratory was erected for his department and came to be known as "Solly's Temple." His appointment as pathologist involved also his appointment as assistant physician, a post which he held until 1923. He continued as head of the department of pathology until his retirement in 1931, when he became consulting pathologist and a life governor of the hospital. For some years he was also consulting medical officer to the Exeter Dispensary. He was one of the foundation members of the Association of Clinical Pathologists, which has just celebrated its coming of age. For many years he was secretary of the Devon and Exeter Medico-Chirurgical Society.

Dr. Solly was a keen entomologist with a special interest in lepidoptera, both British and foreign. For over fifty years he was a member of the Field Club of the University College of the South-West, which he served as president and lecturer. He had a fine collection of butterflies and frequently visited Southern France, particularly around Hyères, in search of rare specimens. He was an adept dry-fly fisherman, making his own flies, and he found time every week for a fishing expedition, often accompanied by one of his technicians. He spent many happy holidays fishing the Wiltshire rivers around Wylye and Mere. In 1902 he married Frances Anne Laura Buckingham, who predeceased him by a week. His publications included articles on rat-bite fever, on Ludwig's angina, and on trichinosis.

F. A. R. writes: "Solly was highly cultured and widely read; of quick, nervous, sensitive, and highly diffident temperament; with a fine sense of humour; quick to an intense anger, which, however, always disappeared equally quickly like an April shower. He was a man of no commercial ambitions or instincts, enjoying a wide popularity among his colleagues throughout Devonshire. No memoir of him would be complete without mention of the speeches annually demanded of him at the Exeter and South-West dinner. At this function his speech was always a main event, eagerly anticipated and delivered with a visible shy hesitation characteristic of the man, but erudite and containing an element of spontaneity and dry humour."

Dr. FREDERICK MCSORLEY, M.P., died suddenly at his home in Belfast on Feb. 9 at the age of 56. He was educated at St. Malachy's College, Belfast, and at Queen's University, where he graduated in 1916. He subsequently obtained the D.P.H., and in 1922 proceeded M.D. Later he took the M.R.C.P.I. and was elected F.R.C.P.I. in 1930. For the last twenty years he had been honorary visiting physician on the staff of the Mater Infirmorum Hospital, Belfast. Some years ago he was also appointed visiting physician to the Belfast City Hospital. He was in daily attendance at both hospitals up to the time of his death. For many years he had been clinical lecturer and examiner for Queen's University, Belfast, and he had also examined for the Royal College of Physicians. In the General Election of 1945 he was returned at the top of the poll as one of the university members of Parliament. His was a very full life and he never spared himself either in the course of his medical or his political duties. He was a member of the British Medical Association and of the Ulster Medical Society. Despite manifold duties which would have overwhelmed a man with less energy he found time to contribute articles occasionally to medical and scientific journals. His opinion was much sought after by his medical colleagues and his advice greatly respected. He enjoyed to the full the confidence of the medical fraternity in Northern Ireland and over the border. In Parliament he was a popular figure, and in the advocacy of his views, often directly conflicting with those of the majority—for example, on the question of the appropriation of hospitals by the Government—he offended no one. He stood for principle and never indulged in personalities. He was a man of the highest moral character and great generosity, lovable both for his sterling qualities and for his cheery optimism. In his own family circle he was seen at his best. To each member of his devoted family his loss is irreparable. He leaves a wife, four sons, and two daughters. To them we offer our sympathy.—E. M. H.

Dr. GEORGE WILSON died at his home in Nairn on Feb. 9 at the age of 80. Dr. Wilson was a native of Strichen, and was educated at Chanonry School, Old Aberdeen, and Aberdeen University. He took his M.A. in 1888, and graduated M.B., C.M. in 1891. He was the senior practitioner in Nairn, where he had settled in 1898. He was in the old Nairn Artillery Volunteers, and later became medical officer to the Inverness battery of the R.H.A., serving in the Middle East in the 1914–18 war. Dr. Wilson took a great interest in local affairs and was medical superintendent of Nairn Hospital and a trustee of Nairn Savings Bank. He had also been visiting surgeon to the Chalmers' Hospital and assistant visiting physician at the Banff District Asylum. In the early years of his practice he did his rounds on horseback and later owned the first motor-cycle in the district. He had been a member of the British Medical Association for over fifty years, and was chairman of the Banff, Elgin, and Nairn Division in 1922–3, and president of the Northern Counties of Scotland Branch in 1929–30. He is survived by his wife and four daughters.

Dr. JOHN WILFRED NUNN, of Hadley Green, Barnet, died suddenly on Feb. 11 at the age of 72. Dr. Nunn, who was born in Penzance, was a student at St. Bartholomew's Hospital, and qualified in 1900. He held hospital appointments at Stamford and at Guildford before settling in Hadley in partnership with the late Dr. Walter Mercer. His elder son, Dr. J. A. Nunn, entered the practice in 1933 and has since continued in partnership with his father. Dr. Nunn was on the staff of the Victoria Cottage Hospital and was medical officer to the Post Office and to the Queenswood School, Hatfield. In his younger days Dr. Nunn was a keen cricketer and lawn tennis player, and he and his wife had been active for many years in the Barnet Arts Club and other local organizations.

Medico-Legal

DEATH OF A DOCTOR

At the Assizes in Leeds on Feb. 25 Mr. Justice Byrne awarded damages of £15,025 with costs to the widow of a doctor. The defendants, the owner and the driver of a motor lorry with which the doctor collided when riding his auto-cycle last April, admitted liability. In the collision the doctor, who was 33, received fatal injuries.

According to a Press report,[1] during the hearing of the case Mr. Justice Byrne was shown a document setting out the terms offered by the Minister of Health to general practitioners joining the new National Health Service. Counsel for the widow said that the doctor had bought a Darlington practice in 1945 for £3,000. In the first full year in which he worked there his income was £3,115, of which £763 came from private patients. The practice was growing steadily. Counsel said that if the doctor had joined the new health service the lowest gross income he would have received would have been £2,208. Counsel for the defendants said in view of what might happen to the profession the doctor might not have entered the service and would have had to depend solely on the income derived from private patients.

Mr. Justice Byrne said: "I am inclined to take the view that if he had remained outside the service the number of his private patients would have increased considerably."

[1] *Yorkshire Post*, Feb. 26, 1948.

Medical Notes in Parliament

The Minister and the Profession

Mr. DE LA BÈRE on March 4 asked the Prime Minister whether, in view of the necessity of obtaining the co-operation of a maximum number of the medical profession before July 5, 1948, he would consider appointing an independent arbitrator for the purpose of finding a solution to the present impasse. Mr. ATTLEE answered, "No, Sir." He said that matters which had already been decided by Parliament would not be a proper subject for arbitration.

Mr. DE LA BÈRE inquired whether the Prime Minister was fully aware of the grave position which must arise in July because he had refused to meet the views of the vast majority of the doctors. Did Mr. Attlee know that the people of the country wished to know why the Government had allowed this position to come to pass? Mr. ATTLEE said that did not give any justification for Mr. De la Bère's proposal. Mr. DE LA BÈRE said it gave every justification.

Air-Commodore HARVEY asked whether the Government intended to charge the public for a service if they were not in a position to supply it.

Hon. Members: Answer. No answer was returned, and Mr. WILSON HARRIS then asked would the Prime Minister be prepared to lend a hand himself in future negotiations if he should think that that would be likely to help matters? Mr. ATTLEE said he was prepared to consider any suggestion put before him.

Squadron-Leader FLEMING asked whether the House was to understand that no approach had been made up to date by either the B.M.A. or the Minister of Health upon this matter?

Mr. ATTLEE: To whom?

Squadron-Leader FLEMING: Each other.

Dental Opposition

Mr. BAIRD asked the Minister of Health what steps he was taking to prevent dentists who had publicly expressed their opposition to the National Health Service Act from serving on the local dental committees set up under the Act.

Mr. BEVAN replied on March 5 that he was taking no steps. He hoped that on a closer acquaintance with the National Health Service dentists generally would recognize its merits.

Honorary Staffs' Honorarium.—Mr. HASTINGS asked on March 4 whether Mr. Bevan knew that certain voluntary hospitals now receiving Treasury grants made the receipt of an honorarium by members of their honorary staffs dependent on resignation from their medical advisory committees; and if, in these cases, he would consider withdrawing the grant. Mr. BEVAN said Exchequer help was given before the appointed day to keep the hospitals going. The action mentioned would not in his view justify interference with the domestic affairs of these hospitals. Nevertheless, he deprecated such action.

St. Leonard's Hospital.—On March 4 Mr. HASTINGS asked the Minister of Health whether he intended to publish the report of the assessors appointed to investigate the training of nurses at St. Leonard's Hospital, Shoreditch; and whether a copy would in any case be supplied to the General Nursing Council and the London County Council for their guidance. Mr. BEVAN replied that it was not the normal practice to publish reports of persons appointed to hear appeals on behalf of the Minister of Health. He did not think there were grounds for making an exception in this case. If the bodies mentioned asked to be supplied with a copy of the report he would furnish one confidentially.

Colostomies and Clothing Coupons.—Mr. THOMAS BROOKS pointed out on March 4 that three clothing coupons had to be surrendered before a colostomy surgical belt was supplied. Mr. HAROLD WILSON replied that surgical belts of not more than 6 inches in width specially designed for a number of specified conditions, including colostomy, were available coupon-free, but coupons were required for other types which could not be thus clearly defined because some could be worn in place of other rationed undergarments. The Board of Trade was prepared to consider sympathetically applications for special allowances of coupons for wearers of colostomy appliances subject to the production of medical evidence.

Exchange Control Medical Advisory Committee.—Mr. GLENVIL HALL said on March 2 that as from March 1 no fees would be payable by applicants to receive foreign exchange for medical treatment abroad. In future all applications should be made through a doctor and not by the patient himself. The members of the Exchange Control Medical Advisory Committee were all distinguished medical specialists who since the foundation of the Committee had received no fees except £1,659 from applicants.

No. 8

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Feb. 21.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	36	3	15	3	—	90	11	21	3	4
Deaths		—	—				1	—		
Diphtheria	180	20	59	13	5	217	16	51	19	6
Deaths	3	2	1	—	—	2	1	1	—	—
Dysentery	191	19	63	—	—	92	10	53	—	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	1	—	—	—	—	3	—	—	—	—
Deaths		—					—			
Erysipelas			51	9	4			59	7	4
Deaths		—					—			
Infective enteritis or diarrhœa under 2 years	48	7	13	15	1	69	5	18	21	2
Deaths				5					5	
Measles*	7,209	766	848	82	19	15,765	644	300	33	288
Deaths†			—	—	—	13	—	2	—	3
Ophthalmia neonatorum	79	4	12	1	—	59	4	12	—	—
Deaths										
Paratyphoid fever	3	—	3 (B)	—	1 (B)	—	—	1 (B)	—	—
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal	788	39	15	9	2	1,139	84	20	38	10
Deaths (from influenza)‡	28	4	2	—	—	135	21	7	4	6
Pneumonia, primary	221	29	224	40	6		115	282	25	23
Deaths				9						
Polio-encephalitis, acute	3	—				1	—			
Deaths										
Poliomyelitis, acute	27	3	6	2	—	14	—	1	5	—
Deaths§	3	—					—			
Puerperal fever		3	8		—		3	12		1
Deaths							—			
Puerperal pyrexia‖	86	8	13	—	—	142	11	13	—	—
Deaths		—					—			
Relapsing fever	—	—			—	1	—			—
Deaths										
Scarlet fever	1,828	118	327	44	36	1,081	70	218	20	23
Deaths†			1	—	—	1	—	—	—	—
Smallpox	—	—	—	—	—	2	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	1	—	1	6	—	3	—	—	3	—
Deaths	—	—	—	—	—	—	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	2,552	155	55	55	11	2,227	212	387	108	32
Deaths	—	1	1	1	—	9	2	6	4	2
Deaths (0–1 year)	355	37	51	17	9	572	67	103	49	20
Infant mortality rate (per 1,000 live births)										
Deaths (excluding stillbirths)	4,801	731	617	167	134	7,896	1313	931	398	229
Annual death rate (per 1,000 persons living)			12·5	10·4				19·4		
Live births	7,964	1216	998	373	270	10,194	1596	1231	397	297
Annual rate per 1,000 persons living			20·1	23·3				24·8		
Stillbirths	215	32	26			260	33	40		
Rate per 1,000 total births (including stillborn)			25					31		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Vaccination and Inoculation

British subjects travelling abroad, particularly to the Tropics or sub-Tropics, may be exposed to the dangers of infectious diseases not normally prevalent in the United Kingdom. In a recent notice issued by the Ministry of Health, the Department of Health for Scotland, and the Ministry of Health and Local Government for Northern Ireland it has not been practicable to give for every country details of the diseases against which travellers from the United Kingdom should protect themselves in their own interest or against which a particular country requires persons entering it to be protected. Travellers are therefore advised to apply for details to the representative in the United Kingdom of the country to which they propose to travel. The following information may, however, serve as a general guide.

(*a*) All travellers abroad are advised to be effectively inoculated against typhoid and paratyphoid fever.

(*b*) The health authorities of certain countries—e.g., Australia—and some countries in the Tropics and sub-Tropics may require travellers to produce evidence of recent vaccination against smallpox—i.e., evidence that they have been vaccinated not more than three years and not less than fourteen days previously.

(*c*) Travellers to parts of the Far East where cholera is endemic are advised to be inoculated against this disease.

(*d*) Inoculation against typhus is advised for travellers to countries —e.g., in South-East Europe and North Africa—in which that disease exists.

(*e*) Travellers who have been in or who pass through those parts of Africa or South America where yellow fever is considered to be endemic are reminded that, when they enter other countries in which yellow fever does not actually exist but where the conditions favour its development—e.g., India—they may be detained at frontier quarantine stations if they do not possess a valid certificate of inoculation against yellow fever—i.e., a certificate issued not less than ten days and not more than four years previously. Special arrangements have been made for yellow fever inoculations to be given free of charge at centres in the United Kingdom.

When a traveller has been vaccinated against smallpox or inoculated against cholera, typhus, or yellow fever he should obtain, and carry with him, a certificate to that effect on the International Form. A certificate of inoculation against yellow fever will be issued on this form by the doctor carrying out the inoculation: for the other diseases the necessary form can be obtained by the traveller from the company with whom he has arranged his transport.

Discussion of Table

In *England and Wales* decreases occurred in the number of notifications of scarlet fever 97, acute pneumonia 83, diphtheria 31, whooping-cough 24, and cerebrospinal fever 18, while increases were recorded for measles 1,030 and dysentery 27.

The largest increases in the incidence of measles appeared in Lancashire 203, Warwickshire 147, London 117, Surrey 116, and Middlesex 102. The notifications of scarlet fever declined in most areas of the country; the largest fall was London 32, and the only exception to the general trend was a rise of 30 in Glamorganshire.

Small decreases in the incidence of acute pneumonia were recorded throughout the country; the largest fall was Durham 33. The largest of the local variations in the returns for diphtheria were decreases in Lancashire 11 and Durham 8. The local trends of whooping-cough fluctuated, and the largest change in trend was a decrease of 38 in London.

The chief centres of dysentery were Yorkshire West Riding 67 (Sheffield C.B. 25, York C.B. 25); Lancashire 40 (Blackpool C.B. 15); Middlesex 23; and London 19. The largest returns of acute poliomyelitis were 3 cases notified in London and in Yorkshire West Riding. Administrative areas with more than one case were Bristol C.B. 2 and Leeds C.B. 2.

In *Scotland* an increased incidence was recorded for measles 46, dysentery 17, and diphtheria 6. The rise in the notifications of dysentery occurred in the north-eastern area; 11 cases were notified in the city of Aberdeen and 10 in Banff County. The other large returns of dysentery were Edinburgh 14 and Glasgow 9. The notifications of diphtheria in Glasgow rose from 25 to 30; half of the total cases recorded in the country were notified in this city.

In *Eire* an increase was reported in the notifications of whooping-cough 36, primary pneumonia 15, and scarlet fever 12, while a decrease was recorded for measles 25 and diarrhoea and enteritis 9. The incidence of measles decreased throughout the country. An outbreak of whooping-cough involving 14 persons was reported from Wicklow, Rathdrum R.D.

In *Northern Ireland* the total notifications of scarlet fever fell by 10. Whooping-cough reappeared in Belfast C.B. with 11 cases.

Week Ending February 28

The notifications of infectious diseases in England and Wales during the week included: scarlet fever 1,710, whooping-cough 2,631, diphtheria 173, measles 7,312, acute pneumonia 732, cerebrospinal fever 31, acute poliomyelitis 24, dysentery 145, paratyphoid 3.

Medical News

Specialists to Visit Africa

The Secretary of State for the Colonies has appointed 18 specialists, nine of whom will visit East Africa and nine West Africa. The Nuffield Foundation will finance the scheme for six years. The experiment originated from discussions between Prof. H. J. Seddon and the late Dr. W. H. Kauntze. It is hoped that the visitors may be of help to colonial medical staffs, particularly those working in isolated posts.

Portuguese Medical Visitor

Prof. Augusto P. Celestino Da Costa, Professor of the Faculty of Medicine in the University of Lisbon, is spending a fortnight in Britain under the auspices of the British Council. He is Director of the Service of Clinical Analyses in the Lisbon State Hospitals, President of the Portuguese Anatomical Society, and Director of the Portuguese Institute of Histology and Embryology, which he founded. A visitor to Britain before the war, Prof. Da Costa is now renewing and making fresh contacts with colleagues working on research in histology and cytology.

Sir G. Gordon-Taylor in Greece

Sir Gordon Gordon-Taylor is visiting Greece for a three weeks' tour to lecture for the British Council on war surgery.

Medical Golfing Society

At a meeting of the Medical Golfing Society held recently under the presidency of Dr. A. Hope Gosse, Mr. A. C. Palmer was appointed Captain, and Dr. A. Lesley Lankester Honorary Treasurer.

Prize for Essay on Colonial Tuberculosis

A prize of 100 guineas will be awarded by the Council of the N.A.P.T. for an essay on "The Control of Tuberculosis in a British Colony." The competition is open to medical men and women in the British Colonial Medical Service who are of not more than ten years', or less than five years', medical standing. At least three years must have been spent overseas in a medical capacity. Competitors should describe their own proposals for a practical scheme for the clinical, social, and administrative control of tuberculosis, either in the British Colonies as a whole or in one or more of them separately. Writers should give their own opinions based on personal experience of public-health and anti-tuberculosis work. Essays should be sent to Dr. Harley Williams, National Association for the Prevention of Tuberculosis, Tavistock House North, Tavistock Square, London, W.C.1, to arrive not later than March 1, 1949.

Health and Air Travel

Under the Public Health (Aircraft) Regulations, 1948, all in-coming aircraft, except those plying between the British Isles, will be met by medical officers from April 1. On arrival the commander of the aircraft will report the state of health on board, and passengers will give the names of the places in which they have been during the past 14 days. Passengers showing no symptoms of an infectious disease will be given a card setting out the precautions they should observe if they fall ill within 21 days after arrival, including showing the card to their doctor. If there is any doubt about the nature of the illness, the doctor is asked to inform the medical officer of health for the area at once.

Holiday Milk for Mentally Defective Children

Milk will be available for mentally defective children attending occupation centres whole-time during the holidays. The children should attend the school centres for holiday milk distribution.

Wills

Dr. John William Hunter, of Ipswich, left £4,544; Dr. Samuel Tonge Brooks, of Bacup, Lancs, £5,109; Dr. Charles Forbes Maclean, of Balham, London, S.W., £13,590; Dr. William Grahame Cobb, of Birchington, Kent, £20,433; and Dr. John Cunningham, of Stewarton, Ayrshire, £45,614.

COMING EVENTS

Medical Research Society Lecture

The fourth Medical Research Society Lecture will be given by Dr. Geo. E. Burch, professor of medicine in the University of Tulane, on "Radio-sodium Studies in Congestive Heart Failure" at St. Mary's Hospital Medical School, Paddington, London, W., on Friday, March 19, at 5 p.m.

Rheumatic Diseases

A concentrated week-end course on the rheumatic diseases will be held at the Rheumatism Unit, St. Stephen's Hospital (London County Council), Fulham Road, S.W., on March 19, 20, and 21. The lecturers will include Prof. J. M. Mackintosh, Prof. B. W. Windeyer, Dr. Francis Bach, Dr. Grace Batten, Dr. Philip Ellman, Mr. A. G. Timbrell Fisher, Dr. David Shaw, and Dr. A. G. Signy. Sir Adolphe Abrahams will preside at the inaugural address on March 19.

Criminal Justice

A conference on criminal justice will be held on March 21, with Dr. H. Mannheim in the chair. Lectures will be given at Oxford House, Mape Street, Bethnal Green Road, E.2, on the treatment of juvenile offenders, women offenders, and men offenders. Limited accommodation and meals are available at Oxford House, to which application should be made as soon as possible.

Association of Sea and Air Port Health Authorities

The forty-ninth annual meeting of the Association of Sea and Air Port Health Authorities of the British Isles will be held at Swansea on Wednesday, Thursday, and Friday, May 12, 13, and 14. The provisional programme includes the following papers: May 12, "The Romance of the Port Health Service and of its Association," by Dr. N. Gebbie; May 13, "History of the Swansea Port," by Mr. E. V. Swallow, and "Some Experiences of a Naval Hygiene Officer 1939–47," by Surgeon Captain H. M. Willoughby, R.N.V.R.; May 14, "The Disinfestation of Ships and Cargoes," by Mr. C. P. Heywood, and "The Egyptian Cholera Outbreak, 1947," by Dr. R. Barrett. Afternoon visits will be arranged at a later date. The honorary secretary of the association is Dr. H. C. Maurice Williams, Health Department, Civic Centre, Southampton.

Society of Chiropodists

The annual convention of the Society of Chiropodists will be held in London on Thursday, Friday, and Saturday, April 22, 23, and 24. The proceedings will be officially opened at Friends House, Euston Road, N.W., by Sir Alfred Webb-Johnson, President of the Royal College of Surgeons of England, on April 22, at 2.30 p.m.; and will be followed, at 3 p.m., by a lecture by Mr. N. C. Lake on "Surgery in Vaso-spastic Conditions of the Leg and Foot." On April 23, at 11 a.m., Prof. F. Wood Jones, F.R.S., will deliver a lecture at the Royal College of Surgeons of England (Lincoln's Inn Fields, W.C.) on "The Emergence of Man"; and on April 24, at 9.30 a.m., at Friends House, Dr. Reginald T. Brain will speak on "Common Skin Diseases affecting the Feet and Nails." There will be a reception by the president of the society and Mrs. Hanby at the Savoy Hotel on April 23, from 7 to 7.30 p.m., followed by a dance, buffet supper, and cabaret. Admittance to all lectures and functions will be by ticket only, and applications must reach the secretary of the society at 21, Cavendish Square, London, W.1, by April 1.

Edinburgh Refresher Course

A fortnight's refresher course at Edinburgh University begins on Monday, May 3, at 9 a.m. It is intended primarily for demobilized medical officers (Class II) and for insurance practitioners. Fee for graduates not claiming expenses from Government sources, 10 gns.

C.M.F./M.E.F. Physicians Reunion Dinner

The reunion dinner of the C.M.F./M.E.F. Physicians will be held at the Apothecaries' Hall, Black Friars Lane, Queen Victoria Street, London, E.C., on Saturday, April 10. Anyone interested should communicate with the honorary secretary, Dr. A. Willcox, 66, Harley Street, London, W.1.

Buckston Browne Dinner

The Buckston Browne Dinner of the Harveian Society of London will be held at the Royal College of Surgeons of England, Lincoln's Inn Fields, W.C., on Thursday, June 17.

American Meetings

The Third Inter-American Cardiological Congress will be held in Chicago at the Michael Reese Hospital on June 13–17. This will be followed on June 18–19 by the Annual Meeting of the American Heart Association, and by the meeting of the American Medical Association during the week beginning June 20. Inquiries should be addressed to the Secretary of the Third Inter-American Cardiological Congress, Michael Reese Hospital, Chicago, Illinois, U.S.A.

SOCIETIES AND LECTURES

Monday

EDINBURGH CLINICAL CLUB.—At B.M.A. Scottish House, 7, Drumsheugh Gardens, Edinburgh, March 15, 8 p.m. *Business Meeting* (Current Affairs).

HUNTERIAN SOCIETY.—At Talbot Restaurant, London Wall, E.C., March 15, 7 for 7.30 p.m. Dinner-meeting. *"Neuritis."* Discussion to be opened by Dr. Philip Ellman, Dr. Aldren Turner, Mr. Dudley Buxton, and Dr. F. S. Cooksey.

Tuesday

CHADWICK TRUST.—At the Sir Edward Meyerstein Lecture Theatre, Westminster Hospital Medical School, 17, Horseferry Road, Westminster, S.W., March 16, 2.30 p.m. *"Adulteration of Food and its Detection,"* by J. R. Nicholls, D.Sc., F.R.I.C.

EUGENICS SOCIETY.—At Burlington House, Piccadilly, London, W., March 16, 5.30 p.m. *"Mental Health Survey in a Rural Population,"* by Dr. W. Mayer Gross.

INSTITUTE OF DERMATOLOGY, 5, Lisle Street, Leicester Square, London, W.C.—March 16, 5 p.m. *Pathological Demonstrations* by Dr. I. Muende.

INSTITUTE OF LARYNGOLOGY AND OTOLOGY, 330, Gray's Inn Road, London, W.C.—March 16, 5.15 p.m. *"Injuries of the Ear,"* by Mr. E. D. D. Davis.

ROYAL PHOTOGRAPHIC SOCIETY.—At 16, Prince's Gate, London, S.W., March 16, 7 p.m. *"Stereoscopy."* Lecture by Prof. D. Harris.

UNIVERSITY COLLEGE HOSPITAL MEDICAL SCHOOL, University Street, Gower Street, London, W.C.—March 16, 4.30 p.m. Sydney Ringer Memorial Lecture. *"Pulmonary Oedema."* 17th Biennial Lecture by Prof. G. R. Cameron, D.Sc., F.R.S., F.R.C.P.

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—March 16, 5 p.m. *"Some Aspects of General Physiology,"* by L. E. Bayliss, Ph.D.

Wednesday

HARVEIAN SOCIETY OF LONDON.—At 26, Portland Place, London, W., March 17, 8.30 p.m. Harveian Lecture: *"Aphasia and Artistic Realization,"* by Prof. Th. Alajouanine.

LONDON ASSOCIATION OF THE MEDICAL WOMEN'S FEDERATION.—At B.M.A. House, Tavistock Square, London, W.C., March 17, 8.30 p.m. Discussion: *"Juvenile Delinquency,"* to be opened by Dr. John Bowlby, Dr. Dorothy Makepeace, and Mrs. Madeline Robinson, J.P.

ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE, 28, Portland Place, London, W.—March 17, 3.30 p.m. *"Postural Defects in Childhood and Adolescence"* (illustrated), by Dr. F. S. Cooksey.

ROYAL MICROSCOPICAL SOCIETY.—At B.M.A. House, Tavistock Square, London, W.C., March 17, 5 p.m. for 5.30 p.m. Ordinary meeting. *"Application of the Barnard Ultra-Violet Light Technique for the Study of Living Cells,"* by Dr. R. J. Ludford; *"New Development in Visual Light Microscopy,"* by Mr. J. Smiles, A.R.C.S.

Thursday

BRITISH INSTITUTE OF RADIOLOGY, 32, Welbeck Street, London, W.—March 18, 8 p.m. Presidential Address: *"The Place of Physics in the Training of the Medical Radiologist,"* by Prof. G. Stead.

ROYAL SOCIETY OF TROPICAL MEDICINE AND HYGIENE.—At Royal Army Medical College, Millbank, London, S.W., March 18, 7.30 p.m. Laboratory meeting of the Society. Various demonstrations will be given.

ST. GEORGE'S HOSPITAL MEDICAL SCHOOL, Hyde Park Corner, S.W.—March 18, 4.30 p.m. *Neurological lecture-demonstration*, by Dr. A. Feiling.

STAINCLIFFE COUNTY HOSPITAL, Heald's Road, Dewsbury.—March 18, 8 p.m. *"Some Aspects of Dermatological Treatment,"* by Dr. J. T. Ingram.

WELLCOME HISTORICAL MEDICAL LIBRARY: UNIVERSITY AND RESEARCH SECTION, LIBRARY ASSOCIATION: MEDICAL SUB-SECTION.—At Royal College of Surgeons, Lincoln's Inn Fields, London, W.C., March 18, 6.30 p.m. *"Some Literary Surgeons,"* by Mr. V. Zachary Cope.

Friday

FACULTY OF RADIOLOGISTS.—At Royal Society of Medicine, 1, Wimpole Street, London, W., March 19. Joint meeting with British Institute of Radiology and Section of Radiology of Royal Society of Medicine. Symposium on Diverticula of the Alimentary Tract. 2.30 p.m. (*a*) *"Diverticula of the Oesophagus."* Openers: Dr. A. S Johnstone and Mr. A. L. d'Abreu. (*b*) *"Diverticula of the Stomach, Duodenum and Small Bowel."* Openers: Dr. R. Fawcitt and Mr. Harold Edwards. 8.30 p.m. (*c*) *"Diverticula of the Large Bowel."* Openers: Dr. J. L. A. Grout and Prof. Charles Wells. A discussion will follow.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.—At Leeds General Infirmary, March 19, 8.30 p.m. *"Diseases of the Anal Canal and Rectum,"* by Mr. C. Naunton Morgan.

ROYAL INSTITUTE OF PHILOSOPHY.—At University Hall, 14, Gordon Square, London, W.C., March 19, 5.15 p.m. *"Truth,"* by Prof. A. J. Ayer.

ROYAL SANITARY INSTITUTE.—At Town Hall, Manchester, March 19, 10 a.m. *"Public Health Planning."* Paper by Prof. A. Topping.

Saturday

KENT PAEDIATRIC SOCIETY.—At the Star Hotel, Maidstone, March 20, 2.30 p.m. *"The Maladjusted and Delinquent Child."*

APPOINTMENTS

The Committee of Privy Council for Medical Research have appointed Harold Percival Himsworth, M.D., F.R.C.P. (Professor of Medicine in the University of London), to be a member of the Medical Research Council.

After being educated at King James's Grammar School, Huddersfield, Prof. Himsworth studied medicine at University College Hospital, where he qualified in 1928, obtaining the University Gold Medal. He proceeded M.D., again with Gold Medal, in 1930, and was elected F.R.C.P. in 1938. He gave the Goulstonian lectures for 1939 and has published numerous papers including many on diabetes mellitus.

John Cecil Wilson Methven, M.R.C.S., L.R.C.P., has been appointed deputy chairman of the Prison Commission.

Dr. J. F. Fraser has been appointed the first full-time medical officer of health for Pontefract, Knottingley, Featherstone, and the Osgoldcross Rural District.

Michael Kremer, M.D., B.Sc., F.R.C.P., has been appointed honorary assistant physician to the National Hospital, Queen Square.

DELANEY, PATRICK J., M.B., B.Ch., D.P.H., Medical and Organizing Secretary of the Medical Association of Eire.

ESHER, F. J. S., M.B., Ch.B., D.P.M., Psychiatrist, Sheffield Regional Hospital Board.

FRASER, A. M., M.D., D.P.H., Senior Administrative Medical Officer and Secretary, Scottish Northern Regional Hospital Board.

GARLAND, HUGH G., T.D., M.D., F.R.C.P., Physician in Charge, Department of Neurology, General Infirmary at Leeds.

HOSPITAL FOR SICK CHILDREN, Great Ormond Street, London, W.C.—*Part-time Out-patient Medical Registrars:* Dorothy W. Wells, M.B., Ch.B., M.R.C.P., D.T.M.&H.; J. J. Kempton, M.D., M.R.C.P., D.C.H.

LENNOX, MARY, M.B., B.Ch., D.P.H., Port Medical Officer, Barry, Glam.

NOTTINGHAM GENERAL HOSPITAL.—*Honorary Assistant Consultant Psychiatrists:* I. J. Davies, M.D., D.P.M., and H. Fisher, M.D., D.P.M. *Medical Specialist:* R. Gwyn Evans, M.B.E., M.D., M.R.C.P.

RAEBURN, H. A., M.D., F.R.C.P.Ed., Senior Administrative Medical Officer, Scottish South-Eastern Regional Hospital Board.

ROGERS, K. B., M.D., Clinical Pathologist, Children's Hospital, Ladywood Road, Birmingham.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Armin.—On Feb. 29, 1948, at Bath, to Dr. Margaret Armin, wife of Dr. Richard Armin, a daughter.

Davies.—On March 4, 1948, at Woking, to Betty (*née* Benjamin), wife of Lieutenant A. Michael Davies, R.A.M.C., a son.

Milton.—On Feb. 24, 1948, at Walbrook, Banchory, Kincardineshire, to Dr. Jane Crystyan (*née* Salkeld), wife of Dr. David Milton, a daughter.

Ronchetti.—On Feb. 28, 1948, at Nuffield House, Guy's Hospital, London, S.E., to Sylvia (*née* Helme), wife of Dr. John Ronchetti, a son—John Kirkland.

Scott.—On March 3, 1948, at Nuffield House, Guy's Hospital, London, S.E., to Esmé (*née* Pascall), wife of Dr. Leslie Scott, a daughter.

DEATHS

Amdor.—On Feb. 22, 1948, at Royal Infirmary, Cardiff, Alfred Amdor, M.B., Ch.B., D.P.H., aged 40.

Badenoch.—On Feb. 22, 1948, at Hermon Hill Hospital, Wanstead, William Minty Badenoch, M.B., Ch.B.

Bowes.—On Feb. 25, 1948, at "Winhill," Manchester Road, Wilmslow, Cheshire, Paul Bowes, M.D.Ed.

Burton.—On Feb. 25, 1948, at Horsebrook House, Calne, Wilts, James Cecil Burton, M.R.C.S., L.R.C.P.

Cahalane.—On Feb. 20, 1948, Michael John Cahalane, M.B., Ch.B.Glas., Squadron Leader, R.A.F.V.R., aged 55.

Clarke.—On Feb. 24, 1948, at Hove, Joseph John Clarke, L.R.C.P.I., D.P.H., aged 86.

Dawes.—On Feb. 21, 1948, at Edenbridge, Kent, Christopher Dering Dawes, M.R.C.S., L.R.C.P., Lieutenant-Colonel, late I.M.S., aged 75.

Durran.—On Feb. 22, 1948, at Edinburgh, Donald Edward Durran, M.B., Ch.B.Ed.

Gardner.—On Feb. 27, 1948, at "Coombehurst," Church Stretton, Shropshire, Henry Willoughby Gardner, M.B.E., M.D., F.R.C.P., aged 86.

Hunter.—On Feb. 24, 1948, at Hutton House, Chilton, Ferry Hill, Co. Durham, Matthew Hunter, M.B., Ch.B.Glas.

Laing.—On Feb. 27, 1948, at 5, Princes Street, Arbroath, David Laing, T.D., M.D., aged 86.

McLean.—On Nov. 30, 1947, at Sydney, N.S.W., Leonard Allen Windsor McLean, M.B., Ch.B.

McVean.—On Feb. 26, 1948, at 24, Forest Road, Bournemouth, W., John Duncan McVean, M.B., C.M.Glas., aged 88.

Martin.—Recently, at 11, Waterloo Avenue, North Strand Road, Dublin, Conor Martin, M.B., B.Ch.

Mathias.—At Burry Port, Idwal James Mathias, M.B., B.S., aged 33.

Pilliet.—On Feb. 14, 1948, at a Nursing Home, Folkestone, Mary Amelia Pilliet, M.B., Ch.B., of Wingate Villa, 210, Canterbury Road, Folkestone, Formerly Assistant Medical Officer, London County Council.

Pollard.—On Feb. 25, 1948, at Royal Halifax Infirmary, Percy Lund Pollard, M.B., Ch.B., of East Lea, Lea Avenue, Halifax, aged 66.

Rivers.—On Feb. 28, 948, at Redruth, Cornwall, Charles Henry Rivers, M.D., M.R.C.P., aged 76.

Rogers.—On Feb. 25, 1948, Alford Rogers, L.R.C.P.&S.Ed., of Montrose, Sewardstonebury, E., and late of Highams Park, Chingford, E.

Smith.—On Feb. 28, 1948, at Ashfield Park, Clogher, Co. Tyrone, N. Ireland, Henry Smith, C.I.E., M.D., M.Ch., M.A.O., Lieutenant-Colonel, late I.M.S., retired, aged 90.

Tavendale.—On Feb. 28, 1948, killed in a car crash, William John Tavendale, M.B., Ch.B., aged 32.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Killing Habits of Leopards

Q.—*In this area (Nigeria) a leopard society is active, and I often have to decide at post-mortem examination whether death was due to human or animal killing. I should therefore like to know: (a) How does a leopard usually kill, and what marks would be expected? (b) What part of the body is a leopard likely to eat first? (c) Will leopards eat intestines when muscle (of leg, etc.) is present? (d) Is it possible for a leopard to sever skin to simulate an incised wound?*

A.—The leopard, like the lion, hunts by night, but, whereas the lion usually hunts in company and only when hungry, the leopard hunts alone and displays a greater inclination towards hunting and killing for their own sake. He is likely to lie in wait, probably in a tree, from which he springs down on his victim. At the moment of impact the claws sink in to establish a grip, from which there is little or no chance of release, and the teeth are plunged into the neck, either at the back or front, depending on the readiness of access. Possibly the victim's throat will be torn out, and the blood drunk as it flows from the wound. Thereafter the leopard, like the lion and a number of other animals, will show a preference for the entrails of the victim, to which access is obtained by tearing open the abdomen with claws and teeth. The muscular portions of the body are likely to be ignored. The body will be dragged into cover for the latter part of the leopard's activities. This summary of the killing habits of the leopard is based on opinions expressed by Mr. T. H. Gillespie, F.R.S.Ed., F.Z.S. It supplies most of the details requested and also goes a long way towards answering the basic question, which may be paraphrased as follows: How is one to form an opinion on whether a killing has resulted from a genuine attack by a leopard or from an attack by men endeavouring to simulate the work of a leopard?

As in a variety of other medico-legal problems, it seems probable that the answer may depend at times not only on the post-mortem findings but on the fullest possible investigation of *all* the available evidence, including the identity of the victim, the presence or absence of motive, the time and place of the killing, signs of disturbance or human activity at the locus, signs of dragging, etc. No doubt the men of a leopard society may at times be extremely sedulous in their efforts, and for this reason such seemingly important details as the presence of claw-fragments or leopard's hair might not be conclusive evidence. The demonstration of specific saliva stains would probably be impossible or impracticable. Certain of the wounds produced by a leopard might undoubtedly *resemble* incised wounds, but the presence of true incised wounds would be strongly suggestive of some other agency. It is improbable that "leopard men" can avoid all inconsistencies and discrepancies which are detectable if looked for carefully. The opinion of the doctor may be an important factor in assisting the investigating authorities in coming to a decision, but it is unlikely to be the only one. Conversely, the doctor should acquaint himself with all possible information on the case before making his examination and forming an opinion.

In an interesting book entitled *Human Leopards*, by K. J. Beatty (Hugh Rees, Ltd., London, 1915, now out of print), the activities of leopard societies in Sierra Leone are discussed, and accounts given of a number of trials which took place there in 1912 and 1913. Apparently a three-pronged knife was sometimes used to simulate the claws of a leopard, but in spite of this and of the fact that the murderer(s) might wear a leopard skin, it does not seem that the methods employed ever bore any very baffling resemblance to a true leopard killing.

Penicillin for Blepharitis

Q.—*How should penicillin be administered, for how long, and in what dosage in a case of blepharitis which fails to respond to routine treatment with sodium bicarbonate lavage and ung. hydrarg. oxid. flav.?*

A.—Patients with blepharitis are usually either under- or ill-nourished. Attention to the general health is therefore a first consideration. Lavage with sodium bicarbonate and the application of ung. hydrarg. oxid. flav. is not a particularly good method of local treatment. It is best to avoid lotions of any kind, as they only make the skin sodden; ung. hydrarg. oxid. flav. is an unsatisfactory medicament, as many people are sensitive to mercury and, moreover, this ointment is unstable and frequently contains highly irritating products of decomposition. Any local treatment of blepharitis requires the removal of crusts before the application of ointments. Crusts are best removed by washing them off with pledgets of cotton-wool soaked in hydrogen peroxide, 10 vol., or olive oil. The lid margins should then be dried and either painted with liquor tinctorium or covered with a thin film of penicillin ointment containing 1,000 units of crystalline (not commercial) penicillin per gramme, the base being a mixture of petroleum jelly and liquid paraffin, 90 and 10 parts of each respectively. The application of liquor tinctorium has the disadvantage that the lid margins are deeply stained. If the application is made only at night most of it washes off with the morning toilet. Penicillin ointment should be used three or four times a day. Blepharitis generally responds to either of these methods of treatment within two to four weeks. Recurrences are, however, likely unless attention is paid to the general health. There is no need for systemic penicillin treatment.

Chronic Suppurating Bone Cavity

Q.—*In the local treatment, apart from surgery, of a chronic suppurating bone cavity would the local application of penicillin and a sulphonamide powder relieve in some degree the offensiveness associated with the discharge?*

A.—A chronic suppurating bone cavity usually becomes walled-in by sclerotic and poorly vascularized bone, in the depths of which the infecting organisms can remain safe from the influence of chemotherapeutic agents, whether they be applied locally or systemically. The cavity may contain a sequestrum which similarly harbours the offending organisms. Moreover, the bacterial infection often becomes a mixed one, and may include organisms which are either naturally immune to chemotherapeutic drugs or which have acquired a resistance to them. These factors unfortunately minimize the possibility of significantly diminishing the offensiveness of the discharge simply by the local application of penicillin and a sulphonamide powder. Nevertheless there could be no harm in trying the effect of such applications, in the hope that by altering the bacterial flora the nature of the discharge might be modified. In cases unsuitable for surgical treatment the odour associated with the discharge can be largely overcome by enclosing the affected part, whether encased in plaster or not, in a bag or sleeve made from special filter cloth. This is a coarse material impregnated with carbon particles. Its use was described by Seddon and Florey (*Lancet*, 1942, **1**, 755), and it has subsequently been found of value in the above type of case.

Secondary Signs of Syphilis

Q.—*Are mucous patches of the mouth and pharynx more common in cases in which the primary sore arose on the lip rather than the genital area? I would be grateful if you could quote me any specific authority on the subject.*

A.—Doubtless mucous patches in the mouth are commoner when the primary chancre is on the lip than when it is on the genitals, since lip chancres are often undiagnosed till secondary signs appear. There is, however, no reason to suppose that the site of the chancre determines the occurrence of mucous patches, since these lesions are "secondaries" and correspond to rashes of the skin; they are merely evidence of generalization of the infection and of the spirochaetes acting on epithelium. The writer knows of no specific authority on the subject, but the explanation seems obvious when the pathology of the condition is considered: spirochaetes do not cause mucous patches by being transmitted direct from the primary lesion, but by being carried to the mucous membranes in the general circulation.

Pemphigus Vegetans

Q.—*What is the right treatment for a case of pemphigus vegetans? Is the disease incurable and always fatal? Is "stovarsol" by mouth of any value, and, if so, in what dosage?*

A.—Pemphigus vegetans is usually fatal. Sometimes it responds to unfiltered *x*-ray therapy in small dosage and to sulphonamides by mouth. Suramin ("antrypol," I.C.I.) intravenously, 1 g. weekly, may control pemphigus, including pemphigus vegetans. The arsenicals are usually disappointing, but stovarsol has been recommended by M. Oppenheim and D. Cohen (*Arch. Derm. Syph., Chicago*, 1943, **47**, 40–2) in a dose of 0.5 g. half an hour before breakfast on the first day, followed by 0.75 g. for the next two days; then three days' rest, after which treatment is resumed, dosage being reduced and intermissions lengthened. The drug should be stopped if there is pruritus or other ill-effect.

Cataract

Q.—(*a*) *Is it best to leave a cataract unoperated upon so long as the sight of the other eye is fairly good?* (*b*) *Is there any danger in allowing a mature cataract to become hypermature, and will an operation in such a case ultimately become essential?* (*c*) *After a successful operation, can the sight of the eye be so corrected by lenses as to enable reading to be undertaken with fair results and without undue discomfort or strain? Would it be possible to drive a motor-car provided that the sight of the other eye remained fair?*

A.—(*a*) As a good working rule a patient much prefers 6/12 even with a glass, in an unoperated eye which still has some power of accommodation to 6/6 in an aphakic eye with no such power of adjustment. It is impossible to use an operated and an unoperated eye together and so regain binocular vision unless a contact glass is fitted to the aphakic eye. Having regard to the fact that such a glass can be worn on an average only for four hours in the twenty-four, and that many cataract patients are incapable of the manipulation required in putting in and taking out the glass, it is practicable in but few cases. The advantage of regaining the temporal field of vision on what was the blind side is sometimes outweighed by an annoying diplopia. Where the cataract is obvious there is cosmetic gain from its removal. All these points must be considered before an operation is performed.

(*b*) A hypermature cataract may very occasionally be ruptured and the lens material escape into the anterior chamber and cause an irritative iritis. Otherwise it is unnecessary to operate.

(*c*) After a successful operation the patient, provided the eye is healthy, can see 6/6 and Ji easily. Reading can be sustained for long periods without strain. So long as the patient can read a number-plate at the prescribed distance there is nothing to prevent him from driving a car. There are many people driving to-day with only one effective eye.

Lichen Planus

Q.—*Can you throw any new light on the aetiology of lichen planus, and what is the latest treatment?*

A.—Nothing very new has been found regarding lichen planus, but there is a growing body of opinion that associates it with an infective agent, possibly a virus. A number of clinical features support that conception, including a resemblance to warts, the occasional zosteriform distribution, the occasional onset after the fashion of pityriasis rosea, and its development in affections originally diagnosed under one of these labels. The provocation of lichen planus by metallic and other drugs and by emotional shock is a further point of resemblance, but no actual virus has been demonstrated. Attempts to cure patients by filtrates made from ground lichen lesions have given indifferent results.

There is no specific therapy; and arsenic and mercury and, more recently, calciferol have their advocates. In the main

the course of lichen planus is suggestive of a psychosomatic disorder, and response to treatment seems often to relate to psychological factors rather than to any particular method of treatment.

Swelling in Boy's Breast

Q.—*What is the differential diagnosis and treatment in the case of a boy aged 14, in perfectly good health, who has been referred to me in connexion with a small swelling in the upper half of the right breast? There is no pain or tenderness on pressure, but what appears to be a tiny cyst can be felt. It seemed to be a case of simple adolescent mastitis, but some question has been raised as to the possibility of new growth.*

A.—The description of the swelling in this boy's breast makes the diagnosis of adolescent mastitis almost certain. The possibility of growth is so remote at this age that in the absence of fixity or accompanying glandular enlargements it can be disregarded. Presumably the effect of rubbing from braces or of other trauma has been excluded. Firm strapping and patience are all that are required in the way of treatment, but if pain is present a course of short-wave diathermy may prove beneficial.

Dextro-amphetamine Sulphate

Q.—*Some proprietary tablets are now on the market the active ingredient of which is dextro-amphetamine sulphate. This drug is of value as a cerebral stimulant; have you any information about the dangers of its use? Is it a habit-forming drug?*

A.—There is no reason to think that dextro-amphetamine has essentially different properties from ordinary amphetamine sulphate, or that the dangers attaching to its use, especially the danger of addiction, are more serious. However, it has not been prescribed widely enough or for long enough for anyone to be sure about this. The danger of addiction with amphetamine sulphate is very small, as there is no tendency to develop tolerance with prolonged use. Accounts have been published of a few patients, all of psychopathic personality, who have taken 50 or 60 mg. daily over prolonged periods; and the psychiatrist sees, very rarely, a toxic confusional psychosis brought on by such a heavy dosage self-administered. There are also a relatively large number of persons who habitually take small doses of amphetamine (5 to 20 mg. daily) for minor nervous symptoms, apparently without ill effect. As a general rule habitual takers can discontinue the drug without much in the way of deprivation symptoms. It may be assumed that the same considerations will apply to the dextrorotatory preparation.

Nocturnal Frequency in Elderly Men

Q.—*Nocturnal frequency of micturition is very common in elderly men. This does not appear to be associated always with an enlarged prostate gland. What other causes produce it, and what can be done about it?*

A.—Nocturnal frequency in elderly men is usually associated with the existence of residual urine, even although per rectum the prostate is not felt to be enlarged. The residual urine should therefore be tested by the passage of a catheter under scrupulously aseptic conditions. The most frequent other causes are infection and polyuria, due to such a condition as granular kidney.

Organisms in Nose and Throat

Q.—*A routine swabbing recently gave the following result: "Streptococcus viridans predominant; no haemolytic streptococcus isolated; right and left nostrils, pure growth of Staph. aureus." Is the presence of Str. viridans in a mother a potential danger to her child? Is it just a normal inhabitant? What treatment would you advise, if any?*

A.—*Str. viridans* is a normal inhabitant of the mouth and pharynx, and is likely to be found in culture from a tonsillar swab in any healthy person. The presence of *Staph. aureus* in the nose, on the other hand, although common, is a morbid condition (pathogenicity being assumed, the best evidence of which is a positive coagulase test). Such nasal carriers can infect patients under hospital conditions (producing, for example, pemphigus in infants and surgical sepsis). Presumably the same sort of thing can happen in ordinary life, and if there are special reasons for safeguarding the health of a particular child the condition might be treated by the insufflation of sulphathiazole.

NOTES AND COMMENTS

Treatment of Chilblains.—E. H. writes: In the answer to "Treatment of Chilblains" ("Any Questions?" Feb. 14, p. 330) I did not see this simple remedy mentioned. I find that both my own and my family's chilblains are cured by two or three exposures to an artificial sunlight lamp applied locally to hands and/or feet. We usually need one course about November when the cold weather starts, and often have to repeat it in January.

Persistent Hiccup.—Col. N. J. C. RUTHERFORD (Farnham, Surrey) writes: I am interested in Dr. J. D Laycock's letter (Feb. 21, p. 378). Though not wounded in battle I underwent a major operation for cholecystitis in Guy's Hospital during 1933. The condition was complicated by old adhesions and entailed a good deal of pulling about. In 24 hours I started to hiccup and kept it up for eleven days. All the well-known remedies were tried, including CO_2, atropine, morphine, posture, etc. I could eat light meals and sleep when doped, but the moment I awoke I was off again hiccuping. Finally a sailor son insisted on trying a couple of liqueur glasses of Bols, a Dutch aniseed liqueur. Being the eleventh day, this treatment acted as a charm and stopped the hiccups. The late Mr. Fagge, who did the operation, informed me afterwards in his cheery fashion that "he had never seen a fellow hiccup so long and get over it. But he always felt sure that I would survive!" Nobody thought of hyoscine—or pineapple juice.

Noah Morris Memorial.—We are informed that a committee has been convened for the purpose of having erected a students' memorial to the late Prof. Noah Morris, of the Department of Materia Medica, Glasgow University. The committee represents the Students' Representative Council, both Unions, G.U.A.C., the two University medical societies, and *Surgo*—the University medical journal. In view of Noah Morris's high reputation as an outstanding teacher and his keen interest in student affairs it is felt that present and past students taught by him would like to contribute to the memorial. Will those who would like to do so please send donations to the Clerk to Council, Glasgow University Students' Representative Council, Pearce Lodge, The University, Glasgow, W.2. Cheques should be made payable to the Students' Representative Council.

Absence of Orgasm.—Dr. JOAN MALLESON (London, N.W.) writes: I think the reply given under this heading (Feb. 28, p. 426) is somewhat incomplete as it stands. A partial or complete vaginal anaesthesia is an exceedingly common hysterical condition and by no means limited to the obviously "neurotic" woman. Inhibition of feeling can include the clitoris too; it is sometimes total, but more commonly partial, in which case the absence of final orgasm can be very frustrating. It is true that some cases of frigidity are secondary to inadequacy or precipitancy on the husband's side (if so, this fact should have been given in the case history), yet even so, if there were no intrinsic inhibition such a wife would have achieved orgasm—sleeping or waking—during the ten years of marriage. In the average case of vaginal anaesthesia it can be detrimental to imply that the fault lies with the husband, for this may be quite untrue and will inevitably cause the husband to feel baffled and hopeless and the wife to feel critical. Fortunately some cases achieve a considerable degree of improvement during the course of life, and an infinitely small proportion of such cases seek psychotherapeutic help, which may relieve them. Perhaps because there is so little effective therapy for this disorder there is a natural tendency for the patient and physician, and even the old-fashioned sexologists, to search for physical or marital explanations. The former are almost non-existent, and with careful history-taking the husband's contribution can usually be fairly accurately assessed. The physician can at least help by advising about dyspareunia, inadequate lubrication, etc., and by explanation and reassurance.

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SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY MARCH 13 1948

British Medical Association

SPECIAL REPRESENTATIVE MEETING

The Special Representative Meeting of the British Medical Association will be held at B.M.A. House, Tavistock Square, London, W.C.1, on Wednesday, March 17.

MOTIONS AND AMENDMENTS OF DIVISIONS

THANKS TO COUNCIL AND HEADQUARTERS STAFF

Motion by NUNEATON AND TAMWORTH: That this Special Representative Meeting before proceeding with the business of the day places on record its gratitude on behalf of the whole medical profession to Dr. Dain and the other members of the Council for their untiring efforts, especially during the past three months, in addressing meetings of Divisions and otherwise making known the important matters at stake in the Health Service to be set up by the Act of 1946. It also congratulates Dr. Hill and the Headquarters Staff on the efficient manner in which they have carried out the duties falling to them and especially in the difficult task of keeping in touch with members in all branches of the profession.

NATIONAL HEALTH SERVICE ACTS, 1946 AND 1947, AND ACCEPTANCE OF SERVICE

Motion by the CHAIRMAN OF COUNCIL that the following recommendation be adopted:

That the Representative Body, reaffirming the whole-hearted desire of the medical profession for a comprehensive health service available to everyone, urges that in the public interest such changes should be made in the Acts of 1946 and 1947 as are necessary to maintain the integrity of medicine and to prevent doctors being turned into State servants, with harmful consequences to patient and doctor alike. The Representative Body therefore expresses the hope that the Government will make it possible for the profession to co-operate by making such changes and states its view that it is not in the best interests of the public or of medicine for members of the profession to enter the Service until such changes are made.

Amendment by NOTTINGHAM: That the following be submitted for the Council's recommendation: (1) That the Representative Body reaffirms the whole-hearted desire of the medical profession for a comprehensive health service available to everyone, and

(2) That the provisions of the National Health Service Acts, 1946 and 1947, are detrimental to the interest of the public and the medical profession alike, and that it is not in the interests of either for the profession to enter the Service under the conditions laid down therein, and

(3) That the Government be urged to make such changes in the Act as are necessary in order to enable the medical profession to enter the Service freely and with good will.

Amendment by GREENWICH AND DEPTFORD: That the following be substituted for Council's recommendation:

The profession having emphatically expressed their opinion through the plebiscite that they would not enter into service under the Acts of 1946 and 1947, the Special Representative Meeting expresses the hope that the Government will forthwith introduce legislation to amend the Acts, so that the medical profession can provide an efficient health service for the people.

Amendment by OXFORD: That for the words "whole-hearted desire of the medical profession for" there be substituted the words "acceptance of the medical profession of."

Amendment by CITY OF EDINBURGH: (i) That after the word "everyone" in line 4, there be inserted the words "declares its willingness to co-operate with the Government and to re-open negotiations through its representatives with a view to the establishment of such a service, but"

(ii) That for the words "integrity of medicine" there be substituted "independent status of medicine."

(iii) That after the word "Government" in line 11 there be inserted "and Parliament."

Amendment by CLEVELAND: That after the words "patient and doctor alike" there be added "In view of the attitude of the present Minister of Health to doctors and the Representative Body, it is obvious that he will never have the confidence of the profession."

Amendment by MARYLEBONE: After the word "co-operate" in line 12 insert the word "willingly."

Amendment by GUILDFORD: That the following words be added to Council's recommendation:

That, in view of the recent B.M.A. plebiscite result, which expressed a 90% disapproval of the National Health Act in its present form, the Representative Body, whilst agreeing with a comprehensive health service available to everyone, requests that it should be postponed until the necessary hospitals have been built and equipped, and the personnel for a complete service have been trained.

Rider by BRADFORD: If the profession is to co-operate in a comprehensive service the essential freedoms must be preserved.

RESOLUTIONS RELATING TO FUTURE SETTLEMENT

Motion by CARDIFF: That the ownership of goodwill by the practitioner, abolition of basic salary and of direction, and the right of appeal to the Courts, be regarded as essentials in any settlement with the Minister.

Motion by SOUTH-WEST ESSEX: (1) This meeting is strongly of opinion that ownership of practice goodwill and the abolition of basic salary are the two issues of fundamental importance for the successful independence of general practitioners.

(2) In the event of negotiations being resumed between the Minister and the B.M.A. and/or following amendment of the Act to the satisfaction of the Negotiating Committee and the Representative Body, it is the desire of the Representative Body that neither Consultants nor General Practitioners should agree to such terms till both sections of the profession are mutually satisfied with them.

Motion by OXFORD: (1) That this meeting considers that the presence of the basic salary element of remuneration is the most important single item in the National Health Act, 1946, which may eventually lead to a salaried State medical service, and instructs its representatives to support any measures which are advised, either to eliminate the basic salary element or to ensure that it will not be used to bring about a fully salaried service.

(2) That in the opinion of this meeting the disposal of the goodwill of general practices should remain in the hands of the profession and not pass into those of the Government.

Motion by READING: That except where special circumstances justify it, the remuneration of general practitioners should be by capitation payment in proportion to the number of persons on a doctor's list and that this principle, which the R.B. regards as fundamental, should be embodied in the Act.

Motion by CITY OF ABERDEEN: That the Representative Body should now ask the Negotiating Committee to offer to

reopen negotiations with the Minister with a view to securing above all else that the principle of payment of general practitioners by capitation only should be established by statute.

Motion by CITY OF ABERDEEN: That service should be accepted by the profession only when the terms of the whole service including Consultants and Specialists are known.

Motion by EAST NORFOLK: That no final solution of differences with the Minister is acceptable, unless it contains a clause that there be no alteration in the terms of service except in agreement with the freely elected representatives of the profession.

Motion by LEIGH: That terms and conditions of service having been satisfactorily arranged should not be altered by Regulation alone, but only after discussion, negotiation, and agreement with representatives of the profession.

Motion by PLYMOUTH: That the Act be amended to guarantee freedom of expression to doctors in all matters relating to the clinical and administrative aspects of the National Health Service in which they are engaged.

APPROACH TO PRIME MINISTER

Motion by BIRMINGHAM CENTRAL: That the Negotiating Committee should approach the Prime Minister forthwith with a view to reopening negotiations.

Motion by READING: That in view of the fact that the medical profession is sincerely anxious to procure the best possible medical service for the country and that all suggestions, which they consider essential amendments to the Health Act, have been regarded as efforts to extort concessions for their own benefit; and that general practitioners have been threatened with heavy financial loss if they do not enter on July 5 a service to which they conscientiously object—this meeting suggests that the Council of the B.M.A. approach the Prime Minister with a request that appointed representatives of the profession may meet a Cabinet Committee to discuss outstanding differences, in the hope that all our energies may be once more directed to constructive effort instead of controversy.

POSTPONEMENT OF SERVICE

Motion by HARTLEPOOL: That the implementation of the National Health Service Act (1946) be postponed *sine die* and that the British Medical Association draw up in outline a scheme of medical service which would be good for the nation and could be carried out.

Motion by READING: That the suggested arrangements for the correction of maldistribution of doctors (except that of financial inducement to under-doctored areas) should be suspended for two years—and be reviewed at the end of that time.

Motion by CITY OF EDINBURGH: That in so far as the medical profession believe that a complete health service cannot be made available to everyone in July 1948 because of lack of staff and other facilities, it is suggested that particular consideration be given to the possibility of introducing the service by stages as this becomes possible.

ADVICE TO PRACTITIONERS

Motion by CARDIFF: That to ensure uniformity of action, the Association be asked to give immediate and concrete guidance on the procedure to be followed by all practitioners

(*a*) When approached individually by the Minister with an invitation to join the Service;

(*b*) When approached by members of the public to be accepted on a new National Health Service List.

Motion by GLOUCESTERSHIRE: That this meeting calls on the Council of the British Medical Association to instruct doctors how they shall act when patients present them with the new medical cards for their signature.

Motion by SUNDERLAND: That the Representative Meeting should determine new methods whereby practice may be carried on in a satisfactory manner should the Minister insist on introducing the National Health Act, as it now stands, on the appointed day.

Motion by SOUTH-WEST ESSEX: In the event of Council's instruction being that we should refuse service after July 4—no certificates of incapacity should be issued by those practitioners not taking part in the Service.

Motion by CHESTERFIELD: That practitioners who feel impelled, for any reason, to take service under the National Health Act should be asked to give an undertaking that they will refuse to accept panel patients now on the lists of doctors who have refused service, or the dependants of such patients, unless or until a general settlement has been reached.

Motion by EASTBOURNE: That the Council should make a statement on current reports that certain persons, who are in favour of the Act in its present form, are advising patients not to enrol with any doctor who is opposed to the Act in its present form, and indicate the appropriate course of action to be followed by any doctor in these circumstances.

ALTERNATIVE SCHEMES

Motion by GUILDFORD: That in the event of a complete deadlock persisting between the profession and the Government, the Council be instructed to draw up and submit to the profession an alternative scheme based upon the 1944 S.R.M. motion by Marylebone, December 5, 1944.

Motion by GLOUCESTERSHIRE: That it is desirable that a comprehensive statement be made by the British Medical Association as to the form of a National Health Service acceptable to and approved by its members. In view of the shortage of personnel and hospital beds throughout the country, an opinion should be expressed as to when such a service could be expected to function adequately.

PRESENTATION OF THE PROFESSION'S CASE TO THE PUBLIC

Motion by HARROGATE: That this meeting urges the immediate necessity of putting the doctors' case more clearly before the general public by every possible means with greater force than hitherto has been the case.

Motion by SUNDERLAND: That a simple statement of the doctor's position be placed before the general public at once and that this statement should be followed up by an intensive publicity campaign.

GENERAL

Motion by BIRMINGHAM CENTRAL: That as this is a fight for freedom which cannot be conducted by appeasement or kid-glove methods the Representative Body should press for withdrawal of certification prior to July 5.

Motion by PLYMOUTH: That the appointment of medical representatives to bodies set up for administration of the Act should only be made after agreement with the elected representatives of the profession.

Motion by PLYMOUTH: That this meeting is of opinion that the profession should stand by the position as revealed by the plebiscite results.

Motion by BIRMINGHAM CENTRAL: That the Minister having agreed to accept the Spens Report on remuneration for general practitioners, the proposals for payment to doctors in his statement to the profession should be referred to that Committee for their consideration.

Motion by GREENWICH AND DEPTFORD: That the profession, having expressed its view emphatically through the plebiscite, this Special Representative Meeting instructs the Council not to be influenced by any "Quislings" however exalted they might be.

Motion by BRADFORD: That there should be adequate provincial representation on the proposed London Liaison Committee, and that the new Committee so formed should represent all consultants.

Motion by PRESTON: That this Meeting recommends that in addition to an advisory capacity the Central Health Services Council be granted executive power.

Motion by SOUTH-EAST ESSEX: That this meeting strongly deprecates the abusive comments made by the Minister of Health in Parliament upon our democratically elected representatives.

Motion by SOUTH-EAST ESSEX: That this meeting expresses its confidence in the Council and the Representative Body, and endorses the policy of the Association during the negotiations with the Ministry of Health.

Motion by GLOUCESTERSHIRE: That Council be instructed to approach the British Dental Association and other ancillary health services in order to establish a common front with all those who are in opposition to the National Health Service Act, 1946, in its present form.

Motion by OXFORD: That this meeting affirms its confidence in the deliberations of the Representative Body, and believes that any recommendation they may make will be based on fair and reasonable discussion.

Motion by MARYLEBONE: In view of the continued misleading statements made by the Minister of Health and supported by some sections of the Press, this meeting wishes to place on record its opinion that the British Medical Association is thoroughly representative of the medical profession and that the Council and the Representatives on the Negotiating Committee could not be elected more fairly or freely.

Motion by SOUTH BEDFORDSHIRE: That this meeting reaffirms the fact that the opposition of the medical profession to the National Health Service in its present form is not connected with parliamentary party politics.

INDEPENDENCE FUND

Motion by EASTBOURNE: That the Council should give the profession some indication of the amount it wishes to be subscribed by individual members of the profession and should state whether this should be in the form of a cash donation or a guarantee.

Amendment by SOUTH-EAST ESSEX: That the Independence Fund be based on guarantees and contributions, and that, if the guarantors be called upon, only 20% be payable in the first instance.

Motion by CLEVELAND: (1) That all other funds be merged in the Independence Fund.

(2) That contribution to the fund should be on the basis of 10% in cash, the remainder by guarantee.

(3) That, subject to the maintenance of a fighting fund, the remainder be available to young practitioners wishing to buy a share in practice, and that the interest thereon should not exceed 1/2%.

Motion by GLOUCESTERSHIRE: That in the event of moneys coming from sources outside the profession, these shall be placed in a separate fund.

Motion by GLOUCESTERSHIRE: That Headquarters should create machinery by which, in the event of a dispute, each district can be kept informed as to what is happening in its own and other districts.

Motion by HUDDERSFIELD: That the Representative Meeting be asked to suggest a suitable form of voluntary pledge or undertaking to be entered into by members meeting in informal groups in any particular district.

Motion by BUCKINGHAMSHIRE: That this meeting requests the B.M.A. and the Insurance Acts Committee to proceed forthwith with the preparation of bonds between practitioners to ensure a united front, which bonds should be put into use in the event of the Council of the B.M.A. advising practitioners to decline service.

MEDICAL MEMBERS OF REGIONAL HOSPITAL BOARDS AND LOCAL EXECUTIVE COUNCILS

Amendment by MARYLEBONE: That medical members of Regional Hospital Boards and local executive councils be requested to continue their membership, for the time being, of these bodies.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

B.M.A. LIBRARY

The following books have been added to the Library:

Ackerman, L. V., and del Regato, J. A.: Cancer. 1947.
Bamford, T.: Poisons. Second edition revised by C. P. Stewart. 1947.
Bancroft, F. W., and Pilcher, C. (Editors): Surgical Treatment of the Nervous System. 1946.
Beaumont, G. C.: Medicine. Fifth edition. 1948.
Behrend, M.: Diseases of the Gallbladder and Allied Structures. 1947.
Binger, C.: The Doctor's Job. 1946.
Boyd, W. C.: Fundamentals of Immunology. Second edition. 1947.
Brunschwig, A.: Radical Surgery in Advanced Abdominal Cancer. 1947.
Burn, J. L.: Recent Advances in Public Health. 1947.
Carling, Sir E. R., and Ross, J. P. (Editors): British Surgical Practice. Vol. I. 1947.
Cecil, R. L.: Textbook of Medicine. Seventh edition. 1947.
Chamberlain, E. N.: Symptoms and Signs in Clinical Medicine. Fourth edition. 1947.
Cyriax, J.: Rheumatism and Soft Tissue Injuries. 1947.
Dewberry, E. B.: Food Poisoning. Second edition. 1947.
Doggart, J. H.: Children's Eye Nursing. 1948.
Edwards, W.: The Art is Long. 1947.
Elman, R.: Parenteral Alimentation in Surgery. 1947.
Engel, S.: The Child's Lung. 1947.
Etheredge, M. L.: Health Facts for College Students. Fifth edition. 1947.
Ewing, I. R., and Ewing, A. W. G.: Opportunity and the Deaf Child. 1947.
Fishbein, M.: A History of the American Medical Association, 1847 to 1947. 1947.
Fishbein, M. (Editor): A Bibliography of Infantile Paralysis, 1789–1944. 1946.
Harris, D. T.: Experimental Physiology for Medical Students. Fourth edition. 1947.
Hentschel, C. C., and Cook, W. R. I.: Biology for Medical Students. Fourth edition. 1947.
Johnson, W. M.: The Years After Fifty. 1947.
Joslin, E. P.: Treatment of Diabetes Mellitus. Eighth edition. 1946.
Jung, C. G.: Essays on Contemporary Events. 1947.
Katz, L. N.; Electrocardiography. Second edition. 1946.
Khoo, F. Y.: Bone Dystrophies. 1945.
Leonard, F. E.: A Guide to the History of Physical Education. Third edition revised by G. B. Affleck. 1947.
Lockhart-Mummery, J. P.: Nothing New Under the Sun. 1947.
McIntyre, A. R.: Curare. 1947.
Mazer, C., and Israel, S. L.: Diagnosis and Treatment of Menstrual Disorders and Sterility. Second edition. 1946.
Micks, R. H.: Essentials of Materia Medica, Pharmacology and Therapeutics. Fourth edition. 1947.
Ogilvie, R. F.: Pathological Histology. Third edition. 1947.
Peters, J. P., and Van Slyke, D. D.: Quantitative Clinical Chemistry. Second edition. Vol. I. Interpretations. 1946.
Pitkin's Conduction Anesthesia, edited by J. L. Southworth and R. A. Hingson. 1946.
Robson, J. M.: Recent Advances in Sex and Reproductive Physiology. Third edition. 1947.
Rubin, I. C.: Uterotubal Insufflation. 1947.
Smith, A. (Editor): Medical Research: a symposium. 1946.
Stephens, G. A.: Hormones and Vitamins. 1947.
Todd, A. T.: Treatment of Some Chronic and "Incurable" Diseases. Second edition. 1947.
Wadsworth, A. B.: Standard Methods of the Division of Laboratories of the New York State Department of Health. Third edition. 1947.
Wharton, L. R.: Gynecology. Second edition. 1947.
Williams, R. T.: Detoxication Mechanisms. 1947.
Williamson, G. S., and Pearse, I. H.: Biologists in Search of Material. Second edition. 1947.
Witmer, H. L. (Editor): Psychiatric Interviews with Children. 1946.

The Home Office announces that Dr. James Cunningham, whose registered address is Abbey Street, Ballyhaunis, Co. Mayo, is no longer authorized under the Dangerous Drugs Acts to be in possession of or to supply dangerous drugs.

Association Notices

ELECTION OF MEMBERS OF COUNCIL

Notice is hereby given that nominations of candidates for election as members of Council 1948–9 (*a*) by the following Branches, (*b*) by Public Health Service members, and (*c*) by women members must be forwarded in writing so as to reach me not later than Saturday, April 17, 1948.

Twenty-two Members by Branches in Great Britain and Northern Ireland

	No. of Members of Council to be Elected by Group
Group A.—North of England	1
Group B.—East Yorks; Yorkshire	1
Group C.—Isle of Man; Lancashire and Cheshire	2
Group D.—Derbyshire; Leicestershire and Rutland; Lincolnshire; Nottinghamshire	1
Group E.—Bedfordshire; Cambridge and Huntingdon; Essex; Hertfordshire; Norfolk; Northamptonshire; Suffolk	1
Group F.—Berks. Bucks. and Oxford; Birmingham; Staffordshire	1
Group G.—North Wales; Shropshire and Mid-Wales	1
Group H.—South Wales and Monmouthshire	1
Group I.—Metropolitan Counties	4
Group J.—Bath, Bristol, and Somerset; Gloucestershire; Worcestershire and Herefordshire	1
Group K.—Dorset and West Hants; South-Western; Wiltshire	1
Group L.—Southern; Surrey	1
Group M.—Kent; Sussex	1
Group N.—Aberdeen; Dundee; Northern Counties of Scotland; Perth	1
Group O.—Edinburgh; Fife	1
Group P.—Glasgow and West of Scotland (Glasgow Division)	1
Group Q.—Border Counties; Glasgow and West of Scotland (Five County Divisions); Stirling	1
Group R.—Northern Ireland	1

Public Health Service Members

Two members of Council are nominated and elected by members of the Association employed in the Public Health Service as defined in By-law 1 (3). Candidates must be members of the Public Health Service as so defined.

One Woman Member

One woman member of Council is nominated and elected by women members of the Association.

Nominations

The nominations must be on the prescribed forms, copies of which can be obtained on application to me. A notice will be published by the Council in the *British Medical Journal* (*Supplement*) on May 8, 1948, of the candidates nominated. Where contests occur, voting papers will be issued on May 15, 1948, containing the names of all duly nominated candidates, from the Head Office, British Medical Association, Tavistock Square, London, W.C.1, to each member in the Group, or to the Public Health Service members, or to women members. A notice will be published by the Council in the *Supplement* of June 5, 1948, giving the results of the elections where there have been contests.

CHARLES HILL,
Secretary.

Diary of Central Meetings

MARCH

16 Tues. Special Conference of Local Medical and Panel Committees, 11 a.m.

17 Wed. **Special Representative Meeting,** 10 a.m.

24 Wed. **Council,** 10 a.m.

Branch and Division Meetings to be Held

CLEVELAND DIVISION.—At St. Luke's Hospital, Middlesbrough, Thursday, March 18, 2.30 p.m. Clinical demonstration of Modern Psychiatric Methods followed by a tour of the Hospital.

EAST HERTS DIVISION.—At County Hospital, Hertford, Thursday, March 18, 9 p.m. Address by Mr. R. Rowden Foote: A Practical Survey of Varicose Problems. The address will be preceded by a report on the Special Representative Meeting on March 17.

GREENWICH AND DEPTFORD DIVISION.—At Chiesman's Restaurant, 33, Lewisham High Street, London, S.E., Thursday, March 18. Annual Dinner and Dance.

HYDE DIVISION.—At Dukinfield Town Hall, Wednesday, March 17, 8.30 p.m. Dr. George Fletcher: Some Healing Cults.

SOUTH ESSEX DIVISION.—At Oldchurch Hospital, Romford, Friday, March 19, 9 p.m. Clinical meeting. (1) Medical film on Government Scheme for Rehabilitation; (2) Clinical Address by a member of the Staff.

SUNDERLAND DIVISION.—At Sunderland Royal Infirmary, Friday, March 19, 7.45 p.m. Clinical demonstration by Messrs. J. M. H. Ross and J. A. Weir; Address by Prof. A. A. Gemmel: Some Aspects of Domiciliary Midwifery.

TUNBRIDGE WELLS DIVISION.—At Kent and Sussex Hospital, Tunbridge Wells, Clinical Week-end Meeting. Saturday, March 13, 2.30 p.m., Dr. Evan Bedford: Hypertensive Heart Disease; 3.45 p.m., Mr. F. A. Williamson-Noble: Eye Emergencies in General Practice; 5 p.m., Prof. Chassar Moir: Post-Partum Haemorrhage and Obstetric Shock; 8.45 p.m., Dr. Gordon Masefield: Common Sense Psychiatry. Sunday, March 14, 10.45 a.m., Prof. Henry Cohen: The Diagnosis of Backache; 12 noon, Mr. W. M. Mollison: The Acute Ear; 2.15 p.m., Dr. A. C. Roxburgh: Skin Diseases in General Practice; 3.30 p.m., Mr. A. Lawrence Abel: Some Common Diseases of the Rectum and Anal Canal (with cinematograph film). Fee for lectures £1 1s. Sunday, March 14, 5 p.m. At Kent and Sussex Hospital, Tunbridge Wells, Special Divisional Meeting. Instruction of Representatives for Special Representative Meeting on March 17.

WESTMINSTER AND HOLBORN DIVISION.—At City Hall, Charing Cross Road, London, W.C., Thursday, March 18, 8 p.m. Agenda: To hear reports by the Representatives on the Special Representative Meeting held on March 17.

Meetings of Branches and Divisions

METROPOLITAN COUNTIES BRANCH

The first of a series of five lectures arranged by the Metropolitan Counties Branch for medical students and newly qualified practitioners was given by Sir Crisp English at B.M.A. House on Nov. 4, 1947. Dame Louise McIlroy presided. Dr. A. French, Hon. Sec. of the Branch, welcomed a large audience. Sir Crisp English took "Patients" as his subject. He pointed out that the best possible results for the individual patient could be achieved only by a study of human nature, aptitude in handling a sick man's mind, and the application of common sense, combined with modern technical treatment. He quoted Sir Frederic Treves, who used to say, "Always explain matters to your patient in simple easily understood language; if you cannot do this, you may be sure that you do not understand or grasp the facts of the case yourself. Medicine is common sense." The doctor must be a good listener, and it was important that he should be able to deal with anxious relatives. The lecturer went on to discuss the range of ages of surgical patients, the need for early post-operative rising, and the different approach called for in the case of mothers, fathers, sons, daughters, and young children. Elderly patients presented special problems, particularly when operation was necessary. Sir Crisp English continued with some account of medical men, scientists, lawyers, and business men as patients, and concluded his lecture with a list of the things that a doctor should not do.

Prof. F. A. Maguire, of Sydney, then described the special difficulties of practice in Australia, and Dr. E. A. Gregg, President of the Metropolitan Counties Branch, moved a vote of thanks to the lecturer.

H.M. Forces Appointments

ROYAL NAVY

Temporary Surgeon Lieutenants (R.N.V.R.) J. M. Cliff and P. D. A. Durham have been transferred to the Royal Navy.

ROYAL NAVAL VOLUNTEER RESERVE

Surgeon Lieutenant-Commanders T. Colver and H. R. Vickers, V.R.D., have been placed on the Retired List.

Temporary Acting Surgeon Lieutenants R. Graham, R. Dwyer, A. P. Cornwell, S. K. Earner, J. P. Finnegan, D. A. Macfarlane, and D. E. E. Jones to be Temporary Surgeon Lieutenants.

ARMY

Major-General E. A. Sutton, C.B., C.B.E., M.C., K.H.S., late R.A.M.C., has retired on retired pay.

Colonels A. C. Jebb, and J. H. G. Hunter, late R.A.M.C., having completed four years in the rank, are retained on the Active List supernumerary to establishment.

Colonel C. O. Shackleton, late R.A.M.C., having attained the age for retirement is retained on the Active List supernumerary to Establishment.

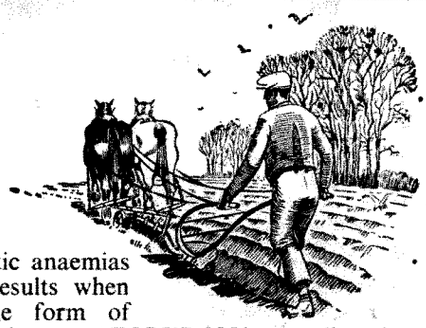
Colonel G. D. Harding, late R.A.M.C., has retired on retired pay.

Lieutenant-Colonel T. B. H. Tabuteau, from R.A.M.C., to be Colonel.

HOUSEHOLD CAVALRY, R.H.G.

War Substantive Surgeon Captain P. R. Westall, from Emergency Commission, to be Surgeon Captain.

Getting down to fundamentals



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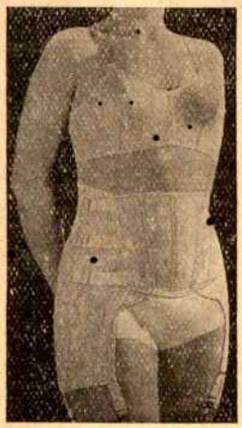

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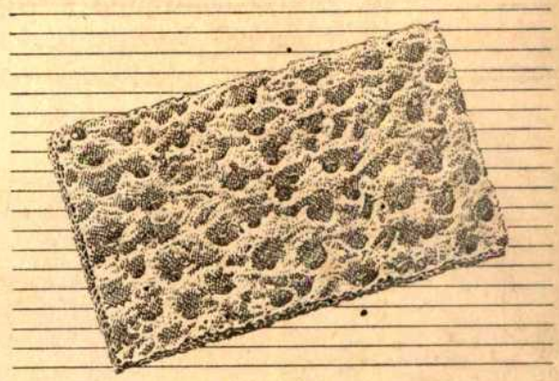

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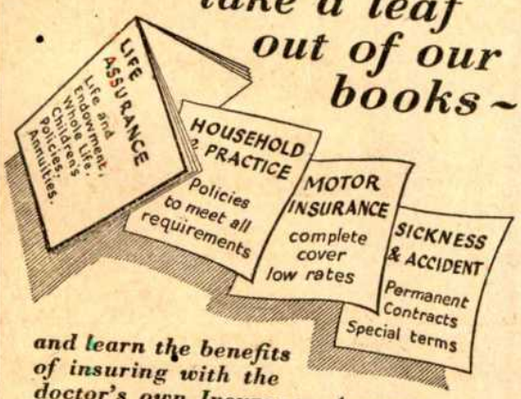

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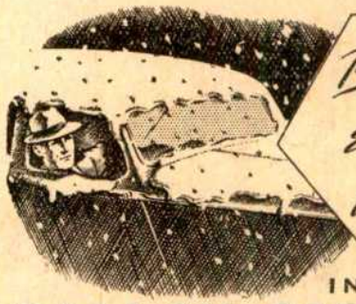

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MEDICAL ANNUAL 1947

Edited by
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K.B.E., M.A., M.D., F.R.C.P. M.D., B.S., B.Sc., F.R.C.S.

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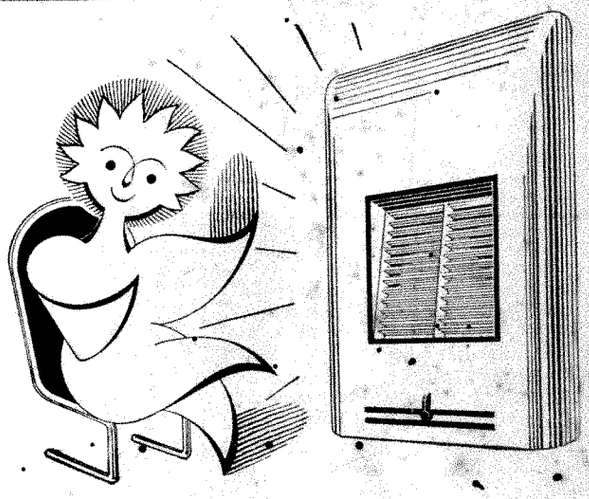

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Applicants should, except where otherwise specified, state name, address, age, nationality, qualifications, and enclose copies of 3 recent testimonials★ with short statement of experience and appointments held. Unless closing date is stated applications should be sent at once.

★ *SERVICE MEMBERS may have difficulty in supplying recent testimonials, but this should not deter them from applying*

A—Whole-time resident house appointments open to practitioners without previous experience.
B1—Whole-time appointments usually resident within the senior establishment—e.g., Registrar, R.S.O., etc.
B2—Whole-time house appointments not within the senior establishment, usually resident, and usually held by practitioners with six months' experience.
R—Male, liable to military service under the National Service Acts.
W—Women practitioners.

EASTER, 1948
PLEASE NOTE

The Advertisement Manager will make every endeavour to ensure insertion of APPOINTMENTS provided they are received not later than the dates mentioned below:

For issue	Not later than
March 27	March 17
April 3	„ 24

APPOINTMENTS

ROYAL SAUDI-ARABIAN EMBASSY, London Health Services, Saudi-Arabia

Applications are invited for the following appointments:—

(a) **QUARANTINE MEDICAL OFFICER.** Applicants should be qualified medical practitioners and have experience in quarantine and port health work and, particularly, in the care and control of large movements of population. Salary £200 per month.

(b) **BACTERIOLOGIST.** Applicants should be qualified medical practitioners and have experience in clinical bacteriology and, particularly, in the investigation of plague, cholera, typhus and smallpox. Salary £200 per month.

(c) **SANITARY INSPECTOR.** Applicants should possess a registrable certificate as a Sanitary Inspector and have experience in port sanitation and hygiene. Salary £120 per month.

Successful candidates will be appointed in the first instance under contract for two years and be required to reside in any part of the Kingdom to which they may be posted. Free passage will be granted and leave equivalent to four months leave of absence in the two year period. The Government of Saudi-Arabia will be prepared to take up with the appropriate authorities the question of the secondment of suitable candidates, where necessary. Applications in the candidate's own handwriting, stating whether married, should be addressed to the Royal Saudi-Arabian Embassy, 30, Belgrave Square, London, S.W.1.

ROYAL NEW ZEALAND NAVY
ONE SURGEON LIEUTENANT-COMMANDER (or Surgeon Lieutenant) (Medical)
TWO SURGEON LIEUTENANTS (Dental)

The Royal New Zealand Navy require one Surgeon Lieutenant-Commander or Surgeon-Lieutenant (Medical) and two Surgeon-Lieutenants (Dental), for a minimum of two years' service from date of embarkation. Preference given to ex-R.N.V.R. Officers. Passages provided at Government expense. Pay according to New Zealand Naval Regulations, varying according to previous length of service, etc. Further particulars from New Zealand Naval Affairs Officer, Halifax House, 51-55, Strand, London, W.C.2.

CIVIL SERVICE COMMISSION
MINISTRY OF HEALTH MEDICAL STAFF
MEDICAL OFFICERS

Applications are invited from registered medical practitioners (men and women) for permanent and pensionable appointment as Medical Officers on the Insurance Regional Medical Staff of the Ministry of Health or the Welsh Board of Health. Inclusive salary scale £1,150 by £30 to £1,300 by £50 to £1,500 (London); rather less in the provinces. The minimum of the scale will be linked to the age of 38 with deductions below that age of £30 per annum and additions of £30 per annum up to the age of 40. From 8 to 14 vacancies will be filled, of which two will be on the staff of the Welsh Board of Health, and at least two will be in London. Candidates must have been qualified for at least ten years and have a wide experience of general practice. If appointed, they may be required to live anywhere in England or Wales. For the posts in Wales a knowledge of the Welsh language is desirable. The duties include (1) acting as medical referees in examining insured persons referred for an opinion on questions of incapacity for work, (2) the examination of persons referred by the Ministry of Labour and National Service under the Disabled Persons (Employment) Act, 1944, and (3) such other duties, not of a clinical nature, as may be required of a Medical Officer in the Ministry or Welsh Board of Health. Further particulars and forms of application may be obtained from the Secretary, Civil Service Commission, Burlington Gardens, London, W.1, quoting No. 2142. No application can be considered unless received on the prescribed form at the Civil Service Commission not later than April 8, 1948, for candidates in the United Kingdom, and May 8, 1948, for candidates overseas.

DEPARTMENT OF HEALTH FOR SCOTLAND
INDUSTRIAL MEDICAL OFFICER

Applications are invited from medical practitioners with experience in industrial medicine for appointment to Medical Interviewing Committees which are being established in Aberdeen, Dundee and Glasgow to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable for session of 1½—2½ hours £2 12s. 6d., plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Department of Health for Scotland, Room 111, St. Andrew's House, Edinburgh, 1.

MINISTRY OF HEALTH
INDUSTRIAL MEDICAL OFFICER

Applications are invited from medical practitioners with experience in Industrial Medicine for appointment to a Medical Interviewing Committee which is being established in Reading to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable for session of 1½ to 2½ hours £2 12s. 6d., plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Senior Medical Officer, Ministry of Health Regional Office, 17, Bath Road, Reading. Applications should be sent in before March 20.

UNIVERSITY OF BRISTOL
PART-TIME PHYSICIAN
IN PULMONARY DISEASES

Applications are invited for the appointment of a part-time Physician in Pulmonary Diseases to the Bristol Corporation and Honorary Physician in Pulmonary Diseases to the Bristol Royal Hospital. The person selected will:—(a) be appointed Physician in Pulmonary Diseases to the City with main beds at Fronchay Park Hospital where there is a Thoracic Unit. He will be available for consultation at other hospitals and sanatoria where municipal patients are maintained, for consultation at municipal clinics, and for duties in connexion with the Workman's Compensation Acts (other than attendance at Court) and the Superannuation scheme, for which he will receive a salary of £800 per annum from the Bristol City Council. He will be required to work in close co-operation with the Tuberculosis Officer of the City; (b) be appointed Honorary Physician to the Bristol Royal Hospital, and see out-patients at the Royal Infirmary Branch; have the right to engage in private practice, but shall confine this to Pulmonary Diseases. Applications with the names of three referees and copies of not more than three recent testimonials should be forwarded to the Registrar, University of Bristol, Bristol, 8, not later than April 3, 1948.

BUCKS COUNTY COUNCIL
TINDAL GENERAL HOSPITAL, Aylesbury
(Acute General Hospital—125 beds; 5 residents)

Applications are invited from suitably qualified male practitioners for the following appointments, which fall vacant on April 30, 1948:—

RESIDENT SURGICAL OFFICER (B1). Salary £455, rising annually by £25 to £555 per annum. Applicants should preferably, but not necessarily, hold the Fellowship of one of the Royal Colleges of Surgeons. Consideration may in special circumstances be given to the commencing salary being above the minimum of the grade. The appointment is for one year in the first instance. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces.

HOUSE SURGEON (B2). Salary £250 per annum. R practitioners holding A posts may apply.

HOUSE PHYSICIAN (A). Salary £200 per annum. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.

All three posts carry full residential emoluments. The two surgical posts are recognized under the regulations for the F.R.C.S.(Eng.). The B2 and A appointments are for a period of six months. Applications, stating date free to commence duty, together with copies of two recent testimonials, should be submitted to the Medical Superintendent by March 22, 1948.

CITY OF OXFORD
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited for the post of Deputy Medical Officer of Health and Deputy School Medical Officer at a basic salary of £877 10s. by £25 to £977 10s. revised Askwith Memorandum. A car allowance will also be made. Further particulars can be obtained from me together with application forms which must be returned by March 31, 1948. Canvassing of members of the Oxford City Council either directly or indirectly in connexion with this appointment will disqualify the candidate.—Harry Plowman, Town Clerk, Town Hall, Oxford.

BRIDGE OF EARN HOSPITAL, Perthshire (Orthopaedic Unit)

Applications are invited for the following appointments, vacant April 1, 1948:—

TWO ORTHOPAEDIC REGISTRARS (B1)
TWO ORTHOPAEDIC HOUSE SURGEONS (B2)

The Unit is the Base Orthopaedic Hospital of the Eastern Region of Scotland, comprising the cities of Dundee and Perth and the counties of Angus, Perth and Kinross. The work is associated with a large Rehabilitation Centre within the hospital grounds. Applicants for the B2 posts may include R practitioners who now hold A posts. If held by an R practitioner the appointments will be limited to six months. Applications for the B1 posts from R practitioners now holding B1 posts cannot be considered unless they are ineligible for H.M. Forces. Salary is at the rate of £428 per annum for the Registrars and £278 per annum for House Surgeons, both with full residential emoluments. Applications, with copies of two testimonials, to be sent to the Medical Superintendent.

CITY OF MANCHESTER
ASSISTANT MEDICAL OFFICERS OF HEALTH FOR MATERNITY AND CHILD WELFARE

Applications are invited from registered medical practitioners for appointments as Assistant Medical Officers in the Maternity and Child Welfare Section of the Health Department. Applicants should have obstetric experience and will be required to undertake duties in ante-natal and child welfare clinics. Possession of the D.P.H. or D.C.H. qualifications will be an advantage. The consolidated salary scale is £735 to £910 per annum. The recommendations in Ministry of Health Circular 12/48 are under consideration. Successful candidates will be required to pass a medical examination and to contribute to the Manchester Corporation Superannuation Fund. A form of application can be obtained on request, and must be sent with copies of three recent testimonials, in an envelope marked "Assistant Medical Officer, Maternity and Child Welfare" to me only, and not to any member of the Council, not later than April 3, 1948. Canvassing in any form, oral or written, direct or indirect, is prohibited.—Philip B. Dingle, Town Clerk.

CITY OF LEEDS
Public Health Department
KILLINGBECK SANATORIUM
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B1) at the above sanatorium. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and rejected by the R.A.M.C., may apply. The duties include the treatment of pulmonary tuberculosis and some previous experience in this work is desirable. The candidate will also be expected to undertake such other general medical duties as may be assigned to him by the Medical Superintendent. The commencing salary is £455 and the maximum £555 per annum (subject to amendment or consideration of Ministry of Health Circular 12/48), plus a cost-of-living bonus, together with board, residence and laundry, these emoluments being valued for superannuation purposes at £120 per annum. There is no accommodation for married men. Applications, endorsed "R.M.O., Killingbeck," to be forwarded to the undersigned not later than Wednesday, May 26, 1948.—I. G. Davies, Medical Officer of Health, School Medical Officer, Public Health Department (Hospitals Administration Section), 12, Market Buildings, Vicar Lane, Leeds, 1.

CITY OF LEEDS
ST. JAMES'S HOSPITAL

Applications are invited from registered medical practitioners (male and female) for the following appointments, vacant April 8, 1948:—

HOUSE SURGEON (B2).
OBSTETRIC HOUSE SURGEON (B2). Two appointments.

Six-monthly appointments. Salary £200 per annum, plus bonus and full residential emoluments. R practitioners holding A posts may apply.

HOUSE PHYSICIAN (A). Six appointments.
HOUSE PHYSICIAN (A). (Children).
HOUSE SURGEON (A). Two appointments.
HOUSE SURGEON (A). (Facio-Maxillary).

Six-monthly appointments. Salary £150 per annum, plus bonus and full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply.

Applications, stating age, qualifications and experience, together with copies of three recent testimonials, should be forwarded to the undersigned as soon as possible.—I. G. Davies, Medical Officer of Health, School Medical Officer, Public Health Department (Hospitals Administration Section), 12, Market Buildings, Vicar Lane, Leeds, 1.

CITY OF LEEDS
Health Department
ASSISTANT MEDICAL OFFICER

Applications are invited from qualified and registered medical practitioners for the post of Assistant Medical Officer for Maternity and Child Welfare. Applicants must have had postgraduate experience, including experience in General Medicine and Surgery, and special experience in obstetrics and antenatal work, and in the treatment of children's diseases and diseases of women. Additional qualifications such as the D.P.H., or the D.C.H., will be a recommendation. Under the present grading scheme of the Corporation the commencing salary will be not less than £650 per annum and subject to satisfactory service will rise by annual increments of £25 to a maximum of £850. The salary will, however, be subject to variation in the light of any provision of the Askwith Scale which may be approved by the City Council. A cost of living bonus is also payable at present. In determining the commencing salary due consideration will be given to previous experience and qualifications. The first increment will take effect on April 1, following the completion of six months' service. The person appointed will be required to pass a medical examination and to contribute to the Superannuation Fund established under the Local Government Superannuation Act, 1937. Form of application and particulars as to the duties of appointment may be obtained from the undersigned. Applications, endorsed "Maternity and Child Welfare Medical Officer," together with copies of three recent testimonials or the names of three persons to whom reference may be made, must be delivered at the Health Department, 12, Market Buildings, Vicar Lane, Leeds, 1, not later than 10 a.m., on March 27, 1948. Canvassing in any form, either directly or indirectly, will be a disqualification.—I. G. Davies, Medical Officer of Health.

CITY OF COVENTRY
ASSISTANT SCHOOL MEDICAL OFFICER AND ASSISTANT MEDICAL OFFICER OF HEALTH
(male or female)

The Coventry Education Committee invite applications for the above post from registered medical practitioners. The possession of a Diploma in Public Health will be an advantage. The duties are mainly in connexion with the medical inspection and clinic treatment of school children, and such other duties as the School Medical Officer may from time to time direct. The inclusive salary will be £735 rising by annual increments of £25 to a maximum of £935 per annum. In deciding the commencing salary, account will be taken of previous experience and qualifications. The successful candidate will be required to pass a medical examination as to fitness and to contribute under the Local Government and Other Officers' Superannuation Act, 1937, as amended by the Coventry Corporation Act, 1936, in regard to annuities to Widows, and to the Coventry Municipal Officers' Widows' and Orphans' Pensions Fund. Applications (no forms provided) enclosing copies of two recent testimonials, should reach the undersigned not later than March 31, 1948. —Charles Barratt, Town Clerk, The Council House, Coventry.

CITY OF PLYMOUTH
CITY ISOLATION HOSPITAL
SENIOR ASSISTANT MEDICAL OFFICER
(Male, Non-Resident)

Applications are invited for the above post. The duties consist of the clinical care of both fever and tuberculosis patients, together with certain venereal diseases clinics, under the general direction of the Medical Superinendent. A junior resident medical officer is employed. Applicants should have had considerable residential experience of infectious diseases and a knowledge of venereal diseases and tuberculosis will be an advantage. The successful applicant will be required to live near the hospital, and should be able to drive a car which is provided by the Corporation. The post is whole-time and superannuable. Any fees received must be refunded to the Corporation. Salary is at the rate of £675 per annum, rising by annual increments of £25 to £875 per annum, plus cost-of-living addition. Further particulars may be obtained from the Medical Superintendent, City Isolation Hospital, Plymouth, and all applications should be sent to the undersigned as soon as possible.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF PLYMOUTH
CITY GENERAL HOSPITAL (400 beds)
ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from duly qualified and registered medical practitioners for the appointment of Assistant Medical Officer (B2) at the City General Hospital, including suitably qualified R practitioners now holding A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be renewable for a further period of six months, terminable by one month's notice on either side at any time. Salary will be at the rate of £300 per annum, plus cost-of-living bonus and with full residential emoluments. All fees other than this, received by the officer, must be refunded to the Council. The duties of the post will be on the medical side of the hospital and will include the care and treatment of sick children. Further information of this appointment may be obtained from the Medical Superintendent. Applications should be sent to the undersigned immediately.—T Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF PLYMOUTH
ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from registered medical practitioners, male and female, under the age of 40, or 45 if at present employed by a local authority, who have had at least three years' experience since qualification, for the above whole-time permanent appointment. The salary scale is £675 per annum, rising by annual increments of £25 to a maximum of £875 per annum, plus cost-of-living addition, and previous service in a similar capacity will be taken into account in fixing the commencing salary within this scale. Forms of application and conditions of appointment may be obtained from the undersigned, to whom all applications should be sent not later than March 31, 1948.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF NOTTINGHAM
Mental Health Service
MAPPERLEY HOSPITAL
JUNIOR ASSISTANT PHYSICIAN

Applications are invited for the post of Junior Assistant Physician to Mapperley Hospital. Candidates should be in possession of a D.P.M., and have had experience in modern methods of psychiatric treatment. Salary £1,000 per annum, non-resident. Plans for a house are in an advanced stage of approval, and the salary would then be £800 per annum with emoluments consisting of unfurnished house with light, fuel and laundry valued for the purposes of the 1909 Asylum Officers' Superannuation Act at £200. Opportunity will be available for experience in out-patient adult and child psychiatry and mental deficiency work. The successful candidate will be expected to take up duty on May 1, 1948. Suitably qualified R practitioners holding B1 appointments and ineligible for H.M. Forces are invited to apply. Applications should be forwarded to the Medical Officer of Mental Health, Mapperley Hospital, Nottingham, by March 20, 1948.

CITY OF BIRMINGHAM
Public Health Department
ASSISTANT TUBERCULOSIS OFFICER
Anti-Tuberculosis Centre

Applications are invited for the whole-time non-resident appointment of Assistant Tuberculosis Officer. Candidates should have had considerable experience of tuberculosis work and of the general duties of a tuberculosis dispensary. Salary £675 by £25 to £875 per annum, plus cost-of-living bonus. The appointment will be subject to the passing of a medical examination, to the Local Government Superannuation Act 1937, to the Widows and Orphans Pension Scheme (if applicable) and to one month's notice on either side. Applications should be addressed to the Medical Officer of Health, Public Health Department, The Council House, Congreve Street, Birmingham, 3, not later than March 18, 1948.

CITY OF BIRMINGHAM
MONYHULL COLONY FOR MENTAL DEFECTIVES AND RESIDENTIAL SPECIAL SCHOOL
King's Heath, Birmingham, 14
RESIDENT JUNIOR ASSISTANT MEDICAL OFFICER (B1)

Salary £455 by £25 to £555 per annum, plus war bonus, with full residential emoluments and £50 per annum to holder of D.P.M. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Appointment subject to Asylums and Certified Institutions (Officers' Pensions) Act, 1918, and successful candidate required to pass medical examination. Applications, stating age, present appointment, experience, and qualifications, with names of three referees to C. J. C. Earl, Medical Superintendent.

CITY OF BIRMINGHAM
Public Health (Tuberculosis) Department
RESIDENT MEDICAL OFFICER

Medical Officer (resident) required for locum tenens duty for a period of six months at Yardley Green Road Sanatorium and the Anti-Tuberculosis Centre. Experience in tuberculosis work necessary. Salary £14 14s. per week, plus board and residence. Apply Dr. J. E. Geddes, Chief Clinical Tuberculosis Officer, 151, Great Charles Street, Birmingham, 3.

COUNTY BOROUGH OF GREAT YARMOUTH
TUBERCULOSIS OFFICER AND DEPUTY MEDICAL OFFICER OF HEALTH

The Council of the County Borough of Great Yarmouth invite applications from qualified and registered medical practitioners possessing the Diploma in Public Health and State Medicine, for appointment to the position of Tuberculosis Officer and Deputy Medical Officer of Health. Candidates must be capable of assuming full responsibility in the Public Health Department in the absence of the Medical Officer of Health, so that general public health experience is necessary. The salary will be £975 per annum, rising by biennial increments of £50 to a maximum of £1,162 10s. per annum, plus cost-of-living bonus. The appointment will be subject to the consent of the Minister of Health and the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Further particulars and forms of application can be obtained from me, and the applications must reach me not later than March 23, 1948.—Farra Conway, Town Clerk, Town Hall, Great Yarmouth.

COUNTY OF SALOP
ASSISTANT TUBERCULOSIS OFFICER

Applications are invited for the appointment of Assistant Tuberculosis Officer on the staff of the County Medical Officer of Health. The selected applicant will be required to reside in the house provided at Shirlett Sanatorium, which is administered by the Shropshire Association for the Prevention of Consumption, and will be seconded to the Association for part-time service as Resident Medical Officer, the remainder of his duties being concerned with clinical work outside the Sanatorium in the County Council's Tuberculosis Service. The appointment will rank for superannuation purposes as whole-time service under the Salop County Council and will be subject to the Local Government Superannuation Act, 1937, and to a medical examination. The salary for the appointment will be according to qualifications and experience within the scale £500 by £25 to £650 plus bonus, together with emoluments valued at £250 per annum on a full residential basis, the apportionment as between cash and emoluments being subject to adjustment in the case of a married man. Further particulars may be obtained from the undersigned, to whom applications should be sent before March 20, 1948 —William Taylor, County Medical Officer, College Hill House, Shrewsbury.

COUNTY BOROUGH OF SUNDERLAND
GENERAL HOSPITAL
DEPUTY MEDICAL SUPERINTENDENT
(Including duties in the Public Assistance Institution)

Applications are invited from registered medical practitioners holding B1 appointments (if ineligible for H.M. Forces), or members of H M. Forces who have held posts within the senior establishment and who are due for early release, for the appointment of Deputy Medical Superintendent, General Hospital, and Assistant Medical Officer to attached Highfield Public Assistance Institution. Applicants must possess a higher degree in medicine, and must have had considerable experience since qualification, including experience in the care of chronic sick. The person appointed will be required to assist the Medical Superintendent in the administration of the hospital, training of nurses, etc., to assist the Medical Superintendent in the medical care of patients in Highfield Institution, including chronic sick and cases coming under the Lunacy Acts; and to deputize for the Medical Superintendent when required. The salary will be at the rate of £606 per annum, rising by increments of £30 every two years to a maximum of £690 per annum, plus appropriate cost-of-living bonus (at present £29 19s. 7d. per annum if resident, £59 19s. 3d. if non-resident), together with full board and residential emoluments valued for superannuation purposes at £135 per annum. As there are no married quarters, the appointment of a married man would be "non-resident" but the above-mentioned cash salary would be increased by £135 per annum. The appointment will be subject to the rules and regulations from time to time adopted by the Council, and any fees received for work within the scope of the engagement or earned within normal working time must be paid over to the Borough Treasurer, unless given specific permission by the Council to retain them. The appointment is superannuated, is subject to passing a medical examination satisfactorily, and is determinable by three months' notice on either side. Applications, stating age, qualifications (with dates) and details of previous appointments and experience, together with copies of three recent testimonials, should reach the undersigned not later than March 20, 1948 Canvassing, directly or indirectly, until after the first selection of candidates will disqualify.—G. S McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY BOROUGH OF SUNDERLAND
GENERAL HOSPITAL
HOUSE SURGEON (A)
(Including duties in the Public Assistance Institution)

Applications are invited from registered medical practitioners, including those within three months of qualification, for the appointment of House Surgeon (A) of the General Hospital (including duties in attached Public Assistance Institution). If held by a practitioner who is liable under the National Service Acts the appointment will be for six months, otherwise renewable at the end of that time. Salary at the rate of £200 per annum, with full residential emoluments valued for superannuation purposes at £135, plus bonus, at present £29 19s. 7d. The appointment will be subject to the rules and regulations from time to time adopted by the Council, and any fees received for work within the scope of the engagement or earned within normal working time must be paid over to the Borough Treasurer, unless given specific permission by the Council to retain them. The appointment is superannuated, is subject to passing a medical examination satisfactorily, and is determinable by one month's notice on either side Applications, stating age, qualifications (with dates) and details of previous appointments and experience, together with copies of not more than three recent testimonials, should reach the undersigned not later than March 20, 1948.—G. S. McIntire, Town Clerk, Town Hall, Sunderland.

Have you read the notice at top of page 12 ?

Have you read the notice at top of page 12 ?

COUNTY BOROUGH OF SUNDERLAND
CHERRY KNOWLE (E.M.S.) HOSPITAL
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the above appointment. R practitioners holding A posts may apply, when the appointment will be restricted to six months' duration. Salary will be at the rate of £200 per annum, with full residential emoluments valued at £100 per annum, and cost-of-living bonus of £29 19s. 7d. per annum. The selected applicant will be required to pass a medical examination, and the appointment will be determinable by one month's notice given in writing at any time by either party to the other of them. Applications must be addressed to the undersigned, endorsed on cover "House Surgeon (B2), Cherry Knowle (E.M.S.) Hospital," and be delivered at my office as soon as possible.—C. S. McIntire, Town Clerk, Town Hall, Sunderland.

COUNTY OF WARWICK
CONSULTING PAEDIATRICIAN

Applications are invited for the appointment of a Consulting Paediatrician in connexion with the hospital services of the Warwickshire County Council. The appointment will be made in consultation with the Birmingham Regional Hospital Board. The person appointed will be required regularly to visit the hospitals under the Council's administration, and also certain voluntary hospitals in the County in the event of the Council entering into an arrangement with such hospitals in connexion with their paediatric services. The appointment is a whole-time one and private practice will not be permitted. Candidates should possess a recognized higher qualication in medicine and have special interest and experience in paediatrics. The salary will be within the range of £1,200 to £1,600 per annum, plus a cost-of-living bonus: the present rate of bonus is 10% on the first £1,000 and 5% on the remainder. The commencing salary will be fixed having regard to the qualifications and experience of the successful candidate. Travelling expenses will also be payable in accordance with the Council's scale. The appointment is on the permanent establishment and will be subject to the Local Government Superannuation Act, 1937, and the person appointed will be required to pass a medical examination. Applications, stating age, qualifications and experience, together with copies of three recent testimonials (or names of referees), should be sent to H. J. Kotch, Shire Hall, Warwick, from whom further particulars may be obtained. Closing date for applications, March 23, 1948.—L. Edgar Stephens, Clerk of the Council, Shire Hall, Warwick.

COUNTY OF DORSET
DEPUTY COUNTY MEDICAL OFFICER

Applications are invited for the appointment of Deputy County Medical Officer of Health and Deputy School Medical Officer. Applicants must be registered medical practitioners possessing the Diploma of Public Health, and experience in the work of the School Medical and Maternity and Child Welfare Services, with the administration of which the successful applicant will be expected to assist under the direction of the County Medical Officer. The possession of experience in the classification of educationally subnormal and maladjusted children, and in the examination of mental defectives will be an advantage, as also would be experience in the organization of health education campaigns. The salary will be at the rate of £1,000 per annum, rising by annual increments of £25 to £1,150 per annum (cost-of-living bonus consolidated). Travelling and subsistence allowances will be in accordance with the County scale in force for the time being. The appointment will be terminable by three months' notice on either side and will be subject to the provisions of the Local Government Officers' Superannuation Act, 1937. The successful candidate will be required to pass a medical examination. Applications on the prescribed form, which may be obtained from the undersigned, must be forwarded so as to be received not later than April 10, 1948.—C. P. Brutton, Clerk of the County Council, County Hall, Dorchester.

COUNTY BOROUGH OF CARLISLE
CITY MATERNITY HOSPITAL AND CITY GENERAL HOSPITAL
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from practitioners with at least six months' hospital experience, including R practitioners holding A posts, for the post of Resident Medical Officer (B2) in the City Maternity Hospital. The hospital is recognized for instruction of medical students in obstetrics and as a training school for midwives and there is scope for preparation for higher diplomas. The person appointed will also be responsible for duties in the adjacent General Hospital. The salary offered is at the rate of £200 per annum and the post will normally be held for six months. Applications, stating age, nationality, medical school, date of qualification, appointments held and experience, together with copies of not more than three testimonials or names for reference purposes, to be lodged with the Medical Officer of Health, 22, Fisher Street, Carlisle, as soon as possible.—H. D. A. Robertson, Town Clerk.

COUNTY BOROUGH OF WEST HAM
SENIOR ASSISTANT MEDICAL OFFICER

Applications are invited from qualified medical practitioners for the post of Senior Assistant Medical Officer. Duties wil be mainly concerned with the Council's Maternity and Child Welfare Service, but the person appointed must be prepared to undertake duties in any section of the Health Services under the direction of the Medical Officer of Health. Salary for the post is £1,000 by annual increments of £50 to a maximum of £1,200 per annum, plus temporary cost-of-living bonus. Applicants must have had previous experience in Maternity and Child Welfare work, and possess a Diploma of Public Health; the Diploma of Child Health will be considered an advantage. Form of application together with list of duties can be obtained from Medical Officer of Health, 223/225, Romford Road, West Ham, E.7, and must be returned to him not later than March 20, 1948.—E. E. King, Town Clerk, West Ham Town Hall, Stratford, E.15.

COUNTY OF HEREFORD
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH

The Herefordshire County Council and the Leominster Borough, Bromyard Urban, Kington Urban, Leominster and Wigmore Rural, Bromyard Rural, Kington Rural and Weobley Rural District Councils require a whole-time Medical Officer who will act as Assistant County Medical Officer and as Medical Officer of Health for the areas of the District Councils named. Salary £1,040 per annum, rising by annual increments of £50 to a maximum of £1,240 per annum, plus bonus at current rate. The person appointed must provide and use his own car in consideration of a travelling allowance in accordance with the County Council's scale. Applications on the prescribed form, which may be obtained from the County Medical Officer, 35, Bridge Street, Hereford, must be received by him within fourteen days from the publication hereof

COUNTY BOROUGH OF ROTHERHAM
MUNICIPAL GENERAL HOSPITAL
Resident ASSISTANT MEDICAL OFFICER (A)

Applications are invited from fully registered medical practitioners (including practitioners within three months of qualification and who are liable for service under the National Service Acts), for the above appointment. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, together with full residential emoluments and a temporary cost-of-living bonus in accordance with the Council's scale. Forms of application may be obtained from the Medical Superintendent, Municipal General Hospital, Moorgate, Rotherham, and must be returned to the undersigned, endorsed "Resident Assistant Medical Officer," as soon as possible.—John S. Wall, Town Clerk, Municipal Offices, Rotherham.

COUNTY BOROUGH OF DONCASTER
ASSISTANT MEDICAL OFFICER FOR OBSTETRICS (B1)

Applications are invited from registered medical practitioners, male or female, with previous experience in midwifery to act as medical officer at Hamilton Annexe, Springwell House (63 midwifery beds), and to perform such other duties as may be required. The salary will be £455 per annum, rising by annual increments of £25 to £555 per annum, plus bonus, with emoluments valued at £150 The recommendations in Ministry of Health Circular 12/48 are under consideration. The appointment is subject to three months' notice. Applications should be sent to me, endorsed "Assistant Medical Officer," not later than March 30, 1948.—H. S. Essenhigh, Town Clerk, Town Clerk's Office, 1, Priory Place, Doncaster.

COUNTY OF WARWICK
STRATFORD-ON-AVON EMERGENCY HOSPITAL (220 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male and female, for the appointment of Resident Surgical Officer (B1), now vacant. The appointment will be limited to a period of one year. Salary £350 per annum, together with cost-of-living bonus, plus the usual residential emoluments. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C., or have completed their term of military service. Applications on forms obtainable from H. K. Kotch, Shire Hall, Warwick, should be returned to him as soon as possible.

COUNTY BOROUGH OF BIRKENHEAD
BIRKENHEAD MUNICIPAL HOSPITAL
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the above post, including R practitioners now holding A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of twelve months. The duties attached to the post are both medical and surgical and will include the administration of anaesthetics. Salary £300 per annum plus bonus and full residential emoluments. Application forms to be obtained from the Medical Officer of Health, 9, Hamilton Square, Birkenhead, to whom they should be returned as soon as possible after completion.—E. W. Tame, Town Clerk.

COUNTY BOROUGH OF HUDDERSFIELD
ASSISTANT MEDICAL OFFICER OF HEALTH (female) for Maternity and Child Welfare purposes

Applications are invited for the above appointment from candidates who have had special experience in ante-natal work and in the care of infants. Salary in accordance with the revised Askwith Scale. Position subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination before being appointed. Applications should be sent to the Medical Officer of Health, Public Health Department, Huddersfield, not later than March 31, 1948. Application forms are not provided.—Harry Bann, Town Clerk, Town Hall, Huddersfield.

CORNWALL COUNTY COUNCIL
ASSISTANT CLINICAL TUBERCULOSIS OFFICER

Applications are invited from registered medical practitioners for the whole-time appointment on the established staff of an Assistant Clinical Tuberculosis Officer. The person appointed will be required to work under the direction of the County Medical Officer and the County Clinical Tuberculosis Officer. He must devote his whole time to the duties of the office, and undertake such other work as he may be required to do from time to time. Candidates should have special experience in tuberculosis, including Dispensary and Sanatorium work. The commencing salary will be within the modified Askwith Interim Grade of £675 by annual increments of £25 to £875, to which is at present added a cost-of-living bonus of £59 16s. a year. A car is essential and there will be a travelling allowance in accordance with the County Scale. In fixing the initial salary of the selected candidate, consideration may be given to previous experience. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The Regional Hospital Board has been consulted and approves of this appointment. Canvassing, either directly or indirectly, will disqualify, and every candidate must disclose in his application whether to his knowledge he is related to any member of the Council or to the holder of any senior office under the Council. Applications should reach the County Medical Officer, County Hall, Truro, not later than March 27, 1948.—E. T. Verger, Clerk of the County Council, County Hall, Truro.

DERBYSHIRE COUNTY COUNCIL
SCARSDALE HOSPITAL, Chesterfield (616 beds)
HOUSE PHYSICIAN (A)

Applications are invited from female registered medical practitioners for appointment as House Physician (A) at the above hospital. The salary is at the rate of £250 per annum, plus full residential emoluments. The appointment will be in the first instance for six months. Applications together with copies of two testimonials should be sent to the Clerk of the County Council, County Offices, St. Mary's Gate, Derby

EAST SUSSEX COUNTY COUNCIL
SOUTHLANDS HOSPITAL
Shoreham-by-Sea (450 beds)

Applications are invited from registered medical practitioners for the following appointments :—

PATHOLOGIST

A newly established laboratory is nearly completed and the successful candidate will have the opportunity of helping to equip it.

RADIOLOGIST

The department has modern equipment and is diagnostic only. There are two radiographers.

The above posts are both non-resident and the salary in each case is £1,000 per annum, plus £150 living-out allowance. Cost-of-living bonus will be payable in addition to salary, in accordance with the scale approved by the County Council from time to time, the present rate in the case of non-resident staff being £59 16s. per annum. The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and a candidate to be successful must pass a medical examination. The appointments will be full-time and subject to (a) three months' notice on either side and (b) such conditions of service as may from time to time be approved on behalf of the County Council. Application forms may be obtained from and should be returned to the Medical Superintendent, Southlands Hospital, Shoreham-by-Sea, as soon as possible.—H. S. Martin, Clerk of the County Council, County Hall, Lewes.

KINGSTON UPON HULL CORPORATION
HEALTH DEPARTMENT
BEVERLEY ROAD HOSPITAL (432 beds)
JUNIOR HOUSE OFFICER (MEDICAL) (A)

Applications are invited from registered medical practitioners of either sex, including those now serving in H.M. Forces, for the appointment of Junior House Officer (Medical) (A) tenable for one year. Salary £250 per annum, plus cost-of-living bonus and plus full residential emoluments. If non-resident, the salary is plus £150 per annum, in lieu of residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Forms of applications, conditions of appointment, etc., may be obtained from and the form should be returned duly completed to, the Medical Officer of Health, Guildhall, Kingston-upon-Hull, as soon as possible.

ESSEX COUNTY COUNCIL
ESSEX COUNTY COUNCIL HOSPITAL
Wanstead, E.11
HOUSE OFFICER (Surgeon, B2)

Applications invited from registered medical practitioners, including R practitioners holding A appointments, for the above post at the Essex County Council Hospital, Wanstead, E.11, to commence duty if possible on April 1, 1948. Salary at the rate of £260 a year plus residential emoluments and war bonus. Applications (indicating age, whether married, qualifications, experience and position in relation to National Service) accompanied by not more than three non-returnable copies of recent testimonials should be addressed to the Medical Superintendent as soon as possible.

KENT COUNTY COUNCIL
WILLESBOROUGH HOSPITAL, near Ashford
Resident ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the above appointment, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Otherwise, it will not exceed one year. Duties will be of a general medical and surgical nature. The salary is £200 a year with full residential emoluments plus a cost-of-living allowance. Applications should state the names and addresses of two responsible persons to whom reference may be made as to professional ability and should be addressed to the Medical Superintendent, so as to reach him by March 23, 1948.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

KENT COUNTY COUNCIL
COUNTY HOSPITAL, Farnborough, nr. Bromley
PART-TIME PHYSICIAN

Applications are invited from suitably qualified medical practitioners for appointment as part-time Consultant Physician at the County Hospital, Farnborough. Applicants must be engaged in consultant practice and be Fellows or Members of one of the Royal Colleges of Physicians. The appointment will be for four half-day sessions each week at a fee of four guineas per session with travelling expenses in accordance with the agreement between the British Medical Association and Local Authorities. Applications, stating age, the names and addresses of two responsible persons to whom reference may be made as to ability and character, should be sent to the Surgeon Superintendent, County Hospital, Farnborough, Kent, as soon as possible.—W. L. Platts, Clerk of the County Council, County Hall, Maidstone.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
RESIDENT OBSTETRICAL AND GYNAECOLOGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the above appointment, which is tenable for a period of twelve months. Applicants must have had previous experience. There are approximately 1,400 confinements in the hospital per annum. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £550 per annum, together with cost-of-living bonus and the usual residential emoluments. The appointment is subject to medical examination and is superannuable. Form of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom all applications must be returned not later than Monday, March 29, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE PHYSICIAN (B2)

Applications are invited for the above appointment from registered medical practitioners, male and female, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to a period of six months, otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, March 29, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE SURGEON (B2)

Applications are invited for the above appointment from registered medical practitioners, male and female, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to a period of six months. Otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, March 22, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
RESIDENT OBSTETRICAL AND GYNAECOLOGICAL HOUSE SURGEON (B2)

Applications are invited for the above appointment, from registered medical practitioners, male or female, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to a period of six months. Otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, March 29, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

GUILDFORD RURAL, HAMBLEDON RURAL and HASLEMERE URBAN DISTRICT COUNCIL
WHOLE-TIME ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited for the appointment of a whole-time Assistant Medical Officer in the Public Health Department. The duties include Diphtheria Immunisation, control of Infectious Diseases and such other duties as the Councils, or the Medical Officer of Health, may require to be undertaken. The use of a car is essential, an appropriate travelling allowance being paid. The appointment is terminable by three months' notice on either side, is subject to the provisions of the Local Government Superannuation Act, 1937, to a satisfactory medical examination and to the regulations governing officers of the Councils (the National Scheme of conditions of service has been adopted by the Councils). The salary attached to the post is £675 per annum, rising by annual increments of £25 to £875 per annum. Applications, stating age, qualifications and experience, and accompanied by copies of three recent testimonials, should be sent to the Medical Officer of Health, Millmead House, Guildford, to arrive not later than Saturday, March 27, 1948.—E. W. Sellings, Clerk to the Guildford Rural District Council, Millmead House, Guildford.

LONDON COUNTY COUNCIL
Consultant and Specialist Service
CONSULTANT DERMATOLOGIST

Applications are invited for appointment as Consultant Dermatologist—(a) at St. Mary Abbots Hospital, Kensington, for one short session a fortnight (duration of one hour or less); (b) at St. Leonard's Hospital, Shoreditch, for one session a fortnight (duration of 1½ to 2½ hours). Remuneration (a) £2 12s. 6d. a session, (b) £4 4s. a session, with mileage allowance in each case. Application forms giving further particulars and conditions of appointment and service, obtainable from the Medical Officer of Health (S.D.6), The County Hall, S.E.1 (stamped addressed foolscap envelope necessary) are returnable by April 1, 1948. Canvassing disqualifies. (588).

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL, Enfield, Middlesex
TWO Resident SENIOR HOUSE SURGEONS (B2)
LOCUM TENENS SENIOR RADIOLOGIST

(a) Two Senior House Surgeons (B2 Resident) required. Registered medical practitioners including R practitioners now holding A posts. Salary £250 per annum, plus any temporary bonus (now £30 per annum, cash). Board, lodging, laundry. Six months' appointment. Whole-time general surgical duties under supervision of Medical Director. Posts vacant April 1 1948, and April 9, 1948, respectively. (b) Locum Tenens Senior Radiologist from March 15 to 27, inclusive; full-time, non-resident post. Salary £13 13s. per week, plus non-resident allowance of £2 2s. per week. Applications (no forms) to Medical Director of Hospital, (a) by March 17, 1948; (b) immediately (quoting D.687, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
NORTH MIDDLESEX COUNTY HOSPITAL
Edmonton, N.18
RESIDENT SENIOR HOUSE SURGEON (B2)

Resident Senior House Surgeon (B2) required, April 6, at North Middlesex County Hospital, Edmonton, N.18. R practitioners holding A posts eligible. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry. Whole-time duties such as Council may require under supervision of Medical Director, six months' appointment. Applications (no forms) stating age, qualifications, experience to Medical Director of Hospital by March 17 (quoting D.773, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
SHENLEY MENTAL HOSPITAL, near St. Albans
CLINICAL ASSISTANT (B1)

Clinical Assistant (B1) required at Shenley Mental Hospital, near St. Albans, Herts, on April 1. Salary £300 per annum, plus any temporary bonus (now £30 per annum cash), plus residential quarters and attendance, six to twelve months' appointment. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications to Medical Superintendent at Hospital (quoting D.758, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
HILLINGDON COUNTY HOSPITAL
near Uxbridge, Middlesex
(Approx. 800 beds. Many specialized departments affording wide range of radiological diagnosis)
RADIOLOGIST

Radiologist required. Men of high professional qualifications, with wide experience in their specialty. General scope of duties, may include teaching, arranged by Medical Director. Inclusive salary at a stage in scale £1,100 plus any temporary bonus (now £60 per annum) by £100 to £1,700 per annum, according to ability and experience. On proof of outstanding achievement further increments of £50 up to £2,000 may be granted. Any fees received to be paid to County Council. Whole-time, non-resident, established, pensionable, subject to medical examination. Required to act as Deputy Medical Director occasionally if called upon. Applications (no forms) to the undersigned, enclosing copies of up to two recent testimonials and referees by April 3 (Quoting D.774, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth, Middlesex
ASSISTANT PATHOLOGIST

Assistant Pathologist required, non-resident, whole-time appointment. Medical men or women with experience in and good knowledge of pathology but with leanings towards bio-chemistry. General scope of duties, may include teaching, arranged by Medical Director. Two to five years' appointment, subject to medical examination. Inclusive salary £750 by £50 to £950 per annum, plus any temporary bonus (now £60 per annum). Any fees received to be paid to County Council. Applications (no forms) to the undersigned by March 24 (quoting D.771, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1

MIDDLESEX COUNTY COUNCIL
HILLINGDON COUNTY HOSPITAL
near Uxbridge, Middlesex
CHIEF ASSISTANT IN BACTERIOLOGY

Chief Assistant in Bacteriology required immediately. Good general knowledge of pathology and experience in bacteriology and immunology. General scope of duties arranged by Medical Director. Inclusive salary according to experience in scale £750 by £50 to £900 plus any temporary bonus (now £60 per annum). Any fees received to be paid to County Council. Non-resident, but required to live near hospital. Further details from Medical Director. Applications (no forms) to the undersigned by March 27, with copies of two recent testimonials and two referees (quoting D.770, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL, Edgware, Mddx.
RESIDENT ANAESTHETIST (B1)

Resident Anaesthetist (B1) required at Redhill County Hospital, Edgware, Middlesex. Special experience in administering anaesthetics and have held resident appointments in general hospitals essential. Whole-time duties such as Council may require under Medical Director and Senior Anaesthetist. Salary £400 per annum, plus any temporary bonus (now £30 per annum, cash) Board, lodging, laundry. Appointment, one year, subject to medical examination. Vacant immediately. R practitioners holding B1 posts ineligible unless rejected for H.M. Forces. Application (no forms) to Medical Director of Hospital by March 18, 1948 (quoting D.727 B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
ASHFORD COUNTY HOSPITAL
Ashford, Middlesex
RESIDENT HOUSE SURGEON (A) (male)

Resident House Surgeon (A), male, required April 12, at Ashford County Hospital, Ashford, Middlesex, for general surgical wards. Registered medical practitioners within three months of qualification and liable for National Service are eligible. Salary £150 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry, six months' appointment. Applications (no forms) to Medical Director of Hospital by March 27 (quoting D. 772, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

NOTTINGHAM CITY COUNCIL
NOTTINGHAM CITY HOSPITAL (1,020 beds)
RESIDENT HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (A), at the City Hospital, Nottingham, for General Surgical and Orthopaedic duties. Salary at the rate of £250 per annum, plus half cost-of-living bonus and full residential emoluments. The appointment will be for six months. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to be sent to the Medical Superintendent, City Hospital, Hucknall Road, Nottingham.—J. B. Richards, Town Clerk, The Guildhall, Nottingham

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

NOTTINGHAMSHIRE COUNTY COUNCIL
EAST RETFORD BOROUGH AND EAST RETFORD RURAL DISTRICT COUNCILS
JOINT MEDICAL OFFICER

The Nottinghamshire County Council and the East Retford Borough and Rural District Councils jointly invite applications from duly qualified and registered medical practitioners including those now serving in H.M. Forces for the joint whole-time appointment of a Medical Officer to act as:—

(a) Assistant Medical Officer of the County Council; (b) Medical Officer of Health of the Borough and Rural Districts of East Retford.

The salary attached to the position will be £960 by £50 to £1,160 per annum, plus cost-of-living bonus. The recommendations in Ministry of Health Circular 12/48 are under consideration. The person appointed will be required to reside within a radius of three miles of the Borough of East Retford. Applicants must have had at least three years' professional experience since qualifying, must be conversant by experience in the duties of a Medical Officer of Health, Medical Officer for Maternity and Child Welfare and School Medical Officer and must possess a Diploma in Public Health. Experience in the examination of Defective children is desirable. As regards his duties under the County Council the Officer will act under the general control and supervision of the County Medical Officer and will be required to perform such duties either as Assistant School Medical Officer or otherwise as may be from time to time prescribed. As regards his duties as Medical Officer of Health of the Borough of East Retford the Officer will also be required to act as Medical Officer for Maternity and Child Welfare. The appointment is subject to superannuation and the selected candidate will be required to pass a medical examination. Forms of application and conditions of the appointment may be obtained from my Office, and applications accompanied by copies of not more than three recent testimonials must be forwarded to reach me not later than March 31, 1948.—K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

SURREY COUNTY COUNCIL
ST. LUKE'S HOSPITAL, Guildford (450 beds)
REGISTRAR (B1)
for X-Ray Therapy and Radium Unit

Applications, including those from suitably qualified practitioners serving with H.M. Forces, are invited for the above appointment. A wide range of experience in the practical treatment of malignant diseases will be afforded. Preference will be given to candidates holding Diploma in Radiotherapy. The unit has approximately 60 beds. The commencing salary will be according to qualifications and experience on the scale £550 by £50 to £700 per annum inclusive, plus full residential emoluments, valued at £150 per annum, or cash in lieu. The appointment is temporary but is subject to the Local Government Superannuation Act, 1937. Suitably qualified R practitioners now holding B2 appointments may apply, but applications from R practitioners now holding B1 appointments cannot be considered unless they have completed a period of service with H.M. Forces, or have been rejected for such service. Information concerning the appointment may be obtained from the Medical Superintendent of the Hospital to whom application by letter should be sent by March 29, 1948.

SURREY COUNTY COUNCIL
EPSOM COUNTY HOSPITAL
Dorking Road, Epsom (450 beds)
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the above appointment. The duties will be mainly in the medical unit but will also include general duties as required by the Medical Superintendent. Candidates must have had previous experience in a house appointment. Commencing salary £250, £350, £400, or £450 per annum, according to qualifications and experience, plus bonus and full residential emoluments. Appointment is for six months, renewable for a second period of six months. Suitably qualified R practitioners now holding B2 posts may apply but applications from R practitioners now holding B1 appointments cannot be considered unless they have completed a period of service with H.M. Forces or have been rejected for such service. Enquiries relating to the appointment should be made to the Medical Superintendent of the Hospital to whom applications by letter should be sent by March 30, 1948.

SURREY COUNTY COUNCIL
BROOKWOOD HOSPITAL
Knaphill, near Woking
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners for the post of House Physician (B2) at the above Mental Hospital. The appointment, which provides facilities for gaining experience in Psychiatry and the modern methods of treatment, is tenable for six months in the first instance, and may be renewed for a further period of six months unless held by an R practitioner. The salary is at the rate of £350, £400 or £450 per annum, according to previous experience, plus cost of living bonus of £59 16s. per annum, with full residential emoluments. Applications to be sent to the Physician-Superintendent, Brookwood Hospital, Knaphill, Woking, Surrey, as soon as possible.

NORFOLK COUNTY COUNCIL
LITTLE PLUMSTEAD HALL AND HECKINGHAM INSTITUTION
(Colony for Mental Defectives)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) from duly registered practitioners. Salary £472 10s. per annum rising by £25 to £572 10s., with emoluments consisting of board, lodging, laundry and attendance, valued for Superannuation purposes at £150, plus appropriate bonus; if holding the D.P.M. an additional £50 per annum will be paid. The appointment is subject to the Asylums and Certified Institutions Officers' Pension Act, 1918. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The selected applicant will reside at the Heckingham Institution (200 beds) and if possessing a motor vehicle will be paid appropriate mileage allowance at the Council's scales. In the event of a married man being appointed, a small house is available at the Institution. Further particulars may be obtained from the Medical Superintendent, Little Plumstead Hall, Norwich. Applications, with copies of recent testimonials, should be sent to H. Oswald Brown, Clerk of the Council, Thorpe Road, Norwich, to arrive not later than Saturday, March 27, 1948.

URBAN DISTRICT OF STANLEY
PERMANENT WHOLE-TIME MEDICAL OFFICER OF HEALTH

Applications are invited from medical practitioners (registered in the *Medical Register* as the holder of a Diploma in Sanitary Science, Public Health or State Medicine) for the above appointment which is subject to the provisions of the Local Government Act 1933 and the Sanitary Officers (outside London) Regulations 1935. The person appointed will be required to devote his whole-time to the duties of the office, will not be permitted to engage in private practice, and must reside within the Urban District. He will also be required to fall in with any subsequent re-arrangements considered necessary as a result of the Durham County Council's proposals under the National Health Service Act 1946. The salary will be at the rate of £1,040 per annum, plus cost-of-living bonus (at present £59 16s. per annum), and a car allowance of £75 per annum. The appointment will be subject to the Local Government Superannuation Act 1937, and to the passing of a medical examination. Applications together with the names of not less than two persons to whom reference may be made, should be sent to the undersigned so as to reach him not later than Monday, March 22, 1948, endorsed "Medical Officer of Health." Canvassing, either directly or indirectly, will disqualify, and candidates should state in their application whether to their knowledge they are related to any member of, or the holder of any senior office under, the Council.—J. J. Shipston, Clerk of the Council, Council Offices, Stanley, Co. Durham.

URBAN DISTRICT COUNCIL OF NEWHAVEN
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified medical practitioners for the above appointment. The Officer appointed will be required to carry out the Medical Inspection of Aliens at the Port, and assist in other Town and Port Health Work, including duties for the County Council in respect of School Medical work. The School Medical Work to occupy two sessions per week. Commencing salary £675 per annum, rising by annual increments of £25 to £875 per annum, plus cost-of-living bonus. Applications with copies of two references to be sent to the undersigned, marked "Assistant M.O.H." and received by me not later than noon on Monday, March 22, 1948.—C. G. Mainwood, Clerk of the Council, Council Offices, Newhaven, Sussex.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £225 per annum, plus full residential emoluments. Applications should be forwarded as soon as possible to C. E. Lowndes, Secretary.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for this appointment, vacant March 27, 1948. Salary is at the rate of £225 per annum with full residential emoluments. Practitioners within three months of qualification may also apply when the appointment will be for six months. Applications should be sent immediately to Arthur L. Bourne, Secretary-Superintendent.

BRADFORD ROYAL INFIRMARY

Applications are invited from registered medical practitioners (male, single), including R practitioners who hold A posts, for the following:—

HOUSE PHYSICIAN (B2)
HOUSE SURGEON (B2)

Six months' appointment commencing May 1, 1948. Salary £200 per annum with full residential emoluments. There are 372 beds and 13 resident officers. Applications should be sent immediately to Hy. Trusson, House Governor and Secretary.

BROCKHALL CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Langho, near Blackpool, Lancashire
SECOND ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (men or women) including R practitioners holding B2 and (if ineligible for H.M Forces) those holding B1 appointments, for a post of Second Assistant Medical Officer (B1). Salary £715 per annum with full residential emoluments valued at £200 per annum, plus the current cost-of-living bonus. £50 per annum is paid in addition to the holder of the D.P.M. or equivalent. A commodious flat (furnished or unfurnished) is available for a married man. Unfurnished, valued at £60 per annum as an emolument, the remainder of the emolument value being paid in cash. If furnished, a reasonable deduction will be made for the use of furniture, etc. The appointment is pensionable and the successful applicant will be required to pass a medical examination. The Institution is modern, fully equipped and accommodates 1,996 patients. Applicants should have had previous mental deficiency or mental hospital experience. Application by letter should be sent to the Medical Superintendent as soon as possible.

BAGULEY EMERGENCY HOSPITAL
RESIDENT MEDICAL OFFICER (B1)
Plastic and Maxillo/Facial Unit

Applications are invited for this vacancy from suitably qualified medical practitioners. Applications may be submitted from R practitioners now holding B2 appointments. Those holding B1 appointments may also apply, provided they are ineligible for the R.A.M.C. Preference will be given to candidates who have had some surgical experience. The post offers facilities for working on and gaining experience in all types of plastic surgery and is full-time in the Emergency Medical Service under the Ministry of Health. It is on a salary range of £522 to £628 per annum payable by the Ministry of Health. Salary is assessed on a non-resident basis and will be at the rate of £100 per annum less if full board and lodging are provided at the expense of the hospital. The appointment is terminable by one month's notice on either side. Applications stating present appointment, if any, giving full details of experience and accompanied by copies of two testimonials, should be addressed to the Surgeon-in-Charge, Plastic Unit, Baguley Emergency Hospital, near Altrincham, Cheshire, and be received not later than March 27, 1948.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)
RESIDENT CLINICAL PATHOLOGIST

Applications are invited for the post of Resident Clinical Pathologist at the Queen Elizabeth Hospital, Birmingham. Previous experience is not essential, but applicants should have held a resident hospital appointment. The appointment is for twelve months, renewable. Salary at the rate of £150 per annum, rising to £200 per annum after six months' service. Further particulars can be obtained from the Director of Clinical Pathological Services. Applications to be sent to the undersigned as soon as possible. Successful candidates if liable for service with H.M. Forces will require the approval of the Central Medical War Committee. —G. Hurford, Secretary, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also incorporating the Queen's Hospital 1840-1941)

Applications are invited from registered medical practitioners for the following posts for the period ending July 31:—

TWO HOUSE SURGEONS (A) to the Ear, Nose and Throat Department.

ONE HOUSE SURGEON (A to the Radio-Therapy Department. Salary in each case at the rate of £70 per annum with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Applications should be sent to the undersigned at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BIRMINGHAM ACCIDENT HOSPITAL AND REHABILITATION CENTRE
Bath Row, Birmingham, 15
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A) to become vacant in March, including practitioners within three months of qualification who are liable to service under the National Service Acts. Appointment will be for six months. Salary is at the rate of £200 per annum with full residential emoluments.—W. George Spencer, Secretary.

BUCHANAN HOSPITAL
St. Leonards-on-Sea (104 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Physician (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for six months. Salary £175 per annum, with board residence and laundry. Applications to be sent to the undersigned.—H. A. Froggatt, House Governor and Secretary.

BECKENHAM HOSPITAL, Beckenham, Kent
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A), including practitioners within three months of qualification who are liable for service under the National Service Acts, to commence duty immediately. If held by an R practitioner appointment will be for a period of six months, otherwise it will be renewable, at the discretion of the hospital, for a further period of six months: Salary is at the rate of £150 per annum, with full residential emoluments. Applications to be forwarded to the undersigned as soon as possible.—Gordon Easto, Secretary.

BRISTOL EYE HOSPITAL
RESIDENT JUNIOR OPHTHALMIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for the post of Resident Junior Ophthalmic House Surgeon (B2), vacant May 1, 1948, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. The salary is at the rate of £150 to £175 per annum, according to experience of applicant, with full residential emoluments. Applications should be sent to the undersigned by March 27.—D. M. Baber, Secretary and House Governor.

BEDFORD COUNTY HOSPITAL (Voluntary)
FOURTH HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the post of Fourth House Surgeon (A), now vacant, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £175 per annum with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BEDFORD COUNTY HOSPITAL (Voluntary)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners F.R.C.S. (male) for the post of Resident Surgical Officer (B1) vacant immediately, including R practitioners who now hold B2 posts. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £500 per annum with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

CALDERSTONES CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Whalley, near Blackburn
ASSISTANT MEDICAL OFFICER (B1)

The Committee of Management invite applications from registered practitioners, who are not liable for service with H.M. Forces, for the appointment of Assistant Medical Officer (B1). The salary scale for a resident post is £473 per annum, rising by annual increments of £25 to £573 per annum, plus residential emoluments valued at £200 per annum, together with bonus at present £29 18s. per annum. For a non-resident post the salary is £673 by £25 to £773 per annum, with bonus at present at the rate of £59 16s. per annum, with an additional £50 to holders of the D.P.M. In the event of the successful applicant being married, an unfurnished flat is available, when the salary will be reduced by £60, the emolument value. Applicants must not be over the age of 41 years unless they have had service with H.M. Forces. The appointment will be subject to the provisions of the Asylums and Certified Institutions (Officers' Pensions) Act, 1918, and the successful candidate will be required to pass a medical examination. The institution is modern, fully equipped, and has a total of 2,378 beds. Suitably qualified R practitioners holding B1 (if ineligible for H.M. Forces), or B2 appointments are invited to apply. Applications, with names and addresses of three referees, should be forwarded to the Medical Superintendent not later than 9 a.m. on Monday, April 5, 1948.

CHESHIRE JOINT SANATORIUM
near Market Drayton, Salop
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Resident Assistant Medical Officer (B1). Commencing salary will be £455 per annum, together with full residential emoluments. The appointment is limited to twelve months. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Form of application and further particulars may be obtained from the Medical Superintendent, Cheshire Joint Sanatorium, near Market Drayton, Salop.

COVENTRY AND WARWICKSHIRE HOSPITAL

Applications are invited for the following positions (male or female):—

HOUSE SURGEON (B2) to the Gynaecological and Obstetric Dept., vacant April 30, 1948.

HOUSE SURGEON (B2) to the General Surgical Depts., vacant April 30, 1948.

HOUSE SURGEON (B2) to the Fracture and Orthopaedic Dept., vacant April 23, 1948.

HOUSE SURGEON (B2) combining Ear, Nose and Throat duties, vacant April 13, 1948.

HOUSE PHYSICIAN (B2), vacant April 1, 1948.

R practitioners who hold A posts are invited to apply. Each appointment is for six months. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

CARDIFF CITY MENTAL HOSPITAL
Whitchurch, Cardiff
PSYCHIATRIST AND DEPUTY PHYSICIAN SUPERINTENDENT

Applications are invited for the post of Psychiatrist and Deputy Physician Superintendent at a salary of £1,200 per annum, with emoluments consisting of house, light, fuel and laundry, valued for the purposes of the A.O.S. Act, 1909, at £200 per annum. The successful candidate will be required to pass a medical examination. Applications will normally be entertained only from candidates possessing wide psychiatric experience, the ability to undertake modern forms of psychiatric and psychotherapeutic treatment and possessing a higher medical qualification and a Diploma in Psychological Medicine or its equivalent. Knowledge of Child Psychiatry will be considered an advantage. The hospital undertakes all modern forms of treatment, includes a Neurosis Centre, a hostel for maladjusted children, staffs out-patient clinics, is associated for teaching purposes with the Welsh National School of Medicine and has in being departments of Neuro-psychiatric Research under a whole-time Director of Research. Forms of application to be obtained from the Physician Superintendent to whom they should be returned by March 30, 1948, with the names of two referees and, if desired, copies of recent testimonials.

CARDIFF CITY MENTAL HOSPITAL
Whitchurch, Cardiff
PSYCHIATRIC HOUSE PHYSICIAN (A)
(two vacancies)

Applications, including those from practitioners within three months of qualification who are liable under the National Service Acts are invited for the post of Psychiatric House Physician (A), (two vacancies). Salary £300 per annum with full residential emoluments. R practitioner appointments limited to six months, otherwise in certain circumstances, may be renewable for a further six months. The successful applicant will have an opportunity of acquiring knowledge in every branch of psychiatry including Psychoses, Neuroses (in-patient and out-patient), Child Psychiatry and methods of Neuro-psychiatric research. Forms of application from the Physician Superintendent to whom they should be returned by March 30, 1948, with the names of two referees and, if desired, copies of recent testimonials.

CHILDREN'S HOSPITAL
King Edward VII Memorial, Birmingham, 16
MEDICAL REGISTRAR (B1)

Applications are invited for the appointment of a Medical Registrar (B1) of this hospital, vacant on June 1, 1948. The appointment is tenable for one year in the first instance, but is renewable for three years. The position is non-resident and carries with it a salary of £500 to £600 per annum according to experience. Demobilised medical officers are invited to apply, and preference will be given to candidates who are members of the Royal College of Physicians and/or hold the Diploma in Child Health. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces may apply. Applications, stating age, nationality, qualifications and experience, together with the names of two referees to whom reference may be made, should be sent to the undersigned by March 31, 1948.—N. R. Winwood, House Governor.

CHILDREN'S HOSPITAL
King Edward VII Memorial, Birmingham, 16
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant on July 1, 1948. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Diploma of F.R.C.S. Suitably qualified R practitioners holding B2 appointments, those holding B1 and ineligible for H.M. Forces and demobilised medical officers are invited to apply for the appointment. The salary is at the rate of £350 per annum with the usual residential emoluments, and the appointment is tenable for one year. Applications should be sent to the undersigned by March 31, 1948.—N. R. Winwood, House Governor.

CARDIFF CITY MENTAL HOSPITAL
Whitchurch, Cardiff
ASSISTANT PSYCHIATRIC PHYSICIAN (B1)

Applications are invited for the post of Assistant Psychiatric Physician (B1). Preference may be given to applicants with some previous experience. Salary on the scale of £472 10s. by £25 to £572 10s. per annum, plus full residential emoluments valued at £150 per annum and cost-of-living bonus. An additional £50 per annum is payable if the applicant holds the D.P.M. No married quarters available in the hospital. R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces may apply. Forms of application to be obtained from the Physician Superintendent, to whom they should be returned by March 30, 1948, with the names of two referees and, if desired, copies of recent testimonials.

CHELMSFORD AND ESSEX HOSPITAL
London Road, Chelmsford (170 beds)
HONORARY PATHOLOGIST

Applications are invited for the post of an Honorary Pathologist. The present acting pathologist is an applicant for the post. Applications to be sent to the undersigned.—R. G. Morrish, House Governor and Secretary.

CENTRAL HOSPITAL, Hatton, Warwick
ASSISTANT PATHOLOGIST

Applications are invited from medical practitioners for the post of Assistant Pathologist in the laboratory at the above-mentioned hospital. The post is in the Emergency Medical Service under the Ministry of Health and is on a salary range of £750 to £1,000 per annum, payable by the Ministry of Health. This salary is assessed on a non-resident basis and will be at the rate of £100 per annum less if full board and lodging are provided at the expense of the hospital. The appointment is terminable by a month's notice on either side. Applications should be addressed to the Medical Superintendent, Central Hospital, Hatton, Warwick, not later than March 27, 1948.

CAMBORNE-REDRUTH MINERS' AND GENERAL HOSPITAL, Redruth, Cornwall
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Physician (A) vacant April 1, 1948. Salary at the rate of £200 per annum, with the usual residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications should be addressed to J. C. Field, Secretary-Superintendent.

COUNTY MENTAL HOSPITAL
Lancaster (3,000 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the post of House Physician (B2) Salary £300 per annum with full residential emoluments. The appointment will be limited to six months but may be extended to twelve months unless held by an R practitioner. Previous general hospital experience desirable. The persons appointed will work under the direction of Senior Psychiatrists.—Apply Medical Superintendent.

COVENTRY AND WARWICKSHIRE HOSPITAL
RESIDENT SURGICAL REGISTRAR (B1)

Applications are invited for the post of Resident Surgical Registrar (B1), vacant about May 20, 1948. Candidates must hold the Diploma F.R.C.S. and should have had previous surgical experience and have held hospital house appointments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months in the first instance; salary at the rate of £500 per annum, with full residential emoluments. Applications should be addressed to the undersigned.—S. Cecil Hill, House Governor and Secretary.

COUNTY INFIRMARY, Carmarthen
VISITING ANAESTHETIST

Applications are invited for the post of Visiting Anaesthetist from registered medical practitioners holding the Diploma in Anaesthetics. Remuneration will be at the rate of £5 5s. per session and the successful candidate will be expected to reside in Carmarthen or the immediate neighbourhood. Further details of the appointment can be obtained from the undersigned. Applications in writing must be received not later than March 31, 1948.—A. W. Youngs, Chief Administrative Officer.

CHELTENHAM GENERAL EYE AND CHILDREN'S HOSPITAL (215 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A). R practitioners within three months of qualification and liable for service under the National Service Acts may apply, in which case the appointment will be for six months, otherwise renewable. Salary £175 per annum, with full residential emoluments. Applications should be sent to S. T. Davis, Secretary-Superintendent.

CORBETT HOSPITAL, Stourbridge, Worcestershire (106 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for the appointment of a House Surgeon (B2) to become vacant shortly, including R practitioners who now hold A posts. The appointment will be for a period of six months. Salary will be at the rate of £200 per annum, with full residential emoluments.—W. G. H. Weston, House Governor and Secretary.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, London, E.7 (138 beds)
HONORARY ASSISTANT PHYSICIAN

The Board of Governors invite applications for the appointment of Honorary Assistant Physician. Candidates must hold a Degree in Medicine of a University of the British Empire and in addition be a Member of the Royal College of Physicians of London. Applications should be forwarded to the undersigned as soon as possible, and should include the names of two referees. Candidates will be expected to send a copy of their application to, and call upon, 15 members of the Honorary Staff, a list of whom will be forwarded by the undersigned, on receipt of the original application.—Reginald Perry, Secretary-Superintendent.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

DEVONSHIRE ROYAL HOSPITAL
Buxton, Derbyshire
HOUSE PHYSICIAN (A)

Applications are invited from duly qualified and registered medical practitioners for the post of House Physician (A). Salary £200 per annum for the first six months and £250 per annum thereafter, if reappointed. This post offers excellent opportunities to any medical officer desiring to prepare a thesis or wishing to undertake special work. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months. Applications, and the names of three people to whom reference may be made, should be submitted without delay to A. Preston-Turner, General Superintendent and Secretary.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification, who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the above appointment, vacant March 28, or earlier by arrangement if necessary. Suitably qualified R practitioners may apply. Salary at the rate of £150 per annum, including full residential emoluments. The appointment will be for a period of six months.—G. W. Beckwith, Secretary-Superintendent.

EAST SUFFOLK AND IPSWICH HOSPITAL
(369 beds)
RESIDENT ANAESTHETIST AND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners liable to service under the National Service Acts and within three months of qualification for the post of Resident Anaesthetist and Casualty Officer (A). The casualty duties are from 9 a.m. to 1 p.m. only. The post is vacant March 21, 1948. Appointment for six months. Salary at rate of £250 per annum with full residential emoluments. —Arthur Griffiths, Secretary, The Hospital, Ipswich.

GENERAL HOSPITAL, Nottingham
(589 beds, including "The Cedars" Branch Hospital)
RESIDENT ORTHOPAEDIC AND FRACTURE OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic and Fracture Officer (B1). Applicants should have had previous experience in Fracture and Orthopaedic work. The Orthopaedic Department serves a large industrial district and the post offers exceptional experience in traumatic surgery. The appointment will be for a period of one year in the first instance. Duties to commence on April 18. Salary at the rate of £400 per annum, with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and rejected by the R.A.M.C., may apply. Applications to be forwarded as soon as possible to Henry M. Stanley, House Governor and Secretary.

GENERAL HOSPITAL, Nottingham
(589 beds, including "The Cedars" Branch Hospital)
HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (B1), duties to commence on April 12, 1948. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for a period of twelve months. The salary is at the rate of £400 per annum with full residential emoluments. Applications to be sent to Henry M. Stanley, House Governor and Secretary.

GRANTHAM AND KESTEVEN GENERAL HOSPITAL, Manthorpe Road, Grantham, Lincs.
(125 beds—Medical, Surgical and Maternity; busy Out-Patient Departments)
SENIOR RESIDENT HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident House Surgeon (B1), becoming vacant on May 1, 1948. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Fellowship of one of the Royal Colleges or who are reading for a Fellowship. Suitably qualified R practitioners holding B2 appointments or B1 appointment if rejected for H.M. Forces are invited to apply. Salary will be at the rate of £450 per annum, plus furnished apartments, board and laundry at the hospital. Applications should be sent to the undersigned.—John E. Ray, House Governor and Sec.

GUY'S HOSPITAL
(Ophthalmological Department)
CHIEF CLINICAL ASSISTANT AND REGISTRAR (two vacancies)

Applications are invited for the post of Chief Clinical Assistant and Registrar (2 vacancies). Duties to commence immediately. Appointment will be until September 30, 1948, in the first instance. Honorarium to be at the rate of £275 per annum, for attendance on two sessions per week. Forms of application are obtainable from the Dean, Guy's Hospital Medical School, London Bridge, S.E.1, and should be forwarded with the names of three referees at once.

GREAT YARMOUTH AND GORLESTON HOSPITALS
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) (male), now vacant, including practitioners within three months of qualifications, who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary £250 per annum, with full residential emoluments. Applications should be sent to John S. Egerton, Secretary-Superintendent, immediately.

GUEST HOSPITAL, Dudley (153 beds)

Applications are invited from registered medical practitioners, including R practitioners who hold A appointments, for the following resident appointments. Full residential emoluments apply to both posts which are tenable for six months:—

HOUSE SURGEON (B2), £200 per annum, now vacant.

RESIDENT ANAESTHETIST (B2), £200 per annum, now vacant. Successful candidate may be called upon to undertake other medical duties.—H. Raymond Hurst, House Governor and Secretary.

GUEST HOSPITAL, Dudley (153 beds)
TWO HONORARY SURGEONS

Applications are invited for the posts of two Honorary Surgeons to the above hospital. Candidates must be Fellows of the Royal College of Surgeons and should be engaged exclusively in consultant practice. Applications, together with certificate of registration, to be sent to the undersigned not later than April 13, 1948.—H. Raymond Hurst, House Governor and Secretary.

GLOUCESTERSHIRE ROYAL INFIRMARY
RESIDENT ANAESTHETIST (A)

Applications are invited from registered medical practitioners (male or female), including R practitioners who hold A posts, for the post of Resident Anaesthetist/Assistant Casualty Officer (A) which will become vacant on April 1. The salary will be at the rate of £200 per annum with full residential emoluments and the appointment is for six months in the first instance. Applications should be sent to C. J. Adams, House Governor and Secretary, Gloucestershire Royal Infirmary, as soon as possible.

GENERAL INFIRMARY AT LEEDS
SENIOR RADIOLOGIST

Applications are invited for the post of Senior Radiologist in the Diagnostic *X*-ray Department. Salary not less than £1,000 per annum. Candidates must be duly registered medical practitioners, special experience in radiological work and possession of the D.M.R. is essential. Applications to be sent to the undersigned not later than March 20, 1948. —S. Clayton Fryers, House Governor and Secretary.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)

RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty on April 1, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150 with full residential emoluments.

HOUSE SURGEON (A) required to commence duty on March 18, 1948 Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

HULL ROYAL INFIRMARY

Applications are invited for the following posts (male):

FIRST HOUSE SURGEON (B2), vacant now.
HOUSE PHYSICIAN (B2) at Sutton Branch.
HOUSE SURGEON (B2), Sutton Branch.

Both posts vacant April Suitably qualified R practitioners who now hold A posts may apply.

CASUALTY OFFICER (A), vacant April. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.

Salary for each of the above posts £200 per annum, with full residential emoluments The appointments will be for six months in the first instance (limited to six months if R practitioners are appointed), but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
CASUALTY SURGICAL OFFICER (B2)
at the Out-patient Dept.

Applications are invited from registered medical practitioners (male and female), including R practitioners who hold A posts, for the resident post of Casualty Surgical Officer (B2) at the Out-patient Department, Bayham Street, Camden Town, N.W.1, vacant now, tenable for six months. Salary £200 per annum with board, lodging and laundry. Applications on he prescribed form, with copies of three recent testimonials, to be returned to the undersigned at once.—Kenneth A. F. Miles, House Governor.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
HOUSE SURGEON (B2)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who hold A posts, for the resident posts of House Surgeon (B2) and House Physician (B2), vacant June 1, tenable for six months. Salary £133 per annum, with board, lodging and laundry. Application on the prescribed form, with copies of three recent testimonials, to be returned by April 6. —Kenneth A. F. Miles, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
RESIDENT MEDICAL REGISTRAR AND PATHOLOGIST (B1)

There will be a vacancy for a Resident Medical Registrar and Pathologist (B1) on une 1, 1948. The appointment, which is renewable, is tenable in the first instance for twelve months; salary £300, rising to £350 per annum after the first year. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Full particulars, with form of application, which must be returned not later than Monday, April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
FIRST ASSISTANT ANAESTHETIST (Part-time)

There is a vacancy for a First Assistant Anaesthetist (Part-time). The appointment, which is renewable, is tenable in the first instance for twelve months; salary £300 per annum. Applicants must be registered medical practitioners, practising solely as Anaesthetists and must hold the Diploma of Anaesthetics. Selected applicants will be required to call upon members of the Visiting Medical Staff and to furnish them with copies of their applications, supported by three testimonials given specially for the purpose. Further particulars and form of application, which must be returned not later than April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
HOUSE PHYSICIAN (B2)
HOUSE SURGEON (B2)

There will be vacancies for a House Physician (B2) and a House Surgeon (B2) on May 15, 1948. The appointments are tenable for six months at a salary of £100 per annum, with full residential emoluments. R practitioners now holding A posts, and practitioners, of either sex, ineligible for military service or rejected by the R.A.M.C. may apply. Further particulars and form of applicaton, which must be returned not later than April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HINCKLEY AND DISTRICT HOSPITAL
Leicestershire
RESIDENT HOUSE SURGEON AND CASUALTY OFFICER (B2)

There is a vacancy for Resident House Surgeon and Casualty Officer (B2), male or female. Salary £300 per annum, full residential emoluments. R practitioners who hold A appointments may apply when the appointment will be for six months, otherwise may be extended. Applications to Secretary-Superintendent, with copies of three recent testimonials.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), now vacant. Salary £175 per annum, plus residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications to E. Barber, Secretary.

KENT AND SUSSEX HOSPITAL
Tunbridge Wells (350 beds)
RESIDENT HOUSE SURGEON AND CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners (male or female), including R practitioners who hold A posts, for the following appointment, Resident House Surgeon and Casualty Officer (B2), vacant March 29, 1948. If held by an R practitioner the appointment will be limited to six months. This post is mainly orthopaedic and an excellent one for working for the primary or final F.R.C.S Salary £200 per annum with full residential emoluments.—E. A. Wagstaff, Superintendent-Secretary.

KENT AND SUSSEX HOSPITAL
Tunbridge Wells (350 beds)
RESIDENT HOUSE PHYSICIAN (B2)

Applications are invited as soon as possible from registered medical practitioners for the appointment of Resident House Physician (B2). Salary at the rate of £200 per annum with full residential emoluments. R practitioners who now hold A posts may apply, when appointment will be limited to six months, otherwise it may be for a period of six to twelve months.—E. A. Wagstaff, Superintendent-Secretary.

HALIFAX GENERAL HOSPITAL (450 beds)
PAEDIATRIC HOUSE PHYSICIAN (A)

Applications are invited for the post of Paediatric House Physician (A), including practitioners within three months of qualification who are liable under the National Service Acts. Six months' appointment, £150 per annum. Resident appointment. Applications should be made as soon as possible to the Medical Superintendent.

INVERNESS DISTRICT MENTAL HOSPITAL
JUNIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment as Junior Assistant Medical Officer (B1). Salary at the rate of £490 per annum, with board, lodging and laundry. Suitably qualified R practitioners holding B2 and those holding B1 appointments (if ineligible for H.M. Forces) are invited to apply. The appointment is subject to the Asylums Officers' Superannuation Act, 1909. Applications to be sent to the Medical Superintendent.

KENT COUNTY MENTAL HOSPITAL
Chartham, near Canterbury
Whole-Time Assistant MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Whole-time Assistant Medical Officer (B1) at the above hospital. Salary £472 10s., rising by £25 to £572 10s. per annum (plus cost-of-living war addition) and, for a single man, full residential emoluments valued at £209 per annum. Temporary accommodation is available for a married man when a cash payment of £209 will be made in lieu of the emoluments and a rental of £50 per annum will be charged for an unfurnished flat. An additional £50 per annum will be paid to holders of the D.P.M. Laboratory experience though not essential will be an advantage. The appointment will be subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Applications, accompanied by copies of three recent testimonials, must be sent to the Medical Superintendent by March 20, 1948.

KING EDWARD MEMORIAL HOSPITAL, Ealing
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners including practitioners within three months of qualification and liable under the National Service Acts for the appointment of House Surgeon (A) to the Second Surgeon and Ear, Nose and Throat Surgeons, to become vacant on April 17, 1948. Six months' appointment. Salary at the rate of £175 per annum, with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned by April 5, 1948.—R. A. Mickelwright, House Governor.

LOWESTOFT AND NORTH SUFFOLK HOSPITAL (108 beds)
TWO HOUSE SURGEONS (A)
(one Senior and the other Junior)

Applications are invited immediately from registered medical practitioners (male or female) for the appointment of two House Surgeons (A)—one Senior and the other Junior—to fill vacancies on April 1 and May 1 next respectively. Salary for the Senior post at the rate of £250 per annum, and for the Junior post at the rate of £200 per annum, and in each case with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications to be sent to the Honorary Medical Superintendent.

LEEDS PUBLIC DISPENSARY AND HOSPITAL
North Street, Leeds, 2

Applications are invited from registered medical practitioners (male or female) for the following posts, including practitioners within three months of qualification who are liable for service under the National Service Acts. Appointments for six months. Salary in each case £175 per annum with full residential emoluments.

HOUSE PHYSICIAN (A), vacant March 30.
HOUSE SURGEON (A) to E.N.T. and Eye Dept., vacant March 30.
CASUALTY OFFICER (A), vacant April 10.

Applications to be addressed to Charles F. J. Maury, Secretary and Superintendent.

LONDON LOCK HOSPITAL
SECOND FULL-TIME MEDICAL OFFICER

Applications are invited from registered medical practitioners (male) for a Second Full-Time Medical Officer (six months), to commence June 1. Salary at the rate of not less than £350 per annum, non-resident. Applications must be in the hands of the undersigned (from whom further information can be obtained) not later than March 31.—J. F. Morton, Secretary, 91, Dean Street, W.1.

LIVERPOOL AND DISTRICT HOSPITAL FOR DISEASES OF THE HEART
34, Oxford Street, Liverpool, 7
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Physician (A), to commence immediately, including practitioners within three months of qualification who are liable for service under the National Service Acts. Appointment will be for a period of six months. Salary at the rate of £100 per annum, with full residential emoluments. Facilities for M.D. Thesis. Applications to the Secretary.

LONDON CHEST HOSPITAL, E.2
HOUSE PHYSICIAN (B2) (Male)

House Physician (B2) (male) required April 1, 1948. Salary at the rate of £150 per annum, residence and laundry provided. R practitioners holding A posts may apply. Six months' appointment. Applications should be sent by March 24, 1948, to the Secretary.

LONDON CHEST HOSPITAL, E.2
HOUSE PHYSICIAN (B2) (Male)
for the Country Branch, Arlesey, Beds

House Physician (B2) male required, April 1, 1948, for the Country Branch, Arlesey, Beds. Salary at the rate of £150 per annum, residence and laundry provided. R practitioners holding A posts may apply. Six months' appointment. Applications should be sent by March 24, 1948, to the Secretary.

MANSFIELD AND DISTRICT GENERAL HOSPITAL (245 beds)
CHIEF ASSISTANT
to the Accident and Orthopaedic Services

Applications are invited for the post of Chief Assistant to the Accident and Orthopaedic Services. 52 beds are allocated to this work and there are numerous Out-patient Clinics and a special Rehabilitation Centre. The appointment will be full-time non-resident and private practice will not be permitted. Commencing salary will be £1,000 per annum and the appointment in the first instance will be for the period up to the establishment of the National Health Service in accordance with the terms of the Ministry of Health Circular 202/46. Candidates must be Fellows of a Royal College of Surgeons and preference will be given to those with previous experience in Traumatic as well as Orthopaedic Surgery. Applications, giving names of three referees, should be forwarded as soon as possible to the undersigned.—A. Ashworth, House Governor and Secretary.

MEANWOOD PARK COLONY, Leeds
RESIDENT JUNIOR ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) including R practitioners holding B2 posts and (if ineligible for H.M. Forces) those holding B1 appointments, for the post of Resident Junior Assistant Medical Officer (B1). Salary £472 10s. by £25 to £572 10s. plus consolidated addition of £30 per annum with full residential emoluments valued at £200 per annum. There is no accommodation for a married man. The appointment will be subject to the provisions of the Asylums and Certified Institutions (Officers' Pension) Act, 1918, and conditional on the candidate passing a medical examination. The appointment will be terminable by one month's notice on either side. The appointment offers experience of Mental Deficiency work of all types. Application forms may be obtained from the Medical Superintendent, Meanwood Park Colony, Leeds, to whom they should be returned as soon as possible.

MONMOUTHSHIRE MENTAL HOSPITAL
Abergavenny
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1) from candidates with previous experience of Mental Hospital work. Salary £555 by £25 to £655 per annum with full residential emoluments valued at £150 per annum, plus £50 for D.P.M. (No married quarters available). Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M Forces. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act 1909. Applications, accompanied by names and addresses for reference purposes, to be sent to the Medical Superintendent.

MANCHESTER ROYAL INFIRMARY
RESIDENT ANAESTHETIST (B2)

The Board of Management invite applications from registered medical practitioners (male and female) for the above post, now vacant. The appointment is for six months at a salary of £150 per annum, with the usual residential emoluments. R practitioners holding A posts may apply. Applications should be sent to the Chairman of the Medical Board not later than March 17, 1948—F. I. Cable, General Superintendent and Secretary.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required as soon as possible for busy department. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

MERTHYR GENERAL HOSPITAL (120 beds)
RESIDENT SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a Resident Second House Surgeon (A), male, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for a period of six months. Salary at the rate of £200 per annum, with board and lodging. Applications to the Secretary, Merthyr General Hospital, Merthyr Tydfil.

MOTHERS' HOSPITAL OF THE SALVATION ARMY, Clapton, E.5 (Maternity—107 beds)
SENIOR RESIDENT MEDICAL OFFICER (B1)

Vacant May 1, 1948. The appointment is for six months and recognized for M.R.C.O.G. Salary £220 per annum with board, residence and laundry. Women practitioners now holding B2 posts may apply. Applications, with testimonials, to be sent to the Secretary-Superintendent as soon as possible.

MOTHERS' HOSPITAL OF THE SALVATION ARMY, Clapton, E.5 (Maternity—107 beds)
JUNIOR RESIDENT MEDICAL OFFICER (B2)
(Female)

Vacant April 24, 1948. Salary £150 per annum, board, residence and laundry. Appointment for six months and recognized for M.R.C.O.G. Applications as soon as possible to Secretary-Superintendent.

NATIONAL HOSPITAL FOR NERVOUS DISEASES, Queen Square, London, W.C.1
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). The appointment will be for one year in the first instance, the successful applicant being eligible for reappointment for a maximum period of three years. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Candidates should have a higher surgical qualification and should have experience in neuro-surgery. Applications are invited from demobilised members of H.M. Forces. The proportion of salary payable by the hospital will be at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned not later than March 31, 1948.—H. Ewart Mitchell, Secretary.

NOTTINGHAM CITY HOSPITAL
Hucknall Road, Nottingham
Resident ASSISTANT OBSTETRIC AND GYNAECOLOGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident Assistant Obstetric and Gynaecological Officer (B1). Applicants should have held previous house appointments and have had experience in obstetrics and gynaecology. The post is approved for the M.R.C.O.G. Salary £455 to £555 per annum, plus half cost-of-living bonus with full residential emoluments. The recommendations in Ministry of Health circular 12/48 are under consideration. The appointment is for twelve months in the first instance. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces, may apply. Applications to be sent immediately to The Medical Superintendent, City Hospital, Hucknall Road Nottingham.—J. E. Richards, Town Clerk, The Guildhall, Nottingham.

NORTH CAMBRIDGESHIRE HOSPITAL, Wisbech (68 beds)
Affiliated to Addenbrooke's Hospital, Cambridge
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of House Surgeon (A), vacant now. Appointment will be for a period of six months. Salary £200—£250 with full residential emoluments. Applications should be sent to the Secretary.

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke-on-Trent (475 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of Resident Anaesthetist (B2), to become vacant shortly, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. The salary is at the rate of £250 per annum with full residential emoluments. Applications to the House Governor.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, London, N.W.1
HONORARY ASSISTANT DIAGNOSTIC RADIOLOGIST

The Board of Management invite applications for the office of Honorary Assistant Diagnostic Radiologist. Candidates are required to be medical practitioners engaged solely in consulting practice, and to possess a higher Diploma in Medical Radiology. Candidates will be expected to do two or three attendances weekly. Applications, giving full details, with names of three referees, must reach the Secretary and House Governor not later than first post Monday, March 31, 1948.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

NORFOLK AND NORWICH HOSPITAL
Norwich
HOUSE SURGEON (B2)
to Ear, Nose and Throat, and Ophthalmic Depts.

Applications are invited for the post of House Surgeon (B2) to Ear, Nose and Throat, and Ophthalmic Departments. Salary £250 per annum with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications should be sent as soon as possible to F. L. Gatfield, House Governor and Secretary.

OXFORD EYE HOSPITAL
(In association with the Royal Berkshire Hospital, Reading)
OPHTHALMIC HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, with some previous experience, for the appointment of Ophthalmic House Surgeon (B2), vacant April 1. The appointment is for six months at the Oxford Eye Hospital, followed by six months at the Royal Berkshire Hospital, and the successful candidate will then be eligible for appointment as Senior Resident Officer (B1) at the Oxford Eye Hospital for six months. Salary commences at £200 per annum with full residential emoluments. Applications should be sent to C. F. Share, Secretary.

OLDHAM ROYAL INFIRMARY
ASSISTANT Resident SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B2), becoming vacant on March 31. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £250 per annum with board, residence and laundry. To R practitioners, the appointment will be limited to six months. Applications should be sent to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
HOUSE SURGEON
to the Orthopaedic, Fracture and Traumatic Dept. and SENIOR CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of House Surgeon to the Orthopaedic, Fracture and Traumatic Department and Senior Casualty Officer (B1), which becomes vacant on April 13. Applicants should have held house appointments and had surgical experience. Salary £350 per annum, plus full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, are invited to apply. Applications should reach the undersigned, as soon as possible.—J. C. Burdett, Director and House Governor.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of Casualty Officer (A), which becomes vacant on April 26. The appointment will be for a period of six months. The salary is at the rate of £120 per annum with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. C. Burdett, Director and House Governor.

PRINCE OF WALES'S HOSPITAL, Plymouth
CASUALTY OFFICER (A)
(Ear, Nose and Throat)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (A), with Ear, Nose and Throat, vacant March 17, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL, Plymouth
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male and female, preferably with the D.A., for the appointment of Resident Anaesthetist (B2), including R practitioners who now hold A posts, vacant April 13. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum, with full residential emoluments. Applications to reach the undersigned as soon as possible.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
ASSISTANT PATHOLOGIST (Whole-time)

Applications are invited for the post of Assistant Pathologist (whole-time) at the above hospital. Salary £1,200 per annum. Candidates should have extensive experience in all branches of clinical pathology. Applications stating nationality, age, qualifications and experience, with the names of two referees, should reach the undersigned by April 3, 1948.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
RESIDENT ASSISTANT PATHOLOGIST (B1)

Applications are invited for the post of Resident Assistant Pathologist (B1) at the above hospital. Salary £350 per annum with full residential emoluments. Candidates should have held the post of House Physician in a major hospital. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Previous laboratory training not essential, but the post will provide excellent training for anyone considering making clinical pathology his career. Applications stating age, qualifications, and experience with the names of two referees, should reach the undersigned by April 3, 1948.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PARK PREWETT MENTAL HOSPITAL
Basingstoke
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners who wish to specialize in psychiatry, for the post of Assistant Medical Officer (B1). Suitably qualified R practitioners holding B2 appointments and also those in B1 posts and ineligible for H.M. Forces are invited to apply. Salary including bonus £484 18s. per annum by £32 10s. to £614 18s., plus full residential emoluments valued at £224 18s. In addition £50 per annum for D.P.M. The recommendations in Ministry of Health circular 12/48 are under consideration. Applications to be forwarded to Medical Superintendent.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
HOUSE SURGEON (B2)
to the Urological Department

Applications are invited from registered medical practitioners for the post of House Surgeon (B2) to the Urological Department, including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £250 per annum with the usual residential allowances. Application should be made as soon as possible to the Superintendent, Royal Infirmary, Preston

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
HOUSE SURGEON (B2) (Eye and E.N.T. Depts.)

Applications are invited from suitably qualified medical practitioners for the appointment of House Surgeon (B2) to the Eye and E.N.T. Department. Duties under Specialist Surgeons. Salary at the rate of £250 per annum, plus usual residential emoluments. The post is recognized for the D.O.M.S., and D.L.O. examinations. R practitioners holding A appointments may apply. Six months' appointment. Applications should be sent to the Superintendent, Royal Infirmary, Preston.

PADDINGTON GREEN CHILDREN'S HOSPITAL (Inc.), London, W.2
HONORARY ASSISTANT SURGEON

Applications are invited for the appointment of Honorary Assistant Surgeon. Candidates must be Fellows of the Royal College of Surgeons, England. Applications (4 copies) stating the names of three referees, should reach the undersigned not later than April 3, 1948.—E. W. Stockwell, Secretary-Superintendent.

PAPWORTH VILLAGE SETTLEMENT
Cambridge
REGISTRAR to the General Thoracic Surgical Unit

Applications are invited for the post of Registrar to the General Thoracic Surgical Unit. The appointment is for six months, with the possibility of renewal. Salary £400 to £600 per annum according to experience. Enquiries should be addressed to the Secretary, Papworth Hall, Cambridge.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, E.2, Shadwell, E.1, Banstead Wood, Surrey
EAR, NOSE AND THROAT REGISTRAR

Applications are invited for the post of Ear, Nose and Throat Registrar (half-time). Candidates must have had experience in this speciality. Appointment will be for one year in first instance. Salary £350 per annum. Applications should reach the undersigned not later than April 5, 1948.—Charles H. Bessell, General Secretary, Hackney Road, E.2.

ROYAL MANCHESTER CHILDREN'S HOSPITAL
Out-Patients' Department, Gartside Street, Manchester
FULL-TIME SENIOR MEDICAL OFFICER (B1)
(Non-resident)

Applications are invited for the post of full-time Senior Medical Officer (non-resident) (B1), vacant on April 1, 1948, including R practitioners who hold B2 posts. Applications from practitioners who now hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for one year in the first instance and may be extended for further periods. Salary £400 to £600 per annum according to qualifications and experience. The post may include some teaching, so that candidates with higher degrees or diplomas will have preference. Applications to be sent to the undersigned at the Hospital, Pendlebury, near Manchester, not later than March 19, 1948.—H. Heardman, General Superintendent and Secretary.

ROYAL FREE HOSPITAL
Gray's Inn Road, W.C.1
PHYSICIAN IN TRAINING
to the Unit of Rheumatology

A Physician-in-Training is to be appointed to the Unit of Rheumatology, for a period of one year. Candidates should be graduates of a recognized University and hold the Diploma of M.R.C.P. Applications are also invited from ex-Service practitioners. Duties will be in connexion with the In-patient Unit (40 beds) at Lawn Road, Hampstead, and the Arthritis Clinic at the main hospital. Salary will depend on experience but will not be less than £500 per annum. The successful applicant will not be debarred from general Medicine but will be expected to make a study of the Medical Locomotor Disorders his career. Applications, with photograph and names of two referees to whom reference may be made, should be sent by March 17 to R. G. Heppell, House Governor.

ROYAL FREE HOSPITAL
Gray's Inn Road, London, W.C.1
RESIDENT CASUALTY OFFICER (B2)

Applications are invited from either men or women medical practitioners of not more than ten years since qualification for the post of Resident Casualty Officer (B2) for a period of six months Duties to commence April 1, 1948. Salary at the rate of £200 per annum. Suitably qualified practitioners holding A appointments are invited to apply Applications and a photograph should be sent to the undersigned on or before March 19, 1948.—R. G. Heppell, House Governor.

ROYAL SURREY COUNTY HOSPITAL
Guildford (228 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable to service under the National Service Acts, for the post of House Surgeon to become vacant on March 31, 1948. The appointment is recognized in connexion with the F.R.C.S. examination. Salary at the rate of £225 per annum with full residential emoluments, an additional £25 per annum will be paid if the successful applicant has previously held a house appointment since qualification but such applicants must not be liable for National Service. Applications should reach the Secretary-Superintendent as soon as possible.

ROYAL GWENT HOSPITAL
Newport, Mon. (255 beds)
HOUSE SURGEON (B2 or A)
Fracture and Orthopaedic Department

Applications are invited from registered medical practitioners (male or female), including R practitioners holding A posts and practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of House Surgeon (B2 or A) to the Fracture and Orthopaedic Department, vacant now. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £210 (B2) or £175 (A) per annum, with residential emoluments. Applications to T. A. Jones, Secretary-Superintendent.

ROYAL EYE AND EAR HOSPITAL, Bradford
(Voluntary Hospital, 102 beds)
RESIDENT AURAL HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male, including R practitioners who hold A appointments, for the appointment of Resident Aural House Surgeon (B2) to take up duty as soon as possible. If held by an R practitioner, the appointment will be for a period of six months. This post offers exceptional opportunity for training in all branches of E.N.T. work, and the hospital is recognized by the R.C.S. for the D.L.O. Salary is at the rate of £220 per annum, with full residential emoluments. Applications should be sent in immediately to Ernest S. Heap, Secretary Superintendent.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL

Applications are invited from registered medical practitioners, male or female, for the following appointments in the Department of Neuro-Surgery:

(a) **CLINICAL ASSISTANT.** Salary rate £350 per annum resident.

(b) **FIRST ASSISTANT.** Salary rate £550 per annum resident.

The appointments, in the first instance, are for twelve months and renewable for a further twelve months. Applications to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury
HOUSE SURGEON (A)

Applications are invited from male registered medical practitioners for the post of House Surgeon (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. Appointment will be for six months and duties include Casualty, E.N.T. and Orthopaedic work. Salary at the rate of £200 per annum, together with full residential emoluments. Post now vacant. Applications should be sent immediately to the Secretary-Superintendent.

ROYAL HOSPITAL, Wolverhampton
(500 beds)
(Incorporated under Royal Charter)
(General Branch 310 beds)

Applications are invited from registered medical practitioners for the following appointments:

SENIOR PATHOLOGIST at a salary of £1,100 to £1,400 per annum according to experience, resident or non-resident £100 in lieu of subsistence if non-resident.

JUNIOR ASSISTANT PATHOLOGIST, Resident at a commencing salary of £650 to £1,000 per annum according to experience.

The laboratory is recognized for the purpose of the D.C.P. of the University of London. Applications, accompanied by copies of two recent testimonials, must be received on or before March 31, and sent to W. Cockburn, House Governor.

ROYAL HOSPITAL, Wolverhampton (500 beds)
(Incorporated under Royal Charter)
HONORARY RADIOTHERAPIST

The Board of Management invites applications for the post of Honorary Radiotherapist at the Royal Hospital, Wolverhampton. Applicants must have had special experience in Radiotherapy, and confine themselves to Consulting Practice. The remuneration of this post will be a subject for arrangement between the successful applicant and the Board of Management, and will be based on the experience of the successful candidate, but will not be less than £1,000 per annum. The Royal Hospital, Wolverhampton, is an associated Hospital of the University of Birmingham. Applications must be received on or before April 1, 1948, and should be sent to W. Cockburn, House Governor.

ROTHERHAM HOSPITAL
Doncaster Gate, Rotherham
(General Voluntary Hospital)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the post of Resident Surgical Officer (B1), vacant on March 20, 1948. This is the senior resident appointment of the hospital, and preference will be given to candidates holding a higher qualification in surgery or studying to obtain one. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary according to qualifications and experience, but not less than £400 per annum to commence, with full residential emoluments. Applications to be sent forthwith to the Secretary-Superintendent.

ROTHERHAM HOSPITAL
Doncaster Gate, Rotherham
CONSULTANT GYNAECOLOGIST

Applications are invited from registered medical practitioners for the above post. Applicants must have the qualification M.R.C.O.G., and a higher qualification in surgery will be considered an advantage. Salary £1,000 per annum. The person appointed will be allowed to engage in private consultant practice. Applications to be sent as soon as possible to the Secretary-Superintendent.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), now vacant. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months; otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A. Stanley Brunt, General Superintendent and Secretary.

ROYAL NATIONAL ORTHOPAEDIC HOSPITAL
Stanmore, Middlesex
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2). Duties to commence April 1. Salary at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to be addressed to the House Governor at 234, Great Portland Street, London, W.1, by March 17.

ROYAL PORTSMOUTH HOSPITAL, Portsmouth
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male, including R practitioners holding A posts, for appointment as House Surgeon (B2). Salary at rate of £225 per annum with full residential emoluments. Six months' appointment. Applications to be sent immediately to G. A. Hughes, Secretary.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM
(Whole-time Temporary Assistant Medical Officer of Health (male).)

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home)

By Order of the Council,
CHARLES HILL,
March 9, 1948. Secretary.

ROYAL BERKSHIRE HOSPITAL, Reading
HONORARY ASSISTANT OPHTHALMIC SURGEON

The Board of Management invite applications for the appointment of Honorary Assistant Ophthalmic Surgeon. Candidates must be Fellows of one of the Royal Colleges of Surgeons of the British Empire or Surgical Graduates of one of the Universities of the British Empire and their names entered on the *Medical Register*. The elected candidate will be required to reside in or near Reading. Canvassing on the part of a candidate or on his behalf will disqualify him. Candidates are required to provide six copies of their applications and testimonials, which must be addressed to the House Governor, and reach him not later than 9 a.m. on Saturday, March 27, 1948. No testimonials will be required from candidates who are members of the existing medical staff. The election will be held on Tuesday, April 6, 1948.—H. E. Ryan, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Anaesthetist (B2), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. R practitioners who now hold A posts may apply when the appointment will be limited to six months. Applications, stating present post, should be sent to H. E. Ryan, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A), post now vacant. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
HOUSE SURGEON (A) to the Accident Dept.

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A) to the Accident Department, vacant immediately. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL LIVERPOOL CHILDREN'S HOSPITAL
RESIDENT SURGICAL OFFICER (A)
at the Heswall (Country) Branch

Applications are invited for the above appointment at the Heswall (Country) Branch of the Hospital (242 beds), salary £120 to £180 per annum according to experience, with full residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. The appointment will be for six months. Applications accompanied by copies of three recent testimonials and names of referees should be sent immediately to the Secretary, The Royal Liverpool Children's Hospital, Myrtle Street, Liverpool 7.

ROYAL WEST SUSSEX HOSPITAL, Chichester
HONORARY ANAESTHETIST

The Board of Management invite applications for the appointment of Honorary Anaesthetist to the hospital from practitioners holding the Diploma in Anaesthetics and willing to share in the emergency anaesthetic work of the hospital. Applications giving the names of three referees should be received by the Chairman of the Board of Management not later than April 15, 1948.

ROYAL HOSPITAL, Wolverhampton (500 beds)
(Incorporated under Royal Charter)
General Branch (310 beds)
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners (male) for the appointment of Casualty Officer (B2), vacant now, including R practitioners who hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum with full residential emoluments.—W. Cockburn, House Governor.

SWANSEA GENERAL AND EYE HOSPITAL

Applications are invited from registered medical practitioners, male or female, for the undermentioned appointments, now vacant.

(a) **HOUSE SURGEON (A)**
(b) **HOUSE SURGEON (A)**

Including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by practitioners who are liable under these Acts, the appointments will be for a period of six months. Salary for each appointment at the rate of £200 per annum with full residential emoluments. Applications should be forwarded to the undersigned.—O. C. Howells, Secretary-Superintendent.

STOCKTON AND THORNABY HOSPITAL
Stockton-on-Tees (135 beds, 3 Residents)
HOUSE PHYSICIAN alternating CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the above post becoming vacant April 1, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts, when appointment will be for a period of six months. Salary £200 per annum with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. Wilkinson, Secretary-Superintendent.

ST. JOHN'S HOSPITAL, Lewisham, S.E.13
HOUSE SURGEON or CASUALTY OFFICER (A)

There is an immediate vacancy for a House Surgeon or Casualty Officer (A) for which applications are invited from registered practitioners, including those within three months of qualification who are liable for service under the National Service Acts. The appointment is for six months at a salary of £150 per annum with full residential emoluments. Applications should be sent to the undermentioned.—J. C. Gilbert, Secretary-Superintendent.

(Continued on page 27)

Have you read the notice at top of page 12?

THE Medical Defence Union

Established 1885 — *MUSeum 1337*

Annual Subscription £1 • **MEMBERSHIP EXCEEDS 31,500** *Assets exceed £170,000*

Protection is essential for every practitioner engaged in any form of practice

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Square, London, W.C.1

EASTER, 1948

PLEASE NOTE

The Advertisement Manager will make every endeavour to ensure insertion of APPOINTMENTS and CLASSIFIED advertisements provided they are received not later than the dates mentioned below:

For issue	Not later than
March 27	March 17
April 3	„ 24

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

DO PLEASE WRITE ADVERTISEMENTS CLEARLY, NAME AND ADDRESS SHOULD BE IN BLOCK LETTERS.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To all other advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d.; or 30 words, 22s.; and 3s. 6d. for each six words or less thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 25s. (minimum); or 24 words, 31s.; or 30 words, 37s.; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 2s. per line thereafter.

(5) To ALL advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.

Telephone: Euston 2111.
Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 12

PERSONAL

DOCTOR (WIFE, S.R.N.) WITH LARGE HOUSE and Garden, N. Devon Coast, would take paying guest(s) for convalescence or rest.—Box 9422, B.M.J.

ONE THOUSAND POUNDS for a Short Story. Full details in the Sunday Dispatch.

FOR AN ENJOYABLE SWISS HOLIDAY join one of the following proposed parties: May 6 to 20, Lugano and Lucerne; June 16 to 30, Pontresina in Engadine; June 30 to July 14, Zermatt; Aug. 5 to 19, Lauterbrunner (for Murren, Wengen and Jungfrau Joch) and Klental; Aug. 17 to 31, Klental and Saas-Fee; Sept. 1 to 15, Oberhofen (on Thun Lake) and Wengen; Sept. 1 to 11, Bernese Oberland Walking Party; Dec. to Jan., Winter Sports at Saas-Fee. Also **DEVONSHIRE OVER EASTER:** Torquay Party, March 24 to 31, Good Hotel. Write C.T.U. (Estd. 1913, Dr. C. F. Fotherg'll), Chorley Wood, Herts. (Phone Chorley Wood 24.)

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

AMERICAN FINE CHEMICALS. Beddow Sales, Ltd., 21, Water Lane, London, E.C.3, announce that they have been appointed concessionaires in U.K. for products of Mann Fine Chemicals Inc., New York, which include, amino-acids, cacodylates, oestrogens, hormones, and vitamins.

EX-I.M.S. OFFICERS, CANADIAN.—Retired Canadian officers of the Indian Medical Service, in or passing through the U.K., are advised to contact the Senior Canadian Air Force Liaison Officer, 11, Hill Street, London, W.1, regarding employment in Canada with the Royal Canadian Air Force.

PERCALL. THE PERSONAL 24-HOUR TELEPHONE service exclusive to doctors, growing with your support, £5 5s. p.a., G.P.O., licensed.—BAL 3331. 387, London Road, Mitcham.

THE CENTRAL COUNCIL FOR THE CARE OF CRIPPLES proposes to appoint a **DEVELOPMENT OFFICER** (man or woman) to undertake an investigation into the Orthopaedic and allied services available and under consideration in the various areas in England and Wales. Applicants should have had previous administrative experience and preferably be conversant with hospital organization and social welfare work. Salary according to qualifications and experience. Minimum £600 per annum, with expenses. Federated Superannuation Scheme optional. Applications to, Chairman Development Committee, 34, Eccleston Square, London, S.W.1.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

ASSAM. A YOUNG BRITISH MEDICAL OFFICER is required for a group of **TEA ESTATES**; he should be recently qualified with some postgraduate hospital experience and will be required to obtain the Diploma in Tropical Medicine. The appointment involves the supervision of hospitals staffed by Indian Assistant M.O.s. Three years' agreement renewable, including passage both ways; bungalow and allowances provided, salary minimum £1,600 per annum. Applications with copies of three testimonials and the names of three other persons for reference purposes to Box 9461, B.M.J.

APPLICATIONS ARE INVITED for the post of ASSISTANT MEDICAL OFFICER in the ALKALI DIVISION OF IMPERIAL CHEMICAL INDUSTRIES LIMITED AT NORTHWICH. Applicants should possess higher qualifications in either Medicine or Surgery, or a Diploma in Industrial Health, and preference will be given to those who have had experience in Industrial Medicine. Salary will be according to qualifications and experience, but not less than £900 a year and will be subject to annual (or periodic) review. Applications giving particulars of qualifications should be forwarded to Staff Manager, Alkali Division, Imperial Chemical Industries, Ltd., Winnington, Northwich, Cheshire.

DICKINSON SCHOLARSHIPS. Travelling Scholarship Medicine £300.—Applications are invited for the **TRAVELLING SCHOLARSHIP IN MEDICINE,** value £300, tenable for one year. Candidates must be graduates of any University who have taken their full course of instruction in Medicine and Surgery at the University of Manchester and at the Manchester Royal Infirmary. Copies of the regulations governing the Scholarship may be obtained from the undersigned, to whom six copies of application should be sent not later than April 15, 1948.—F. J. Cable, Secretary to the Dickinson Scholarship Trustees.

PHYSICIAN, M.D., M.R.C.P., RHEUMATOLOGIST, seeks opportunities for Clinical Research into rheumatic disease in industry.—Box 9475, B.M.J.

BEIT MEMORIAL FELLOWSHIPS FOR MEDICAL RESEARCH.—Notice is hereby given that an **ELECTION of JUNIOR FELLOWS** to begin work on October 1 will take place in July, 1948. Junior Fellowships are normally of the annual value of £600 for three years, but candidates younger than those usually elected or whose promise for Medical Research must be judged mainly on work outside that field, may be awarded a lower rate of £500 for the first two years. Candidates are asked to state whether they would be unable to accept this lower rate. Candidates must have taken a degree in a faculty of a University in the British Empire or a Medical Diploma registrable in the United Kingdom. Election to Junior Fellowships are rarely made above the age of thirty-five years. The Trustees are desirous of furthering reseach in Mental Diseases and in the general allotment of Fellowships will give some preference to a candidate proposing research on approved lines in that subject. Applications from candidates must be received by May 14. It is necessary for candidates to submit evidence that they can be given accommodation in the departments where they propose to work, which must be either in Great Britain or Ireland. Forms of application and all information may be obtained by letter only, addressed to: Dr. A. N Drury, C.B.E., F.R.S., Secretary, Beit Memorial Fellowships for Medical Research, Lister Institute, Chelsea Bridge Road, London, S.W.1. For Overseas candidates, forms of application may be obtained from: The Secretary, South African Medical Council, P.O. Box 205, Pretoria, South Africa. The Secretary, Universities Commission, Box 4061, G.P.O, Sydney, Australia. The Department of Health Wellington, New Zealand The Canadian Medical Association, 184, College Street, Toronto, Canada.

ISLAND OF BAHREIN.—Required by Important Group of Oil Companies, **FOURTH MEDICAL OFFICER,** preferably a graduate with one year's experience as House Physician. Interesting post. Salary, £1,000 to £1,200 p.a. according to experience, plus free board. Air conditioned accommodation. Apply in writing to Dr. Gomer Williams, Grosvenor House, W.1.

THE ROWETT RESEARCH INSTITUTE, Aberdeen.—CHIEF LABORATORY TECHNICIAN wanted for Pathology and Bacteriology Department. Preference given to men over 30 years of age with final I.M.L.T. qualifications and experience in photography. Present salary scale is £240 by £15 to £300, plus consolidated addition £78 per annum, which is meantime under review, and the proposed new consolidated salary scale is £380 by £20 to £520 per annum. Applications in writing, and the names of three referees, should be addressed to the Secretary, The Rowett Research Institute, Bucksburn, Aberdeenshire, not later than April 10, 1948.

THE WELSH NATIONAL SCHOOL OF MEDICINE. Grade B (i).—LABORATORY TECHNICIAN, Histological technique essential, required in Pathology Department. Salary £440 to £470. Written application to Secretary, 10, The Parade, Cardiff.

TWO MEDICAL OFFICERS required (English or Scottish, Single) for Commercial Company in Newfoundland. Salary about £1,050 per annum with board. Surgical experience needed for one appointment.

JUNIOR MEDICAL OFFICER required (age under 35) for Company in the Middle East. Salary £1,000 per annum, with allowances.

Apply British Medical Bureau, Tavistock House South, Tavistock Square, W.C.1.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN CHILD HEALTH.—The University Court will shortly proceed to the appointment of a full-time Lecturer in Child Health at a salary of £500 to £600, or £600 to £750, or £750 to £900, placing according to qualifications and experience, with F.S.S.U. and children's allowance. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than March 27, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN BACTERIOLOGY.—Applications are invited for the post of Lecturer in the Department of Bacteriology. Salary £600 to £750 according to qualifications and experience. Persons desirous of being considered for the office should be graduates in medicine and have experience of general hospital bacteriology. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than March 27, 1948.—H J Butchart, Secretary, The University, Aberdeen

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh

WANTED, INDIVIDUAL COACHING FOR D.L.O. Part II. Evening hours. Any day including week-ends.—Box 9487, B.M.J.

UNIVERSITY OF LONDON
BRITISH POSTGRADUATE MEDICAL FEDERATION
INSTITUTE OF ORTHOPAEDICS, ROYAL NATIONAL ORTHOPAEDIC HOSPITAL
234, GREAT PORTLAND STREET, LONDON, W.1.

Course in Advanced Clinical Orthopaedics to be held from April 5–10, and repeated April 19–24, 1948.

MONDAY—GREAT PORTLAND STREET—		
10 a.m.	Club Foot	MR. A. ROCYN JONES
11.15 „	Volkmann's Contracture and Torticollis	MR. R. C. BAIRD
12.30 p.m.	Lunch	
1.30 „	Ward Cases	MR. R. C. BAIRD
4.15 „	Tea	
4.30 „	Shoulder and Brachial Plexus	MR. P. H. NEWMAN
TUESDAY—GREAT PORTLAND STREET—		
10 a.m.	Orthopaedic Principles in Arthritis	MR. D. TREVOR
11.15 „	Scoliosis	MR. A. T. FRIPP
12.30 p.m.	Lunch	
1.30 „	Ward Cases	MR. P. H. NEWMAN
4.15 „	Tea	
4.30 „	Some Bone Dystrophies	MR. H. J. BURROWS
WEDNESDAY—COUNTRY BRANCH, STANMORE—		
10 a.m.	Clinical Demonstration	MR. K. I. NISSEN
12 noon	Surgery of Infantile Paralysis	MR. K. I. NISSEN
1 p.m.	Lunch	
2.30 „	Clinical Demonstration	MR. V. H. ELLIS
4.15 „	Tea	
4.50 „	Bone Tumours	MR. V. H. ELLIS
THURSDAY—GREAT PORTLAND STREET—		
10 a.m.	Congenital Dislocation of the Hip	MR. A. ROCYN JONES
11.15 „	Tendons	MR. R. C. BAIRD
12.30 p.m.	Lunch	
1.30 „	Ward Cases	MR. A. T. FRIPP
4.15 „	Tea	
4.30 „	The Foot (not Club Foot)	MR. R. Y. PATON
FRIDAY—COUNTRY BRANCH, STANMORE—		
10 a.m.	Clinical Demonstration	MR. E. P. BROCKMAN
11.15 „	Kyphosis	MR. E. P. BROCKMAN
12.30 p.m.	Lunch	
1.30 „	Clinical Demonstration	MR. J. A. CHOLMELEY
4.15 „	Tea	
4.30 „	Principles in Treatment of Tuberculosis	MR. J. A. CHOLMELEY
SATURDAY—GREAT PORTLAND STREET—		
10 a.m.	Coxa Vara and Coxa Plana	MR. D. TREVOR
11 „	Intervertebral Disks	MR. H. J. BURROWS
12 noon	General Discussion	CLASS AND STAFF

The fee for the course is six guineas.

Early application, stating the date preferred, should be made to the Dean at the above address.

UNIVERSITY OF LONDON
BRITISH POSTGRADUATE MEDICAL FEDERATION
REFRESHER COURSES FOR GENERAL PRACTITIONERS, JANUARY-JUNE, 1948

Date	*No. of Weeks*	*Subject*	*Hospital*
April 1–June 18	Every Thursday afternoon	General	Hampstead General Hospital, Haverstock Hill, N.W.3
April 19–24	1	General	Royal Sussex County Hospital, Brighton
April 26–30	1	Medicine	Metropolitan Hospital, Kingsland Road, E.8
May 3–7	1	Obstetrics and Gynaecology	Paddington L.C.C. Hospital
June 7–11	1	Obstetrics and Gynaecology	North Middlesex County Hospital, Silver Street, Edmonton, N.
June 14–18	1	Medicine	West Middlesex County Hospital, Isleworth

Fees: 10 guineas for 2 weeks' course; 5 guineas for 1 week and extended courses. Schemes of financial assistance are available, subject to certain conditions, for (a) demobilized general practitioners, (b) N.H.I. practitioners.

Applications for places, and further particulars, should be made to the Secretary, British Postgraduate Medical Federation, 2, Gordon Square, W.C.1. They should state if the practitioner is applying under (a) or (b) above, or not.

EXAMINING BOARD IN ENGLAND
by the
ROYAL COLLEGE OF PHYSICIANS OF LONDON
and the
ROYAL COLLEGE OF SURGEONS OF ENGLAND

Notice is hereby given that the following Examinations will commence on the dates stated below:—

DIPLOMA IN PHYSICAL MEDICINE
Friday, April 9

DIPLOMA IN MEDICAL RADIO-DIAGNOSIS
DIPLOMA IN MEDICAL RADIOTHERAPY
Friday, April 16

Candidates who have fulfilled the necessary conditions, and who desire to present themselves for examination, must give notice in writing to the Secretary, Examination Hall, 8-11, Queen Square, London, W.C.1, at least 21 days before the date of the Examination, transmitting at the same time such certificates as may be required by the regulations of the Board, together with the full amount of the fee for the part or parts of the Examination for which they desire to enter. Applications for Part II which are due at the same time as those for Part I.—F. M. Stent, Secretary.

NATIONAL HOSPITAL, QUEEN SQUARE, MEDICAL SCHOOL (British Postgraduate Medical Federation).—A course of clinical demonstrations will be given on Saturdays, at 10.30 a.m., from April 17 till July 3; and also on Wednesdays, at 4 p.m., from April 14 till June 30, inclusive. These demonstrations are open to postgraduate students at a fee of one guinea for the course. Admission will be by ticket, but no doctor will be allowed to attend both courses. Application should be made to the Dean.

HAMPSTEAD GENERAL AND NORTH WEST LONDON HOSPITAL, POSTGRADUATE MEDICAL SOCIETY, The Green, Hampstead, N.W.3.—AN EXTENDED REFRESHER COURSE for General Practitioners and ex-Service Medical Officers will be held at the Hampstead General Hospital on Thursday afternoons from April 1 to June 17, 1948, inclusive. The fee for the course is 5 guineas. Financial assistance is available for demobilized practitioners and National Health Insurance practitioners. Applications for places and for particulars of the Course to K. A. F. Miles, Secretary to the Society.

INSTITUTE OF UROLOGY (University of London) In association with ST. PETER'S and ST. PAUL'S HOSPITALS.—POSTGRADUATE COURSES OF UROLOGICAL INSTRUCTION will be held as follows: April to July. September to December. These courses will include systematic lectures covering the whole subject of Urology, out-patient sessions, ward visits, operation sessions and tutorial demonstrations. All postgraduates taking the course are expected to attend lectures and may attend all tutorial demonstrations. They will be allotted individually to certain out-patient sessions, ward visits, and operation sessions. The fee for this three months' course is fifteen guineas. In addition, an intensive course of two weeks duration for students taking higher examinations will be held in September and March. Fee for this course is ten guineas. A certain number of Clinical Assistants are appointed in January and July of each year. Applications should be made to the Secretary, St. Peter's Hospital for Stone, Henrietta Street, W.C.2 and envelopes clearly marked "Postgraduate." Lectures will be held at 5 p.m.—Director of Studies, A. Clifford Morson, Esq., O.B.E., F.R.C.S. Joint Deans, A. W. Badenoch, Esq., M.D., Ch.M., F.R.C.S., A. R. C. Higham, Esq., T.D., M.B., F.R.C.S. Secretary, John R. Hopkins.

ANAESTHETICS, April 12 to 30. Royal Cancer Hospital. First week, Part I; second and third weeks, Part II. Candidates may attend either or both Parts.—Apply, Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

BASIC SCIENCES

A three months' course in Applied Anatomy, Physiology, Pathology, Bacteriology and Biochemistry will begin on July 5, 1948. This course is suitable for postgraduates wishing to take the Primary Fellowship examination. The number attending will be limited to 40. Fee 30 guineas.

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment. 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Basic Sciences, Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

POSTAL COACHING for all Medical Examinations. Examination Successes, 1901-47: M.D.Lond., 454; M.B., B.S.Lond., Final, 436; F.R.C.S.Eng., Primary, 411; F.R.C.S.Eng., Final, 308; M.R.C.P. Lond., 427; M.R.C.S., L.R.C.P., Final, 891; D.A. (1936-47), 143; F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

ROYAL BUCKINGHAMSHIRE HOSPITAL, Aylesbury.—A TWO-WEEK'S REFRESHER COURSE for General Practitioners and ex-Service Medical Officers (Class II) will be held at the above hospital commencing on May 10, 1948. The fee for the Course will be 10 guineas. Schemes for financial assistance are available under which the cost of both the fee and travelling and subsistence allowances will, subject to certain conditions, be repaid to:—(a) Demobilised General Practitioners within one year of release from the Forces, and (b) Doctors engaged in practice under the National Health Insurance Acts. Applications for places in the Course and for particulars of the financial assistance available should be made to the Chairman, University of Oxford Postgraduate Medical Education Committee, 91, Banbury Road, Oxford, and *not* to the Hospital.

RHEUMATIC DISEASES, March 19, 20 and 21. Friday afternoon, all day Saturday and Sunday. Rheumatic Unit, St. Stephen's Hospital. Apply, Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

LECTURES

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LECTURES IN SURGERY. MARCH–APRIL, 1948

The following Lectures in Surgery will be delivered at the College in Lincoln's Inn Fields, London, W.C.2, at 5 p.m. on each day:

Tues.	16	MR. A. J. GARDHAM	Surgery of Malignant Disease of the Pharynx
Wed.	17	PROFESSOR LAMBERT ROGERS	Surgery of the Spinal Cord
Thurs.	18	MR. RODNEY MAINGOT	Surgery of Peptic Ulcer
Fri.	19	MR. A. DICKSON WRIGHT	Varicose Veins and Ulcers
Mon.	22	SIR REGINALD WATSON-JONES	Fractures of the Spine
Tues.	23	MR. M. F. NICHOLLS	Surgery of the Urethra and Bladder
Wed.	24	MR. A. HEDLEY WHYTE	Surgery of the Rectum
Thurs.	25	MR. T. TWISTINGTON HIGGINS	Urinary Obstruction in Childhood
Tues.	30	MR. R. M. HANDFIELD-JONES	Some less usual examples of acute Intestinal Obstruction
Wed.	31	PROFESSOR G. GREY TURNER	Surgery of the Spleen
Thurs.	1	SIR HENEAGE OGILVIE	Scrotal Swellings
Fri.	2	MR. R. SCOTT MASON	Surgery of the Duodenum

The fee for the whole Course is £5 5s., or 10s. for one Lecture.

Fellows and Members, and Fellows and Licentiates in Dental Surgery, of the College will be admitted to the whole course on payment of a fee of £3 3s., or to one Lecture on the payment of 7s. 6d.

Applications, accompanied by a cheque for £5 5s. or £3 3s., should be sent to the Secretary, Postgraduate Education Committee, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2.

W. F. DAVIS,
Secretary, Postgraduate Education Committee.

EDUCATIONAL

MEDICAL CORRESPONDENCE COLLEGE, 19, Welbeck Street, London, W.1, provides COACHING for all Medical Examinations, D.A., D.P.M., D.O.M.S., D.L.O., D.C.H., D.M.R.D. and D.M.R.T., M.R.C.P., F.R.C.S., M.D. thesis, and all qualifying exams. by a staff of highly qualified Tutors, Honoursmen, and Gold Medallists. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested.

SOUTH EASTERN HOSPITAL FOR CHILDREN, London, S.E.26.—POSTGRADUATE TEACHING will recommence on May 1. Details of the Summer Course and application forms can be obtained from the Director of Postgraduate Studies, South Eastern Hospital, Sydenham, S.E.26.

THE COMBINED HOSPITALS POSTGRADUATE SCHOOL OF OBSTETRICS AND GYNAECOLOGY, ROYAL NORTHERN AND CITY OF LONDON MATERNITY HOSPITALS (OBSTETRICS); SOHO AND SAMARITAN HOSPITALS (GYNAECOLOGY).—A Course of training for M.R.C.O.G., M.D., etc. is being given by Prof. F. J. Browne and the Staffs of the above hospitals. Next term begins April 13. Details from Prof. F. J. Browne, Hospital for Women, Soho Square, London, W.1

TUTORING IN NEUROLOGY, NEURO-ANATOMY and PSYCHOLOGY for D.P.M., etc. Private or classes. Apply Box 9462, B.M.J.

UNIVERSITY OF GLASGOW, POSTGRADUATE MEDICAL EDUCATION COMMITTEE, REFRESHER COURSES FOR GENERAL PRACTITIONERS.—The tenth Course for General Practitioners will be held from May 17 to May 29, 1948. The Course will comprise ten lectures and approximately sixty hours devoted to clinical demonstrations and ward visits. The fee for the Course will be 10 guineas. Schemes for financial assistance are available under which the cost of both the fee and of travelling and subsistence allowances will, subject to certain conditions, be repaid to: (a) demobilized general practitioners within one year of release from the Forces, and (b) doctors engaged in practice under the National Health Insurance Acts. Since the numbers will be restricted, both Service and civilian practitioners wishing to attend should make early application to the Director of Postgraduate Medical Education, The University, Glasgow, W.2, from whom further information may be obtained.

UNIVERSITY OF LEEDS POSTGRADUATE COMMITTEE.—A REFRESHER COURSE for General Practitioners is being arranged by Leeds University during the two weeks commencing Monday, May 24. The fee for the course will be 10 guineas (or 5 guineas for one week). Schemes of financial assistance are available under which both the fee and travelling, subsistence and locum tenens allowances will, subject to certain conditions, be repaid to:—(a) demobilised general practitioners within one year of release from the Forces; and (b) doctors engaged in practice under the National Health Insurance Acts. Applications for places in the course, and for particulars of the financial assistance available, should be made to the Senior Administrative Officer, School of Medicine, Leeds, 2, it being stated whether the applicant falls into Class (a) or Class (b), or proposes attending at his own expense.

UNIVERSITY OF LIVERPOOL. Department of Child Health.—It is proposed to hold a full-time **REFRESHER COURSE** (clinical and academic) in **PAEDIATRICS**, from May 18 to June 8. The Course will be primarily for those who intend to specialize in Paediatrics and Child Health, and it should be suitable as a preparation for the D.C.H. The fee for the course will be 15 guineas and the number of candidates will be limited to 20, with 15 as a minimum. Those wishing to enrol for the course should apply to the Dean of the Faculty of Medicine before April 17, 1948.

ROYAL COLLEGE OF PHYSICIANS OF LONDON.—The Royal College of Physicians is giving a **COURSE OF POSTGRADUATE LECTURES IN MEDICINE** which will begin on May 3 and continue until June 25, 1948. Commence at 5 p.m. There will be approximately 26 Lectures. The full programme is not yet complete but preliminary details can be obtained from the College. The inclusive fee for the course will be 7 guineas and the total entry will be limited to 200. Fees are payable in advance and must be received at the College by April 19, 1948. —H. E. A. Boldero, D.M., Registrar, Pall Mall East, London, S.W.1.

ASSISTANTSHIPS

VACANT

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Wanted, Married Assistant, Leicester. Own car essential. Furnished accommodation available.—Box 9416, B.M.J.

Wanted. N.W. Durham. Outdoor Assistant, married, British. Free unfurnished house, light, coal, etc. provided. Car necessary. Salary £650 p.a. and £52 p.a. car allowance, plus midwifery and other fees. Possible view. Usual bond.—Box 9481, B.M.J.

Wanted, Assistant, British, male or female, must be experienced and able to drive car. Wolverhampton area. Salary £14 14s. weekly all found. Send full details and testimonials.—Box 9401, B.M.J.

Wanted, Outdoor Assistant (preferably single), country practice Shropshire, must own car. £800 per annum.—Box 9402, B.M.J.

Wanted, Assistant with Early View to Half Share Partnership for mixed general practice, East Midlands City. Salary and car allowance by arrangement. Half share approximately £2,000.—Box 9403, B.M.J.

Wanted immediately, Male Assistant. Good salary and car allowance. House available. North East Coast.—Box 9404, B.M.J.

Wanted, Single Male Assistant for mixed country practice, Wye Valley. Car available. Dispenser kept.—Box 9050, B.M.J.

Wanted, Full-time Assistant for large mixed practice in Essex suburb of London, for April. Dispenser kept. Capable man essential.—Box 9425, B.M.J.

Wanted, Young Assistant, for S.E. London practice. Salary by arrangement.—Box 9424, B.M.J.

Wanted. Reliable energetic Outdoor Male Assistant for mixed practice in Staffs. town. Salary by arrangement according to experience. Suit single man as no house available at the moment.—Box 9083, B.M.J.

Assistant, with View to Partnership and Early Succession to whole Practice, wanted for North East England. House available later. Semi rural area. Apply, stating experience and qualifications, to Crawford, Herron & Cameron, 257, West George Street, Glasgow, C.2.

Assistant required in busy industrial practice, preferably young and single. Own car an advantage. Salary by arrangement.—Box 9426, B.M.J.

Male Assistant for small practice Central London for one year. Suit postgraduate. Salary by arrangement. Living accommodation available shortly but not at present.—Box 9434, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments—Write, A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool, 1.

Would Doctor (male or female) Take Over elderly Doctor's small country Practice to work in conjunction with woman doctor also in practice.—Box 9480, B.M.J.

Young ex-Service Practitioner in new practice near large housing estate, 1½ hours London, seeks assistant with View in promising venture. Available capital secondary to desired personal qualities. Interviews by appointment.—Box 9463, B.M.J.

WANTED

Wanted, Assistantship, with or without View, London or Home Counties. Medical and dermatological specialist. Ex-R.A.M.C., M.B., B.Ch. (Dublin).—Box 9488, B.M.J.

Wanted, Assistantship, with or without View, by Scot. M.B. (Glasgow) 1942, aged 28, abstainer, Protestant, married, no children, ex-R.A.F. Specially interested medicine and paediatrics. House or flat essential. Free April.—Box 9405, B.M.J.

Wanted. Part-time Assistantship by postgraduate resident S.W. Experienced hospital and G.P.—Box 9476, B.M.J.

Wanted, Morning or Evening Surgeries or Ophthalmic work, anywhere Greater London. Accept house or large flat in lieu fee.—Box 9479, B.M.J.

Wanted, mid-April, rural or country town Assistantship. M.R.C.S., M.A.Cantab, aged 31, married, one child, car owner. Ex-R.A.M.C. hospital postgraduate, some G.P. experience. Unfurnished accommodation essential.—Box 9431, B.M.J.

Wanted, Assistantship by conjoint man, British, aged 37, married, abstainer, energetic, 10 years in busy general practice. Keen midwifery, own car. Unfurnished house required.—Box 9432, B.M.J.

Wanted, Assistantship with View, by experienced G.P. (Cambridge and Guy's), married, two children. Unfurnished house essential. Car owner. Home Counties or South preferred.—Box 9430, B.M.J.

Wanted, by experienced medical practitioner, Part or Whole-time Assistantship, or other Medical Work, in Tunbridge Wells area. Highest references. Own car.—Box 9009, B.M.J.

Wanted, Assistantship with or without View, by ex-R.N.V.R., 31, married. Own car. Accommodation essential.—Box 9007, B.M.J.

Wanted, Evening Surgeries in London, preferably Central or S.W. London Graduate, aged 31, with higher qualification.—Box 9466, B.M.J.

Wanted by experienced G.P. Assistantship with or without View in Northern Ireland. Own car, furniture and capital available.—Box 9428, B.M.J.

Assistantship wanted, View Permanency, by well qualified woman doctor, young and energetic, with eight years' G.P. experience and Postgraduate Obstetrical Degree.—Box 9435, B.M.J.

Assistantship wanted, with Early View, M.B., B.Chir.(Cambs), M.R.C.S., L.R.C.P., aged 30, Bart's. Ex-R.A.M.C. Own car. South or South West England preferred. Capital available.—Box 9436, B.M.J.

Assistantship, preferably with View, wanted by M.B., Ch.B., age 27, married, no family. Hospital and G.P. experience. Own car. Accommodation essential.—Box 9467, B.M.J.

Assistantship wanted now by M.B., B.S. (Bart's) with View to Partnership or Succession in country town practice with local cottage hospital facilities and where unfurnished accommodation is available. Advertiser is 32, married, has held good hospital appointments, served in the R.A.M.C. and had varied G.P. experience. Car owner.—Box 9433, B.M.J.

Assistantship wanted by woman doctor, Scot. M.B., Ch.B. 1942. Hospital, G.P. experience. Able to drive. Surrey, Sussex, Hampshire.—Box 9406, B.M.J.

Light Assistantship wanted by Woman Doctor (M.B., Ch.B., 1934). Separate accommodation preferred.—Box 9465, B.M.J.

Outdoor Assistantship wanted, London, by M.B. (L.M., obstetrics), aged 29, single, driver, three years' G.P. experience. Resident W.5 district.—'Phone: Perivale 3420.

Permanent Assistantship with married accommodation wanted by Scot, M.B., 1942. Married, no children, own car. Hospital, Army and 1½ years G.P. experience.—Box 9427, B.M.J.

Postgraduate Student with previous G.P. experience available for Evening Surgeries, or Night Calls in return for Accommodation.—Box 9084, B.M.J.

Woman, aged 31, three years' hospital, three years' R.A.M.C., wants Assistantship with View. Preferably in group.—Box 9464, B.M.J.

Woman doctor desires Part-time Work, 9 years' experience G.P. Resident East London.—Box 9437, B.M.J.

Woman doctor, Hospital and G.P. experience, excellent testimonials, requires Morning Work. London area, April and May.—Box 9429, B.M.J.

LOCUMS

VACANT

Wanted, reliable and experienced Locums for town and country practices. State full particulars. —British Medical Bureau, 33, Cross Street, Manchester, 2.

Grosvenor Sanatorium, Ashford, Kent.—Locum Tenens. Applications are invited for Locum Tenens for period mid-April to mid-June. Applicants must have experience in the treatment and diagnosis of pulmonary tuberculosis. Salary £550 per annum, with full residential emoluments. Applications should be sent to B. Roberts, Medical Superintendent, Grosvenor Sanatorium, Ashford, Kent.

Locum wanted, April, three months, Birmingham area, take place partner away on course. Own car preferred. Accommodation available.—Box 9407, B.M.J.

AVAILABLE

Wanted, Locum or Permanent Sanatorium work by M.B., B.S., London, H.P., H.S., A.M.O. sanatorium, aged 24. Excellent testimonials. Available now.—Box 9468, B.M.J.

Experienced G.P., Psychiatric experience, has vacant dates for Locum Work, private or institutional. Own car, for London and Home Counties area. Abstainer, Anglo-Scot.—Box 9438, B.M.J.

Experienced G.P., aged 49, qualified 1939, having sold own practice, desires Locum Work anywhere. Short or long periods. British. Own car. Wife available if convenient.—Allcock, Crowhurst, Sussex, 'phone 11.

Male, G.P., 33, married, own car, available for Locum Work from April 1. Accustomed to sole charge. Wife willing to do housekeeping and cooking. Periods of one month or longer preferred.—Box 9469, B.M.J.

PARTNERSHIPS

OFFERED

Lancashire Coast Resort. Partnership 1/2 Share in old-established practice, private and panel. Will stand investigation. Gross receipts 1947, £5,205. Premium 1½ years' purchase. Property would be on rental.—Write, Reynolds & Branson, Ltd., Medical Agency, Leeds.

Medical Partner wanted for Glasgow west-end practice. Income £1,200. House available for purchase if desired. For further particulars apply to Crawford, Herron and Cameron, Solicitors, 257, West George Street, Glasgow. Telephone Central 3063/4/5.

Midlands. Mixed practice with excellent prospects. Panel 4,000. Partnership following short assistantship. Unfurnished flat and resident caretaker. House at valuation later. Initial share one-third. Premium 1½ years.—Box P9470, B.M.J.

One Third Share Partnership after short Preliminary Assistantship offered to young British Doctor in a rapidly increasing urban and rural panel and private practice in Essex.—Box P9486, B.M.J.

Partnership Offered, Nr. Lincs. town, half share at £1,500 gross, 1½ yrs. purchase. Panel 1,500. Scots or English, ex-Service preferred.—Box 9482, B.M.J.

Partnership offered to keen man. No capital required. Nucleus practice with unlimited scope in developing Middlesex suburb. Unfurnished modern house, rent free.—Box P9440, B.M.J

Partner wanted in old-established mixed practice in Middlesex. Cottage hospital in vicinity. Share worth £1,800. 1½ years' purchase. House available. Box P9439, B.M.J.

S.E. Outer London. Third Partner offered 4/20 with 6/20 after two years in practice £7,000 predominantly panel—therefore now considerable scope—at two years purchase with conditional reduction to 1½ years. Payments out of income over six years if desired. House available.—Box P9409, B.M.J.

WANTED

Wanted by woman M.B., B.Ch., D.P.H., 1941, 29 years, Partnership, preliminary Assistantship if required. Good hospital and G.P. experience. Interested midwifery. Married, no family. House to rent if possible or purchase. Own car and furniture. Keen worker, England or Scotland. All replies answered.—Box P9034, B.M.J.

Wanted by woman M.B., D.P.H., Partnership, preferably 25 miles radius Coventry. Experienced hospital and G.P. Unfurnished accommodation required.—Box P9033, B.M.J.

Partnership wanted in South Coast region, large or small group, non-industrial, by M.D., Scot, 40, married, two small children, ex-Service. Internal medicine and dermatology especially. House to rent an advantage at outset. Share £2,000 upwards.—Box P9471, B.M.J.

Partnership or Practice wanted in Newcastle-upon-Tyne by experienced G.P. Capital available.—Box P9032, B.M.J.

Woman doctor, single, aged 36, capable and well experienced, desires Partnership or Practice in Southern England, Kent or Surrey preferred. Own car and furniture.—Box P9056, B.M.J.

MEDICAL POSTS

VACANT

Clinical Assistant wanted, latter end of March (male or female), group of psychiatric nursing homes, advantage if conversant with E.C.T. Six months' appointment, with possibility of extension. Salary £450 per annum, with full board and resident accommodation. Apply immediately, with testimonials, Medical Director, Arthington, Barton Road, Torquay.

Electrocardiograph Technician required by Middle-sex County Council at Hillingdon County Hospital, near Uxbridge, Middlesex. Previous experience in this work and in the care of equipment is essential. Knowledge of photography an advantage. Salary £285 by £15 to £330 per annum, plus any temporary bonus (now £60 per annum). Established, subject to medical exam. Whole-time duties such as Council may require, under supervision of Medical Director. Applications, stating age, nationality, qualifications, etc., to Medical Director of Hospital by March 20. No forms. (Quoting D.726, B.M.J.)

London County Council. Laboratory Technician required at Horton Hospital, Epsom, Surrey. Candidates must have good experience in general clinical pathology. Salary scale in accordance with the Joint Negotiating Committee (Hospital Staffs). £360, rising to £435 a year. For application form, returnable by April 2, 1948, send stamped addressed foolscap envelope to Medical Officer of Health (MHS/D), County Hall, Westminster Bridge, S.E.1. (591).

The Royal Hospital, Wolverhampton (500 beds) (Incorporated under Royal Charter). General Branch (310 beds).—Wanted immediately for Pathological Laboratory a Grade B Technician, commencing salary in accordance with the Joint Committee recommendations on salaries and wages for hospital staffs. Must be qualified and experienced, and have not less than four years' experience of Laboratory work, and should have passed an examination of the standard of the Final Examination of the Institute of Medical Laboratory Technology or its equivalent. Applications, with copies of testimonials, to the House Governor, The Royal Hospital, Wolverhampton.

WANTED

Wanted by Irish M.B., B.Ch., Position as Medical Officer in Tropical or Sub-tropical Country, aged 28 years, single. Two years experience tropical medicine.—Box 9408, B.M.J.

PRACTICES

FOR SALE

Birmingham. Midst large modern housing area, freehold modern four-bedroomed House. Nucleus Practice. Panel could be added. Equipment at valuation £5,000.—Bernard Guest, Valuer, 109, Colmore Row, Birmingham CEN. 2820.

Country Practice, Yorks-Lincs border. Panel 2,500. Average receipts last three years £4,200. Modern house, garages. Purchase price 1½ years. House at valuation.—Box P9443, B.M.J.

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Durham Coast. well established Mixed Practice. Panel 3,500 units, good club, appointments, midwifery. Gross income £5,000 per annum. Also good house with large garden and garage for two cars, apart from surgeries. Suit two partners or principal with Assistant. Good reason for disposal.—Box P9075, B.M.J.

Death Vacancy. Practice, mainly panel, for sale in the centre of Birmingham. Gross income £1,100. Apply, Philip Harris, 144, Edmund Street, Birmingham.

Excellent Practice and House for Sale. Panel over 3,000. Total income £3,500. 1½ years' purchase. Pleasant West London area.—Box P9087, B.M.J.

For sale in April. Old established country town practice in picturesque locality. Gross receipts 1947, £3,296. Panel £1,471. Transferable appts.: £130. Charming large country house in excellent repair, all modern conveniences. Large garden with tennis court. Grammar school. All country sports. House, practice, large supply drugs, some surgery fittings and furniture. Price £11,000 cash.—Box P9477, B.M.J.

For Sale. Better class Practice, delightful area within 20 miles London. Receipts £1,800 to £2,000. Modern 4 bedroom house, fully furnished. Panel 850. Premium for practice, house and furniture. £13,500.—Box P9478, B.M.J.

Halifax. Old-established Practice. Gross receipts 1947, £1,770. Panel patients 1,607. Would consider letting house (double fronted) on a three years' lease.—Write, Reynolds & Branson, Ltd., Medical Agency, Leeds.

Large Ophthalmic Practice in Western Industrial area for sale or would consider sale of 1/2 to suitable man, preferably F.R.C.S. and D.O. or D.O.M.S. Many appointments, mostly transferable.—Box P9136, B.M.J.

Liverpool. Death vacancy. Practice and house for disposal in densely populated working-class area. Panel over 2,900 units. Further particulars write: A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool 1.

Liverpool. Established Practice in working-class area for disposal. Panel approx. 1,100 units. Good house also for disposal. Further particulars write: A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool 1.

Mixed Practice with Furnished house—Immediate Sale—Spot cash. Owner going abroad. North London suburb. Panel, over 1,500, growing. Established ten years. Income over £2,000. Easily run freehold furnished house with garage. Practice two years' purchase. Ideal ex-Serviceman with capital.—Box P9444, B.M.J.

Mixed Panel and Private (cash) Practice for sale in suburb of Portsmouth, £2,000 including surgery furniture, etc. Small freehold house available for purchase with possession £2,000.—Glanvilles (Solicitors), Portsmouth.

North Wales Coast. Old-established Practice in rural area. Audited receipts last year over £1,850. Large panel, increasing. Five-bedroom freehold house with large garden. Vendor specializing. Price house and practice £5,900. Immediate settlement necessary.—Box P9442, B.M.J.

Nucleus, Industrial Yorkshire. Panel 500. Stone-built house, garage. House and practice, £2,200.—Box P9445, B.M.J.

Ophthalmic Practice for Sale, Home Counties. Hospital appointment, 2 clinics. House, 3 reception, 4 bed. Garden, garage.—Box P9059, B.M.J

Practice. Good residential district in Kent, near outer London border. Income £3,500. Panel 500. Two years' purchase. Very exceptional freehold house, £7,500, or can make special arrangements—Box P9441, B.M.J.

Practices and Partnership Shares for sale in Midland and Northern Counties. Full details free on request.—British Medical Bureau, 33, Cross Street, Manchester, 2.

Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool Telephones: Royal 8116 and Royal 7480. Telegrams: "Organic," Liverpool.

Sale, Lancs-Cheshire border, easily run Practice. Panel 1,500. Income nearly £2,000 increasing. Small modern house, garage, garden. Surgery rented town centre. House, practice, drugs, surgery furniture, £5,000.—Box P9410, B.M.J.

WANTED

Wanted, Practice or Partnership. Experienced principal Scots, ex-Service, married. Gloucestershire or South. Capital. Exchange Perthshire considered.—Box P9449, B.M.J.

Wanted, Practice in London suburb or environs, including about 1,000 panel. Capital available.—Box P9063, B.M.J.

Wanted, Practice in or near Nottingham for family reasons. Good price paid for suitable practice, or would exchange present sound practice in pleasant city, South of England, with necessary cash adjustment. Replies strictly confidential.—Box P8414, B.M.J.

Wanted immediately, Mixed Practice in London area. Panel approximately 1,500. House to rent preferred.—Box P9448, B.M.J.

Doctor wishes to purchase Practice, London area. Ample capital available. Any size. Will also purchase house if necessary. Replies treated in confidence. No agents.—Reply Box P9017, B.M.J.

Ex-Major (M.B., B.S.), experienced practitioner, desires good mixed practice in select London area. Accommodation desirable, but not essential. Capital available, quick settlement. Telephone Ladbroke 1067.

Experienced practitioner requires Country Practice in Lake District or West Yorkshire. Income £1,000 to £2,000. Capital available.—Box P9064, B.M.J.

M.B., Ex-Major, R.A.M.C., urgently requires Practice. Income £1,500—£2,000. Panel 1,000 upwards. Ample capital available for immediate purchase.—Box P9474, B.M.J.

N.W. Lancs. Old-established Mixed Practice Panel 1,600. Income £4,500 audited figures. Central consulting room, garage, living accommodation if required.—Box P9412, B.M.J.

Practice wanted by well-experienced G.P., pre-ferably London or Suburbs. Capital available.—Box P9413, B.M.J.

Practice or Nucleus required by experienced ex-Service doctor, London or Suburbs. Capital available. Accommodation desirable but not essential.—Box P9411, B.M.J.

Practice wanted, seaside resort preferred but not essential. Partnership considered. Capital available. Replies in confidence to W. G. Richards, M.B., B.S., M.R.C.O.G., 65, Wentworth Avenue, Southbourne, Hants.

Practice with good panel, London suburbs, Home Counties or Coast, wanted by fully experienced principal. Income £2,000 to £3,000. House to rent, or would exchange panel and club practice in rural and mining area, income approximately £2,800. Large flat to rent.—Box 9452, B.M.J.

Practice with scope, anywhere south or south-west of Birmingham. Keen ex-Service doctor, 28, married, well qualified, recent hospital (obstetrics and gynaecology) and G.P. experience, with excellent references and capital.—Box P9019, B.M.J.

Practices and Partnerships wanted anywhere, England, Scotland, Wales. Purchasers waiting Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

Southampton practice, partnership or assistantship wanted by well-qualified experienced doctor Urgent.—Box P9447, B.M.J.

Vicinity Richmond, S.W.14, Twickenham, Prac-tice, with or without living accommodation, or partnership.—Box P9451, B.M.J.

Well qualified doctor, thoroughly used to seaside practice, wishes to buy Coast Practice or would consider Partnership. Ample capital available.—Box P8449, B.M.J.

X-Ray Practice or Partnership in London, Home Counties or large provincial town, desired by experienced D.M.R., meantime holding Honorary appointments in semi-rural area.—Box P9450, B.M.J.

DIETITIANS, DISPENSERS, NURSES,

VACANT

Wanted, Dispenser-Bookkeeper, for practice of three on South West Coast. Laboratory experience an advantage but not essential. Good salary to suitable applicant.—Box 9420, B.M.J.

Wanted, Dispenser-Bookkeeper, state age, experience, when available and send references. Interview essential.—Drs. Aubrey and Dudley Ireland, Shrewsbury (2866).

Dispenser wanted urgently by Doctor in North London. Suitable accommodation available nearby. Please send testimonials. Tel.: LAB 3858.—Box 9078, B.M.J.

Experienced Lady Dispenser wanted for G.P. in Croydon. Apply stating age, experience, and full particulars.—Drs. Hudson and Lane, 391, Lower Addiscombe Road, Croydon. Addiscombe 2100.

AVAILABLE

Hall Dispenser requires Post with doctor, pre-ferably Manchester or Leeds. Hospital and general experience. Typing and bookkeeping.—Box 9417, B.M.J.

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

Wanted at once, Gentlewoman (over 40, or 25 to 35, with permission of Ministry of Labour), earnest Christian. Resident (preferably) or non-resident. Expert shorthand-typist for Christian organization in country close to London. Varied interesting work with possibilities for occasional travel. Good salary.—Box 9473, B.M.J.

Woman Industrial Medical Officer requires full-time Secretary for Clinic in London. Knowledge of medical terms desirable but not essential. Apply giving full particulars and references.—Box 9472, B.M.J.

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

AVAILABLE

The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the Local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

All types Receptionists, Secretaries, Dispensers, Med. Aux., etc., again wanted and supplied. No fee to employer.—Medical Services Employment Bureau, 23, Mount Park Road, W.5. Tel.: Perivale 1976.

Doctor's Secretary-Receptionist, 41, seeks Posi-tion in Birmingham. Bookkeeping, typing, some shorthand. (Mrs.) M. Caine, 2, Coppice Road, Birmingham, 13. Telephone: South 0627.

South Coast or Home Counties. Would doctor needing conscientious Bookkeeper-Receptionist and Relief Driver consider offering cottage or part house and small salary in exchange? Suggestions welcomed.—Box 9414, B.M.J.

Speed and Accuracy in all varieties of Type-writing. Temporary staff supplies.—Rae Secretarial Services, 29, Monmouth Road, London, W.2. Tel.: Bayswater 7768.

Typewriting. 'Phone VICtoria 7989. Expert typists at the Raven Agency, 302, Vauxhall Bridge Road, Victoria, S.W.1, undertake all medical work at moderate charges. Prompt town and country services.

Typewriting, Duplicating, Medical Manuscripts, testimonials, etc. Immediate service, ex-R.A.M.C. staff. Satisfaction guaranteed.—Specialist Typewriting Bureau, 30, City Road, E.C.1. Mon. 4881. Mai. 6344.

Well educated girl, 23, S.R.N., knowledge of secretarial work, able to drive car, seeks post with doctor. Exempt registration, available end of April. —Box 9454, B.M.J.

HOUSEKEEPERS

Receptionist-Housekeeper, adaptable, good ap-pearance, can also cook. Not London.—Box 9455, B.M.J.

Lady, with year's experience, seeks Post as House-keeper in doctor's establishment. Free from May 1st.—Box 9456, B.M.J.

MISCELLANEOUS

PRIVATE

Wanted, Model Pelvis and Foetus for midwives' training school mission hospital in China.—Chesterman, 93, Gloucester Place, London, W.1.

Boyle Davis mouth gag, stainless chrome, five blades, sizes 1 to 5, telescopic chestplate for above. Large and small Adenoid curettes. Tonsil Volsellum forceps. Set 3 Tonsil Guillotines, in metal case, unused; tongue depressor; case instruments for indirect laryngoscopy, including headmirror, etc. First cheque for £25 secures.—Box 9419, B.M.J.

For Sale. Endotherm Surgical Diathermy Unit with Cutting and Coagulating switches, foot-operated control, voltage 105-240, the whole mounted on strong white enamelled trolley.—Box 9458, B.M.J.

For Sale. Half-skeleton. Also dozen pre-war pre-clinical Textbooks. Pathological Slides.—Box 9457, B.M.J.

For Sale, Secretarial Furniture, Desk, 12 guineas. Two revolving chairs, £4 and £3. Table on castors, £9. Easy chair, £12.—Apply, Secretary, WEMbeck 7330.

For Sale. Ophthalmometer, Javal-Schiotz model Haag-Streit, with resistance and spare bulbs, in perfect condition. Offers to Dr. Goldsmith, Oxford Street, Nottingham.

Microscope for sale, Bausch and Lomb, complete in case, plus Leitz oil condenser. Fixed stage. Condition excellent. £40.—Box 9421, B.M.J.

One Siemens single valve unit. 1 Schall mobile unit. 1 mechanically rectified unit. 1 hand-tilting couch. 1 B.P. couch. 1 screening stand. Inside drying cupboard. Various tubes, etc.—Box 9418, B.M.J.

Required Rotary Converter 2KVA, 50 cycles, for short-wave diathermy machine (A.C.), 220 volts.—Reply Advertiser, 1, Sheen Common Drive, Richmond, Surrey.

Skeleton. Fully Articulated Human Skeleton (new specimen) male. Price £30 or best offer.—Write BM/Sebae, London, W.C.1.

New unused horizontal type Steam Glove and Dressing Sterilizer by Slater, 18 in. diameter, 24 in. long. Surplus to requirements, £300 complete. Detailed specification upon request.—A. A. Howick, Secretary-Administrator, British Legion Village, Maidstone, Kent.

For Sale. Schall upright, self-protected 6 ft. teletechnique screening stand. Fluorescent screen and lateral movement. 10 K.W. Metalix air cooled tube (very little used), £130 or nearest offer.—Apply Medical Superintendent, Eversfield Chest Hospital, St. Leonards-on-Sea, Sussex.

TRADE

Wanted to Purchase. Good quality used Micro-scopes and Accessories. Highest prices paid.—Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. MAYfair 7311.

American General and Medical Periodicals sup-plied by postal subscription. Send stamp for lists. —Herga, Ltd., 185, Waverley House, Havelock Road, Hastings.

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire.

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept., B.M.J.), 3, Railton Road, London, S.E.24.

APARTMENTS, BOARD, ETC.

AVAILABLE

Bed and Breakfast, 15s. daily, from 3 gns. weekly.—10, Welbeck Street, London, W.1.

Harley Street. Large Room, running h. and c., full or part board, with or without exclusive use of Standard 12 car and garage. Vacant approx. mid-April for three or four months.—Box 9415, B.M.J.

Hampstead Heath, Bed, Breakfast, well furnished rooms. Collector's unique quiet house. On heath 300 ft. up, magnificent views.—50, Parliament Hill, N.W.3. Hampstead 8844.

Overlooking Heath, near "Bull and Bush," Hampstead, to let unfurnished, self-contained top flat, 2 good rooms, 2 large cupboard recesses, kitchen bathroom. Rent £200 per annum (electric heating, light, and hot water included). Garage for small car available.—Box 9453, B.M.J.

S.W.3, near Sloane Square, Furnished Service Rooms with Breakfast—3 guineas weekly and upwards.—Phone Kensington 4435, or write Box 7588, B.M.J.

WANTED

Dental Surgeon (ex-R.A.F.V.R.) now senior medical student urgently requires Unfurnished Accommodation for himself and wife, within daily reach of East End.—Box 9459, B.M.J.

R.A.M.C. Officer on release leave starting post-graduate appointment London, urgently requires Accommodation. Wife, child 9 months. House or flat, furnished or unfurnished. London or near.—Box 9143, B.M.J.

HOTELS

Bournemouth. Children welcome. Near sands, Good food. Comfortable beds. Terms 6 to 8 gns.—Broughtly Ferry Hotel, Boscombe 3000.

Convalescents specially catered for at The Bournemouth Hydro, West Cliff, sea front. Every comfort and convenience, excellent service and cuisine. Accommodation available before or after Easter. 'Phone Manager 341.

Near Shrewsbury, Longnor Hall. Easter and Spring. Carpets of daffodils. Lovely parkland. Find peace and comfort in this beautiful 17th century house. Perfect meals. Ideal service. Private bathrooms. Club licence. Trout fishing, etc. Tel.: Dorrington 58.

Old Red Lion Hotel, Stow-on-the-Wold, Glos. (Tel.: 66). Cotswolds, easily reached by train, well heated, good cooking, own poultry, garden, magnificent country, restful. Winter terms from 3½ gns. Summer 5 to 6½ gns.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild allowing visitors to be out in the wonderful air. The Hotel is central heated, individual heating in bedrooms, H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

South Cornwall, Pendower Hotel, Ruan High Lanes, near Truro, for quiet holidays. Large garden, with path to private beach and bathing pool in Gerrans Bay. A comfortable, well-appointed hotel, where the cooking is excellent.

FOR SALE

Land's End, Sennen Cove Hotel, 6 recps., 39 bedrooms, 7 baths., Garages, Sun-lounge. Atlantic view. Freehold £12,000.—Box 9484, B.M.J.

HOUSES, CONSULTING ROOMS

Consulting room, Waiting room and spare room to be let in densely populated area of S.E. London (Peckham). Old established qualified dental practice on the premises.—Box 9483, B.M.J.

Freehold, Sixteen rooms, 4 lavatories, double bath-room, garage and outbuildings. Standing on 15,000 sq. ft. and 50 ft. frontage, opposite Lewisham hospital and Municipal buildings. Main road. Water and electric light in every room. All decorated in cream and brown. Fully furnished with modern pre-war furniture of best quality. Carpet in all rooms. The complete home, lock, stock and barrel. Present owner going abroad (vacant possession £10,000). Also Vauxhall 10, 1939 saloon £450. 'Phone, Lee Green 3972.

Harley Street. Large First Floor Consulting Room now available for one or two. One name plate allowed.—Box 8733, B.M.J.

Two Consulting Rooms available shortly close to Sloane Square. Flat, 2 rooms, bathroom and kitchen, and Maisonette, 5 rooms, bathroom and kitchen, available in same building. Reasonable rents and premiums.—Box 9460, B.M.J.

MOTOR CARS

MILHALL MOTOR CO., LTD

1940 M.G. 2.6 litre Sports Saloon.

1940 Morris 10 h.p. Saloon. Speedometer read-ing 25,000.

1946 (first registered) Rolls Royce Phantom III, semi-razor edge 7-seater limousine Mulliner. 6,500 miles only.

1939 Rover 14 Sports Saloon. Speedometer reading 29,000 miles.

1938 Rover 20 Sports Saloon.

1933 Rolls Royce 20-25 Sports Saloon. Thrupp and Maberly.

Showrooms: 5, ST. JAMES'S STREET, S.W.1 (Whitehall 1952-4)

Service: 55-57, South Edwardes Square, W.8 (Western 2769)

Gentleman urgently requires 1946/7 car, earlier model considered if condition exceptional.—Cutmore, 34a, Burnt Ash Hill, London, S.E.12. (Imperial 3527).

Motourists (London), Ltd., of Great North Road, East Finchley Station, N.2, urgently require late model cars of all makes, any h.p. Representative will call by appointment. Tudor 2301-2.

OVERSEAS CARS LIMITED offer: 1946 16 Armstrong Siddeley D/H Coupe, 1939 8 and 10 Austins, 1939 Hillman Minx D/H Coupe, 1946 Humber Hawk, 1939 1½ litre Jaguar, 1946 2½ litre Jaguar, 1937 2 litre M.G., 1939 and 1947 Morris 8, 1939 12 Rover, 1946 8 Standard, 1947 Studebaker, 1947 2 litre Sunbeam Talbot, 1939 10 Vauxhall and many others. Full particulars from 227, Brompton Road, S.W.3. Tel. KENsington 7475.

1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

The Automobile Specialists to the Medical Pro-fession offer:—1939 (October) Humber Sixteen 6-cylinder saloon, reconditioned engine June 1946, completely re-chromium plated, re-cellulosed dark blue and black, new carpets, magnificent car in perfect mechanical condition, £775; 1939 (first registered, 1946) Wolseley 14/60 h.p de luxe saloon, black, brown hide, reconditioned engine August 1947, a car in superlative condition, £635.—George Clarke (Motors) Ltd., 276-278, Brixton Hill, London, S.W.2. Tulse Hill 3211.

NURSING HOMES

A few Vacancies available in Nursing Home, best part of Streatham. All medical facilities available. Ladies and gentlemen. Fees from 5 guineas. —Box 8734, B.M.J.

Nursing Home run like first-class, private house. Resident medical man and wife. Certificated nurses. Rest cures, neurasthenics and convalescent (not certified, malignant nor tubercular). Guests also received. Lounge hall, large dining room, lovely drawing room. Own poultry Very private garden. Beautiful country. Shops 4 minutes. London 40 minutes. Very comfortable. Quiet. Good catering and cooking. Consultants and other medicals can visit their own patients.—C. F. Fothergill, M.B., B.Ch., "Hensol," Chorley Wood, Herts. (Phone: Chorley Wood 24).

Vacancies exist in Medical and Convalescent Nursing Home. Proportion of chronic cases received.—Carlton Nursing Home, 1, Carlton Road, Ealing, W.5. Perivale 2819.

APPOINTMENTS

(Continued from page 21)

Have you read the notice at top of page 12 ?

ST. THOMAS'S HOSPITAL, S.E.1
SENIOR ASSISTANT MEDICAL OFFICER
(two vacancies)

Applications are invited for the post of part-time, three days a week, Senior Assistant Medical Officer (two vacancies) in the Tuberculosis Department for a period of one year in the first instance. Salary £700 per annum. M.D. or M.R.C.P. qualification is required. Previous experience in chest-diseases, and pneumothorax therapy is desirable. Applications stating age, qualifications with dates, and experience and the names and addresses of three referees, should be sent by March 31, 1948, to the Clerk of the Governors.

SALFORD ROYAL HOSPITAL (256 beds)
RESIDENT ANAESTHETIST (B2)

Salary £175 per annum, plus full residential emoluments. R practitioners who hold A posts may apply. Appointment for six months. Applications should be made at once on a special form obtainable from the undersigned, accompanied by copies of three testimonials.—H. B. Shelswell, General Superintendent and Secretary.

SOUTHEND-ON-SEA GENERAL HOSPITAL
HOUSE PHYSICIAN (B2)

Applications are invited from male practitioners for the post of House Physician (B2), vacant April 1. This post recognized for D.C.H. Salary will be at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to reach the undersigned by March 17.—John Williams, House Governor and Secretary.

SOUTHEND-ON-SEA GENERAL HOSPITAL
JUNIOR CASUALTY OFFICER (B2)

Applications are invited for the post of Junior Casualty Officer (B2), now vacant. Salary will be at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications to reach the undersigned immediately.—John Williams, House Governor and Secretary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
Voluntary Hospital—201 beds (5 R.M.O.s.)
SENIOR HOUSE SURGEON (B1)

Applications invited from medical practitioners for above post, vacant in April, 1948. Salary £250 per annum, with full residential emoluments. Holders of B1 appointments cannot be considered unless ineligible for H.M. Forces. Excellent experience in Orthopaedic and General Surgery. Applications to be forwarded to the Superintendent-Secretary as soon as possible.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary Hospital 201 beds, 5 R.M.O.s)
HOUSE SURGEON (B2)

Applications are invited for above post vacant in April, including R medical practitioners who now hold A posts, when the appointment will be for six months. Salary £200 per annum with full residential emoluments. Applications to be forwarded to the Superintendent-Secretary as soon as possible.

TILBURY HOSPITAL, Tilbury, Essex
RESIDENT HOUSE PHYSICIAN AND ANAESTHETIST (B1)

Applications are invited for the post of Resident House Physician and Anaesthetist (B1), now vacant. Salary £300 per annum, with full residential emoluments. Suitably qualified R practitioners holding B2 posts, or those holding B1 posts, being eligible for H.M. Forces, may apply. The appointment will be for six months in the first instance. Applications to be sent as soon as possible to the Secretary.

SAINT MARY'S HOSPITALS, Manchester
HONORARY ASSISTANT PAEDIATRIC PHYSICIAN

Applications are invited from suitably qualified registered medical practitioners for the appointment of Honorary Assistant Paediatric Physician. Applications to be sent to the undersigned not later than March 19, 1948.—A. R. Wise, General Superintendent.

TIVERTON AND DISTRICT HOSPITAL
HOUSE SURGEON (A)

Applications are invited for the appointment of House Surgeon (A), vacant now, including practitioners within three months of qualification who are liable under the National Service Acts. If held by a practitioner who is liable under these Acts the appointment will be limited to six months. Salary is at the rate of £200 per annum, with full residential emoluments. Apply Secretary.

VICTORIA HOSPITAL, Worksop, Notts (150 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those in H.M. Forces, for the appointment of Resident Surgical Officer (B1) to become vacant on March 16, 1948. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £350 per annum with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and ineligible for H.M. Forces, may apply. Applications should be sent as early as possible to the Secretary-Superintendent.

VICTORIA HOSPITAL FOR SICK CHILDREN
Park Street, Hull
ASSISTANT PHYSIOTHERAPIST (Non-resident)

Assistant Physiotherapist required. Non-resident. Salary as per J.N.C. and F.S.S.N. and H.O. Scheme in force. Apply with full particulars to Matron.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
Resident ASSISTANT SURGEON AND TUTOR

Applications are invited from qualified registered medical practitioners (male), preferably unmarried, for the post of Resident Assistant Surgeon and Tutor. Candidates should hold one of the higher Surgical qualifications. Salary will be at the rate of £650 per annum with usual residential emoluments. Four weeks' holiday a year. The appointment is for one year, from June 1 next, terminable by three months' notice either side, and, subject to annual re-election, may be extended to not more than three years. The duties will include deputising for the Visiting Surgeons, teaching in the Medical School, and, as Senior Resident Officer, the candidate appointed will be responsible for certain administrative duties. Applications accompanied by the names of two referees should reach me not later than Tuesday, April 6. Selected candidates will be asked to attend for interview by the Medical Council and House Committee, and, if so notified, also attend a meeting of the Board of Management on Thursday, May 13, at 5.30 p.m., when the appointment will be made.—C. R. Lockhart, Secretary.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
Watford, Herts (206 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A), vacant immediately. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be limited to six months. Salary is at the rate of £200 per annum with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M. Maskell, Administrator.

WEST END HOSPITAL FOR NERVOUS DISEASES
HOUSE PHYSICIAN (B1)

Applications are invited for the post of House Physician (B1) at the Neurological In-Patient Unit at St. Charles Hospital, Ladbroke Grove, W.10. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for a period of six months, salary at the rate of £400 per annum. Applications should be sent to the Secretary, West End Hospital for Nervous Diseases 73, Welbeck Street, W.1, as soon as possible.

WEST CORNWALL HOSPITAL, Penzance
ASSISTANT PATHOLOGIST

Applications are invited from ex-Service Specialists for the above appointment approved by the Ministry of Health under Circular 202/46. The post is a full-time one and private practice is not permitted. Salary is at the rate of £1,000 per annum. The Assistant Pathologist will work under the general direction of the Honorary Pathologist to the Hospital and will be an Assistant Member of the Area Laboratory Staff when this is established. Applications must reach the undersigned immediately. —K. I. Newell, Secretary-Superintendent.

WEST CORNWALL HOSPITAL, Penzance
SURGEON

Applications are invited from ex-Service specialists for the post of Surgeon under the terms of Ministry of Health Circular 202/46. The post is non-resident and the salary is at the rate of £1,000 per annum. Candidates should have had wide experience of general surgery and be Fellows of the Royal College of Surgeons. Applications to be forwarded not later than Monday, March 22, 1948, to the undersigned.—K. I. Newell, Secretary-Superintendent.

WEST CORNWALL HOSPITAL
Penzance (116 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) vacant now. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent to K. I. Newell, Secretary-Superintendent.

WALSALL GENERAL HOSPITAL (181 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Vacant April 1. Salary £300 per annum plus full residential emoluments. Applicants should have held house appointments and had surgical experience. Suitably qualified R practitioners holding B2 appointments and those holding B1 and ineligible for H.M. Forces may apply. Applications should be forwarded to the House Governor and Secretary.

WEMBLEY HOSPITAL, Wembley, Middlesex
CASUALTY OFFICER (Non-resident)

Applications are invited from registered medical practitioners for the post of non-resident Casualty Officer, to attend six days a week from 9 a.m. to 1 p.m. Salary £200 per annum (lunch provided). A previous member of the resident medical staff is applying for the post. Applications should be sent to the undersigned as soon as possible.—P. E. Windo, Secretary.

WREXHAM AND EAST DENBIGHSHIRE WAR MEMORIAL HOSPITAL, Wrexham
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the following six months' appointment of Resident House Surgeon (B2), primarily to the Ear, Nose and Throat Department, and Eye Department to commence at once. Salary is at the rate of £350 per annum, with full residential emoluments. R practitioners holding A posts may apply. Applications to Leslie Spencer, Secretary.

WORCESTER ROYAL INFIRMARY

Applications are invited for the following positions:—

HOUSE PHYSICIAN (A), vacant May 1.
HOUSE SURGEON (A), vacant April 1.

Including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by R practitioners the appointments will be limited to six months. Salaries at the rate of £170 per annum with full residential emoluments. Applications should be addressed to J. S. Rippier, House Governor.

WEST KENT GENERAL HOSPITAL
(Incorporated), Maidstone (135 beds)
TWO HOUSE SURGEONS (A or B2)

Applications are invited from registered medical practitioners (male and female) for the appointment of Two House Surgeons (A or B2). Posts vacant March 29 and April 5 respectively. The appointment will be limited to six months. Salary at the rate of £200 per annum with full residential emoluments. Applications should reach the undersigned forthwith.—Edward J. Gregg, House Governor and Secretary.

WESTMORLAND GENERAL HOSPITAL
Kendal (82 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2), non-resident, to become vacant at end of March. Salary £450 per annum. R practitioners who now hold A posts may apply, when appointment will be limited to six months; otherwise may be extended. Applications should be sent without delay to J. M. Somervell, Hon. Secretary.

YORK COUNTY HOSPITAL (222 beds)
HOUSE SURGEON (B2)
mainly Eye, Ear, Nose and Throat Department

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) whose main duties are in the Eye, Ear, Nose and Throat Department (37 beds, with busy Out-patient Clinics), but who will share in the general work of the hospital and in casualty duty, including R practitioners who now hold A posts. If held by an R practitioner appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments. This post is recognized for D.O.M.S. and D.L.O. examinations and becomes vacant on April 1, 1948. Applications to be sent to the undersigned by March 15, 1948.—J. R. Mackrill, Secretary.

Have you read the notice at top of page 12 ?

CONNAUGHT HOSPITAL, Walthamstow, E.17

Applications are invited from registered medical practitioners (male) for the following position now vacant.

CASUALTY OFFICER (B2)

R practitioners who now hold A posts may apply. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £200 per annum, with full residential emoluments. Applications should be sent to R. Halton Harrison, General Secretary.

WEST SUFFOLK GENERAL HOSPITAL
Bury St. Edmunds

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following appointment:—

HOUSE SURGEON (A) with responsibility for E.N.T. and general surgery. Now vacant. Salary £200 per annum. Appointment normally for six months. Applications should be addressed to the Secretary, E. E. Hardwicke, F.H.A.

HOMES

THE MAGHULL HOMES FOR EPILEPTICS (INC.), MAGHULL, near LIVERPOOL

Open air occupation and recreation for patients, farming, gardening, football, cricket, tennis, bowls, etc. School recognized by Ministry of Education. Fees: 1st class (men only), from £3 3s. per week; 2nd. class (men and women), from £2 2s. per week; 3rd class (men and women) supportetd by Public Assistance Committees, from 35s. per week; Education Committees from 41s. 6d per week; private, from 23s. 6d. per week. For further particulars apply to the Secretary, G. Millington, A.L.A.A., The Thomas Bartlett Home, Liverpool Road South, Maghull, near Liverpool.

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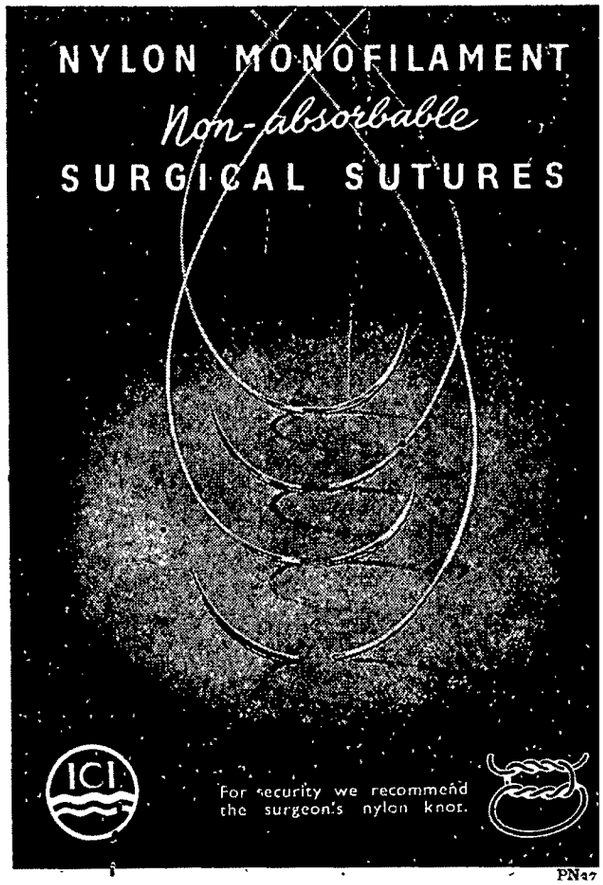

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY MARCH 20 1948

EPILEPSY*

BY

Sir CHARLES SYMONDS, K.B.E., C.B., D.M., F.R.C.P.
Physician for Nervous Diseases, Guy's Hospital

Now and again in the history of medicine the invention of a new instrument suddenly lights up the path of clinical observation so that many things which have been seen dimly become clear. Speculation is replaced by knowledge, which in turn shows the way to further speculation. Thought advances at a bound. At such a moment it may be forgotten that had it not been for all the patient and careful examination of what had already been seen this advance could never have been made, and that further progress must still depend upon clinical observation, helped, but not replaced, by the new method. The electro-encephalogram (E.E.G.) has thrown a light into many dark places on our way to the knowledge of epilepsy, but I would remind you at the outset that although the existence of an abnormal discharge of energy in the cerebral cortex coincident with epileptic attacks has only recently been proved by electrical methods, Hughlings Jackson seventy years ago conceived the idea that such a discharge must be the basis of epilepsy, and his views have been accepted by neurologists since that time as the basis of further speculation.

One of the ways in which the E.E.G. has helped the neurologist is in testing clinical hypothesis. For example, a man aged 30 came to me in 1947 with the story of two recent generalized epileptic attacks. There was a family history of epilepsy. The patient also complained of twitching in his eyes, which had gone on continuously since he could remember. This symptom was easily observed, for it occurred two or three times in every five minutes. The eyelids closed briskly but not so completely as to prevent one seeing an associated upward movement of the eyeballs. The whole episode lasted about a second. This complaint had been diagnosed as a tic or habit spasm, but it was not quite like a voluntary movement. Incomplete closure of the eyes as a voluntary movement is not associated with visible upward movement of the eyeball. Considered in its setting the symptoms suggested an epileptic discharge for this reason, and I made a note that I thought it must be epileptic though I had never seen a case with such frequent, circumscribed, and stereotyped motor expression. There, before the advent of the E.E.G., the observation would have ended in suspicion without proof. The electrical record showed a typical epileptic discharge with each episode of blinking. Confirmation in a case of this kind is of great value, for we have all many times seen little attacks in which the diagnosis has been doubtful, and with increasing experience we have all probably become less inclined to exclude epilepsy as the cause, because we have continued to observe new and sometimes quite peculiar variants happening, at first alone, but later as the aura of an undoubted fit. Now we have at least the chance of getting confirmation, though a negative record would still leave doubt, for in these very brief myoclonic episodes there may be no detectable electric discharge.

Epileptic Variants

There are many variants of epilepsy of whose nature we can be sure without the aid of the E.E.G., but which because they depart so far from the "ordinary" attacks are apt to escape recognition. I suppose that loss of consciousness with or without convulsive spasm is the criterion most widely used in practice for the diagnosis of epileptic attacks. It is not sufficiently appreciated that in many attacks consciousness is not lost but disturbed. The sufferer may be aware of all that is going on around him, may hear and understand what is being said, but is for the time being unable, as he says, to collect his thoughts or reply to a question. There is in fact not loss of consciousness, but confusion, which may be of the mildest degree. As Gowers put it, the effect of an epileptic attack upon the stream of consciousness may vary from a complete interruption of its flow to a mere ruffling of the surface.

Apart from convulsive spasm there may be a momentary *loss* of power, and on the sensory side a great variety of abnormal feelings constituting the epileptic aura, which may occur without disturbance of consciousness. The chief characteristic of all these slight attacks is their suddenness and brevity. It would be impossible here to attempt any classification of epileptic variants. I shall select one or two for example.

First, the attacks called myoclonic. Anyone who has witnessed a generalized convulsion will have observed that sometimes after this is over there is occasional twitching of the limbs, which may continue for a while after the patient has regained his senses. Myoclonic twitching of this type often precedes an epileptic attack, and it may be the only symptom of an attack. Usually it is confined to the arms, and is especially apt to occur during the first hour or two after waking. There is no disturbance of consciousness, but sudden jerking movements of one or both arms which may interfere for the moment with dressing or shaving. The experienced patient knows when this happens that he may have a fit, but quite often the myoclonus passes off without this. The movements are fractions of a generalized convulsion. In rare instances such myoclonic twitching may be the only evidence of

*Annual oration to the Harrogate Medical Society, 1947

epilepsy in a patient who never has any generalized convulsion or disturbance of consciousness, and may occur with great frequency

Next let me take a rare form of attack. Ramsay Hunt (1922) noted many years ago that a patient might sometimes fall without any disturbance of consciousness at all. Recognizing the epileptic character of these attacks, he called them "drop seizures." I have met with several examples of this kind of attack, and two families in which several members were afflicted. I recently saw a married woman of 62 whose only complaint was of falling attacks. These she had had since the birth of her first child when she was 26. They tended to occur in series at long intervals, and she had had five in as many weeks before I saw her. All were exactly the same. They occurred only when she was standing; without warning and without any impairment of consciousness she fell to the ground, as a rule forwards on hands and knees, often bruising herself. She was immediately able to get up without assistance. These attacks were never precipitated by laughter or other emotion, being thus distinguished from the well-known phenomenon of cataplexy. Her mother, who died at 65, had exactly similar attacks during the last ten years of her life, and an older sister also has them.

Focal Symptomatology

All these peculiar phenomena of the epileptic attack should, I think, be classified under the heading of focal symptoms because symptoms which are so specific must be related to the site of maximal epileptic discharge. This was the conception of Hughlings Jackson, derived from clinical observation long before modern methods had provided opportunity for precise observation. Seeking proof to support his theory, he found a case in which convulsive spasm in a single limb was associated with a scar in the appropriate area of cortex due to a depressed fracture. Hence the extraordinary notion that Jacksonian epilepsy and traumatic epilepsy were the same thing. Jackson used a case, which happened to be traumatic, to prove his argument that a lesion of a particular part would cause a particular kind of attack. To anyone who reads his papers it must be perfectly clear that this was all he meant. He was concerned with the localization of the lesion, not with its pathology. He was well aware that focal symptoms might occur in cases of brain tumour, or in what is called idiopathic epilepsy. Dr. James Collier used to say that the commonest cause of a Jacksonian attack was idiopathic epilepsy—a broad generalization which I believe is true when the idiopathic attacks are accurately observed, for there is very often an initial symptom of the attack which indicates a focal origin.

Penfield's (1946) observations in recent years have enriched our knowledge of focal symptomatology. With painstaking accuracy he has recorded the effects of electrical stimulation of different areas of cortex in patients subjected to craniotomy under local analgesia. His experiments have confirmed in the most striking way many of the conclusions reached by Hughlings Jackson from clinical observation. Jackson, for example, first described two kinds of attack associated with lesions of the anterior temporal lobe—the hallucinatory attack of taste or smell, and what he called the dreamy state Penfield was able to produce both kinds of attack by stimulation of the anterior temporal cortex and of no other part of the brain. These attacks therefore have great localizing value, and the descriptions given by patients are characteristic. The smell or taste is always the same, always unpleasant, never quite like any normal taste or smell. The dream, which may include both hallucinations and illusions, has the dreamlike combination of unreality and familiarity. In many cases both of organic disease and of idiopathic epilepsy Penfield was able to reproduce by stimulation attacks which the patient recognized as the same as those which happened spontaneously.

From what I have said you will appreciate that when we recognize a focal origin for the attack this does *not* imply an organic basis. Nevertheless the story of focal attacks in a patient with idiopathic epilepsy is usually different from that of a patient with a cerebral tumour, and the difference seems to depend upon the existence in idiopathic epilepsy of an abnormal state of the cortex as a whole, which makes it easier for the epileptic discharge to spread. The focal attack of idiopathic epilepsy may remain focal if the discharge is a slight one, but a more severe discharge will tend to spread. Consequently the patient often has minor attacks which consist of nothing but what we call an aura; but if there is a major attack consciousness is lost and convulsion, if it occurs, is generalized. By contrast, the discharge from an organic lesion is often restricted whatever its degree. The patient may have focal convulsions or sensory phenomena of considerable extent and rapid recurrence with no loss of consciousness or generalized convulsion. Such attacks recurring in stereotyped form usually indicate a coarse lesion—most often, of course, a tumour.

Modern Methods of Pathological Diagnosis

The preliminary sifting is made from the clinical data. Fits beginning under the age of 20 in those with a positive family history are idiopathic unless there is some strong clinical evidence to the contrary. The same is true of fits beginning in this age period which have continued for several years even though the family history is negative. But when we meet with a recent history of fits in an adolescent with negative family history and clinical examination, a radiograph of the skull is worth while. It is a simple procedure, and now and again will reveal some gross abnormality. For example, an otherwise healthy girl of 16 had a single fit with generalized convulsion and loss of senses. The onset was with spitting as if she wanted to get rid of something unpleasant—suggestive of a temporal lobe focus. Clinical examination was negative, and there was no family history of attacks. The radiograph showed a calcified tuberculoma in the right temporal lobe.

In adults the onset of the fits demands more detailed investigation. Past head injury, middle-ear or sinus infection, encephalitis, and cerebral syphilis are uncommon but important causes, and anyone who has lived in India should have the limbs *x*-rayed for evidence of cysticercosis. Radiographs of the skull should be done as a routine—calcification is quite common in the gliomas, which are the commonest of cerebral tumours. The E.E.G. is useful, and doubtless when apparatus is available will be considered indispensable. In 50% of idiopathic epileptics, the record is of positive diagnostic value, and in another 25% it shows abnormalities which are suggestive. An organic lesion if fairly near the surface shows focal slow wave activity. An air encephalogram completes the investigation. Useful information can be obtained by the injection of 30 c.cm. by lumbar puncture—a procedure which as a rule upsets the patient only for a day or two. If epilepsy is symptomatic of a removable tumour (meningioma) there will very probably be a filling defect, though normal pictures are compatible with an infiltrating glioma. No one quite knows how many of the patients without apparent hereditary or other cause starting to have fits in adult life eventually prove to have tumours. It is commonly estimated at 50%.

Nattrass (1943) has questioned this belief on the basis of a follow-up of 81 cases whose first attack was after the age of 40, finding that of 57 who could be traced 16 had died in less than twelve years, but only nine of proved organic cerebral disease. The course in the others, both dead and survivors, had been that of idiopathic epilepsy. My impression is that his figures, though small, are near the truth. A considerable number of idiopathic epileptics have their first attack after 30, and idiopathic epilepsy is a very common disease.

Causation

About the causation of idiopathic epilepsy we have much still to learn, but the E.E.G. has taught us a good deal about the hereditary factor. Its familial incidence has of course been long recognized, though in only about a quarter of the cases, and then curiously enough more often in siblings, aunts, and uncles than in either parent; but Lennox and the Gibbses (1940) have recorded the following observations. They examined E.E.G. of 183 first-degree relatives of 94 patients with clinical epilepsy and found abnormal E.E.G.s in 60% as compared with 10% of 100 persons with no personal or family history of epilepsy. In 53 instances records were obtained from both parents, and in only 5% were both normal. Even more startling was the finding that in 35% both parents showed an abnormal E.E.G. Of the relatives with abnormal E.E.G.s only 1 in 3 had clinical epilepsy. Lennox and his collaborators conclude that the abnormal E.E.G., presumably associated with an epileptic tendency, may be inherited as a dominant trait. The risk of an epileptic offspring having epileptic children is great only if the mate also carries the trait. Thus if a person with epilepsy will choose a mate who has a normal brain rhythm his chance of having any offspring with epilepsy is greatly reduced. His chances of normal offspring are greater than those of parents both of whom have no present or family abnormality but have brain waves of abnormal frequency.

The E.E.G. has therefore become an indispensable aid to the doctor who is asked for advice about the risk of inheritance by a person about to marry who has a personal or family history of epilepsy. The answer is that if the proposed mate has no personal or family history of the disease and has a normal E.E.G. the risk is negligible.

It is fairly safe to assume from the available data that the most important cause of idiopathic epilepsy is an inborn liability to abnormal cortical discharge. If this is granted we still want to know what are the conditions which from time to time precipitate this discharge. We know that most people may have epileptic attacks under certain conditions—for example, extreme degrees of cerebral anoxia or hypoglycaemia—but in idiopathic epilepsy no such conditions are required. The attacks as a rule occur without any apparent cause. In a very small proportion of the cases the opposite is true—the attacks occur only with a specific precipitant. These cases of so-called reflex epilepsy form an interesting group. The best-known example probably is acousticomotor epilepsy, in which a sudden noise precipitates an attack, but there are many others. Coughing, micturition, and sexual orgasm, for instance, may be specific precipitants, or sudden contact of particular parts of the body. In this last group sometimes local contact will provoke a focal attack in the part touched, and electrical records can show the arrival of the sensory impulse in the cortex, the local epileptic discharge, and the resulting muscular contraction occurring in a time sequence corresponding with the known rate of conduction of the nervous impulse.

The artificial production of attacks in epileptics is often possible by alkalosis induced by over-breathing, or by extreme hydration brought about by a high fluid intake and injections of "pitressin," but there is no evidence to suggest that these causes are commonly of any clinical importance.

Age is certainly important. Infants are peculiarly susceptible to fits, but it is certain that in many cases infantile convulsions are evident of an abnormal liability in this direction. The proportion of infants with convulsions who later develop epilepsy is higher than of those who have not had them; a history of infantile convulsions is commoner in epileptics than in non-epileptics; and a history of infantile convulsions is more often obtained among the relatives of epileptics than of non-epileptics: all these differences are significant and the point has an important bearing upon treatment. An infantile convulsion, especially if without adequate precipitating cause, should be the occasion for inquiry into the family history, and if this is positive regular and protracted sedative treatment should be given.

A striking feature in many cases of epilepsy is the time at which the attacks occur. They may occur only during sleep or between certain hours of the day, often during the first hour or two. A monthly rhythm is frequently noticed in women on account of the relation to menstruation, but is also to be observed in males. Periodicity of the attacks, however, may be seen at much longer intervals of months or years (Griffiths and Tylor Fox, 1938). Such periodicity must always be looked for and taken into account in treatment. Without this it is impossible to estimate the efficacy of drugs.

Diagnosis of Epileptic Attacks

I shall confine myself here to the distinction between epilepsy and syncope, which I think may be a very difficult problem. Syncope as a rule has an obvious cause—for example, long standing, especially on an empty stomach, sudden emotion, or intense apprehension—and it is fairly safe to say that a sudden attack of falling with loss of consciousness without such a cause is not syncopal. It is not so safe to assume that an attack of this kind provoked by emotion is not epileptic. In some persons with reflex epilepsy emotion may be the precipitant, and it may be a particular kind of emotion. In a syncopal attack there is usually some warning—dimness of vision, weakness, uncertainty of balance. But this is not an absolute rule. A person may fall in a faint with little or no warning; and, conversely, a minor epileptic attack may be preceded by similar sensations. If the epileptic attack is closely observed twitching of face or hands is commonly seen—symptoms which at first might be considered diagnostic of epilepsy. But this is not true. If the cerebral anoxia resulting from syncope is severe enough an epileptic discharge with twitching is the result. The following case illustrates the difficulties of differential diagnosis.

In 1937 I saw a boy aged 13 with the history that in the previous six years he had had five attacks of unconsciousness. The first occurred when he had a tooth out with local analgesia, the second on getting up after influenza, when at lunch he suddenly slid unconscious under the table. The third happened when he was standing in a row of boys at school waiting to be examined by a doctor, the fourth also at school while waiting to be inoculated, the fifth when because of the recent attack he was taken to see his family doctor, who gave the following account. "While I was listening to his heart and chest I looked up at his face and noticed he was very white. He then fell. At first he was pale; his lips then became cyanosed, and at the same time I noticed twitching of fingers and hands. This lasted only a few moments; his colour then immediately returned and he got up and said he was all right." The only relevant fact in the family history was that a maternal uncle had from childhood

always fainted easily when frightened—if, for example, he saw an accident. The patient himself had had a serious head injury in a car accident at the age of 3, being severely confused for a fortnight. I decided in favour of syncope, and heard no more of him till he was 21 and an officer in the Guards.

The story then was that he had had no further attacks till he was at Sandhurst, when while listening to a lecture on first aid he had suddenly lost his senses and fallen from his seat on to the floor. A year later he had a similar attack while being medically examined. The medical officer was convinced from his observation that this was an epileptic attack and sent him to a neurologist with this diagnosis. While the neurologist was listening to his heart it suddenly slowed to a rate of about 20 a minute and then stopped for an estimated period of 45 seconds, during which the report stated "he had a fit, rolling eyes, rigidity, and a few convulsive movements." The neurological diagnosis was Stokes-Adams disease, and he was recommended for invaliding. The E.C.G. and E.E.G. were normal.

Dr. Denis Williams then staged an attack. Preparations were made for simultaneous recording of E.E.G. and E.C.G; a rather large needle was produced and the patient was told that it would be stuck into his arm and would be painful. He at once became pale, with marked slowing of the heart beat; his lips became cyanosed and he was momentarily confused. There was no abnormality in the E.E.G. My conclusion was that these attacks were neither epileptic nor symptomatic of heart block, but severe syncopal attacks with a specific emotional precipitant. I gave considerable weight to the family history. However, I advised that he should see Dr. Parkinson, who was confident that they were not Stokes-Adams attacks but gave his opinion against the diagnosis of syncope. His arguments, which he has kindly allowed me to quote, are of great interest. "I know that in extreme instances of fainting convulsions can occur, but rarely. Ordinary faints seldom persist from age 8 to 21 years; the warning is longer, and lesser degrees are common in the same individual. You will gather that in my opinion they might be severe faints, but I incline personally to regard them as of an epileptic nature."

It is my own opinion that we have here an example of what might justly be called reflex syncope. I have met with several comparable examples, and all have had these features in common: (1) a specific liability to faint at the sight of blood, or an accident, or the account or thought of injury or illness; (2) a tendency for this liability to begin in youth and persist into adult life; (3) the occurrence in some attacks of epileptiform convulsions; and (4) a family history of similar liability.

Anticonvulsant Drugs and E.E.G.

The E.E.G. has been of a certain value in providing scientific proof of the efficiency of anticonvulsant drugs. Many patients who are subject to repeated attacks show between these attacks very frequent brief discharges on the E.E.G. which are characteristic of an epileptiform explosion. These are known as subclinical attacks, and it can be shown that their frequency can be diminished or even abolished by sufficient doses of phenobarbitone. Another interesting demonstration is the effect of concentrated mental activity in inhibiting these subclinical attacks, confirming the impression of all experienced clinicians that epilepsy is most apt to occur when the mind is empty and least when it is active and busy. Unfortunately the impression of many lay persons is the opposite, and the doctor is often expected to prescribe prolonged absence from school at the onset of epilepsy—advice which is sometimes given with harm to the patient.

The most important contribution of the E.E.G. to treatment, however, is in connexion with the new drug "tridione." The normal E.E.G. consists of a fairly regular 10-a-second rhythm of low-voltage discharges. Of all patients with clinical epilepsy 25% show rhythms within normal limits; 50% show abnormality of an irregular kind—usually medium-voltage slow-wave activity; 25% show runs of slow- or fast-wave activity which is characteristic of epilepsy. In this group—the epileptics with epileptic E.E.G.s—there are different kinds of abnormality in the E.E.G. which corresponds roughly to different varieties of attack.

In what is clinically called grand mal—loss of senses with generalized convulsions—the E.E.G. shows bursts of high-voltage fast waves or spikes. Attacks of similar pattern but lesser degree, which the clinician might well call petit mal—brief loss of senses with widespread but slight and momentary tonic and clonic spasm—are associated with the same type of E.E.G.—i.e., the grand mal type of E.E.G. A new name is needed for these attacks, and, based upon the E.E.G. findings, the somewhat ambiguous title "minor grand mal" has been used to describe them. The term has some practical value because attacks with this type of E.E.G., whether grand mal or minor grand mal, respond on the whole better to phenobarbitone, with or without "epanutin," than to other drugs.

Another type of E.E.G. is that in which there is a series of medium-voltage flat-topped slow waves. This is found to be associated with attacks in which confusion and disordered behaviour are the outstanding features, with little or no muscular twitching. These so-called psychomotor attacks respond best to epanutin.

The third type of E.E.G. is characterized by alternating slow and fast waves of rather high voltage—the so-called wave-and-spike complex. This again is subdivided into a round wave followed by a sharp spike—the so-called dome-and-dart E.E.G.—which is characteristic of true petit mal, and a more rapid alternation of flat-topped wave and spike known by electro-encephalographers as the petit-mal variant. Of practical importance here is that if attacks are associated with the dome-and-dart E.E.G. they are likely to be controlled by tridione and are equally unlikely to be influenced by any other anti-epileptic drug. The dome-and-dart E.E.G. is invariably found in what at one time was called pyknolepsy. The main characteristics of this variety of petit mal are an onset in childhood; the daily occurrence of frequent, brief, stereotyped attacks of loss of consciousness seldom accompanied by muscular twitching, except in the face; preservation of the intellectual functions; and a relatively good prognosis. It was recognized before the advent of tridione that the attacks not infrequently ceased at puberty never to return. Other clinical varieties of what the electro-encephalographer calls a true petit mal because of the association with a dome-and-dart complex are brief myoclonic attacks and attacks in which there is sudden falling with loss of consciousness but without twitching. Lennox (1947a) has reported the effects of treatment with tridione in 166 patients with true petit mal, having the characteristic E.E.G.: 31% became entirely free from attacks, 32% had less than one-fourth the previous number; 20% improved to a lesser extent, and 17% are unimproved By contrast, tridione given to patients with uncomplicated grand mal brought about improvement in only 20%, and actually made 50% of the patients worse. Patients with psychomotor attacks are not so often the worse for tridione, but they do not do so well as with epanutin. I have mentioned that the clinical pattern of true petit mal varies, including very brief loss of consciousness with twitching, if any, confined to the face: myoclonic twitching without loss of consciousness; and attacks of falling with momentary disturbance of consciousness. All three of these clinical variants are equally amenable to tridione. The shorter the history and the younger the patient the better the result of treatment.

Tridione is dispensed in 0.3-g. capsules. The initial daily dosage for infants is one capsule a day, for those aged 2–4 years two capsules a day, for those 5–16 years three capsules a day, and for adults three or four capsules a day. If after one month the attacks are not controlled the dose is increased by one capsule at monthly intervals until relief is secured, toxic symptoms occur, or the dose is doubled. The maximum improvement is usually in the first month, but Lennox reports the case of a child of 8 having 50 to 70 attacks a day in whom at the end of six months the dose was raised to seven capsules daily with final disappearance of the attacks

The commonest toxic symptom is photophobia, which occurs in about half the cases. It is very seldom severe enough to require cessation of treatment, though sometimes the patient may have to wear dark glasses in sunlight. Rashes have been observed in 14% of cases treated, usually acneiform and confined to the face, sometimes generalized and like that of measles. This calls for cessation of treatment, which is begun again when the rash has subsided, starting with one capsule every other day and gradually increasing the dose to the required level. Most patients acquire tolerance. Much more important, but apparently rare, is the danger of agranulocytosis. Lennox reports three deaths from this cause, and it follows that a fortnightly white blood count is essential for all patients taking tridione. Lennox recommends that a leucocyte count below 4,000 together with polymorphonuclears less than 40% should be an indication for at least temporary discontinuance.

Social Problem of Epilepsy

The epileptic in society has not hitherto been given much sympathy or help. He is obviously disqualified from many professions and trades, but most epileptics are intelligent and normal persons apart from their attacks, and quite able to earn their living In the U.S.A. it has been estimated that 1 in 200 of the population are epileptic, and there is no reason to suppose that the incidence in this country is less —which means that there are something like a quarter of a million persons suffering from this malady in Great Britain. Supposing half of these to be educable and employable the problem deserves special consideration if only on account of its size. A good deal has been done in America to bring the public to a sense of their responsibility in this matter. There is, however, an instinctive repugnance among healthy people not so much for the disease as for the sight of an attack, and it is for this reason that I believe schoolmasters and parents on the one hand and employers on the other may successfully resist the humanitarian appeal for the epileptic to be admitted more freely to the normal social group. More epileptic schools and self-supporting colonies therefore seem to be the answer.

One problem which most of us must have encountered is that of the epileptic who wants to drive a car, and often does so whatever medical advice may have been given. The applicant for a licence has to answer the question "Do you suffer from epilepsy?" and is told that if in doubt regarding the answer he should get professional advice. The responsibility for declaring a liability to fits clearly lies with the applicant, but it is presumably the responsibility of the applicant's medical attendant to inform him that he has such a liability. Many patients have consulted me who have had one or more epileptic attacks but as the result of treatment have been free from attacks for so long that they claim, not unreasonably, that they should no longer be considered liable to fits as applicants for a driving licence. I have sought from the Ministry of Health and from the Home Office a definition of epileptic liability for purposes of the Road Traffic Act with no very satisfactory result. My inquiries were related to two separate cases—one that of a man whose fits had been traumatic and who after surgical removal of a bone fragment which had penetrated the dura had remained free for two years. The other patient, a young farmer, had had two attacks of the idiopathic kind. I advised regular dosage with phenobarbitone and told him on no account to stop this without seeing me again. He returned six years later, having continued regularly with his treatment, with no further attacks. Owing to the death of his father he was now in a position in which inability to drive a car was a very serious handicap.

I am informed that the Ministry of Transport in drawing up the regulations for driving licences were advised by a committee of experts appointed by the B.M.A. and were advised that "once an epileptic always an epileptic," and that any person who has at any time suffered from fits should be refused a driving licence. No legal ruling, however, was made, and the answer to my specific question in 1946 was that there is no provision in the law which defines the time which must elapse from the occurrence of a seizure before an applicant for a driving licence may be certified as not being liable to fits. "The legal department takes the view that subsequent liability under the circumstances is entirely a medical question." This to my mind is an unsatisfactory state of affairs, placing as it does an unfair onus upon the practitioner. For his own protection he would probably be wise to inform his patients that the occurrence of a single epileptic attack is a permanent disqualification for a driving licence. This also may be the ideal advice for the protection of society, but is it practically fair? As Lennox (1947b) points out, driving accidents must be at least a hundred times more often due to chronic alcoholism than to epilepsy, but the applicant is not required to state that he has never been under treatment for alcoholism. Nor are patients with known coronary disease debarred. I have known two who have had coronary occlusion when driving, in each case resulting in a serious accident. I think it is time that legal machinery should be set up which would enable the epileptic who has been free from attacks for a specified period to state his case before an impartial tribunal. This would not only be fairer to the epileptic but would also be in the public interest. I have no doubt that at present many epileptics are driving to the danger of the public who might be deterred from doing so by a law providing a specified period of freedom from attacks.

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The annual report of the Institute of Child Health of Birmingham University has recently been published. The Institute attaches great importance to postgraduate training, dividing it broadly into three main types: (1) for those doctors who intend to specialize in paediatrics; (2) for general practitioners who want a refresher course; and (3) for medical men who want to specialize in administration. The Institute has received large numbers of applications from postgraduate students in Britain and abroad, and during 1947 received students from India, Palestine, Italy, Poland, Malta, and South Africa. Some of the main lines of research carried out at the Institute are outlined in the report as follows: (1) The nutrition of premature infants. This work is sponsored in part by the Medical Research Council and is being carried out at the Premature Baby Unit at Sorrento. (2) Protein digests in premature, wasted, and marasmic infants. (3) Infections in infancy—nature, reactions, and treatment. (4) Protein and fat metabolism in coeliac disease. (5) Aplastic anaemia, kernicterus, and other haematological problems. (6) Causes of stillbirth and neonatal death.

A PSYCHO-ANALYTIC CONCEPT OF THE ORIGIN OF DEPRESSION*

BY

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General interest in the psycho-analytic psychopathology of depression may have been kept in the background for a long time owing to the rapid development of interest in the psychopathological understanding of the less complex symptoms common in neurosis, such as anxieties, phobias, obsessions, etc. The psychopathology of schizophrenic symptoms, where the mechanisms sometimes seemed obvious and apparent but where the psycho-analytic treatment was not then helpful, interested more analysts in the early days than did the psychopathology of manic-depressive symptoms. Nevertheless since 1911, when Abraham first discussed depression, the psycho-analytic psychology of normal sorrow, depression, mourning, and grief, and the psychopathology of abnormal depressions have gradually developed until now concepts have been worked out which are to a considerable degree new and can be stated simply. Such new concepts have been found to be of essential value in psycho-analytic attempts at therapy and investigation of depressed states regardless of the degree of severity, regardless of the sex, and more or less regardless of the age—children as young as 2¼ years and adults in the sixth decade having been treated.

The earlier work of analytic writers (Abraham, 1911, 1916, 1924; Sigmund Freud, 1917; Rado, 1927; Jones, 1929) was invaluable. The background of theoretical construction already developed was necessary to make the recent development possible. With the recent work courage was needed to make the new observations. The work done in this country in the past 15 to 20 years, chiefly by and under the stimulation of Klein, has brought much clarity to the problem of abnormal depressed states, and incidentally points the way to further work with schizophrenia. Klein published her first conclusions on this subject in 1935. She has added much to our knowledge of the technique of investigation and attempts at therapy, and has added (1940) to our theoretical constructions.

Most of the views I am putting forward are based on evidence personally obtained during the psycho-analytic treatment of neuroses with depression and with manic-depressive states in different sexes of different ages from late infancy to late life (Scott, 1946).

First Appearance of Depression

To introduce the subject a brief outline needs to be given of how the infant develops to a stage which allows depression to appear for the first time. What follows after this stage of development has been reached is the history of the different forms depression assumes at different periods of life. Just as the early stages of love and hate are significant in understanding their later development, so also may the varieties of adult depression become understood to a greater degree if we can become clearer about the genesis of depression in human life.

Regardless of different views about the source or nature of instinct, it can be said that from an early age the infant breathes air, sucks milk, passes water and stool, moves about, and sleeps. These activities are normally pleasant. If any of these activities is frustrated the infant becomes angry. Regardless of how intense or diffuse his anger may become, regardless of how many organs he uses to vent his anger, he will first show his anger in the situation where the frustration is; for instance, if breathing is frustrated he will breathe angrily, if sucking is frustrated he will suck angrily.

From the earliest period of life one aspect of each of these pleasant or angry activities is its direction, namely, the direction of movement or interchange between what can be called the outer and the inner worlds, or the direction of interchange between this inner world and the outer world—for instance, breathing in, breathing out, swallowing in, vomiting out, etc.

Only slowly in the developing scheme of things are "people" as the adult knows them included. Earlier the world consists of what adults would call "parts"—breasts, faces, hands, etc. Only slowly in the scheme of things does a "self" as a "whole person" or "other people" as "whole people" develop. Only slowly do distinctions between what are later called perceptions, memories, images, etc., arise. Along this line of development crucial points can be discovered, and it appears that at one of these crucial points depression becomes possible for the first time. Previously only simpler affects, such as anger, pleasure, pain, fear, etc., are possible. It is in relationship to the manner in which these early depressive feelings arise and are dealt with that we can see the hope of understanding the symptoms of later depressions and understand how they can be dealt with. It is here that we see the beginnings of the development of normal tolerance of depression, of normal ways of dealing with depression, and also the beginnings of pathological depressed states.

"Good" and "Bad"

Let us follow some of these early sequences in greater detail. Hunger *may* lead to sucking a breast or breast substitute and to pleasure. Through the feelings of breathing, sucking, smelling, touching, swallowing, etc., the feeling of a "good something" going into or entering the inner world occurs. Technically this something is customarily referred to as an "object." During or following such an experience the child may pass water or stool or sleep with pleasure without as yet clearly appreciating with the same clarity as it later will that there is "a something" or "an object" associated with the experience of evacuation. Nevertheless he is already beginning to realize that an interchange between the outer and the inner world and between the inner world and the outer world is occurring. The general feeling of an infant feeding and later evacuating and sleeping is that both the inner and the outer world are "good" and that a "good" interchange in each direction has occurred.

On the other hand, hunger *may not* be followed by such a satisfying experience. Instead it may be followed by frustration and bellowing and gnashing of toothless gums, by angry movements, by passing water and stool in his rage, and so forth. This leads to the feeling that the inner and outer worlds are "bad" and that any object differentiation in the inner or outer world is into many "bad" objects, and that any interchanges between the inner and the outer world, which may have occurred in either direction, have been bad. Such a bout of anger may, of course, be followed later by satisfaction, but this type of satisfaction will be different from what it would have been had the bout of anger not preceded it. Similar experiences are repeated and repeated. The series of pleasures, frustrations, and annoyances build up memories, on the one hand, of attitudes to the inner and outer worlds in which the omnipotent infantile loving imagination has had free play, and, on the other hand, of persecutory attitudes to the outer and inner worlds in which omnipotent infantile hateful imaginations have had free play. Here much may be learned

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concerning the developing attitude to the external world, to the body, and to the inner world of phantasy, memory, constructive thought, and so forth; and further work in this field should lead to our understanding of much that we are ignorant of in the psychopathology of schizophrenia.

Love and Hate

But it is the next step in development to which I wish to refer specifically. Sooner or later *sufficient integration occurs for the infant to realize that the memories of the loving satisfying breast and the hated frustrating breast are of one and the same breast, and that memories of the happy, sucking mouth and of the angry, frustrated, hungry mouth are of the same mouth.* I said "sooner or later"—the time will depend at least on the degree of maturity at birth, the constitutional intellectual endowment, and the quality of the previous emotional development. In other words an integration seems to occur in which the belief in a continuing self, or what would later be called a part of the self, emerges and the belief in continuing people in the environment, or what would later be called parts of these people, emerges. Coincident with this integration a new affective state arises The realization that maximal love and maximal hate can be expressed by the same bodily organs, that both maximal love and maximal hate can be felt towards the same object, and that this object can be both satisfying and frustrating or can appear to be loving and hating is crucial. Another way of saying the same thing is that the earliest form of depression is the feeling which emerges, first, out of the realization that it is the same self that can both love and hate; secondly, out of the realization that the ego can hate and love the same object; and, thirdly, out of the realization that the same object or person can be gratifying or frustrating or can appear to be loving or hating. Whether or not this new feeling is tolerated—whether or not it is accepted as a fact of developing human experience—is certainly important. Tolerance is related at least to whether love is believed to be greater than hate or hate is believed to be greater than love. When the store of love is greater than hate love can be used quickly to overcome, to annul, to repair the effects of hate. Love can be used following separation from or death of a loved person to keep the memory alive and to keep alive the belief in a capacity to love and be loved, and consequently to believe that people worth loving and people who may love one still exist in the outer world. The more normal methods of dealing with depression thus arise.

The Genesis of Depression

There are many ways in which a partial and incomplete tolerance of a depressive situation may arise, and these lead to the many forms and symptoms of the abnormal depressive states of all degrees of severity. The many ways in which the intolerance of the depressive situation is shown are at least related to whether the angry impulses, acts, and imaginations are greater than the loving ones. If the anger is greater than the love—if the memories (or their symbolic substitutes) of the many aggressive acts, impulses, and imaginations are greater in strength than the memories of love—then arise hopelessness and depressive anxieties connected with the belief that one can do only bad things and that only bad can be expected of one. This may lead to a situation in which the self has to be destroyed to protect from one's badness the people and objects which go to make up one's inner and outer worlds. The self will be destroyed actually in suicide, or symbolically in a temper tantrum or a fit.

The situation I have tried to describe is the earliest example of one which will be repeated over and over again during later life. The changing ways the repetitions are dealt with have much to do with personality development and character, but an essential relationship to the realization that the person can both hate and love, and that the same objects can be both loved and hated and believed to be lovable and hateable, remains and is crucial. Subsequent developments concerning the realization of one's self as a "whole person" and of other people as "whole people," and of one's self as of a certain sex and of other people each belonging to a certain sex, bring in many complexities, but the importance of the original situation remains. From the onset much—in fact most—of the developments mentioned have occurred unconsciously. Most of the normal ways of dealing with depression have developed unconsciously, as also have the various defences against depression.

The beginnings of depressive feelings related to the integrations already mentioned are concerned with the concepts of a continuing self and of other continuing persons. These beginnings are more in relation to what we would call in adulthood parts of a self or parts of another person. Nevertheless, soon the emphasis shifts as further development occurs to the conception of whole people—to the whole self and the whole people in the environment. Throughout life the conception of what a whole person is, the conception of what a human individual is or is worth, what a lifetime is or is worth, is continually changing and developing, and it is difficult to say what is the best or most useful formulation of a "whole person." At the present stage of human evolution, and being a part of our complicated discontented civilization, one would hesitate to generalize concerning "wholeness," but at least one can be tolerably sure that the study of what a "good whole person" is is intimately connected with the study of healthy and unhealthy ways of dealing with the depressive situation.

Connected with the integration which results in the belief in a whole self and in whole people (which often lasts more or less a lifetime with relatively little alteration) the conscience begins to develop in an elaborate form. One might have thought that the complicated nature of the good and bad conscience in depressive states would have forced psychiatrists long ago to realize the need for using methods of investigation which would bring to consciousness further details regarding their development. Analytic methods bring to consciousness details of what has come to be called the super-ego. The super-ego is both a great hindrance and a great help. Gradually more concerning its development has been elucidated. The super-ego is a much more elaborate, inhibiting, and stimulating unconscious construct than all that is connoted by a good and bad conscience. With adults, of course, the manifold implications of conscience and the super-ego have their importance in the symptomatology of depressive states. Nevertheless, depressive states and depressive anxieties (guilt, remorse, regret, etc.) can arise in connexion with simultaneous love and hate of part objects which are realized to have a continuing existence. In the analysis of depressed children and manic-depressive adults the content of analysis may deal mostly with memories (or their symbolic substitutes) of repetitions of coincident love and hate of part objects, but part objects which are realized to have a continuing existence. It is this situation which appears to contain the most significant ego and object relationship for the understanding of the genesis of depression.

The content of behaviour and speech of the depressed person deals with his attempt to discover a satisfactory way of dealing with the realization that his hate for some person is greater than his simultaneous love for the same person, without at the same time denying that it is he who feels both love and hate and without denying that it is to the same person that he feels both love and hate. The manifold

symptom-picture has to take account of the nature of the loving and hating impulses, acts, and imaginations at the early stage of development, when the integration already mentioned began. At this period the impulses, acts, and imaginations are predominantly oral. Nevertheless all organ activities which can reach consciousness may play some minor part at this time. Indeed, I think it is difficult to substantiate the view that there is an early period when some organs—for instance, the genital—play no part whatsoever.

Age of Onset

There is disagreement about the age at which depression can first occur, but I believe there is much evidence that it often occurs early in the first six months of life. It must also be remembered that the tests of reality which can be made at such a period are of an infantile type. The intensity and explosiveness of the infantile satisfactions and rages interfere with perception of reality, both inner and outer. The way each satisfaction and each rage is shown colours the outer world and the inner world by rapidly acting and by complicated types of introjection and projection. The effects of these mechanisms lead to many of the later complexities of depressive states. Regardless of how old the person is, if he has not dealt successfully with the infantile depressive situation he will be left throughout life with an infantile attitude to the dangers of realizing that he is a being who can both love and hate simultaneously and can feel both feelings simultaneously for the same person. If treated he may be brought face to face with the intensity of the complicated feelings appropriate to his present-day situation and may for a time suffer more severely while he is learning to deal healthily for the first time with depression.

In such a brief presentation little other than conclusions can be put forward and nothing can be said about the earlier analytic views. The conclusions I have mentioned do not contradict these earlier views. They do little else than elaborate earlier views in the developmental sense. Nevertheless a few brief sketches of the sort of patient whose study has led to these conclusions can be given.

Illustrative Cases

Case 1.—A boy aged 2 years and 1 month became severely disinterested in everything and everybody, following a seemingly successful weaning at 9 months. He became constipated. He was slow and quiet, and showed no interest in learning to speak. During seven months' treatment he became able to deal more normally with the depressive anxieties and situation already described. The subsequent mood-changes were such that in retrospect it was easy to recognize his earlier state as a severe anergic depression. In analysis he showed by play florid content of depressive type. He did not speak a word during analysis, but began to learn to speak at home. By play he could show much more complicated content than he could expect to speak of for years. He did nevertheless make tests of oral projective activity by yelling in rage once and by making a few sounds easily recognizable as signs of considerable pleasure.

Case 2.—A woman of 20, who had for at least 10 years gradually become more disinterested and depressed and later suicidal, showed during more than four years' treatment how homosexuality and severe masochistic and sadistic imaginations were the unhealthy attempts to cope with her forgotten wish to deal with the effects she believed her early aggression has had on her mother. Following much noisy dissatisfaction during the first month of her life, during which she had been breast-fed, she was seemingly satisfactorily weaned. She showed no open oral aggression from the first month of life till many months after the beginning of her treatment. Only after learning to deal with almost simultaneous or at least very rapidly alternating hateful and loving impulses and acts of extreme intensity during treatment, which occurred in a hospital environment, was she able to begin to use her adult capacities to deal with the implications of her previously persistent infantile depression. During the crucial stages of her treatment her emotions were nearly, if not indeed quite, epileptic in intensity. During treatment stuporous states were interrupted by attacks of rage which, I think, were related to epileptic furor. Such rages were followed by disturbances of consciousness. Later intensely energetic loving outbursts occurred. These gradually lessened. The alternating love and hate gradually lessened in intensity as the depression connected with the realization that both were, had been, and would be felt towards the same people became more tolerable.

Case 3.—A man of 59 developed an agitated depression. During treatment he showed how a deep attachment to a grandfather in infancy might have led to the development of adult homosexuality had the grandfather not died at 60, when the patient was 4. The patient did not grieve openly then, but his super-ego became to a large extent modelled on this grandfather. During treatment, when he realized the degree of his identification with his grandfather and when he realized that he had unconsciously feared his own death at 60, he began to be able after the lapse of 55 years to mourn the death of his grandfather openly. He then became able to plan a life modelled on a scheme based more on the memory of the ambivalent love and hate for his own mother, whom he had ceased to feel for in his infancy when he gave his love to his grandfather. Had he coped more healthily with depression in infancy he might not have become so pathologically attached to his grandfather. Thus he might have avoided a severe depression at 59, when his age was nearing that at which his grandfather died. Such a history demonstrates how difficult it would have been to predict, for instance, when he was 40, that he was seriously predisposed to an illness at 59.

One could also sketch many failures, but unfortunately the chief point with regard to the psychopathology of psychoanalytic failures is that the data on which one might base inferences to explain why they were failures cease to be collected. Here I would make a plea to those who have under observation depressed patients who have had analytic treatment and are still unable to deal healthily with depression to report the later developments. I am confident that the patients' previous analysts would co-operate.

Conclusion

I do not think I can do better than suggest that the implications of the simple formula already outlined regarding the onset of depressed states be investigated fully. I restate the formula: out of the realization that at one and the same time it is possible for a person to love and hate, and out of the realization that such love and hate can be felt for one person, emerges the human capacity for depression, both normal and abnormal. The vicissitudes of the imbalance between the loving and hating impulses determine the normal or abnormal subsequent development with regard to the capacity to deal healthily with depression.

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Many students find *Essentials for Final Examinations in Medicine,* by John de Swiet (J. and A. Churchill, 9s.), of value during the harassing weeks before their final examinations, and it has now reached a third edition. No great changes have been made, but the author has brought it up to date by including new sections on penicillin, pellagra, and other changing aspects of medicine, and has added an index. It is no light undertaking to attempt to compress even the salient features of general medicine into so small a compass, but the author has succeeded reasonably well. A few minor inaccuracies are present, but for the most part the information is sound and clearly presented.

THE SIGNIFICANCE OF HARRISON'S GROOVES

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The origin of the term "Harrison's grooves, or sulcus," has hitherto been obscure. Three standard medical dictionaries—Dorland's, Stedman's, and Gould's—attribute the eponym to *Edward* Harrison (1766–1838); but no account of the deformity can be found in any of his works (Edward Harrison, 1806, 1810, 1820). Dr. Charles Singer told us that because of this uncertainty Sir Frederic Still was unable to include a note on the grooves in his *History of Paediatrics*.

Samuel Gee (1870) and W. Fox (1891) both refer to *Edwin* Harrison's method of determining the height of the diaphragm by means of the lateral thoracic grooves, which were apparently common in the early part of the last century. In following up this clue we have been successful in exhuming the original description of the grooves.

Edwin Harrison (1779–1847), a physician to the St. Marylebone Infirmary, wrote no books and few papers. However, the pages of the *London Medical Gazette* for the years 1835–7 reveal that he was interested in the grooves as a physical sign in examination of the chest. The first inkling comes from an article by a Dr. Williams on Oct. 3, 1835. He refers to the grooves, and states that "the chief object of this communication is to announce them to the profession as original observations of my friend, Dr. Harrison, whose peculiar repugnance to authorship deters him from doing so himself." Then, in July, 1836, Clendinning (in a paper which is printed next to Marsh's original description of his test for small quantities of arsenic) gives more details and an acknowledgment to Harrison. Finally, in 1837, Edwin Harrison managed to overcome his "peculiar repugnance to authorship," and we have a note which included the following observations:

"2. On moving the hand along either side of the chest vertically, on what may be considered as the median line, it will sink into a depression corresponding to the height of the diaphragm on that side.

"3. A depression, or depressions, between the ribs can be felt or seen, or both felt and seen, at each abdominal inspiration, indicating (at least in the physiological state) the presence of the diaphragm in that part of the chest.

". . . If it should turn out that my opinions are not so original as I believe them to be, I trust that I shall always be found ready to make the avowal."

Theories of Causation

The mechanism of the formation of the grooves has also remained obscure, and has been the theme of many fairy-tales told to students in their early clinical days. Rilliet and Barthez (1843) first expressed the view that the grooves correspond to the attachment of the diaphragm to the ribs, and this error has been repeated in textbooks up to the present day (Holt, 1939; Nelson, 1946; Paterson and Moncrieff, 1947). Seventeen years later Jenner (1860) pointed out that the grooves are level with the upper surfaces of the liver, spleen, and stomach, whereas the diaphragm is attached to the margins of the ribs and costal cartilages diagonally along the thoracic outlet. This observation was given publicity by Charles West (1874) in what was for many years a standard textbook on children's diseases.

Rilliet and Barthez (1843) also postulated a gap between the attachments of the major muscles of thoracic respiration and those of the diaphragm: they suggested that the negative intrathoracic tension is in that area able to overcome muscular resistance and so produce indrawing of the ribs. Jenner (1860) was unable to find this gap. Examination of a cadaver confirms his observation. The ribs and cartilages are clothed closely in muscular attachments, and the insertions of serratus magnus interdigitate most intimately with those of the external and internal oblique muscles. Moreover, the line of insertion of serratus magnus runs diagonally across the site of Harrison's grooves.

Jenner (1860) considered that the determining cause of the deformity was atmospheric pressure, aided by the elastic contractility of the lungs. He stated that if the thoracic wall were made of cast-iron the diaphragm would descend only so fast as the air could enter the lungs. If the chest wall were soft, or if there were obstruction to the entry of air into the lungs, recession of the wall would be expected to occur. This recession would occur at the most yielding part of the wall—that is, on either side of the sternum, at the costochondral junctions, and at the anterior ends of the ribs. The abdominal viscera would prevent the collapse of the lower ribs.

Herlitz (1945) states that he has observed hiccuping in infants, and that in them reaction of the chest wall occurs at the same site as Harrison's grooves. Hiccup is due to involuntary contraction of the diaphragm, which sucks in air so suddenly that the vocal cords are drawn together. After this the negative pressure in the thorax must become very great. If further proof of the role of non-expansion of the lung be needed, try the experiment of pinching a newborn baby's nose while its mouth is kept shut. Recession of the ribs at the site of Harrison's grooves then occurs. Dupuytren (1847) noted an association between the grooves and an enlargement of the tonsils in children at the breast, but the children he described seem to have been suffering also from rickets and bronchitis. Fisher (1906) noted the development of a unilateral groove in a child suffering from pulmonary collapse following measles.

Rogers-Harrison (1842) attributed the grooves to the habit of grasping infants tightly round the chest when lifting them. Rees (1850) thought that they were due to the infant's arms being folded across its chest and bound too tightly with swaddling-clothes. McGonigle (1931) stated that they were due to the abdominal enlargement which is found in rickets pressing the lower ribs outwards.

Jenner's reasoning does not adequately explain why Harrison's grooves should develop where they do. Recession of the chest wall, according to him, should occur along the line of the costal cartilages on either side of the sternum, but in fact this type of *vertical* groove is commonly seen only in severe rickets, when the anterior ends of the ribs and costal cartilages are softened by disease. There must be some other explanation to account for the extremely frequent development of the *transverse* Harrison's grooves. Here it is necessary to refer back to the theory of the muscular gap. Although no such gap exists, it is nevertheless true that at the site of Harrison's grooves there is a neutral zone between two parts of the thorax, each moving in a slightly different direction. Thus the upper ribs move upwards and forwards, rotating outwards, while the lower ribs move outwards and backwards, increasing the transverse diameter of the upper abdomen (Johnston, 1932). It would seem likely, therefore, that increased negative intrathoracic tension would tend to cause buckling in of the chest at the hinge between these two movements rather than anywhere else.

Method of Study

The present investigations were undertaken in order to provide some factual basis for discussion, and in the hope of stimulating thought and research in the future. The full results and the analysis are given in a work already published by one of us (J. Naish, 1947).

The following groups were studied: (1) 500 children selected at random from 23 primary schools in the City of Bristol; (2) 25 children who were diagnosed as suffering from rickets eight years previously; (3) 100 children attending a clinic for asthmatics; and (4) 36 children suffering from congenital heart disease.

The depth of the grooves was measured with a home-made instrument, which was calibrated in fractions of an inch. This instrument was applied vertically to the chest at the site of the maximum depth of the groove. A light even pressure was used in order to avoid sinking the flat edges of the instrument into the skin. The width of the measuring blade prevented this from sinking into an intercostal space and so giving a false reading. Girls at about the age of puberty could not be examined because development of the breasts interferes with these measurements.

Control Group

The 500 children, whose ages ranged from 5 to 12, were examined at routine school inspections at 23 primary schools in the City of Bristol. The incidence of the grooves is given in Table I. Analysis of the full figures showed

TABLE I.—*Incidence of Harrison's Grooves in Control Group*

Harrison's Grooves	No. of Children	Percentage of Total
Absent	272	54·4
Unilateral	17*	3·4
Up to 3/16 in. (0.48 cm.) deep ..	177	35·4
3/16 in. or more deep	34	6·8
Total:	500	

* 13 (77%) of these were left-sided. This finding contrasts with the statement that the grooves are commoner on the right side (Holt, 1939).

that there was no significant difference of incidence between males and females or between separate age groups.

A full examination was possible in only 354 of the 500 cases; in the rest (146), owing to the absence of the parents or some other cause, a satisfactory history could not be obtained. The incidence of grooves in the 354 children was not significantly different from that in the whole group (45.2% as against 45.6%).

Positive Results.—(1) Harrison's grooves occurred more often in those who had suffered from pneumonia in early life. (2) The association of the grooves with bronchitis, measles, and pertussis in early life was probable, but not statistically significant. (3) From the parents' statements it also seemed that grooves occurred more often in children who had suffered from greater degrees of upper respiratory disease (frequent colds or sore throats and ear disease) in infancy and early childhood, but this finding was not significant. (4) Grooves occurred with significant frequency in children with pigeon breasts, and in these children there was often other evidence of past rickets. (5) Grooves were found to be commoner in the children of poorer parents.

Negative Results.—(1) Breast-fed children were no less liable to develop Harrison's grooves than bottle-fed children. (2) Vitamin D fortification of diet in infancy did not reduce the incidence. (3) Neither present objective evidence of past rickets nor smallness of stature was associated with an increased incidence.

In addition the grooves occurred in a number of healthy children who had no history of previous disease.

The association with pneumonia is shown in Table II. The grooves occur more often and are deeper in those who have had pneumonia, especially during the first year of life or on more than one occasion. The results are significant.

TABLE II.—*Association of Harrison's Grooves with a History of Pneumonia*

Harrison's Grooves	No Pneumonia	Pneumonia Occurred			
		At 2 Years or Over	Between 1 and 2 Years	Below 1 Year	Twice or More
Absent ..	179	10	3	1	1
Unilateral ..	9	2	0	1	1
Up to 3/16 in. deep	107	5	2	3	7
3/16 in. or more deep	17	3	0	2	1
Totals: ..	312	20	5	7	10

The social and economic conditions of the 121 children selected at random were investigated by Miss E. C. Moynagh, lady almoner at the Bristol Royal Hospital. On the basis of the average weekly income of the household during the first two years of their lives, the children have been separated into two groups, with a dividing-line at 10s. per head. The results show that grooves are more common in poverty-stricken households (Table III). The difference is significant.

TABLE III.—*Association of Harrison's Grooves with Poverty*

Grooves	No. with Average Income Over 10s. per Week per Person	No. with Average Income Under 10s. per Week per Person
Absent ..	37 (59·6%)	18 (30·5%)
Present ..	25 (40·4%)	41 (69·5%)

Rickets

Dr. Corner (1944) recorded the cases of a large number of children who had been diagnosed as suffering from rickets eight years previously. She kindly allowed us to examine her records, and we chose 60 children in whom the evidence of rickets in infancy had been unequivocal. Only 25 mothers were able to bring their children for re-examination. This poor response was due chiefly to population movements during the war. The results are set out in Table IV. Of the 25 children examined 16 (64%) had grooves. A high proportion of those with deep grooves had shown either unequivocal clinical evidence of rickets in infancy or very high plasma phosphatase values, or else had been diagnosed after the age of 6 months.

TABLE IV.—*Evidence of Past Rickets Correlated with Depth of Harrison's Grooves*

Case No.	Age When Diagnosed (months)	Evidence of Rickets in Infancy in 1938					Depth of Harrison's Grooves in 1946
		Rib Beading		Craniotabes	Plasma Phosphatase (units/100 ml.)	Radiological Rickets	
		Minor	Marked				
1	11	—	—	—	23·5	Yes	Absent
2	2	Yes	—	—	23·5	—	"
3	15	"	—	—	13·5	Yes	"
4	2	—	Yes	—	24·0	—	"
5	5	—	—	Yes	19·5	—	"
6	12	—	Yes	—	—	Yes	"
7	3	Yes	—	—	30·0	—	"
8	4	"	—	—	18·0	—	"
9	N.K.	—	—	—	—	—	"
10	10	Yes	—	—	17·0	—	Minimal*
11	2	"	—	—	21·5	Yes	Left unilateral
12	6	"	—	—	18·0	—	Minimal*
13	1	"	—	—	30·0	—	"
14	12	"	—	—	17·0	—	"
15	3	—	Yes	—	22·0	—	"
16	3	Yes	—	Yes	50·0	—	3/16 in. deep
17	2	"	—	—	20·0	—	" "
18	2	"	—	Yes	80·0	—	" "
19	19	"	—	—	12·5	—	" "
20	14	"	—	—	78·0	Yes	" "
21	2	—	Yes	—	13·0	—	" "
22	4	Yes	—	—	25·0	—	1/8 in. "
23	8	"	—	—	13·0	—	3/16 in. "
24	5	—	Yes	—	56·0	—	1/8 in. "
25	8	Yes	—	—	—	—	" "

* Minimal = One side less than 1/8 in. (0·32 cm.) deep, but grooves present on both sides.

In drawing conclusions from these findings it should be understood that treatment has probably modified the course of the disease, particularly where the diagnosis was made early. There are two unknown factors in each case: (1) the duration of rickets before diagnosis, and (2) the extent of bone-softening before treatment was instituted. It is tempting to postulate that the children with the highest plasma phosphatase values are those with the greatest degree of bone-softening. This is supported by the results in Table IV, but the number of children examined was too small for significant results to be obtained.

Asthma

We examined 100 children at the Bristol Children's Hospital in 1946. All were suffering from chronic bronchial asthma and were attending a special clinic under the care of Dr. Corner. There were 65 boys and 35 girls, whose ages ranged from 3 to 13. Of these 79% had Harrison's grooves, and 36% had grooves at least 3/16 in. (0.48 cm.) deep. There is a significant difference, therefore, between the incidence in this group and that in the control group. Deep grooves occurred more often in children in whom asthma developed early in life, but the difference in incidence is not significant. There was, however, a significant association between the occurrence and depth of the grooves and the duration of the asthma. This is shown in Table V. A history of pneumonia had no influence on the incidence of the grooves in these children.

TABLE V.—*Harrison's Grooves and Duration of Asthma*

Grooves	Duration of Asthma Less than 4 Years	Duration of Asthma 4 Years and Over
Absent	15	6
Less than 3/16 in. deep ..	18	25
3/16 in. or more deep ..	3	33
Totals: ..	36	64

(*Note*: We have been unable to gain access to the paper written by J. Brock in 1942 entitled "Uber Pseudorachitis Asthmatica.")

Congenital Heart Disease

A. E. Naish (1945) records eight cases of congenital heart disease seen in infancy with marked inspiratory indrawing of the lower intercostal spaces. There was no evidence of rickets or upper respiratory obstruction in these children, and in only one was the heart grossly enlarged. He told us that five of them were observed for three years, and in that time three died and two developed Harrison's grooves.

We examined 36 unselected children with congenital heart disease attending Prof. C. Bruce Perry's cardiac clinic at the Bristol Royal Infirmary. The results are shown in Table VI. The numbers in each group are too small to be analysed separately, but the incidence of grooves in cases other than those of apparently uncomplicated pulmonary stenoses and of patent interventricular septa was significantly greater than in the control group.

TABLE VI.—*Harrison's Grooves in Congenital Heart Disease*

Grooves	Controls	Pulmonary Stenosis or Patent Interventricular Septum	Other Congenital Heart Disease
Absent	272	11	2
Present	228	12*	11*

* Including three cases in infancy with marked indrawing of lower intercostal spaces at the usual site for Harrison's grooves.

Summary and Conclusions

Reference is made to the original description of lateral thoracic grooves by Edwin Harrison.

Theories as to their causation are summarized. The theory that the grooves are caused by the insertions of the diaphragm has been disproved several times and should be abandoned.

A study was made of a sample of 500 Bristol school-children, 25 cases of past rickets, 100 cases of asthma, and 36 cases of congenital heart disease.

Harrison's grooves occurred in 45.6% of normal school-children between the ages of 5 and 12 years. Grooves at least 3/16 in. deep were present in 6.8%. The grooves were often found in children known to have had severe rickets in infancy; on the other hand, in milder cases or cases diagnosed and treated early their incidence was not different from the normal. They occurred very frequently in children with the deformity known as pigeon breast, which is almost certainly due to severe rickets. In these children vertical grooves on either side of the sternum are often also present. Whistler (1645) noted: "At first the sternum is depressed; but as the disease progresses it projects." The conclusions reached by Dalyell and Mackay (1923) that Harrison's sulcus is valueless as an early sign of rickets has been borne out by this study; while the older observations that the grooves develop (frequently in association with a pigeon breast) in severe rickets has been substantiated.

The grooves occurred more often in children who had had pneumonia, particularly if they had suffered from the disease in the first two years of life. They also occurred frequently in children who had had bronchitis, measles, pertussis, or severe upper respiratory infections in early life, but the statistical significance of these findings could not be proved. The heaviest incidence was in children suffering from asthma, and the longer the asthma had persisted the more likely were the grooves to be present.

These results seem to support the suggestion that the most important factor in the production of Harrison's grooves is deficient expansion of the lungs.

Grooves were also frequently found in children with severe grades of congenital heart disease. The explanation of this is not clear. Sheldon's (1938) suggestion that the probable cause of indrawing of the intercostal spaces is pulmonary atelectasis occurring as a complication of the heart disease seems to fit in with the known facts, but this has not been confirmed.

We wish to express our gratitude to Prof. C. Bruce Perry for his help and advice during this investigation; to Dr. Beryl Corner for allowing us access to her cases and records; and to Miss E. C. Moynagh for her work on the social and economic conditions of some of our cases. We would also like to thank Dr. J. Brierley for advice on anatomical considerations, Dr. George Smart for assistance with statistical calculations, and Mr. G. F. Home, librarian of the Royal Society of Medicine, for helping us to find Harrison's original description.

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"MYANESIN" AS A RELAXANT IN CHILDREN

BY

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α : β : dihydroxy-γ-(2-methylphenoxy)-propane ("myanesin," British Drug Houses Limited) is obtainable in 10-ml. ampoules of a 10% solution. Its use as a relaxant in anaesthesia was first described by Mallinson (1947), and its pharmacology has been discussed by Berger and Bradley (1947). Unlike curare, myanesin does not appear to interfere with voluntary movements, but only with spinal reflexes, and therefore, presumably, with muscle tone. It may be suggested that its site of action is the internuncial neurones, which might account for the fact that respiration is not inhibited for long periods. Toxicity is low.

Myanesin has been used by me since February, 1947. In adults its action was not so marked as that of curare, and it was enhanced by ether and by thiopentone, while its effect was minimal when only nitrous oxide or cyclopropane was the anaesthetic used. Further, although abdominal relaxation might occur, laryngeal spasm was not prevented. It therefore seems that its use in adult surgery is limited, although it may be of value in cases in which the respiratory depression caused by curare may be a source of alarm.

Relaxation may be obtained for abdominal surgery in infants by a number of methods. Deep ether anaesthesia is open to obvious dangers; local analgesia is time-consuming, and comparatively large doses of the agent may be needed, and even then relaxation may not be perfect; spinal analgesia, while being unsuitable psychologically for children over 2 years of age, is difficult to give to younger infants, and there are obvious hazards associated with it. Curare, in my hands, has given good relaxation, but has always been associated with profound respiratory depression. This may be serious in the infant, owing to the difficulty of controlling it: closed and semiclosed methods of anaesthesia are contraindicated on account of the "dead-space," while without endotracheal intubation it is almost impossible to inflate the lungs and not distend the stomach. It is questionable whether intubation, with consequent narrowing of the glottis, is advisable in very small infants.

Myanesin was administered to 44 children between the ages of 24 days and 4½ years. The results have been satisfactory. In all cases maintenance of anaesthesia was with open ether, induction being with ether, nitrous oxide, or ethyl chloride. There were 16 cases of intussusception, 16 of pyloric stenosis, and 12 of appendicitis, with or without peritonitis. Anaesthesia was maintained in first plane, third stage; in cases lasting up to 20 minutes it was found that one dose of myanesin sufficed, and that no more ether was required after the peritoneum had been opened. Recovery was extremely rapid, and the post-operative condition was always better than would have been expected had other means been employed. Respiratory depression lasting 15 to 30 seconds occurred in one-third of the cases; in one case respirations were completely inhibited for nearly half a minute. After the initial depression the tidal air assumed normal proportions. There were no obvious changes in pulse rate, although blood pressures were not taken. There were no deaths during operation, but two occurred after operation, in neither case ascribable to myanesin. Relaxation came on rapidly and was good for 10 to 25 minutes after injection, its extent being sometimes obscured by pre-existing distension of the bowel. Clinically, no effect upon bowel movements or tone could be seen.

The injection of myanesin was made into the intravenous drip, if one were set up, or into the longitudinal sinus at the posterior angle of the anterior fontanelle, for at this point the sinus is wider than in front and the approaching edges of bone direct the needle automatically into the vein. Blood is aspirated before injection, but it is unlikely that intrathecal injection would be dangerous. The dose was in the order of 2 ml. per stone (6.35 kg.) of body weight.

The following cases, selected from the series, illustrate the dosage and effect of myanesin in children.

Case Reports

Case 1.—Pyloric stenosis. Aged 24 days. Weight 9 lb. 3 oz. (4.17 kg.). General condition good. Rammstedt's operation. Induction and maintenance with open ether. Myanesin 1.5 ml. into the longitudinal sinus at six minutes. Slight respiratory depression for 30 seconds. Relaxation excellent and still present at the conclusion of operation at 26 minutes. Child began to cry as the last suture was inserted. No ether had been given after the peritoneum was opened. Recovery uneventful.

Case 2.—Pyloric stenosis. Aged 4 weeks. Rammstedt's operation. Induction and maintenance with open ether. Myanesin 1 ml. at eight minutes. Operation concluded at 19 minutes. Relaxation good. No respiratory depression. Recovery uneventful.

Case 3.—Pyloric stenosis. Aged 6 weeks. Weight, 7 lb. 2 oz. (3.23 kg.). Rammstedt's operation. Induction with open ether, maintenance with ether-oxygen endotracheally with Ayre's T-piece. Myanesin 0.75 ml. at five minutes. Operation concluded at 19 minutes. Relaxation poor at first (? underdosage), although there was slight respiratory depression for 15 seconds. Relaxation good during closure. Recovery uneventful.

Case 4.—Pyloric stenosis. Aged 8 weeks. Rammstedt's operation. Induction and maintenance with open ether. Myanesin 1.5 ml. into the longitudinal sinus at seven minutes. Operation concluded at 20 minutes. Relaxation excellent. Respirations completely inhibited for 20 seconds after myanesin had been given. This inhibition of respiration caused some alarm while it lasted, but there was no change in colour. When respiration was resumed it was at first rather shallow, but it became normal after a further 30 seconds. Recovery uneventful.

Case 5.—Intussusception. Aged 3 months. Weight, 11 lb. 5 oz. (5.13 kg.). Induction and maintenance with open ether. Myanesin 3 ml. at five minutes. Operation concluded at 27 minutes. No respiratory depression. Relaxation good; reduction of the intussusception intraperitoneally. Recovery uneventful.

Case 6.—Intussusception of three days' standing. Aged 4 months. Weight, 10 lb. 10 oz. (4.82 kg.). General condition fair. Intravenous drip (plasma) set up two hours before operation. Induction and maintenance with open ether. Myanesin 1.5 ml. was administered at seven minutes, with slight respiratory

depression for 30 seconds. Intraperitoneal reduction of the intussusception was impossible and resection of a portion of the gut with end-to-end anastomosis was undertaken. At 38 minutes a further dose of 1 ml. was administered. Operation was concluded at 57 minutes. Only small quantities of ether were employed from time to time to maintain anaesthesia in the first plane, and the child started to cry while the skin was being sutured. Death occurred five hours later.

Case 7.—Intussusception. Aged 7½ months. Weight, 19 lb. (8.62 kg.). Induction and maintenance with open ether. Myanesin 2 ml. into the longitudinal sinus at six minutes. There was slight respiratory depression for five minutes. Operation concluded at 14 minutes. No ether was administered after the myanesin had been given. Relaxation was excellent. Recovery uneventful.

Case 8.—Intussusception. Aged 11 months. Weight, 18 lb. 8 oz. (8.39 kg.). Induction and maintenance with open ether. Myanesin 2 ml. at 13 minutes into the longitudinal sinus. Operation concluded at 33 minutes. No ether administered after the peritoneum was opened. Relaxation was excellent. Recovery uneventful.

Case 9.—Appendix abscess for 48 hours. Aged 1 year 10 months. General condition bad. Induction and maintenance with open ether. Myanesin 3.5 ml. into the intravenous drip saline at two minutes, and a further dose of 1.2 ml. at 16 minutes. Operation concluded at 32 minutes. There was no respiratory depression, but relaxation was not quite so good as usual. Death occurred from peritonitis on the fifth day.

Case 10.—Appendicitis. Aged 3 years 11 months. Induction with ethyl chloride, maintenance with open ether. Myanesin 5 ml. at three minutes. Operation concluded at 16 minutes. There was no respiratory depression. No ether was administered after the peritoneum was opened. Relaxation was good. Recovery was uneventful.

Case 11.—Appendicitis with abscess. Aged 4 years 6 months. Temperature, 103° F. (39.4° C.). Pulse, 150 before operation. Induction with nitrous oxide, maintenance with open ether. Myanesin 3 ml. at three minutes and 1.5 ml. at 23 minutes. Operation concluded at 33 minutes. Small quantities of ether were required from time to time. There was no alteration in the pulse rate during operation and no respiratory depression. Relaxation was good. Recovery uneventful.

The 44 cases to which myanesin was administered were unselected. The results achieved seem to indicate that relaxation in infants can be obtained with greater ease and safety with myanesin than with any method previously employed. The lack of anxiety which was felt during operation, even about patients gravely ill, is a fair measure of the success obtained with this drug.

Summary

Various methods of obtaining relaxation in children not having proved entirely satisfactory, myanesin was used with success in 44 cases. There were no deaths or post-operative complications attributable to it, in spite of the serious general condition of some of the patients. Relaxation was good and of a sufficient duration to render a second dose unnecessary, save when the operation was somewhat prolonged.

The technique of administration is described, and the dosage employed in eleven cases is given in detail.

Anaesthesia was maintained in every case with ether, and it was usual to find that little or none was required after the myanesin had been introduced.

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Clinical Dental Roentgenology Technic and Interpretation, by J. O. McCall, D.D.S., F.A.C.D., and S. S. Wald, D.D.S., F.A.C.D. (2nd edition, W. B. Saunders, 35s.), is a comprehensive and well-illustrated book including accounts of specialized dental x-ray technique and interpretation of bony and dental pathological conditions. The latter section in particular has excellent illustrations, making it most useful for reference.

TREATMENT OF GOLD DERMATITIS BY BAL

BY

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The use of BAL (2,3-dimercaptopropanol) in the treatment of gold dermatitis has been reported on in this country by Peters *et al.* (1947) and by Slot and McDonald (1947), and in the U.S.A. by Cohen, Goldman, and Dubbs (1947), by Ragan and Boots (1947), and by Lockie, Norcross, and George (1947). Its efficacy seems to be due to its ability to form relatively stable ring compounds with gold salts, thereby diminishing the reaction with the tissues and increasing urinary excretion from the system (Peters *et al.*, 1947). The following account is of its action on two cases of gold dermatitis seen recently.

Preparation and Mode of Administration.—The preparation used was 5% BAL in arachis oil, with 10% benzyl benzoate. It was administered by deep intramuscular injection into the buttock or thigh. The site of injection was subjected to light massage for a few minutes afterwards, as it was thought that this might diminish any pain and tenderness and possibly lessen the danger of inflammation and abscess formation. The dosage was 2 ml. four times on the first day, 2 ml. thrice daily for three days, 2 ml. once daily for nine days, and thereafter 2 ml. every alternate day.

Case 1

A lorry driver aged 45 had suffered from rheumatoid arthritis over a period of fifteen years. In 1942 he was given a series of gold injections (preparation and total amount prescribed unknown). After 12 injections the course had to be stopped because of the development of a rash involving both axillae, perineal and scrotal areas, legs, and trunk. He at the same time had what appears to have been a severe stomatitis. There was apparently no amelioration of the rheumatoid arthritis.

A second course of 16 injections of "myocrisin," totalling 0.985 g., was given between May 20 and Sept. 30, 1947. There was apparently a marked improvement in his primary condition, the E.S.R. falling from 123 mm. to 28 mm. in the hour (Westergren), but the patient himself noticed little change in the pain or the disability. On Oct. 7 (one week after finishing his course) a rash appeared, and on Oct. 21 he was admitted to the Royal National Hospital for Rheumatic Diseases, Bath.

On admission he was a typical case of long-standing rheumatoid arthritis, with an extensive exfoliative dermatitis of seborrhoeic type involving almost the whole body, being particularly severe on the scrotum and in the axillae. There was oozing in the scrotal area, and generalized itching which caused great discomfort. BAL therapy was started on Nov. 10 and discontinued on Nov. 21. A total of 32 ml. was given. On Nov. 18 an area of inflammation (redness, heat, pain, and induration) developed in the right buttock at the site of an injection. This resolved after treatment with local heat and parenteral penicillin. There were no other complications. No amelioration of symptoms occurred until the sixth day after the beginning of treatment, when the itching stopped and it was noticed that the dermatitis was improving.

The patient continued to improve, and on Dec. 8 the rash had almost completely disappeared, only pale pink discoloured areas in various places remaining. He noticed no change in the condition of the arthritis. Corrected suspension stability by the method of Collins *et al.* (1939) was 82% in the first hour at the beginning of treatment and 5[illegible]% in the first hour on Dec. 8.

Case 2

A miner aged 43 gave a history of typical rheumatoid arthritis dating from January, 1946. He was first admitted to this hospital on Nov. 12, 1946, when he was treated by

rest, physiotherapy, balneotherapy, and myocrisin. Ten injections of myocrisin were given whilst he was an in-patient, and the course was to be completed by his private doctor after discharge. Immediately after the twelfth injection, in February, 1947, he developed a massive generalized exfoliative dermatitis involving almost the whole of his skin surface. The total dosage of myocrisin given by then was 0.86 g. He was readmitted to hospital on June 3, when it was found that there had been a dramatic improvement in his arthritis; he now had no obvious manifestations of the disease, and the corrected suspension stability had improved from 58% in the first hour on the previous admission to 92%. However, a generalized exfoliative dermatitis involved the whole of his body, including scalp and face, associated with severe itching.

He was admitted for the third time on Oct. 21, when his general condition was found to be unchanged. His dermatitis had become more chronic: very little skin surface was not involved, and there were large areas of induration, especially over parts subject to pressure and where he had scratched himself. BAL therapy was started on Oct. 24 and concluded on Nov. 21, a total of 56 ml. having been given. There was no marked improvement until Oct. 30, when the itching ceased completely and the exfoliation was noticed to be less severe. The condition steadily improved, the rash gradually disappearing and the areas of induration becoming softer. On Dec. 1 only pinkish discoloured patches remained, and these were confined to those parts where the dermatitis had been most severe and the induration maximal. There were no complications during the treatment. Corrected suspension stability in the first hour was 83% at the beginning of treatment and 88% on Nov. 28.

Discussion

In these two cases the effect of BAL on gold dermatitis was dramatic. This was particularly so in Case 2, in which the condition was very severe and had existed for nine months before treatment was started. No other case of over three months' standing relieved by BAL can be found in the literature, and in one case of three months' standing the dermatitis proved resistant to BAL (Ragan and Boots, 1947).

The occurrence of inflammation at the site of injection is of interest. Similar complications have been reported (Lockie, Norcross, and George, 1947), but in view of the striking relief of symptoms it is not felt that this is an indication for stopping treatment.

An interesting point emerging from both these cases is the time interval of six days after institution of treatment before improvement began. No such regular period has been noted in other reports.

Frequent blood counts, corrected suspension stability estimations, and urine examinations were done, but no significant change was noticed during the course of treatment. There were no complications except the inflammatory reaction in the buttock already described.

Ragan and Boots (1947) suggest that after relief of dermatitis by BAL, symptoms of rheumatoid arthritis previously improved by aurotherapy might recur within a month. No such change has yet been noted in these two cases. Both have now been under review for four weeks. In Case 1 the fall in corrected suspension stability after treatment was stopped was not considered significant from this point of view, because of the associated inflammatory complication.

Summary

Two cases of dermatitis due to aurotherapy treated by BAL are described, one of a more chronic type than any so far described in the literature.

The type of preparation of BAL and its method of administration are detailed.

The complications are discussed.

The return of symptoms of rheumatoid arthritis after therapy has not been noted in these cases.

The same time interval of six days between institution of treatment and relief of symptoms occurred in both cases.

I should like to express my thanks to Dr. J. B. Bennett for kindly allowing me to treat these cases, and to Dr. G. D. Kersley and Dr. H. J. Gibson for their encouragement and help in preparing this paper.

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"AMELLIN" FOR DIABETES

BY

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"Amellin," an extract of *Scoparia dulcis* (broom), has been claimed by Nath[1-7] to have an important therapeutic action in diabetes. A critical study of his papers gives no clear evidence of this; indeed, the reasoning is so widely divergent from current views on carbohydrate metabolism as to be an argument against his thesis. However, since amellin appears to have inspired some credence in India it seemed desirable to give it a trial.

In two cases this was done, and the results, after careful investigation, show no effect of this substance on diabetes. Some details are here recorded of one case without and another with insulin. Both patients were supplied with a mixture of amellin, calcium gluconate, and lactose, and were instructed to take a measured 5-gr. (0.32-g.) dose by mouth thrice daily for three months.

Case 1.—A factory worker aged 57 was found to have diabetes in May, 1946, but before this trial had received no treatment other than restriction of his daily carbohydrate to 180 g. The blood sugar had gradually fallen from 348 mg. per 100 ml. at the onset to 144 mg. per 100 ml. in November, 1946. Thereafter his diabetes became progressively worse, so that heavy glycosuria and hyperglycaemia (blood sugar, 252 mg.) were constant by July 2, 1947. Insulin was obviously necessary at this stage, but was withheld in order to test amellin. After three months of treatment with this drug his weight had fallen by 1½ lb. (680 g.), traces of ketone bodies accompanied his glycosuria, and the blood sugar was 348 mg. per 100 ml. His general health had declined to a state comparable to that at the onset of his disease. When protamine-zinc-insulin, only 16 units daily, replaced amellin, his weight rose by 3½ lb. (1.59 kg.), the urine became sugar-free, and the blood sugar four hours after breakfast was 206 mg. per 100 ml., while his general health showed the usual improvement.

Case 2.—A Civil Servant aged 47, who in the course of a routine medical examination in 1938 was found to have diabetes, had since the inception of treatment kept detailed records of his tests and progress. When amellin was begun on June 2, 1947, his urine contained large amounts of sugar by reason of his low renal threshold, but ketones were absent and the blood sugar five hours after his single mixed daily dose of 24 units of protamine-zinc with 12 units of soluble insulin was only 46 mg. per 100 ml. The soluble insulin was reduced by 4 units and amellin started with no alteration in his daily carbohydrate. On Sept. 3, 1947, after three months of amellin, the urine showed traces of ketone bodies with heavy glycosuria, the blood sugar four hours after insulin was 125 mg. per 100 ml., and his weight had fallen by 7 lb. (3.18 kg.). His previous records

showed comparable variations, and it was obvious that amellin had not made the slightest difference to the closely studied pattern of his progress.

This test was undertaken on the suggestion of Dr. R. D. Lawrence and Prof. F. G. Young at the request of the Medical Research Council and the (then) India Office. Acknowledgment is due to Prof. M. C. Nath for his kindness in supplying a sample of amellin for the test.

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THE PRE-ERYTHROCYTIC STAGE OF HUMAN MALARIA, PLASMODIUM VIVAX

BY

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In the issue of *Nature* dated Jan. 24, 1948, Shortt and Garnham reported the finding of pre-erythrocytic forms of *Plasmodium cynomolgi* in the liver of *Macaca mulatta*. A more detailed description of the appearance of these parasites, as seen on the sixth and seventh days of the incubation period, was given later by Shortt, Garnham, and Malamos (1948). *P. cynomolgi* being so closely similar in its morphology and life-cycle to *P. vivax* of man, it was reasonable to infer that, at a corresponding stage of the incubation period of an infection the pre-erythrocytic stage would also closely resemble that of *P. cynomolgi*.

The affiliation to the London School of Hygiene and Tropical Medicine of the Ministry of Health's Malaria Laboratory at the Horton Hospital for Mental Diseases, Epsom, where malarial treatment of general paralysis is carried out as a routine, supplied the means of verifying this supposition, and suitable arrangements were made through Dr. G. Macdonald, Chairman of the Tropical Course Subcommittee of the Council of the London School of Hygiene and Tropical Medicine. As there was at the time no suitable patient about to undergo this treatment at Horton Hospital, we applied to the Bucks County Mental Hospital, Aylesbury. The superintendent, Dr. J. S. I. Skottowe, who had a patient requiring malarial infection by mosquito-bites, was glad to co-operate with us, and transferred the patient to Horton for treatment, at the same time obtaining his consent and that of his wife to the performance of a biopsy on the liver during the incubation period of the infection.

Infection of the patient was effected by feeding upon him, on two successive days, a large number of *Anopheles maculipennis atroparvus* mosquitoes infected with *P. vivax* and by the intravenous inoculation of isolated salivary glands of a certain number of the same mosquitoes. Seven days after the first feeding by mosquitoes a biopsy was performed on the liver under local analgesia by Mr. E. J. Radley Smith. The material, when examined in sections, revealed the presence of plasmodial masses studded with chromatin particles very similar in appearance to those previously seen in the case of infection of the monkey with *P. cynomolgi*. The forms seen measured up to 42μ in diameter and showed in some instances the vacuoles noted in the case of *P cynomolgi*.

There seems no doubt that these bodies are the pre-erythrocytic forms of *P. vivax* in man. The material in our possession is being studied and further observations will be communicated when completed.

In recording this finding we wish to express our indebtedness to Dr. Skottowe for his help in obtaining a suitable patient requiring treatment by mosquito-induced malaria; to Dr. W. D. Nicol, superintendent, Horton Hospital, for admitting this patient and for making all the arrangements for our investigation; and to Mr. E. J. Radley Smith, who performed the biopsy of the liver. The technical operations connected with this investigation were most efficiently carried out by Messrs. W. Cooper and E. Blackie, and Misses Wall, Stedman, and Maryon.

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Medical Memoranda

Allergy to Penicillin

The personal experiences outlined in the following case report may be found of interest.

CASE HISTORY

The patient, a general practitioner aged 34, had a personal and family history of migraine, and a family but not personal history of hay-fever. On May 8, 1947, he fractured the neck of the femur. Open reduction was carried out under general anaesthesia on May 12, and reduction in imperfect position was maintained by a Smith-Petersen "pin." Convalescence was interrupted by 20 to 25 stitch abscesses between June 1 and Sept. 1. A keloid scar developed. He had a fixed flexion of 35–40 degrees and a nocturnal pyrexia of 99.8° F. (37.7° C.) throughout. There was a leucocytosis of only 10,650. On Oct. 10 radiographs gave no evidence of bony union, and the condition was unaltered. Comparative radiographs showed possible bone abscess in the great trochanter. The "pin" had not shifted. From Oct. 21 to 25 inclusive he was given 500,000 units of penicillin intramuscularly three times a day (total 7,500,000 units). There was no history of previous penicillin therapy.

The immediate results of penicillin therapy were: pyrexia abolished, fixed flexion reduced to 10 degrees, regression of keloid scar, great diminution of pain, and general condition much improved. There was no change in this encouraging state (except that a radiograph on Nov. 11 showed the first sign of callus) until Nov. 12 (17 days after cessation of penicillin therapy), when he was awakened at 4 a.m. by irritation of the left eyelid. During the day general simple urticaria developed, with lesions up to 4 cm. square. Next day the condition was the same. Very little of the body was unaffected. "Benadryl" in full dosage was given without benefit. The temperature was 99.6° F. (37.55° C.), and the pulse 100. On the 14th the swelling was less of the cutaneous and more of the subcutaneous tissues ("angioneurotic oedema" or Quincke's disease). Adrenaline hydrochloride in doses of 5, 5, 8, 10, 10, and 15 min. (0.3, 0.3, 0.5, 0.6, 0.6, and 0.9 ml.) was given at intervals, with no benefit. The temperature was 99.8° F. (37.7° C.), and the pulse 90–110. Two "antistin" tablets were given thrice daily on the 15th and 16th, with no benefit. Oliguria and dysuria were present.

On the 17th periarticular swelling of various joints (large and small) occurred. Each lesion lasted about 36 hours after a precipitate onset. No benefit was derived from 1/2 oz. (14 ml.) mist. sod. salicyl. two-hourly. The temperature was 99.2° F. (37.3° C.), and the pulse 90. He had epigastric discomfort and diarrhoea. "Anthisan" was tried without effect.

In addition intermittent oedema of fauces, glottis, and tongue occurred from Nov. 18 to 21, and from the 19th to the 24th asthma and paroxysmal rhinorrhoea occurred intermittently by day and night. This was relieved by ephedrine 1 gr. (65 mg.), by mouth. He had considerable pain in the hands and feet and severe pruritus all over the body, especially on a change of temperature. His temperature was still 99.2° F. The pulse was steady except during asthma.

In view of dermographism and the obviously "vascular-permeability" nature of the residual symptoms a course of 20 mg. of vitamin K (synthetic) twice daily was started on Nov. 28. Whether by coincidence or not, the pruritus ceased immediately and there were no further joint lesions.

I would like to thank Sir Arnold Stott and Dr. P. J. W. Milligan for their care and sympathy during the above troubles.

R. A. SHAWYER, B.M., B.Ch.

Reviews

DANCE OF THE GENES

Genetics, Medicine and Man. By H. J. Muller, C. C. Little, and Laurence H. Snyder. (Pp. 158; illustrated $2.25 or 12s. 6d.) New York: Cornell University Press. London: Geoffrey Cumberlege (Oxford University Press). 1947.

The material of this book originally consisted of six Messenger Lectures on the evolution of civilization delivered at Cornell University in 1945. The Messenger Lectureship was founded to provide an annual course for the special purpose of raising the moral standard of American political, business, and social life. Although it is somewhat difficult, after reading this book, to imagine how the lectures can directly serve such praiseworthy purposes, they nevertheless must have been both enjoyable and instructive. Three geneticists, each outstanding in his own field, delivered them to a general audience, giving an account of the fundamental principles of genetics, parental influence and the growth of individuality, and the special genetics of man.

Prof. H. J. Muller, simple yet meticulously accurate in statement, presents an account of genetic fact and modern theory. It is doubtful whether anyone who is not already acquainted with the subject-matter of a more pedestrian textbook of genetics would be able to appreciate fully the significance of what Prof. Muller has to say, but those who know the elementary principles of the subject will find most attractive his account of the nature of the genetic material, the nature of the genetic effects of mutations, the gene and the origin of life, the dance of the genes, and gene equilibria in populations. Dr. C. C. Little, Director of the Roscoe B. Jackson Memorial Laboratory, Bar Harbor, recently completely destroyed by fire, draws deeply on his experience as a geneticist working on the mouse. He enjoys unique facilities and uses them to bridge the gap between formal genetics and the processes of development, linking genetics with both physiology and psychology. In his second lecture Dr. Little discusses problems of growth, normal and abnormal, and individuality, in so far as genetic factors influence them. Prof. Snyder in his two lectures presents an astonishingly comprehensive account of the special genetics of man, which must be of particular interest to all who practise medicine. There has been no better short statement of the main facts of human genetics than this.

F. A. E. CREW.

CLINICAL CHEMISTRY

Quantitative Clinical Chemistry Interpretations. By John P. Peters, M.D., M.A., and Donald D. Van Slyke, Ph.D., Sc.D. Volume I. Second edition. Part I. (Pp. 1042. 38s. 6d.) London: Baillière, Tindall and Cox. 1946.

The rapid progress of clinical chemistry imposes a Herculean task upon the authors of such a standard work as this. The first edition appeared in 1931, and by 1937 they decided that the production of a second edition was the only alternative to the book becoming obsolete. They have had wholly to rewrite the text, and to subdivide "Interpretations" into two volumes. In this, the first of these two volumes, they consider the overall energy exchanges and the metabolism of the three major foodstuffs—carbohydrates, lipids, and proteins; in the second they will be concerned with plasma proteins, water, and inorganic elements. They have retained the excellent bibliography embodied in the first edition and brought it thoroughly up to date. In each section the authors first discuss the chemistry and physiology of the substance in question, and then the application of this knowledge to clinical medicine. No better work of reference could be desired by the physician interested in the diseases of metabolism, and an excellent index facilitates use. The authors have fully maintained the high standard that they set themselves in the first edition, and one can only regret that this edition, like its predecessor, will also become obsolete and may not again be re-edited by the same authors.

O. L. V. DE WESSELOW.

HEROIC SURGERY

Radical Surgery in Advanced Abdominal Cancer. By Alexander Brunschwig, M.D. (Pp. 324; 118 figures. 42s.) U.S.A.: University of Chicago Press. Great Britain and Ireland: Cambridge University Press. 1947.

This book contains the detailed account of the operations performed upon a series of 100 patients suffering from advanced cancer of one or more of the abdominal viscera. After perusing the book everyone will agree that Dr. Brunschwig is a bold, skilful, courageous, and optimistic surgeon. As the author says in the foreword, such heroic surgery would not have been possible without modern aids—blood transfusion, skilled anaesthesia (he favours continuous spinal), the maintenance of fluid and nitrogen balance, and chemotherapy. The fourth chapter, in which he discusses these supportive measures, is worth special study. The author does not allow the idea of prognosis to affect his definition of "operable." He defines an operable neoplasm as "one that can be excised regardless of where or how much spread has developed." Here of course we are on debatable ground, for decision to excise depends so much upon the experience, skill, and judgment of the individual surgeon. It is quite likely that many surgeons would have deemed some of these cases inoperable, certainly the one which led to the most extensive operation of all, in which were excised the whole of the stomach, much of the left lobe of the liver, the spleen, the body and tail of the pancreas, the transverse colon, nearly all the omentum, most of the left upper quadrant of the abdominal wall, and some of the retroperitoneal tissues. The author states that the patient (a young man of 28) was quite comfortable for several weeks, but he died two months after operation. The impression made upon the reader's mind is similar to that which he experiences when first he reads of the charge at Balaclava. The results appear to justify this extensive surgery. Though of the 100 patients 34 died as the result of the operation and 17 obtained no palliation, yet 30 were distinctly relieved and 19 survived in good condition for varying periods; 13 were still living (at the time of publication), with an average period of survival of 40 months.

The author frequently mentions the work of other surgeons in the text, but gives no definite references; this detracts from the value of the book to other surgeons. Moreover, we were surprised not to see anywhere a reference to the extensive and dramatic operations performed by Gordon-Taylor and by Grey Turner, who have both done pioneer work of this kind. Most of these operations would be possible only in the hands of a very experienced surgeon, and we would earnestly caution the young surgeon not to attempt the heroic before he has graduated successfully in the hard school of routine major surgery of the abdomen. For the experienced surgeon this book will be a stimulus and an encouragement.

V. ZACHARY COPE.

RECENT GYNAECOLOGY

Progress in Gynecology. Edited by Joe V. Meigs, M.D., and S. H. Sturgis, M.D. (Pp. 552; illustrated. 35s.) London: William Heinemann (Medical Books), Ltd. 1947.

Dr. Joe V. Meigs and Dr. S. H. Sturgis have published this up-to-date account of recent work in gynaecology for the special requirements of those ex-Service doctors who were unable to read the literature during the war. They asked individual American specialists to write chapters on subjects which were their particular interest in the specialty. The contributors represent a "Ministry of All the Talents" in American gynaecology; the high quality of their work is most impressive and the book as a whole is outstanding. Almost without exception each chapter is full of information concisely arranged and clearly expressed.

Schiller's article is particularly noteworthy for depth of thought and his discussion of biological progress and experiment. John Rock writes on "The Causes and Relief of Infertility" with that peculiar, graceful condensed style which is unrivalled in the prose writings on gynaecology, and of which the author tells me he is quite unconscious. Similarly, Edward Davis's chapter on "The Gonadotrophins in Gynaecology" is excellent, as is that by Reifenstein on "The Relation of the Adrenal Cortex to Gynaecology." Dr. Meigs himself has

written on enterocele and on Wertheim's operation, the latter article being particularly important because of his observations on the blood supply to the ureter.

One criticism which has been expressed is that the contributors are too restricted to the neighbourhood of Boston and New York. Hamblen's article alone is insufficient to cover the whole subject of functional uterine haemorrhage, and some of his views are by no means generally accepted. Counsellor's article on the treatment of vesico-vaginal and other pelvic fistulas is too short, although it is well concentrated. The elaboration of Taussig's operation, though well described, is perhaps not theoretically sound; nevertheless, Nathanson's description is beautifully written and illustrated. With the possible exception of Neuweiler's *Gynäkologische Diagnostik* this book is perhaps the most important on gynaecology in the last ten years. It can be read with enjoyment, and every paragraph contains some useful information. Marlowe's "infinite riches in a little room" is perhaps an apt description.

WILFRED SHAW.

CHILDREN'S DISEASES

Diseases of Children. Edited by Donald Paterson, M.D., F.R.C.P. and Alan Moncrieff, M.D., F.R.C.P. Volume I. With contributions by 29 contributors. Fourth edition. (Pp. 771; illustrated. 30s.) London: Edward Arnold and Co. 1947.

The fourth edition of Garrod, Batten, and Thursfield's famous textbook is in many respects a new book. Not only has it lost its last link with the original editors, but many of the contributors are newcomers since the last edition was published in 1934. It has changed its format by dichotomy, and owing to the post-war difficulties of reproduction and delivery the second twin is likely to be born many months later than the first. This volume is a handsome child, of which the two parents and twenty-seven godparents can feel that the prospects of survival are excellent. When we come to examine its internal structure, we still find some of the familiar landmarks—for example, the opening chapter on heredity—but the first part ("General Considerations") is rather a hotchpotch. The account of vital statistics, growth and development, and feeding appear here logically enough, but those of treatment of talipes, hare-lip, and undescended testicle seem out of place in such company. There is a useful section on water and electrolyte control summarizing much of Gamble's work, and others on practical procedures, drug therapy, clinical pathology, and anaesthetics.

The second part ("Diseases of Children") is presented in a more orthodox way and is arranged under systems, though the newborn baby, nutrition, metabolism, allergy, and tuberculosis are separately considered. There is some overlapping between the account of tuberculosis and the section on the respiratory system which is perhaps inevitable. Chapter XV has evidently been misnamed, or should have been combined with Chapter XVII. There are the inevitable startling transitions which always occur in a work by several authors. What a world of difference, for instance, lies between the child who arrives at hospital with abdominal pain (medical aspect of) and the one with abdominal pain (surgical aspects of). One wonders where the child would go who simply had abdominal pain (or where, for that matter, the child with an ischiorectal abscess: possibly having hunted under "Rectum," we should find it described in the second volume). The editors have also allowed themselves considerable latitude over the reproduction of *x*-ray photographs as positives or negatives. Thus, infantile rickets appears as one, late rickets as the other; and the legend on p. 324 describing a "dense white line" in scurvy (which is reproduced in the illustration as a dense black line) has evidently so confused somebody that Trummerfeld's zone appears to have been touched up with dense white, and a little extra white added beyond the calcified matrix to give full measure. In view of the advances which have been made in endocrinology in recent years the chapter on this subject is rather disappointing, and we note that over half the seventy-one references are more than twenty years old. Apart from these minor criticisms, however, the authors maintain a high standard throughout, and since the production was undertaken at a time of great difficulty it reflects much credit on editors, contributors, and publishers alike.

R. W. B. ELLIS.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

Science News 6. (Pp. 144. 1s. 6d.) London: Penguin Books. 1948.

Some recent advances in science described for the layman.

Nutrition and Diet Therapy. By A. E. Pavey, S.R.N., D.N. (Pp. 304. 12s. 6d.) London: Faber and Faber. 1948.

A detailed account for nurses.

Psychoanalytic Psychiatry. By A. A. Brill, M.D., Ph.B. (Pp. 259. 15s.) London: John Lehmann. 1948.

A collection of lectures on psycho-analysis.

Handbook on Fractures. By D. Eve, Jr., M.D., F.A.C.S. (Pp. 263. 25s.) London: Henry Kimpton. 1947.

A profusely illustrated manual on the treatment of fractures.

Education and Health. By R. Gamlin, M.A., M.B., D.P.H. (Pp. 372. 12s. 6d.) London: James Nisbet. 1947.

A work on health and hygiene intended primarily for school-teachers.

Modern Plastic Surgical Prosthetics. By A. M. Brown, M.A., M.D. (Pp. 293. 35s.) London: William Heinemann. 1947.

A general account of prosthetic devices and their manufacture, with emphasis on those intended for facial reconstruction.

Illustrative Electrocardiography. By J. Burstein, M.D., and N. Bloom, M.D. 3rd ed. (Pp. 309. No price.) New York and London: D. Appleton-Century. 1948.

A practical survey of electrocardiography, with many illustrations.

The Biology of Melanomas. Edited by R. W. Miner and M. Gordon. (Pp. 466. $5; members, $4.) New York Academy of Sciences. 1948.

Papers on pigmented neoplasms in man and animals.

The Past Won't Die. By McKnight Malmar. (Pp. 120. 6s.) London: Hurst and Blackett. 1948.

A crime story.

Gastritis. By R. Schindler, M.D., F.A.C.P. (Pp. 462. 50s.) London: William Heinemann. 1947.

A monograph on the pathology, clinical aspects, and treatment of gastritis.

The U.F.A.W. Handbook on the Care and Management of Laboratory Animals. Edited by A. N. Worden, M.A., B.Sc., M.R.C.V.S., A.R.I.C. (Pp. 368. 31s. 6d.) London: Baillière, Tindall and Cox. 1947.

Contains also an appendix on statistical analysis.

A Summary of Surgery for Nurses. By S. Taylor, M.A., M.Ch., F.R.C.S. (Pp. 93. 5s.) London: Faber and Faber. 1948.

Alphabetically arranged synopsis of surgery.

Über die Kaliumbestimmung in Biologischer Substanz. By W. K. Rieben. (Pp. 73. Paper 9 francs; stiff covers 12 francs.) Benno Schwabe and Co.

Biochemical estimation of potassium.

Thromboendangiitis Obliterans des Gehirns. By F. Llavero. (Pp. 248. 24 Swiss francs.) Benno Schwabe. 1948.

A monograph on thrombo-angiitis obliterans of the brain.

Hypnotism Today. By L. M. Lecron, B.A., and J. Bordeaux, B.A., M.A. (Pp. 278. 25s.) London: William Heinemann. 1947.

The theory and practice of hypnotism and its use in psychotherapy.

Counseling in Schools of Nursing. By H. P. Gordon *et al.* (Pp. 279. $3.00.) New York and London: McGraw-Hill Book Co. 1947.

Discusses the management of student nurses.

Liber Jubilaris J. Rodhain. (Pp. 409. No price.) Brussels: Imprimeur du Roi. 1947.

A collection of papers on tropical medicine.

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TOWARDS A DECISION

This week's *Journal* goes to press on the eve of the Special Representative Meeting held on Wednesday to consider the Council's recommendation and to receive the results of the plebiscite. Some of the motions and amendments of divisions were published in last week's *Journal* and give some indication of the trend of opinion, especially among general practitioners. The plebiscite has given the representatives an overwhelming vote of confidence in the policy at present followed. Some 40,000 doctors have expressed disapproval of the Act in its present form, and it is obvious that unless some changes are made very large numbers of doctors will refuse to enter the Service on July 5, and that in any case a service will be begun which can give no satisfaction to anyone, least of all to the public. Mr. Aneurin Bevan in the debate in the House of Commons a month ago said that he desired the enthusiastic and harmonious co-operation of the medical profession in the Service of which he is part architect. After he had made this statement an overwhelming majority of all sections of the medical profession told him that they disapproved of his Act, but since the publication of the plebiscite results he has made no move to inquire into the causes of this disapproval and no attempt to secure the co-operation he considers desirable. The Government has, in fact, said that the Service will start on July 5 whether the medical profession wants to work in it or not. If the opposition to the Act had come from one section only of the profession and had been based on some selfish concern about remuneration, this attitude on the part of the Government could have been understood. In view of the policy of the Labour Party in favour of a whole-time State service, opposition from general practitioners and consultants might have been foreseen. But the vote of no confidence in the Government's Act on the part of those who have freely chosen whole-time service surely must indicate to the Government and the public that the National Health Service Act in part or in whole is an unsatisfactory instrument for providing a medical service for the nation. It is therefore idle for anyone to suppose that the medical profession will agree to work in the new Service under the Act in its present form.

We do not, of course, know what resolutions may have been passed by the Representative Body by the time this issue of the *Journal* is published. But we may note that the recommendation of the Council put before it was couched in moderate and unprovocative terms. Propagandists will no doubt make the usual stupid remarks about this being an indication of weakness, without reflecting that to be reasonable at the moment of strength is a sign of wisdom. The medical profession is now in the position of having to decide what its ultimate object is. There would seem to be two courses open to it. The plebiscite result can be interpreted as a root-and-branch opposition to the Act as a whole. This is undoubtedly the attitude of some of those who have voted. If this were, in fact, the attitude of the majority of those who expressed disapproval, then the ultimate object would be the removal of the Act from the Statute Book. If the great majority of consultants and general practitioners refused to enter the Service the Act would die a natural death, and a different one would have to be put in its place. Some consider that even if it were amended in certain respects the main effect of the Act—namely, the nationalization of the medical profession—would be unaltered. Many thoughtful medical men see this as part and parcel of the principal political theme of the contemporary world—the relation between the State and the individual. Mr. Butler said in the House of Commons that "you cannot nationalize conscience"; still less can one nationalize the intimate relationship existing between the sick person and his physician. Even if the Act were amended the Minister of Health, a political figure, will still have enormous power and what amounts to an autocratic control over the medical profession.

The alternative object would be to reopen negotiations with a view to obtaining satisfactory safeguards against the introduction of a full-salaried State medical service. The British Medical Association, in declaring opposition to the Act in its present form, has implied that if the present Act were altered by amendment service under it could be made possible. The Negotiating Committee, of which the B.M.A. formed half the membership, presented a statement to the Minister last December which he considered raised objections to all the principal provisions of the Act. From the standpoint of general practice, criticism has been directed principally at certain features of the Act and certain proposals of the Minister. Mr. Bevan in December made some minor concessions to consultants and specialists, but in spite of this they expressed their disapproval of the Act by an overwhelming majority. It may well be, therefore, that the consultants, who include the teachers of Medicine, are less concerned with the details that interest the general practitioners, and more concerned with the effect of the Act upon the free development of Medicine under the monopoly control of the State.

The Representative Body may have stressed those matters of special interest to general practitioners, who constitute the majority of doctors. But if negotiations are reopened they must include matters that affect all branches of the profession as well as those that concern the general practitioner. There is no need to enumerate them here or engage in the profitless task of trying to arrange them in order of priority. Of overriding importance is the preservation of the professional and individual freedom of the practising doctor. Should it be possible to reopen discussions with the Government, the central fact of independence must be kept in the forefront and not obscured by a preoccupation

with this or that detail. In negotiation there is always "give" as well as "take." To secure concessions concessions must be made. But no concession could be made that would open the door to the introduction of a whole-time salaried State medical service. We believe Mr. Bevan when he says that it is not his intention to introduce such a service, and it is no reflection upon him to say that this expressed intention is no safeguard to the medical profession, because it would not be binding on his successor in the new Government that will be formed after a General Election to be held within two years from now. There is nothing in the present Act which offers the safeguard required, and the logical conclusion is that nothing short of an amending Act would provide this safeguard.

At the moment of writing the decisions of the Representative Body are not known. They may be related principally to the position of the general practitioner. The British Medical Association, however, has among its members all sections of the medical profession. In proportion, in fact, the consultants and specialists are as well represented in membership as are the general practitioners. The B.M.A. is therefore representative of the profession and is conscious of its obligation to the profession as a whole. It will therefore be essential to take into account the attitude and opinion of the consultant world if these find corporate expression through its organizations. Since the publication in January last year of the letter by the three Presidents the Colleges have refrained from any positive expression of opinion except in so far as they contributed to the work of the Negotiating Committee. They cannot, however, long remain silent, and it is much to be hoped that the Colleges will discover what are the views of their Fellows and take steps to make them public, hampered though they may be by a machinery that does not include what the Webbs have described as "the devices of advanced democracy."

It is becoming the fashion to compare medical men with miners and other manual workers. Those who do this do not pursue the argument by stating that the miners wanted nationalization in order to pursue their necessary and honourable task with a contented mind. Medical men have asked not to be nationalized because they feel that if they are they will not be able to work with a contented mind. But while the miners are granted their wish, the medical men are denied theirs. This method of consent by compulsion is misnamed "Democracy." Both the Government and the medical profession wish to see that the public has an efficient medical service. The Government claims that their Act will provide this, but we repeat once more that if this Act, even amended, comes into operation on July 5 the public will be disillusioned, and will have a less efficient medical service than at present, for the reason that it will be impossible by July 5—or even for years to come—to provide the necessary number of hospitals, doctors, nurses, dentists, and other health workers, not to mention health centres. We suggest that it is still not too late for the Government to review this position so that both the public and the medical profession may co-operate in their fight against disease and in the maintenance and promotion of health.

THE WORLD FOOD POSITION

Sir John Boyd Orr, director of the Food and Agriculture Organization of United Nations, told the third conference of that body when it assembled last autumn that the position was no better than it had been the year before, and that unless the war-devastated countries were provided with machinery and fertilizers for the harvest of 1948 the severe food shortage would last for at least two years more. He said also that, taking into account the probable increase in world population, food production would need to be doubled during the next 25 years to provide everybody with a diet capable of maintaining health and working efficiency. Meanwhile the continuing shortage calls for the fullest use of all available sources of food supply, prevention of avoidable waste, protection of vulnerable groups, and careful watch on the nutritional position in general.

If this is a world crisis at least world opinion and resolution are mobilized to meet it. After the first World War the League of Nations measured itself against the prevailing need but took little cognizance of food problems. The word "nutrition" or "food" does not appear in its covenant. It set up organizations to deal with health, with the drug traffic, with social questions, with the resettlement of refugees, but not specifically with famine, though later in its history there was formed the Technical Commission on Nutrition, which has done valuable work, to be continued, it is hoped, under F.A.O. But the United Nations had scarcely been established before F.A.O. became one of its instruments. It was conceived at Hot Springs in 1943, held its first conference at Quebec in 1945, its second at Copenhagen in 1946, its third at Geneva in 1947, attended by representatives of fifty nations. Under its encouragement 34 countries—this was the number last year and is probably now exceeded—have set up national committees. Regional offices have been established or are projected for Europe, the Middle East, Asia, and Latin America. Two regional conferences are planned, in Latin America and in the Far East. The staff of the Organization in Washington, numbering something like 400, is organized in about six divisions—agriculture; economics, marketing, and statistics; fisheries; forestry; nutrition; and technical and administrative services. There is also the nucleus of a division of rural welfare. The work is assisted by six standing advisory committees. The report of the meeting of the Advisory Committee on Nutrition, held at Geneva last September under the chairmanship of Lord Horder, is summarized elsewhere in this issue. The Director of the Organization has sent a cable to Lord Horder approving a suggestion that material in the possession of the Advisory Committee should be made available to the Nutrition Committee set up not long ago by the British Medical Association. Thus a useful liaison between the Association and F.A.O. will be established.

The subject of nutrition and food requirement is extraordinarily well documented. At every meeting the results of new studies become available, and instructions are given for yet more. When the Advisory Committee assembled at Geneva it had to absorb about twenty reports and memoranda. The ordinary man may feel some impatience at so much preliminary surveying when the important

tiling is to get more cereals and roots under cultivation and develop animal husbandry, but the object of these reports and the expert consideration they receive is to avoid the wastage and misuse of food which with marginal resources can be ill-afforded. The recent F.A.O. conference was reminded that the very increase of agricultural production achieved by exporting countries in their efforts to relieve the world shortage may well lead to unmarketable surpluses. An observer back from Greece has told how some of the food sent by U.N.R.R.A. wilted in Athens shops, the Greek preferring his traditional bread and olives. The feeding of the world is, after all, a task for experts. If the world managed to survive in an earlier period without the expert it was only because of seeming abundance, and even then there were regional famines and ill-balanced diets for large populations. Indeed, the conclusion of the World Food Survey by F.A.O. was that before the recent World War half the population of the world was underfed in that it subsisted on a diet inadequate to maintain normal health, to allow for normal growth in children, and to furnish energy for normal work.

One of the present tasks of F.A.O. is to collate all research projects in the field of nutrition in various countries, to construct an index of nutrition workers and institutions, and to disseminate information wherever it is wanted. A useful achievement is the co-operation between F.A.O. and the World Health Organization, almost the youngest of the nine or ten specialized agencies of United Nations, and now, twenty-five countries having ratified its constitution, to be established on a permanent basis. The first co-operative effort of the two organizations is a report on child nutrition, intended for the guidance of the International Emergency Children's Fund for the rehabilitation of children and adolescents in the war-devastated countries. This fund is making plans to provide supplementary food, especially dried skimmed milk, for millions of such children. A point emphasized at the recent conference was the need for increasing the amount of dried skimmed milk available, and at the same time there was a Belgian proposal, referred to the divisions, that a study be made of the distribution of fresh milk in different countries. With the improvement of herds in pastoral regions and an increase in mixed farming, a more abundant milk yield may go far to help matters.

At a recent meeting in Rome experts on nutrition problems in Europe considered ways of improving the production and consumption of fruits and vegetables. The Nutrition Division is concerning itself with aspects of cereal technology, cereals in most countries contributing half the calories in the diet. Another special activity of F.A.O. is the collection of data on school meals, on which a preliminary report was made to the conference. School feeding is regarded as one of the most effective ways of ensuring improved nutrition.

Food is a world problem, but, as the report of the third conference states, "problems of nutrition differ in various parts of the world, and it is necessary to attack them on a regional basis." It is here that a world organization proves itself of greatest service. It is able to review national or regional problems relating to food and agriculture in such a way that the activities and programmes in one region or country can be correlated with those in others. The lessons learned in one part of the world can be applied elsewhere. The experience of one country can supplement that of its neighbour and make good its deficiencies, and accepted principles of a general character can be modified to meet a local situation, having due regard to dietary habits and nutritional state. That is what, through many channels, the F.A.O. is doing.

TYRANNY IN THE UNIVERSITY

Those of us who were at school in the halcyon days before 1914 when we learnt of the murder of Socrates, of the trials by the Inquisition, or of the horrors of the slave trade were easily led to think that such things could never happen again. We thought that with material progress there must also be spiritual progress. But the spirit of tyranny is just as active to-day as ever it was, and the centralization of power in one country after another makes its task easier than ever before. The technique of tyranny is now familiar —infiltration, the political coup from either the right or left by a determined minority not afraid to use force, then the purge of newspapers and the radio, the closing of frontiers, the banning of foreign literature, and finally the control of universities and teaching.

In Europe this has now become such a matter of course as scarcely to excite a nine days' wonder. It is perhaps less well known that the same thing has been happening in the New World. When we announced[1] the election as a foreign member of the Royal Society of Prof. Bernardo A. Houssay, the distinguished physiologist and Nobel Prize Winner for 1947, we referred to the fact of his dismissal from the University of Buenos Aires. Since then things have gone from bad to worse, and now there are no fewer than 1,073 members of the staffs of the six Argentine Universities who have been either summarily dismissed or compulsorily retired, or have voluntarily resigned. A pamphlet has recently been issued by the Federation of Societies for Defence and Advancement of the Democratic and Free University of Argentina entitled "The Enslavement of the Argentine University." The preface of this pamphlet outlines very clearly the present situation in that country:

"During the current political crisis, for our country the major one in fifty years, the university professors of Argentina, responding honourably to the democratic tradition and to the demands of citizenship, have opposed themselves firmly to the advances of a dictatorship which arose from the militarist movement of 1943. In doing so, they complied with their civic duties, inescapably imposed upon them by their position as teachers of the youth. It was not only the professors who raised their voice against the dictatorship. The students of all the Argentine universities responded similarly in the defence of the basic institutions of the country, gravely endangered at this sad hour of our political evolution.

"The Decree of Intervention, pronounced in May, 1946, was an act of vengeance against this patriotic attitude; its aim was to dismiss from their posts all who, maintaining their duties as teachers, also complied with their civic duties. The Government dismissed all the Rectors, the great majority of the Deans, and a large number of Professors, whose lives had been dedicated to teaching and to scientific research. No consideration was given to, nor respect shown for, the prestige which the work of these savants had brought to Argentine science.

"Through the vindictiveness of the Government, the students of Argentina have received the most impressive lesson of their careers; but happily for the future of the country, they have

[1] *British Medical Journal*, 1947, 2, 698.

protected and cherished their high ideals without equivocation. In all manner of means they have expressed their respect and regard for their dismissed professors, who had undertaken their civic and patriotic activities only because of high moral concepts and at risk to their personal interests. Many students have been imprisoned, suspended, or dismissed; some have had to continue their studies out of the country, finding it impossible to do so in the halls of the Argentine universities.

"Time cannot erase the humiliation which has been heaped, not on the professors themselves, but really on the dignity of the university professions. Despite the formal return to constitutional law, the universities have undergone actually no change either with respect to acts of the Government or the decisions of professors and students. The Government maintains the Argentine universities in the same state of vassalage; students and professors continue their protest against the situation.

"Through the imposition of the new laws, the Free University will disappear, and with it justice and right for the professors, freedom to teach, and stimulus to investigators who will never feel secure in their classrooms and laboratories. With the dismissal of the group of professors who gave lustre to the nation's universities and examples to the youth, and with authority, through the new laws in other hands, the universities will have ceased to be fountains of learning and will have become mere technical schools and mouthpieces for the bureaucracy of the Government."

We believe that this sort of thing "can't happen here." Nevertheless there are danger signs. The publication of any scientific periodical can easily be impeded, delayed, or even suspended by failure to allot the necessary paper. The import of scientific books or periodicals from abroad is already controlled and curtailed. Men of science are having a hard fight to maintain their integrity against the demands for secrecy of Government Departments, and in research institutes there is the tendency for commercial interests to muzzle and hamper the spirit of unfettered scientific curiosity. Since our universities are now largely financed by Government grants there is temptation for the Government to exercise control—no doubt in the public interest. But who is to interpret public interest—the omniscient "omni-incompetent" State, or those who in the universities preserve the values of our civilization?

FRESH THOUGHTS ON HARRISON'S GROOVES

Publications of purely clinical findings are all too few, and there appears elsewhere in this issue a paper by two young physicians—Dr. J. Naish and Dr. H. R. E. Wallis—regarding the significance of Harrison's grooves, which is in every way a happy choice of subject. These authors point out for the first time that this physical sign was the observation of one Edwin Harrison and not of the better publicized Edward Harrison, and that the former indeed wrote very little. Having cleared up this obscurity they then turn to the question of the actual mechanism of the formation of the grooves. Much confusion regarding this point exists even to the present day, and they are certainly not produced at the attachment of the diaphragm to the ribs, as many textbooks continue to assert. The suggestion now put forward is that these transverse depressions occur in a zone between the upper ribs, which move upwards, forwards, and rotate outwards, and the lower ribs, which move outwards and backwards—thus increasing the transverse diameter of the upper abdomen. In the presence of increased negative pressure in the thorax the point most likely to buckle would be at that zone where the two movements diverge; a point that has been termed the "muscle gap."

A study of various groups of children in Bristol led Naish and Wallis to conclude that as many as 45% of normal school-children have detectable grooves, and about 7% have grooves as deep as 3/16 in. There is no reason to think that the grooves are particularly common in mild rickets, though they are frequent in severe forms of the disease, and the contention that Harrison's sulcus is valueless as a sign of early rickets is again confirmed.

The connexion between bronchitis, whooping-cough, measles, or any severe upper respiratory infection in early life and the development of these sulci could not be proved on statistical grounds, although the deformity was more common in children who had suffered from these diseases. In asthma, on the other hand, the incidence was heavy, and long-standing asthma was the commonest aetiological factor.

A curious finding was the frequency in which the condition was associated with congenital heart disease, but no firm explanation is offered. Indeed the exact mechanism of the development of these grooves remains in some doubt, though the presumption is that it is associated with conditions producing increased intrathoracic traction. Be that as it may, this paper is a very useful contribution to the lore of clinical signs.

TESTOSTERONE IN ANGINA OF EFFORT

John Hunter observed that Nature resorts to vascularity when she has work to do. Prodigal in most things, Nature needs encouragement, and the patient needs help with exogenous coronary vasodilators in cardiac effort pain; for there seems little doubt that the relief from pain given by nitroglycerin and other related drugs is due to augmented coronary blood flow. Although it is now generally agreed that the symptom of cardiac effort pain, or angina of effort, originates in myocardial ischaemia, the many remedies which have been suggested should remind us that the unsolved problems include the influence of temperament, emotion, and suggestion, the absence of correlation between the severity of the pain and the extent of ischaemic myocardium, the impracticability of finding out what would happen in any individual case if we did nothing, and the difficulty of assessing the action of a drug in a disease where all other symptoms are dwarfed by the purely subjective symptom of pain.

Prolonged treatment of angina of effort with testosterone propionate has been increasingly advocated in the last few years. Waldman[1] has reviewed the results of this treatment in 74 cases in the literature. He has added ten cases of his own in which, unlike many of the other cases, there was adequate regard for control periods and in which full use was made of those electrocardiographic criteria which are reasonably supposed to indicate myocardial anoxia. His conclusions were that testosterone propionate in no way replaces the well-established coronary vasodilators such as nitroglycerin in the treatment of acute attacks, but that when it is given in 25-mg. doses intramuscularly twice weekly for a minimum period of eight weeks it usually produces a sustained improvement. Side effects could be regarded as insignificant. Lesser[2] more recently reported a series of 100 cases which he treated with testosterone propionate, some of his earlier cases having been included in Waldman's review. His conclusions appear to rely less on controls or objective criteria than on the size of his series. The dosage and period of treatment are much the same as those given by Waldman, but both authors stress that "individualization" is necessary and some patients need treatment for five or six months before prolonged improvement occurs. In Lesser's series of 100 cases 91

[1] J. clin. Endocrinol., 1945, 5, 305.
[2] Ibid., 1946, 6, 549.

improved—51 of these to such an extent that each "was able to increase his physical activity without precipitating an anginal attack for a period of at least two months after testosterone therapy was discontinued." As Lesser points out, it would be most unusual for the almost uniform improvement to occur spontaneously in such a large series, and he attributes these good results to testosterone propionate, adding a warning against intensive therapy, to which he attributes acute cardiac failure in one of his patients who was given 25 mg. of testosterone propionate daily for one week.

There are several concepts of the mechanism of testosterone therapy in angina of effort, summarized by Waldman. All of them seem very speculative, and they are perhaps best passed over with the thought that many respectable drugs of accepted therapeutic value have had even stranger origins. More extended and carefully controlled trials are necessary before the long-term treatment of angina of effort with testosterone can be established.

THIRTY-MILLION VOLT X RAYS

Further details can now be given of the 30-million electron volt synchrotrons which are being built for the Medical Research Council and the Atomic Energy Research Establishment of the Ministry of Supply. In so far as their medical use is concerned the generation of x rays of such voltage will substantially increase the ratio of depth to surface dosage, compared with either existing x-ray equipment or radium bomb irradiation.[1 2] The synchrotron is merely one possible method of accelerating x rays to the required high voltage, and the x rays are generated, as with ordinary equipment, when the electrons thus accelerated hit a metal target. The particular combination of magnetic and electrical acceleration which the synchrotron achieves was first demonstrated, as an experimental system, by the Telecommunication Research Establishment at Malvern, and subsequent development up to the manufacturing stage has been in the nuclear physics laboratories of the General Electric Company at Stafford, where a demonstration of progress to date was given recently.

The first of the synchrotrons, destined for the Atomic Energy Research Establishment, is now physically complete and at an advanced stage of testing; the second and third to be produced will go to the Medical Research Council. In external form they are cylinders about four feet in diameter, and their weight is about three and a half tons. Whilst a formidable piece of equipment, the synchrotron is reasonably compact considering the high energies produced. The x-ray beam emerges from a fixed point (the target) and, with reference to the synchrotron, its direction remains constant. The beam is about 15 degrees in total width—and the word "total" should perhaps be emphasized, since beam-widths are often measured to half intensity. For medical use, provision will be made for the rotation of the complete synchrotron about its axis, and with gimbal-mounting direction of the x-ray beam will be a simple matter. The synchrotron, thus given effective mobility in three dimensions, will be set up in the treatment room so that patients will lie beneath it, in general at about a metre from the point of emergence of the beam. Control will necessarily be remote, since workers in the department must obviously not be continually exposed to stray radiation. A small television apparatus has accordingly been designed which will enable those responsible to observe continuously from the control room the condition and position of the patient. Thus, if the patient had moved so that the beam was no longer being correctly directed treatment could at once be suspended.

A further piece of equipment, which was also shown, is of experimental rather than therapeutic interest. This is a pulse-operated generator, designed to provide extremely high doses of x rays for short periods. With individual pulses of irradiation of only about half-a-millionth of a second duration—a similar length of time to that used in some forms of radar equipment—a dosage equivalent to 2,500,000 r per minute can be attained—roughly fifty times greater than the highest rate about which published information is available. For comparison, the accepted safety limit in atomic energy plants is 0.1 r in a full eight-hours working day, and, below this again, radiation-recording equipment is available which will give a full-scale reading at one-tenth of the permitted rate; finally, at one-tenth of the latter, and at one-hundredth of the permitted level for atomic energy workers, we reach the inevitable permanent background of irradiation provided by cosmic rays. The total range in rate of dosage between cosmic radiation and the experimental pulse generator already mentioned is accordingly of the order 10^{12} to 1—a figure which is perhaps more eloquent than a verbal description of the engineering progress which has been made.

Further developments in this field include a 300-million electron volt synchrotron planned for the department of physics at Glasgow University. A similar machine is under construction at the Massachusetts Institute of Technology. Prof. Kerst, of the University of Illinois, Urbana, also plans to accelerate electrons to 300-million volts with the older betatron type of equipment which he himself developed. Although 300-million volt x rays are thus already within sight, it appears unlikely that for therapeutic purposes there will be any advantages in going much, if at all, beyond the 30-million volt generators now available.

[1] *British Medical Journal*, 1947, 1, 571.
[2] Ibid., 1947, 2, 101.

INTERNATIONAL CONGRESS OF INDUSTRIAL MEDICINE

The 9th International Congress of Industrial Medicine will be held in London from September 13–17 of this year under the patronage of the King and the Queen. The last Congress was held ten years ago, and the first in 1906. The success of past Congresses has been in no small measure due to the inspiration of Prof. Carozzi, who is taking an active part in securing the success of the Congress to be held this year. As is befitting in an industrial country, the Government is officially sponsoring the Congress, and the following Ministers have agreed to serve as Vice-patrons: Mr. Ernest Bevin, Mr. G. A. Isaacs, Mr. Aneurin Bevan, Mr. James Griffiths, Mr. G. R. Strauss, and Mr. H. T. N. Gaitskell. Lord Moran and Sir Alfred Webb-Johnson have accepted office as Presidents of the Congress; Mr. T. E. A. Stowell is Chairman of the British Committee and Dr. Donald Hunter of the Planning Committee. The programme of papers is not yet complete, but it has been decided that various sections will deal with such subjects as: Young Persons in Industry; the Determination of Dusts in Air; Administration and Training; Pneumoconiosis; Dermatology; Burns; Industrial Medicine in the Tropics; and the Training of Industrial Medical Officers. There will be a discussion on rehabilitation, and arrangements have been made to visit various rehabilitation centres, clinics, and hospitals. The official languages of the Congress are French and English, and those who wish to have further information should communicate with the Organizing Secretary, Room 501, Garden Court Wing, B.M.A. House, Tavistock Square, London, W.C.1.

THE FOOD CRISIS AND THE F.A.O.

RECOMMENDATIONS OF ADVISORY COMMITTEE ON NUTRITION

The Food and Agriculture Organization of United Nations has a standing advisory committee on nutrition, which held its first meeting at Copenhagen in 1946 and its second at Geneva in September of last year. The second meeting, which took place under the chairmanship of Lord Horder, was attended by thirteen members from eleven countries and three observers and lasted for nine days.

One matter to which the Committee drew attention was the agenda of the regional conferences which F.A.O. is arranging. It was considered that these conferences should centre on three main subjects: (1) the most important problems of nutrition in the region concerned, with special regard to areas within the region in which malnutrition is particularly serious; (2) practical measures for improving nutrition; and (3) a follow-up by means of national organizations. One of the practical measures recommended is to devise programmes for certain "demonstration areas" calling for the co-operation of experts in nutrition, agriculture, animal husbandry, fisheries, sociology, cultural anthropology, and home management. These demonstration areas would serve as training grounds for field nutrition workers.

On the question of school feeding, on which a large amount of information has been collected, the Committee felt that the Nutrition Division of F.A.O. might do more than present a picture of the situation in different countries; it should attempt to provide guidance for those concerned in the organization of school feeding. School meals should, wherever possible, be rich in protective foods, and should effectively supplement home meals. "Definite merit attaches to the 'mid-morning snack' which is in vogue in some countries."

Another recommendation was that the Division should prepare and periodically revise tables of food composition for international use, should encourage research on composition of foods, methods of analysis, and correct identification, description, and classification of foods, and should support the study of chemical composition and physiological value of foods which have been insufficiently investigated, and of products newly recognized as food.

A series of recommendations were also made concerning food technology: that there should be a study of the comparative nutritional value of different types of rice produced in different parts of the world; that dried skimmed milk should receive attention; that more use might be made of soya bean products in the emergency; that dried yeast had nutritive value as a supplementary food for human beings; and that more information should be obtained on the subject of synthetic edible fats and their nutritive value.

Education in Nutrition

The Committee reinforced the view which it expressed at its previous meeting in 1946, that education in nutrition is of prime importance, that it should begin with the child, that school feeding is itself a valuable means of nutrition-teaching; also that "the family doctor, being in a key position, should be taught the principles of nutrition in his preclinical studies, and should be familiar throughout the whole of his clinical training with the many ways in which degrees of malnutrition enter into disease processes." The report adds: "The crux of the position, admittedly unsatisfactory, seems to lie in the question, Who shall teach the teacher? The answer, in great measure, lies with the universities."

Other subjects on which the Committee made recommendations included the preparation of memoranda on the technique and interpretation of diet surveys, physiological requirements of calories and nutrients, and the assessment of nutritional status. The Committee reaffirmed its view that lessons of value for the future can be drawn from the study of nutrition and food management during the war and its aftermath, and recommended that the Nutrition Division should keep itself informed about relevant studies in this field which have been made in different countries.

In the course of its sitting the Committee received a deputation from the League of Red Cross Societies, which pointed out that it represented a very large body of voluntary workers experienced in the handling of school meals and in education in nutrition, and the Committee drew the attention of the Director-General to this fact and expressed the hope that ways and means of collaboration between the F.A.O. and the League might be found.

Of the many documents before the Committee one of the most valuable was a text prepared by one of its members, Dr. Isabella Leitch, of the Rowett Institute, Scotland, entitled "Preliminary Notes on Vital Statistics and Standards of Living," in which the relations between mortality, occupation, social and economic status, and nutrition were discussed. This analysis is to be developed further on the nutritional side, and is likely to clarify an issue of great interest and importance to F.A.O.

WORLD FOOD SITUATION

Prof. J. R. Marrack, who holds the chair of chemical pathology at the London Hospital Medical College, addressed the Anglo-Austrian Society in the theatre of the British Council on March 11 on the organization of world food supplies. Mr. A. L. Bacharach presided.

During the recent war, said Prof. Marrack, the United States managed to produce more food than ever before for its own people and for export, and it was realized that here was an example of what might be done, through a proper system of production and regulation, towards eliminating malnutrition throughout the world. At the Hot Springs Conference in 1943 the problem was seen to be not the production of the food but the ability of the consumer to pay for it. Even though farmers set themselves to produce as much food as possible, if the power of buying was restricted the depression of the early 'thirties would be repeated.

It was unfortunate that the scheme envisaged at the Hot Springs Conference was not put into force at the end of the war. U.N.R.R.A. was formed not only for the administration of relief but to rebuild the economies of the occupied countries of Europe, but unfortunately, in the final draft scheme for U.N.R.R.A., although the second purpose remained in its name, rehabilitation was in fact dropped and the scheme became one merely of emergency relief. U.N.R.R.A. had supplied food only to those countries which could not afford to pay for it, and the countries which could afford to pay had started a scramble for inadequate supplies. Thus the whole idea of supplying each country according to need fell to the ground.

Disappointed Hopes

Out of the Hot Springs Conference arose the Food and Agriculture Organization of United Nations. Prof. Marrack held that this Organization should have been enabled to buy and hold stocks of food, to supply countries in need, and to administer finance in such a way as to give farmers throughout the world the necessary farming equipment. Sir John Boyd Orr had contemplated the building up of buffer stocks of food so that when there was abundance the Organization could buy and supply to areas where food was scarce. But what had emerged in the end, instead of an international body to buy stocks, was an agreement that individual countries should buy. Prices had been fixed for wheat—the key commodity—and an agreement had been made whereby three out of the four great producing countries would during the next five years produce set amounts which a large number of consumers would take. This gave security to farmers, but it did not give international control of food production, nor did it include arrangements for holding back buffer stocks for relief and improvement of nutrition all over the world. The scheme was essentially a restrictive one, whereas Orr's original scheme was one of expanding economy, ensuring freedom from unemployment by stimulating food production and making sure that malnutrition should cease.

Prof. Marrack contrasted effectively the relative lack of achievement in the application of science to agriculture and the achievements in recent years in medicine. If in agriculture and agricultural economy the same scientific methods had been pursued with the same conviction and enthusiasm, in the prevention of diseases of animals and plants, in the planning of production and regulation of distribution, the spectre of malnutrition might no longer haunt the world. He concluded by saying that the western nations of Europe could not unite for a better purpose than to run a food organization.

GUY'S HOSPITAL DENTAL SCHOOL

The annual clinical meeting of Guy's Hospital Dental School took place on March 6, when the departments and theatres were crowded with old students for a full programme of demonstrations and exhibits. The emphasis in the exhibition was on preventive dentistry. The *x*-ray department showed the advantages of intraoral stereoscopic projections. The prosthetic laboratory contained some interesting models in acrylic resin, and this material found various uses in the conservation-room. Among the pathological and experimental specimens in the research laboratory were the results of an investigation on the effect of prematurity on tooth enamel. Radiographs and photographs indicated that where there had been no illness in pregnancy the position of the infant's teeth was well marked, the neonatal line corresponding to the degree of prematurity; but where there had been severe constitutional disturbances there was evidence of interrupted enamel deposition and altered structure. In the conservation-room some work on the use of penicillin in root canal therapy was demonstrated. Various methods for the prevention of dental caries were illustrated: the application of sodium fluoride in distilled water; the use of zinc chloride and potassium ferrocyanide; and a mouthwash and dentifrice based on the effect of ammonia nitrogen on the growth of the lacto-bacillus acidophilus. It was stated that the regular use of this mouthwash and tooth-powder had been shown to produce a marked reduction in the oral lacto-bacillus counts, but confirmatory evidence of a reduction in actual caries was still awaited.

The preclinical department showed the methods of stress analysis which had been adapted for the study of stress distribution in the different parts of a clasp with the object of reducing high stresses and consequent danger of breakage. The making of copper dies of the teeth as a means of ensuring accuracy and hardness for fillings, crowns, and bridges was also shown. Besides the various demonstrations, operations for osteoma of the jaw, for ankylosis of the temporomandibular joint, and for other conditions were undertaken.

Nova et Vetera

CENTURY OF CERTIFICATION

That the provision of certificates worried medical practitioners 100 years ago is shown by the following letter that appeared in the "Provincial Medical and Surgical Journal," the predecessor of the "B.M.J.," on March 22, 1848.

Baptism of Sick Infants

SIR,—May I beg the favour through the medium of the *Provincial Journal*, of inquiring of my professional brethren, how they are in the habit of treating certain applications made to them under the following circumstances?

It appears that the clergy in the diocese of Norwich, and, most probable, the same is the case elsewhere, are instructed that the baptism of infants shall only be performed in strict conformity with the rubric, and that the practice of a preliminary baptism or "naming," as heretofore customary, should be discontinued. In complying with this ordinance, the clergy, as if by a mutual understanding, have set apart one Sunday in each month, and it is expected all children born in the intervening period, shall on this day be brought to the font, attended by the required sponsors. Now, it happens not unfrequently, that an infant is attacked with sickness previous to the advent of this important day, and the parents, anxious to secure it a christian burial, and perhaps, if imbued with faith in the doctrine of baptismal regeneration, dreading the death of their infant unregenerate, apply to the minister to have it baptized. The answer is—"Unless you bring a certificate from a surgeon, stating that the child's life is in imminent peril, the rite cannot be performed." Hitherto I have declined giving the necessary document, as I can only regard such a demand on the part of the clergy as tending to fasten unduly a solemn responsibility on the medical profession, which naturally belongs to themselves.

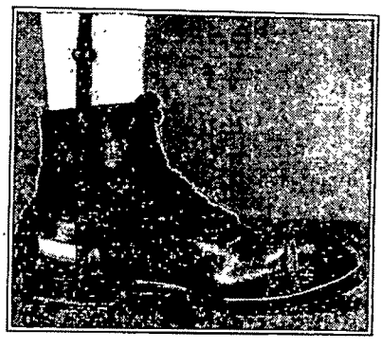
I am, Sir,
Your most obedient servant,
JAMES COOPER.

Filby, Great Yarmouth, Norfolk,
March 13, 1848.

Preparations and Appliances

A DEMONSTRATION WALKING CALLIPER-BOOT

Mr. HORACE DAVIES, visiting orthopaedic surgeon, Birkenhead Municipal Hospital and Whiston County Hospital, writes: It is often difficult to demonstrate in a convincing way to students and nurses the principle of the weight-bearing walking calliper. We have to rely mainly upon the patient's word that his heel is not in contact with the boot. This is particularly difficult in children, especially if the calliper has to be worn for a lengthy period, and constant adjustments are necessary. The heel-boot space can, of course, be shown by removing the back of the boot, but this is of use only in a demonstration model. A serviceable method enabling normal use of the calliper is shown in the accompanying photograph. An oblong



piece of the boot is removed from the inner side and replaced by "perspex." The plastic is inserted from the top, between the leather and the lining, and then cemented into position, using a waterproof plastic glue. Through this window the heel and the space below can easily be seen and adjustments of calliper length made with precision.

ROUGHENED NEEDLE-HEAD FOR TREATMENT OF VARICOSE VEINS

Mr. R. ROWDEN FOOTE, London, W.1, writes: This needle-head is a modification of that on the Stevenson needle, and presents the following advantages: (1) Its "nutmeg-grater" surface scarifies the venous intima and allows a more perfect thrombosis than when a sclerosant only is employed; (2) gentle manipulation of the pliant shaft will traumatize the intima

Enlarged View

Bell & Croyden, London

without unnecessary damage; (3) the rocket-shaped nose of the needle facilitates the entry of this instrument into the vein. The shaft is usually 12 in. (30 cm.) long, and it is fitted with a "record" needle mount.

This instrument was made for me by John Bell and Croyden, Wigmore Street, W.1. I am indebted to Mr. Proudfoot for his patience and interest, and for the many specimens of this needle constructed before I was finally satisfied.

The Australian Commonwealth Director of Tuberculosis, Dr. H. Wunderly, believes that Australia could wipe out tuberculosis in 20 years if sufficient money were available. After examining the conditions in each State during the past six months, he has presented a report on the incidence of the disease to the Minister for Health.

Reports of Societies

RUPTURE OF CERVICAL INTERVERTEBRAL DISK

The subject for discussion at a meeting of the Section of Neurology of the Royal Society of Medicine on March 4 was rupture of the intervertebral disk in the cervical region. Dr. C. WORSTER-DROUGHT presided.

Dr. W. RUSSELL BRAIN said that the problem presented itself in patients who complained of symptoms of irritation of a posterior root in the cervical region, or of compression of the spinal cord in the neck, or in some cases of both. Some had a protruded intervertebral disk without arthritis, some had protrusion with arthritis, and some had arthritis without protrusion; the protrusion might be cartilaginous alone or both cartilaginous and bony. The condition might be the result of trauma or it might be associated with chronic inflammation.

Disk protrusions were common in the cervical and lumbar regions, rare in the thoracic. Both cervical and lumbar regions had greater mobility than the thoracic spine, and were specially exposed to trauma—in the lumbar region by strains due to weight-lifting or by falls on the buttocks, and in the cervical region by the effects of violent movements of the head. In the cervical spine the intervertebral disks were larger, relative to the vertebrae, than in the lumbar region. The posterior longitudinal ligament extended opposite each intervertebral disk, but did not reach the disk margin. If the central fibres were ruptured the disk protruded backwards in the mid-line, but if that did not happen or the disk protruded somewhat to one side it tended to extend laterally.

No doubt the earliest changes were vascular. The veins were the first vascular structures to be compressed, and since the flow in the veins was upwards the effect of compression was to produce oedema of the segments of the spinal cord immediately below the site of compression. The first effect of an anterior or antero-lateral protrusion would be an oedema of the anterior or antero-lateral areas of the cord at the site of compression and in a few segments immediately below. It was an interesting point whether the arterial blood supply also suffered; on general grounds it would be expected to suffer later.

Clinical Findings

Dr. Brain illustrated his further remarks with ten surgically verified cases, from one of which post-mortem material was also available. Most of the ten were middle-aged or elderly; only two were under forty. Only two had symptoms of the root irritation type alone; in the remaining eight the spinal cord was compressed. These numbers did not represent the relative frequency of the two clinical pictures. Trauma appeared to have been a factor in only two of the cases; osteoarthritis of the cervical spine was present in at least seven and might be fairly diffuse or limited to the articulations adjacent to one intervertebral disk. In one of these patients protrusion occurred during pregnancy, which was interesting in view of the relation of pregnancy to herniation of the lumbar intervertebral disk. Patients in whom trauma was an important factor seemed to be, on the whole, younger than those with osteoarthritis and more likely to develop root irritation than compression of the cord. The site of the disk protrusion was between the fifth and sixth cervical bodies in five of the cases, between the fourth and fifth in two, and in the other three cases it was between the second and third, the third and fourth, and the sixth and seventh, respectively.

Four principal ways in which the protrusion might manifest itself could be distinguished: an acute onset of symptoms, especially pain, involving the neck and one upper arm; insidious and perhaps remittent onset of the same character and distribution; insidious onset with root symptoms referred to one upper arm, together with evidence of lesion of the spinal cord; and finally, and much less commonly, there was the insidious onset of a progressive spinal cord lesion alone. The acute onset of symptoms involving the neck and one upper limb seemed often to follow trauma. The history of compression of the spinal cord was quite short in a number of cases: in five of the ten patients it varied from two to nine months; others had a history extending over two or two-and-a-half years, and in one case ten years.

The most prominent symptom was pain, usually described as shooting or burning in character, and sometimes as agonizing. Sensory loss was usually slight and patchy, involving cutaneous rather than deep sensibility. A severe degree of muscular wasting, weakness, and hypotonia was uncommon. When the cord was involved above the cervical enlargement the signs of a pyramidal lesion were evident in all four limbs. One conspicuous feature was the frequency of wasting of the small muscles of the hand. In eight of the nine cases in which the cerebrospinal fluid was investigated some abnormality was found.

As with herniated lumbar disks, recovery from the symptoms of root irritation might follow conservative measures. Prolonged immobilization should be tried; operation should be carried out in those comparatively few patients who suffered from persistent pain in the neck or upper limb or from serious muscular wasting and weakness, or from spinal compression.

Surgical Approach

Mr. G. C. KNIGHT spoke of the importance of the relation of mid-line protrusion to the anterior spinal artery. Thrombosis of the anterior spinal artery in the lower part of its course was likely to have an ascending effect on the cord. He had seen a permanent paraplegia result from thrombosis in that artery. In true protrusion there was evidence of a progressive tendency towards herniation. The protrusion might increase in size and tend to involve more and more of the cord. He had seen three cases which appeared to form a localized spondylitis deformans, and in one case the bony changes in the spine were unilateral. In a traumatic case where there was possibly displacement of the disk as a whole pain could be felt not only in the usual localities but in the supraclavicular and suprascapular regions, and sometimes even in the precordia, leading to a misdiagnosis of the condition as coronary disease. Determination of which root was involved was better based on the paraesthesia than on the distribution of the pain.

Myelography was valuable at all levels. The best treatment for any protruded disk was "a long waiting list." Care should be taken not to operate on these cases unnecessarily or too soon. Rest in the position of greatest comfort to the patient would cure or relieve the majority. Flexion of the head away from the side of the lesion was usually the most comfortable position, but occasionally the opposite might be true. Manipulation was dangerous in disk protrusions. The indications for operation were fairly clear-cut. In a state of established compression, operation was indicated after conservative treatment had failed. He discussed the operative procedures. The single root compression could be tackled adequately by hemilaminectomy. In cord cases a full laminectomy was required.

Dr. J. W. D. BULL gave an interesting survey of the anatomy of the subject. On examining the size of the lower cervical canal the distinction from the lumbar canal was very striking. The tumour in the lumbar disk, when there was maximum protrusion, might be compared to the size of a cherry; on the other hand, in the cervical disk, it was about the size of a red currant. In radiographic examinations it was advisable to take four projections: the standard antero-posterior and lateral, and also two oblique. The antero-posterior view should be taken last after having seen to what extent the vertebral bodies were angulated in the lateral views. So far myelography had not helped very much in the diagnosis of ruptured cervical disk.

Conservative Treatment

Dr. ALDREN TURNER spoke in favour of conservative treatment. His remarks were based on 46 personal cases, in all of which there was pain at the back of the shoulder and down the outer side of the arm, and in some of the cases in the neck and the upper part of the chest. On examination, pain was accentuated by movement of the neck. Neurologically they all showed some signs of interference with function. Very few had radiological evidence of osteoarthritis. None of these patients was operated on. One of them was lost sight of; the

other 45 were followed up until the pain was better. They were treated in bed with four or five pillows below the neck, a sling on the arm, and a mild analgesic. Within less than three weeks 31 were relieved of the pain, and within four weeks a further 9. The remaining 5 were more resistant, and it was from 5 to 12 weeks before the pain ceased. Although the pain was relieved the paraesthesia continued, and he believed might continue for weeks and months. It was as well to warn patients of this fact.

In some further discussion Mr. J. E. A. O'CONNELL said that the average lumbar disk was 25 times as heavy as the average cervical one; nevertheless, quite small cervical protrusions had been known to produce severe clinical symptoms and signs. There were, in his view, four groups of cases of cervical disk protrusion: (1) Cases with cervical and brachial pain, the signs and symptoms showing themselves in the distribution of one cervical root. In this group, with conservative treatment, the prognosis was very good. He had seen 50 cases, of which only one underwent operation. (2) Cases in which at the onset there might be only neck pain and pain in one limb, but symptoms and signs of cord compression then appeared quite suddenly. He had had four cases of this kind in which he had removed unmistakable protrusions which were severely affecting the cord, causing not only compression but contusion as well. (3) Cases in which there was evidence of a severe lesion in the cervical cord developing acutely after trauma. (4) Cases of minor injury to the cervical cord associated with head injury. The features of these cases were stiff neck, weak limbs, and characteristic reflex changes, especially interference with the radial reflex. The lesion responsible he believed to be a cervical disk protrusion.

PSYCHO-ANALYSIS IN HOSPITAL

At a meeting of the Section of Psychiatry of the Royal Society of Medicine on March 9, Prof. Sir DAVID HENDERSON presiding, a discussion took place on "The Application of Psycho-analytic Principles to the Hospital In-patient."

Dr. JOHN RICKMAN defined the aim of psycho-analytical therapy as being to enable the patient to disclose as fully and freely as possible the history of his development, including that of which he had been unconscious. This disclosure the doctor must meet with sincerity of purpose and dispassionately, and he must not lose patience in the face of failure. These qualities were also prerequisite for research. Discovery of the cause and solution of the problem of mental pain were not possible unless the patient experienced relief of suffering in the course of treatment, then he would co-operate in both research and therapy. "No research without therapy; no therapy without research." Invariably there was a strong but unconscious tendency on the part of the patient to defend himself against the research, and this defence process affected both patient and doctor, for if the latter had not worked out his own past experience he would unwittingly co-operate with the patient's defences in greater or less degree, thereby nullifying both the investigating process and the content of the therapy. The aim of psycho-analytical procedure was to facilitate the patient's re-experience of the uncompleted and unconscious emotional situations of the past.

In this Dr. Rickman went on, there was nothing incompatible with the exhibition of sedatives, shock therapy, surgical interference with the brain or other organ, nor even with the restriction of social locomotion (certification). All these could be pursued along with psycho-analytical therapy, provided—a most important proviso—that every event was referred back to the broad kind of social relationship between doctor and patient known as transference. In the psycho-analytical treatment of the hospital in-patient complications arose from other simultaneous doctor-patient relationships—with the medical superintendent and the house physician, for example, as well as with the analyst. The role ascribed to each of these persons in the patient's fantasies had to be discerned separately, and it might well happen that the patient would play off one doctor against another, so that the situation became exasperating. But in the long run it would work out satisfactorily if there was co-operation between the analyst and the other doctors concerned.

Relation of Analysis to Other Treatment

Dr. E. STENGEL said that psychiatry could not afford to neglect any approach which promised to contribute to the understanding of mental phenomena. Most cases in mental hospitals were not accessible to psycho-analysis in the ordinary sense, and what could be practised was in the main applied psycho-analysis. Psycho-analysis was thought of too frequently mainly as a therapeutic procedure, and the fact was overlooked that its contribution to mental science consisted of certain fundamental formulations. There was still a tendency amongst psychiatrists to judge the significance of psycho-analysis from its value as a therapy, and to forget, as Ernest Jones had put it, that psycho-analysis had provided psychiatry with an interpretive, a dynamic, and a genetic approach.

He had found it particularly helpful in cases of schizophrenia with remissions to study the patient's reaction by the application of psycho-analytic principles; this had helped him in arriving at a correct assessment of improvement. Dr. Stengel added that the understanding of mental illness did not preclude the possibility that it was an organic disease. On the other hand, the organic nature of the illness did not imply that it could not be influenced psychologically. It had been said that the neurological approach to mental illness, from which the primary clarification was expected, was incompatible with psycho-analysis. For his own part, he saw no difficulty in combining the neurological and the psycho-analytical approach. Some of Freud's concepts had much in common with those of Hughlings Jackson. Psycho-analysts did not claim a monopoly in their approach, but they did claim that for the solution of a great number of scientific problems it was indispensable, and they looked forward to the time when more trained psycho-analysts would work in mental hospitals.

Dr. CLIFFORD SCOTT gave a lengthy and detailed account of the application of psycho-analysis to a manic-depressive female patient at the Cassel Hospital in 1936–8. This patient, who was aged 20 when treatment began, was subject to emotional outbursts in the course of the treatment, but there was eventually an improvement in behaviour and certain homosexual fantasies gave place to normal sexual inclination. After discharge from hospital, treatment was continued for eighteen months, and when last heard of two years ago the patient was well. In such cases, if time was available, if colleagues were co-operative, and if psycho-analytical methods were persistently used, great improvement could be achieved and much good material from the point of view of psychological research would become apparent.

Advantages of Institutional Treatment

Dr. W. H. SHEPLEY agreed that there were certain disadvantages in treating patients analytically in an institution, particularly where the patients were in contact with other doctors, but the advantages far outweighed them. One advantage was that doctor and patient lived in the same community and were familiar with the same events—events which formed an important element in the patient's dreams. There were certain patients who could be treated only by physical methods, such as insulin or shock therapy, and only by resort to physical methods did the patient become accessible to psycho-analysis. He held that the remissions obtained by physical methods of treatment were not satisfactory; in his experience relapse invariably occurred if reliance was placed upon such methods alone, but when the patients had been made accessible to psycho-analysis and treated over a long period—a year or more—subsequent relapse might be avoided. Many of the patients themselves were acutely aware that physical methods alone meant ultimate relapse. It was an advantage in securing the patient's co-operation if he knew that psycho-analytical methods were undertaken to support the favourable results of the physical therapy.

Dr. IRENE YATES said that there were difficulties in treating patients in the wards, but with patience and strict honesty in approach they could be overcome. The psycho-analyst must be prepared to explain to the patient why he was doing certain things. Respect should be paid also to the patient's own "tempo" both in hospital management and in psychological treatment. The patient himself would often tell one what to do and what not to do. "I feel as if I had been run over

by a train," said one woman, "and cut to pieces. Leave me alone in bed and I shall come together." Matters should be allowed to unfold slowly, the psychotic patient being allowed to talk his own language, and the analyst talking that language too.

Dr. C. R. BIRNIE said that in the treatment of psychotic patients by psycho-analysis a more active type of therapy was necessary than was usually countenanced by the Freudian school. A point to be borne in mind was that in the attempted psycho-analytical treatment of patients in mental hospitals the situation was liable to become complicated because in the fantasy of the patient the nurse might become the "mother" or "sister" as the case might be. It was very desirable, therefore, to have mental hospital nurses who could appreciate the psycho-analytical view.

Dr. E. H. ROSENBERG said that the use of the psycho-analytical method of investigation would throw light on a number of problems. It was important in psychotic illness to make some estimate of how far the morbid process was capable of arrest. She regretted that the discussion had not emphasized more the administrative difficulty which arose in treating hospital in-patients.

Dr. E. BIERER said that in modern mental hospitals psycho-analytical principles had been understood for many years, and he thought the openers had been preaching to the converted. Dr. Stengel had criticized the "short" method, but how was it possible to apply in practice in a mental hospital the full unabridged Freudian analysis?

Change of Attitude

Sir DAVID HENDERSON, the President, said that while the attitude of psychiatry might have changed, that of psycho-analysis had changed also. Psycho-analysts had developed a philosophy which was of extreme importance, but viewed as a therapeutic procedure he had no hesitation in saying that there was still wanting a technique which would give results in mental hospitals. Psycho-analysis as a therapeutic measure in mental hospitals had not justified itself to the extent that had been hoped. He was not gainsaying the contribution which Freud and others, including in this country Ernest Jones and Edward Glover, had made to the knowledge and understanding of the personal equation, but he still believed that from the point of view of therapy, taking it all through, it was a most disappointing procedure. Dr. Stengel was trying to get the best of both worlds, suggesting that physical and psycho-analytical methods needed all to be balanced up together. The plea for such integration was certainly significant of a change of attitude.

Dr. RICKMAN, in reply, said that if short methods were employed in mental hospitals they should be carried out only by those who were trained and kept refreshed in full psycho-analysis. Dr. STENGEL thought that those who practised the short treatment should call themselves psychotherapists; there was nothing wrong in the name. Dr. CLIFFORD SCOTT also urged that only those who had had experience of psycho-analysis extending over a long period should be permitted to use the abridged treatment.

AETIOLOGY OF INFLUENZA AND THE COMMON COLD

A meeting of the Medical Society of London on March 8 was devoted to a discussion of the aetiology of influenza and the common cold. Mr. W. E. TANNER, the president, was in the chair.

Dr. CHRISTOPHER H. ANDREWES, F.R.S., said that such a discussion must take note of a number of upper respiratory diseases among which influenza and the common cold stood out more or less clearly. The others included the affection unfortunately named atypical pneumonia and febrile catarrh, which the Americans had recently been referring to as undifferentiated acute respiratory disease, or "A.R.D." This was an infection usually febrile, more severe than the common cold, and probably having as one of its manifestations an exudative pharyngitis and tonsillitis with which streptococci were not associated; its incubation period was apparently five to seven days.

Epidemic influenza might be caused by one or other of two serologically unrelated viruses known as A and B. There was good reason for thinking that they covered most of the epidemics, though in some epidemics it might be difficult to demonstrate the presence of either of them. He exhibited a chart prepared by Dr. S. D. Collins, of the U.S. Public Health Service, showing the distribution of outbreaks of influenza from 1920 to 1943. The distribution appeared to be entirely irregular until it was recognized that there were two viruses concerned. Immunity to virus B lasted rather longer than immunity to virus A. Outbreaks of influenza in which virus A was concerned might be said to occur in a two or three years' cycle, whereas those in which the aetiological agent was virus B occurred in a cycle of four to six years, but it was not yet known why epidemics arose when they did. The irregularities in epidemics might be explained by variation in the antigenic structure of the virus, and when a little more was known about its structure it might be possible to predict epidemics with more certainty.

Certain evidence suggested that a new strain of influenza might travel about from country to country. A recent paper by M. D. Eaton (*California Medicine*, 1947, 67, 234) in which the seasonal incidence and geographical location of outbreaks were discussed made it difficult to avoid the conclusion that A and B viruses travelled about the world. The World Health Organization had established an influenza centre which would receive strains from laboratories in all countries, compare them antigenically, and try to build up a picture of influenza as a world-wide phenomenon. It was possible that the pandemic of 1918–19 was not peculiar in its rapid spread all over the world; in other years epidemics might spread with equal rapidity, though with less virulence. Immunization against influenza looked promising two years ago with good results reported from the United States, but last year there was complete failure both in the United States and in this country. This failure was probably due to the appearance of a variant of influenza A, antigenically remote from the strains used to make the vaccine.

Common Cold

Much less was known about the aetiological agent of the common cold. It was possible to transmit colds to human volunteers with filtrates from the nasal washings of cold sufferers. Dr. Andrewes spoke of the results of such transmission to volunteers at the Common Cold Research Unit at Harvard Hospital, Salisbury. Filtrates produced in about half the subjects symptoms of varying degrees of severity, from the really "heavy" cold to something which could hardly be called a cold at all; 50% of the subjects were immune. It was believed that they had succeeded in transmitting colds in series from one person to another, and therefore some confidence was felt that the agent was a virus. He had an open mind on the question whether certain colds might be due not to a filtrable agent but to bacteria—whether there might not be the "pneumococcal colds" of which their bacteriological colleagues spoke.

The incubation period in the production of a cold was, as a rule, two or three days, though this was in curious contrast to some reports from America, where quite a number of different groups had recorded incubation periods of less than twenty-four hours. It seemed fairly certain that the mere bringing together of the virus and the susceptible person was not enough to produce a cold. It was not known what the other factors were nor how important they might be. Was it possible that a great many people carried the aetiological agent of a cold in their noses until something happened to upset the balance between host and parasite and a cold followed? He had no doubt that specific immunity did play a part, but he also had the feeling that non-specific factors might dominate the situation in this country. Efforts to grow the virus in eggs and to infect experimental animals were continuing, but the whole picture remained for the present highly confused.

Epidemiological Characteristics

Prof. C. H. STUART-HARRIS said that of the group of respiratory tract disorders only two were sufficiently defined—namely, the common cold and influenza. The common cold could be described as a relatively trivial ailment, usually afebrile, but

certainly one of the most troublesome that afflicted mankind. Many conditions had been grouped under "influenza." At least four different entities, partial entities, or syndromes were recognized—influenza, the common cold, febrile catarrh, and atypical pneumonia. Since the viruses of influenza were most accessible to study, more was known about them. Influenzas A and B, though clinically indistinguishable, corresponded reasonably closely with what was reported of past epidemics. There was no reason to think that the two were dependent on each other or connected in the immunological sense. During the last fifteen years there had been three fair-sized epidemics of influenza A, and in between there had been certain "rumblings" and occasionally rather sharp waves due to influenza A or sometimes to influenza B, and now and then influenza B predominated. The cycle of two or three years had been fairly well obeyed by influenza A; the cycle of four to six years for influenza B had been obeyed in the States, but less certainly in this country. The clinical picture was relatively uniform, the emphasis always being on symptoms of a general febrile character—headache, shivering, malaise, and anorexia. Among respiratory symptoms cough was most frequent; the coryza was not to be confused with that attending the streaming cold. In any outbreak, and particularly in the years of localized outbreaks, a proportion of cases did not yield serological evidence of either virus. It was characteristic of most outbreaks of influenza that the cases remained uncomplicated.

Febrile Catarrh

Localized outbreaks of febrile catarrh, Prof. Stuart-Harris continued, had been recorded frequently in the past, and cultures had been shown not to yield influenza virus. No one had yet succeeded in recovering the aetiological agent in this disease, but there were certain broad facts about febrile catarrh which were interesting and justified the view that it was a distinct entity or group of entities. In an Army camp it was found specially to attack the new recruits; the incidence among the seasoned troops was much lower. On the other hand, the seasoned troops were attacked by influenza. Most cases of influenza came on quite suddenly, whereas febrile catarrh had much less commonly an acute onset, usually starting with a little cough or cold, the fever coming on a day or two later. Sore throat, hoarse voice, and substernal chest pain were common. But the clinical picture of febrile catarrh was not uniform and some cases resembled streptococcal tonsillitis. As for atypical pneumonia, this was relatively rare in Great Britain, and there were only sporadic cases among British troops during the war at a time when the Americans were experiencing considerable outbreaks.

Secondary Invaders

Dr. FREDDY HIMMELWEIT said that a number of pathogenic organisms, and especially pneumococci, had been looked upon, ever since the discovery of the influenza virus, as secondary invaders, responsible only for complications which might vary from individual to individual and from epidemic to epidemic. In his view, however, these secondary invaders might not only aggravate the primary infection but play an essential part in causation. He believed that they facilitated infection by the virus by destroying the inhibiting action of the mucin of the upper respiratory tract.

The discussion, in which Sir JAMES WALTON, Dr. WILFRID OAKLEY, Dr. GEORGE GRAHAM, and Dr. CARLYLE LYON took part, resolved itself largely into a recital of personal experiences in combating colds. Sir James Walton said that he had found *Strep. viridans* vaccine highly protective. Mr. V. E. NEGUS mentioned nasal defence. The reason why some people never had colds was because of the efficiency of their ciliated epithelium. The cilia were very resistant, but could not work without a covering of mucus.

Dr. J. B. W. ROWE suggested that in the case of the people of Spitsbergen, who were said to get infection only when the ships visited the island in the summer and to be free from colds during their isolated state in the winter, the reason for the manifestation might be the change of diet which followed the arrival of the ships with food. Some allergic factor might play a part in the aetiology of the cold. Dr. W. H. BRADLEY remarked that the winter of 1947-8 had been phenomenal in the fact that deaths from influenza had been the lowest on record and deaths from pneumonia much lower than usual. On the suggestion just made, was it possible that this had anything to do with the food we had not eaten? Mr. JOHN BUNYAN said that a large number of people suffered from gingivitis, which might afford a foothold for the invasion of the virus.

Dr. ANDREWES, replying to the discussion, said that Dr. Himmelweit's theory needed a good deal of further consideration before it could be accepted. He did not think at this stage they could justifiably reverse their opinion on the relative parts played by the virus and bacteria in causing these infections. The one thing that was clear about vaccines was that many people placed implicit faith in them. In the United States a mixed catarrhal vaccine was given to a number of students and records were made of the incidence of colds among them during the following year. Of those who received the vaccine 55% reported benefit. But a corresponding number had received not the vaccine but a saline injection, and an even larger proportion of these students reported benefit, and some of them wrote to the doctors concerned asking whether they could be told, in confidence, the formula of the preparation which had proved so effective.

CONTROL OF POST-PARTUM HAEMORRHAGE

A meeting of the North of England Obstetrical and Gynaecological Society was held in Manchester on Feb. 6 with the president, Mr. J. E. STACEY, in the chair.

Mr. K. V. BAILEY (Manchester) showed a film illustrating a safe manœuvre for stimulating the uterus to retract in cases of third stage and post-partum haemorrhage, and also an additional method of infant resuscitation. After mentioning the dangers and disadvantages of the usual methods of controlling the uterus, of fundal massage, and of expression of the placenta. Mr. Bailey demonstrated a method of stimulating the uterus by gentle stretching of the lower segment which was achieved by stroking the uterus upwards with the ulnar border of the hand. In some cases when the infant required resuscitation he advocated laying it face downwards on the palm of the left hand with its head hanging down to drain the air passages. Artificial respiration was achieved by throwing the whole child upwards for about three-quarters of an inch, inspiration being encouraged during its "flight" and expiration when it settled back on the hand. Both procedures were discussed by several members of the society, and there was general agreement that stretching of the lower segment by various methods was of value in the control of post-partum haemorrhage.

Dr. S. BENDER (Liverpool) discussed a case which presented as tuberculosis of the cervix and which macroscopically resembled carcinoma of the cervix. Dr. A. A. GEMMELL (Liverpool) described a case of fibroid in the cervical stump after subtotal hysterectomy. Six other published reports of this condition were discussed, and Dr. Gemmell suggested that incomplete removal of ovarian tissue at the time of hysterectomy might favour the subsequent development of fibroids in the cervix, and that the rapid growth which appears to be a feature of these fibroids might be due to early degenerative changes consequent upon a poor blood supply. Finally Prof. D. DOUGAL (Manchester) gave an account of an interesting case of carcinoma of the body of the uterus and fibroids treated with radium and subsequently by hysterectomy.

The sixth and final dinner meeting of the 1948 session of the Chelsea Clinical Society was held on March 9 at the South Kensington Hotel, with the president, Dr. Neil Maclay, in the chair. There were nearly a hundred members and visitors present to hear a discussion on "Medical Experiments in Nazi Camps" opened by Major A. Keith Mant, R.A.M.C., whose work with the British War Crimes Commission made his contribution particularly valuable. An interesting discussion ensued in which Dr. Pitts, Mr. Gwynne Evans, Dr. Stuart Webb, and Dr. Eckenstein joined, and finally Major Mant replied. The annual dinner of the society will be held on May 11.

Correspondence

Bad for the Public

SIR,—None can tell for certain what made so very many in the profession say "No" in the plebiscite, but I am quite unable to believe that it was no more than zealous support for the Association's four points or even their immediate implications. There must be many besides me whose hopes, raised a little by that impressive demonstration of unity, will fall below zero unless the declared basis of our objection is broadened and deepened.

I believe the majority was so great partly because a free profession, with a great record of service in peace and war and almost a monopoly in knowledge and understanding of medicine, has been treated as so much technical labour, and partly because it sincerely believes the Act to be in many fundamental respects a disastrous blunder. Mr. Bevan rightly observes that our quarrel is not at bottom with him: it is with the plan, and it goes back to the start. No Royal Commission, invited to examine the country's medical services and to plan their extension and ultimate perfection, could ever have recommended anything like this Act. It has never been a single-minded endeavour to give the people first-class medical care—let alone health. It has been from the outset largely concerned to implement "Assumption B" on an appointed day and to equalize medical attention regardless of quality. Its motives and ideals are not medical or hygienic but political.

The result is a plan which bids fair to reserve the practice of real medicine and surgery to the hospitals, while outside the practitioner plays his part in the ordering, repeating, and dispensing of medicines, the directing to specialists, and above all in that "careful certification" of the Beveridge report.

Mr. Bevan does not blush to suggest that we take on 4,000 or more potential patients—blind, seemingly, to the fact that he who does so must bid farewell to the practice of medicine. No reward is offered for work performed or for excellence of any kind. Good honest private practice is made as difficult as possible. Charlatanism is, to put it mildly, in no way discouraged, and the temptation to see other men's patients behind their backs is greatly increased. Collective bargaining and trade unionism, alien to a free profession, clearly await us. None of the benefits the practitioner might have hoped for—ancillary services at call and better access to hospitals—is to be his, at least for years to come. Even the queerly named "health centre" is indefinitely postponed. Finally, we are to be involved in a fiasco—the opening of a non-existent show for which all have been compelled to buy tickets.

All this is at least as bad for the public as for us. What is bad for medicine and for the doctor cannot be good for a medical service and those it serves, nor can it be supposed to be good for the credit of Parliament or the Government. The profession has expressed disapproval of the Act, and I believe it means what it says. The Act is bad. To have a stand-up fight about it on four points, none of which touches the quality of medical practice or the place and function of the general practitioner in the projected service, seems to show a distaste for facing realities almost equal to that of Parliament itself. The whole future of medicine is at stake. Are we not strong enough and brave enough to demand postponement of the relative parts of the Act and a constructive reconsideration of the medical service on a medical basis?—I am, etc.,

London, N.W.3. LINDSEY W. BATTEN.

Freedom of Consultants

SIR,—The professional freedom of consultants is vital to the public, for it is to consultants that disputed points of certification and other questions of controversy are ultimately referred. Great play has in the past been made of the desirability of a detached position for the Royal Colleges from which they may descend in order to inaugurate a compromise between the Minister on the one hand and the B.M.A. on the other. This argument is allowable so long as questions of principle are not involved, but no man with a true respect for the integrity of medicine will compromise upon this vital point of consultant freedom.

The political mind is distinguished from the scientific mind by its blind spot where principles are concerned and its obsession with manipulation and manœuvre. All actions and statements at the present juncture must be judged by the profession on this issue of principle and on this alone.—I am, etc.,

London, W.1. GEOFFREY BOURNE.

The Minister's Confusion

SIR,—The statement recently made in Parliament (Feb. 9) by the Minister of Health shows a deplorable ignorance of what precisely is entailed in the sale of goodwill of a medical practice (see *Journal*, Feb. 14, p. 323): "The Government regarded it as inconsistent with a civilized community and a reasonable health service *for patients to be bought and sold* (my italics). That existed in no other country, and was a blot on our medical system. . . . So far as the Government was concerned there could not be any question that the health service must not contain the buying and selling of public practices."

Apparently the Minister still confuses the buying and selling of a farm (where the cows, pigs, hens, etc., even if dissatisfied with the newcomer, are *not* free to select another farmer) with the buying and selling of the *goodwill* of a medical practice (where the patients, if dissatisfied with the newcomer, are quite free to select another doctor). It must be stressed that *no* patients are in any way bought or sold. It is merely the *goodwill*—i.e., the probability (no more) that a proportion, perhaps 66–90% of the patients of the retiring doctor will give the incoming doctor a trial (and then not necessarily remain one of his patients). Private patients remain free, as always, to change their doctor at will. Panel patients are actually informed officially of the change in practice, and they are therefore at liberty to select a new doctor within the next month; and after that time they can of course change in accordance with N.H.I. regulations.

The Minister's statement was made, presumably after due forethought, in opening a Parliamentary debate. It was not subsequently retracted or modified. It was made by the Minister, who has held office—the same office—for two and half years, and therefore has had ample time to discover the true facts. Indeed it was his bounden duty so to do before initiating the N.H.S. Act. He has failed in this duty.

Owing to his confusing the buying and selling of the goodwill of a medical practice with the buying and selling of patients he has misled himself and Parliament. He has piloted an Act through Parliament based on his misunderstanding of a fundamental principle. In consequence of his error many provisions (which would otherwise have hardly seemed necessary) have been incorporated in the Act, or regulations to be made under it, which are repugnant to a big majority of the medical profession.

If the Minister could clearly grasp this fundamental distinction then his objections to the buying and selling of goodwill might well be overcome, and he could then explain to Parliament that he had misled them and recommend that the amendments so earnestly desired by the profession be reconsidered.

If the right to sell goodwill remains, the severe penal clauses designed to prevent concealed sale of goodwill, ambiguity over partnership agreements, direction (or negative direction), and perhaps even basic salary (for the main admitted object of this is to enable a doctor to subsist while building up a practice)—all these difficulties would be settled. This would leave only the question of appeal to the courts, the equitable implementation of the Spens Report, and freedom to publish to be settled.

Regarding appeal to the courts, I feel that under the Act as it stands injustice to any practitioner is unlikely. Nevertheless it is hard to see why the Minister should object to the findings of the Executive Committee and of his Tribunal being challenged in the High Court. If the proceedings in these investigations have been fairly conducted and a just verdict passed, then surely the High Court will merely confirm the decision; and if the decision is reversed then there must at least be doubt about the practitioner's guilt. The Minister's refusal to allow appeal to the Courts suggests that he is not really so sure of justice being done by the Executive Committee and Tribunal.

I consider freedom to publish letters, articles, or books on all medical matters (including clinical subjects and the organization and administration of the Health Service) without having to seek permission from individuals or authorities should be specifically incorporated in the amending Act of Parliament. Mr. Bevan's reply on Feb. 12 to Col. Stoddard-Scott on this subject appears inadequate, as it is not binding on his subordinates or successors.

Regarding remuneration, though a capitation fee is not intolerable I personally would prefer payment per item of service —thus resembling private practice, which is usually preferred by patient and doctor alike. Also it might diminish unnecessary work inflicted on doctors by Government authorities. If the Treasury had to pay, say, 3s. 6d. for a consultation and 1s. for a certificate each time a hyperthyroid patient had to see the doctor for no reason other than a renewal of a milk priority it might soon be found possible to require these at longer than one-monthly intervals. Or a "repeat medicine as required" prescription might after all be acceptable for mag. trisil. co., etc., for a gastric-ulcer patient or insulin for a diabetic. Nor might a doctor's consultation be necessary to confirm addiction to tobacco.

It is generally conceded that in the past private practice has partly subsidized panel and club practice. Now it seems likely our income will be reduced by 10–25%, our expenses increased by 5–10%, and our work increased by 10–25%. This is hardly as recommended by the Spens Committee.—I am, etc.,

Rugby. R. PRESTON HENDRY.

Leavening the Commonplace Mind

SIR,—It is not clear from the last paragraph of Dr. F. M. R. Walshe's excellent letter (Feb. 28, p. 407) whether he advocates a firm stand against the National Health Act in its present form or against any change in the *status quo*. That the latter is the more probable is suggested by his reference to "a retrograde political ideology" and later "a ruthless and levelling force" which must be resisted. The pleasure engendered by the force and clarity of his exposition of "first things first" is apt to lull us into accepting not only the diagnosis, with which few of us could disagree, but also the treatment prescribed.

Wilfred Trotter said (*Journal*, July 17, 1926): "In biological inquiry an abstract conception, though professedly no more than a convenient summary of experience and constantly subject to the censorship of facts, is apt to acquire a quasi-vitality of its own through which it loses its immediate dependence on experience and comes to dominate instead of serving. The danger arises not so much from the extreme cases of conceptions which easily show as flagrantly inconsistent with facts but from ideas primarily good and sound which have been endowed with a prestige that in their very nature they could not deserve." If we take the liberty of substituting the word "sociological" for "biological" we find these remarks most apt to the present trend of events.

Socialism, though originating from "ideas primarily good" appears to-day to be an abstract conception flagrantly impervious to the censorship of at least some of the facts, one such being the impossibility of "nationalizing conscience." It certainly appears in our own case to promise to dominate the profession rather than serve the community. We are tempted to believe, therefore, in our moral obligation to resist what Dr. Walshe describes as "a ruthless and levelling force" and what I have somewhat euphemistically called a "trend of events."

In filling in my plebiscite form I found myself on the verge of signifying approval, for though as it stands the Act contains many apparent and real injustices, incongruities, and absurdities which automatically make us revolt against it I had to confess that I found in it nothing iniquitous (using the word in its worst interpretation) except the extent of the power with which the Minister is to be endowed. It cannot be said that the present state of medicine from the patients' point of view contains no iniquities. However, the Minister's future power coupled with his recent provocative manner finally overcame my fear that the profession by its disapprobation might amend the Act out of existence.

If socialist ideology is an abstract conception which has acquired "a quasi-vitality of its own through which it has come to dominate instead of serve," the same may be said of our conception of the *status quo ante* which we call free enterprise. I do not deny that free enterprise is in itself an "idea primarily good," but it is a system in which its advocates also ignore the censorship of facts, the most important of which is the monotonous recurrence of war with its attendant "corpses, cripples, rags, smithereens, and ruination," to use a phrase of Shaw's.

Though evolution is another abstract conception, one of its component experiences is the relentless revolt of the masses, which to-day faces us with concrete reality. I believe this revolt to be primarily directed against social injustice and the power of money. I believe this "levelling down" process, which feature of the revolt must be repudiated by the professional classes, is due, first, to a failure by the masses to distinguish between the hereditary money owner and excessively rewarded shareholder on the one hand and the successful business man or talented professional man on the other; secondly, it is due to a failure by the latter to recognize against whom the revolt is really directed.

It would appear, therefore, that two extremes of action present themselves for our choice. We can be reactionary and strive for an indefinite postponement of this Act or we can, after fighting for the four main amendments, accept the "inevitable" grudgingly and with docility. The former reaction would eventually be crushed by public opinion, the latter would show an inertia which, if followed by other sections of the community, would lead to communism as we now see it. Both lines of action would result in the death of the ethics, integrity, and intellectual freedom of the medical profession, the one murder, the other suicide.

I submit that there is a middle course capable of acquiring a real vitality of its own which would in time endow the medical profession with the prestige it could so richly deserve. In other words the future health service is going to be what we make of it. I suggest we exceed our present demands and insist on an altered executive whereby the profession would be more adequately represented and the supreme authority a council rather than one man. A united and contented profession with security for its own unassailable freedom, guaranteed by law, would be potentially the greatest power for good that this country has seen for a century. The "qualities of rare excellence" will be capable of removing the "imperfections" only through the medium of a comprehensive service. It is up to the profession as a specialized minority to reassert its place as an influential unit in the mass rather than submit to virtual extinction by fighting to the death outside it or by resignation. The commonplace mind is in dire need of good leaven. This must come from within.—I am, etc.,

Liverpool, 17. ARTHUR S. WIGFIELD.

Adulation

SIR,—The general impression given by the very long letter from Dr. Stephen Taylor (March 6, p. 463) referring to the present Minister of Health repeats the phrase "but for him . . ." no less than three times in a single paragraph, which ends with the pompous phrase, "in battle, he will neither give nor ask for quarter."

Dr. Taylor's sincere but fulsome adulation of Mr. Bevan as a hero almost implies that this Minister can do no wrong and that it is really rather wicked even to criticize him and at least a mild misdemeanour to hold a different opinion from his own. This quasi-religious tone applied to a Minister who, after all, is merely a man and a politician is as absurd as it is irritating and displays the sort of attitude which, carried to an extreme, might lead to the suggestion that a portrait of Mr. Bevan be placed upon the wall of every doctor's surgery. If we are to indulge in idolatrous adulation let us think of men and women who have been of some real service to the science and art of medicine.—I am, etc.,

London, W.4. JOHN C. C. LANGFORD.

Why Compulsion?

SIR,—"If you declare war, you will lose." Dr. Stephen Taylor (March 6, p. 463) is, on his own admission, a Labour M.P. "who happens also to be a doctor" [*sic*] and his prediction can be relegated to the category of propaganda of the "inevitable, bound-to-come" type to which Labour-Socialists are so addicted (cp. Dr. Stark Murray: "We are *unquestionably* going to have a Service which is free at the time of use"). It is sufficient to point out that the Australian medical profession in similar circumstances has successfully rejected a comparable Act.

His instance of the General Strike of 1926 is singularly unfortunate from the point of view of his argument. That event was an attempt by direct action to subvert the British Constitution and overthrow Magna Carta in favour of a dictatorship of the proletariat. It failed through the common sense of the British

people. The National Health Service is a more subtle attempt to achieve the same end by fifth-columnry masquerading under the guise of constitutional methods; and please God it will fail also. If that is an incorrect reading of the situation, why the need for compulsion? Why is the patient denied the right to contract out of the Service? We are asked to believe at one and the same time (1) that this Act represents the will of the people, and (2) that the people must be coerced into it by the methods of totalitarian compulsion we have seen in action in Nazi Germany. We are told that the Service would not pay financially unless everyone contributed; that is to say, it cannot stand on its own feet by its own merits but has to be bolstered up by force. A "great Health Service" indeed! It stands utterly condemned out of the mouths of its own protagonists.—I am, etc.,

St. Germans, Cornwall. W. H. SPOOR.

Change the Appointed Day

SIR,—Dr. C. H. Barber (March 6, p. 472) may find it alarming that so many of his confrères are dispassionately analysing the main points of difference between the Negotiating Committee and the Minister and finding themselves lacking that zeal for self-immolation which apparently animates him and the majority, but it is a factor with which he and they must reckon. Truly the points of difference are not the expression of sacred principles at all, but only the expressions of a desire, which is widespread in the profession, to avoid a full-time salaried service. This could equally well be achieved by adopting some face-saving formula such as that suggested by Dr. Joan Wagstaff (Feb. 21, p. 358)—namely, that the basic salary be designated an "expenses allowance" and that amending legislation be introduced to limit the Minister's power to vary this above the ceiling limit of such reasonably agreed minimum expenses as every doctor must incur. Dr. A. C. Mowle well says (March 6, p. 468) that this is the only point on principle which the Government can concede, and it will save the face equally of the Minister and the B.M.A.

I am not at all clear whether the wording of the resolution to be put forward to the Representative Body by the Council (*Supplement*, Feb. 28, p. 29) is intended as an ultimatum to the Government, or whether it is intended as an olive branch to procure reopening of negotiations. If the latter, as I hope, may I suggest that it would be more helpful and more in accord with the hope of a settlement if the final clause were deleted and the Government simply invited to make it possible for the profession to co-operate in the new Health Service by making certain changes by the appointed day? I have no desire to preach, but neither have I any intention of allowing my pig-headedness to start me charging down a slope into the sea.—I am, etc.,

South Molton, Devon. R. A. NASH.

Monotonous Repetition

SIR,—Thanks to Mr. Colm Brogan's article (Jan. 31, p. 209) even the merest tyro in politics can see his predictions being fulfilled in the arguments of favoured Labour M.P.s. Dr. Stephen Taylor's letter (March 6, p. 463) may seem mild in tone, but the Hitlerite method is there for all to see. The main point is to keep telling your adversary with monotonous reiteration that he is bound to fail, and that resistance is therefore useless. By this tactic the enemy hopes to secure victory without a battle. I quote the relevant tactical repetitions from Dr. Stephen Taylor's letter. (1) "Any attempt to frustrate the law by extra-parliamentary means is bound to end in failure." (2) "In battle, he [Mr. Bevan] will neither give nor ask for quarter" (this to frighten the enemy). (3) "If the B.M.A. decides to continue the fight, *the public will be gravely injured* [*sic*] . . . and the ultimate defeat of the B.M.A. is certain." (4) He assumes that the public are entirely with the Socialist Party, and say that "for the public, defeat of the B.M.A. is certainly preferable to capitulation of Government and Parliament to the B.M.A." (5) "If you declare war, you will lose."

It seems that no Government has ever been holier than the present Government. No one was holier than Hitler. No German wanted to see Hitler defeated. No one in Britain wants to see the present Government defeated! It is worth reminding Dr. Stephen Taylor and Mr. Bevan that in Australia the doctors defeated the Socialist Government by refusing their services to the Government. The public did not suffer gravely. The doctor's prime duty is to serve his patients, and we can serve them and utterly ignore the efforts of the State to enter within the doctor–patient relationship.

In the General Strike of 1926 the workers who struck received no pay, because they were entirely dependent on payment from employers or the State, when strike-pay ran out. This was the lesson that the arrogant T.U.C. and the Labour Party learnt. The strike fizzled out in 11 days. Cardinal Bourne spoke against the immorality of the strike, which imposed considerable hardship on practically all the people in the country merely because the T.U.C. wished to gain their points.

We have the moral right to stay out of this Socialist State Service, and to keep the State from interfering in the doctor–patient relationship, by possessing our souls, our consulting rooms, and our practices. We shall still serve our patients, even if we have to treat them all as private patients. If we hold firm the State will have to climb down.—I am, etc.,

Slough. N. C. HYPHER.

Freedom of G.P.s

SIR,—It is rumoured that the Negotiating Committee will have to capitulate on the right to buy and sell the goodwill of medical practices because they will not receive the support of the Opposition in the House of Commons. If this rumour is correct, and if this attitude is going to be adopted by the profession at large, let me say most emphatically that it is a wrong attitude. We must realize now, and more especially with the result of the recent plebiscite in front of us, that we must press for an amendment of the Act as a united profession, and not rely on the support of any political party—we must be prepared to oppose the Opposition if necessary.

The whole of our freedom as general practitioners is at stake, and do not let us forget, especially those of us who are practising in congenial areas, that the freedom of the junior and future general practitioner is also at stake. The right to buy and sell the goodwill of our practices is the keystone on which our professional liberty is built. Surrender this and we have direction—negative direction, they say, but still direction. So long as we retain this right we can go where we like, practise where we like and are liked, and we can choose our successor to take over a practice which we have built up by our own efforts and which is very dear to us.

Take the case of a doctor who has worked hard for ten to fifteen years in a busy industrial area and then wishes to take a smaller and more congenial practice in another district. What chance will he have? In theory, as much chance as anyone else, but in actual practice not an earthly chance. And then there is the case of the doctor who will want to move to a better type of practice. How is this going to be attained? Suppose the owner of the practice dies—are we going to have compulsory billeting of the newcomer on the widow until he can find a house to practise from? To pursue the matter further, if the sale of goodwill is abolished it will ultimately lead to the direction of the patient to other doctors who are less successful, because in any practice—be it private or State—there will always be goodwill, for each doctor will always attract a certain type of patient and repel another. If one wants to take a suitable partner or assistant, must this also be decided by the Medical Practices Committee?

The Negotiating Committee and the medical profession must not agree to the abolition of the buying and sale of goodwill, for if they do our freedom as general practitioners will go and we will become members of a full-time State medical service, be it Labour or Conservative in origin, and payment by basic salary or capitation fee and the right to appeal to the courts will mean nothing. We will be State servants and our future movements will be controlled by the State.

During the next few months we have a heavy responsibility, but we must shoulder it ourselves and realize that in so doing, in addition to preserving our own liberty, we are fighting for the freedom of our patients. Do let us remain united and not be side-tracked by fears which are without foundation. Tell the public what we stand for and we will have their support. All the individual patient is interested in meantime is—"Am I going to be allowed to retain my own doctor?"—I am, etc.,

Aberdeen. DUNCAN MCLELLAN.

A Fantasy in One Act

SIR,—May I call attention to the problem of the well-established G.P. of twenty or thirty years' standing, with a panel—usually built up, not bought—of under a thousand? Not on principle, not for politics, but from purely practical considerations many of these doctors must refuse service under the Act.

If the Service does not mean more attention for more people, it is not needed at all. If it does, the busy doctor and his harassed wife and household, already pestered from 8.30 a.m. to 11.30 p.m. with 'phone, bell, and messages, apart from night emergencies, already bolting meals almost invariably interrupted, already struggling with inadequate assistance to keep the house warm and clean—if it does, I say, the hunted leisureless doctor and his unpaid self-sacrificing wife must say "No" before coronary thrombosis says it for them. An eighty-hour working week and twenty-four-hour seven-day duty do not call for more sacrifice on the part of the doctors and their families but for some amelioration of their conditions of work. If the scheme is started before clinics are available to halve the doctor's clinical and administrative work it will prove a fantasy in one act, and, far from giving more doctors to the people, must deprive them of the services of some doctors who have so far been found sufficiently satisfactory to make them intolerably overworked.—I am, etc.,

London, N.8. JOHN RUBRA.

State Control

SIR,—Now that the medical profession have shown by an overwhelming majority by the plebiscite that they reject the proposed service it is to be hoped that a repetition of 1912 will not occur and that some doctors will not, as the Cabinet puts it, "break away" and become blacklegs to the cause.

In the present panel system prescribing is done by a formulary, and, should a doctor order a proprietary preparation which to his own satisfaction and with his experience he has found to give better results than mist. A.B. or pil. X set out in the National Health *Formulary*, he will be a lucky man if the hand of authority does not descend on his head and an admonition given telling him he must not write his own prescription when mist. A.B. or pil. X is in the *Formulary* and would do. His independence to practise where he so wishes is taken away and he would merely become a slave to the supply and demand of a specified area. Has such a state of affairs ever been known in the history of medicine? Again, even if there was a right of appeal, to whom could the doctor appeal? The courts of law could only deal with appeals on a point of law—viz., interpretation of the Act—and should a special tribunal be appointed the odds are on the members of the same striving to uphold the Minister's decision.

Again, the doctors are offered "compensation." Was not the whole country promised payments of our post-war credits when hostilities ceased? Have we received them? If the present economic crisis—as it is doing—gets deeper and deeper into the morass, we will no doubt say "goodbye" to the payment of these credits. What guarantee can we possibly have of receiving compensation for our practices, etc.?

Mr. Bevan believes doctors will be discouraged by means of the basic fee from taking too many patients. Take a look at the present panel lists. A doctor is allowed 2,500 panel patients and another 1,500 if he has an assistant. In purely or mostly panel practices where the doctor has a full panel the number of patients the same doctor will have under the Health Scheme is at least 7,500 (allowing one wife and one child on the average for each insured patient). Even if the remuneration is alluring with such a number, can any doctor honestly say that he can give a first-class service to 7,500 souls, or be expected to do so? Such is impossible.

Let Mr. Bevan start his Service on July 5 with his 4,100 doctors, but let all those doctors who have now voted against the scheme stand fast by their guns, because no one, nothing, can survive that battery of power which the doctors have at their disposal. After July 5 let the doctors carry on on the present basis. Let them say openly to the patient, "I am not in the Service; I will treat you; you pay me and send the account to the State if you wish."

Those who insist on State attention will go to one of the 4,100, but it will not be many days before they return to their original practitioner. But if the doctors *en masse* should ever once give any form of free treatment once the scheme comes into being, then the purpose for which we have voted and all the efforts of the B.M.A. on behalf of the profession will truly be wasted.—I am, etc.,

London, E.C.4. C. ST. J. DE VERE SHORTT, Barrister-at-Law.

The Plebiscite Results

SIR,—Let no one be deceived by Mr. Aleck Bourne's plea (March 6, p. 464) to overlook the results of the plebiscite. I for one would be disappointed to feel that the value of my vote and the long considerations which preceded it had been rendered void as a result of his letter. He can hardly be so optimistic as to expect his attempt to be anything but in vain. His appeal to minimize the value of its results is to be regarded as anything but a compliment to 56,000 practitioners who have given much time, thought, and worry to the whole problem. Mr. Bourne might with equal hope attempt to throw doubt on the reliability of the maternal and infant mortality rate, but in these instances he would be on surer and firmer ground by reason of his special qualification and experience. No! Mr. Bourne's insinuations will assuredly fall off us as water off a duck's back, and his observations can perhaps best be described in the words of Benjamin Disraeli as "a chaotic mass of heterogeneous inconsistencies."—I am, etc.,

Windsor. PHILIP H. WILLCOX.

G.M.C. to Mediate

SIR,—It is with extreme reluctance that I venture to add to the voluminous correspondence in the *Journal*, but in view of the deadlock now existing between the profession and the Government perhaps there is something in the following suggestion of an elderly practitioner (78) still in general and panel practice. It is that some use be made of the General Medical Council to bring the disputants together. We know that this body is very jealous of the standard of conduct required of all qualified medical practitioners, so why not enlarge its functions and powers to advise the Government in the present crisis as to what course should be adopted to insure the whole-hearted co-operation of the profession to make the National Medical Service a success? If there is anything in this idea of mine I must leave it to others better qualified to consider it. It would at least remove the issue out of the political arena—a very real stumbling-block.—I am, etc.,

Wymondham, Norfolk. ALEX. P. AGNEW.

Active Resistance

SIR,—On April 1 or thereabouts we shall be receiving intimation that N.H.I. will cease and that N.H.S. will take its place on July 5. About this time or shortly afterwards we shall be invited to join the new Service and presumably to accept patients who will be treated under it when it starts. Yet as late as March 17 all the B.M.A. will have done is to offer to the Representative Body a resolution once again asking the Minister very politely whether he will not oblige the profession by reconsidering his attitude.

It has been made more than abundantly clear to most of us that the Minister will not be surprised at this and is ready for it, that he has every intention of starting his Health Service if necessary with only a "skeleton" staff, that he intends to rely on the attraction of an immediate substantial income (for it will be substantial, with so few joining) to draw in any beginners or waverers, and that he has every hope of doubling his numbers in six months and of causing a landslide within a year. I am, for one, heartily disgusted at the lack of vision in submitting a resolution of this kind so late in the day to a person who far from understanding the genuine desire to establish a good health service which lies behind it will only regard it as a sign of weakness on the part of the "old gentlemen of the B.M.A." Surely none can expect any useful purpose will be served putting it to one whose ideas of powerful negotiation are based on strikes, lock-outs, picketing, and so forth. If all the B.M.A. propose to do at this late hour with its overwhelming majority mandate is to pursue this form of passive resistance culminating no doubt in a last-minute advice to the profession not to join the Service then we are fighting a losing battle in which we do not stand a chance. I for one, opposed as I am to the Act, do not propose to throw away the capital value of my practice in the pursuit of such a policy of futile passive resistance.

The sort of resolution I had hoped to see, not on March 17 but at least two weeks earlier, was one regretting the unaltered decision of the Minister to force his measures on the profession in spite of its clearly expressed opinion against them and stating that the B.M.A. would have now no option but to recommend immediate and forceful measures to prevent him doing so. Far from recommending that members who have accepted appointments for various committees should continue with them at present, a date in the very near future (such as a week's time) should have been set for their resignation. A token certificate strike of one week should have been prepared, with a permanent certificate strike to follow if this did not produce results. Prompt resignation from the panel on a named date (irrespective of the three months' notice necessary) should also have been provided for without waiting for intimation on April 1. Breach of contract? Of course it is! Illegal? Quite possibly. But so also are various unofficial strikes which lead the Government to appoint committees to negotiate and arbitrate. Not satisfied with this an invitation to be present at, say, Piccadilly Circus at 2.30 p.m. on some suitable weekday could be issued to the profession, and if any of us felt such a gathering beneath our dignity they might be reassured by the fact that several thousand medical students from the whole of the University of London, to say nothing of a few interested bystanders, would not.

This is the sort of argument that Labour leaders understand, and methods calculated to be effective in a dispute between, say, two faculties of a university can hardly be expected to make any impression on them. If the B.M.A. really means business it will certainly not be afraid to publish this letter. If, as Mr. Bevan thinks, it is going to give in but is only stalling, then I propose to sign on the dotted line, and I want to see action now if I am to refrain from doing so.—I am, etc.,

London, W.9. A. LEWIS.

Confidence Between Practitioners

SIR,—The struggle for freedom in which we are engaged is a serious one, and all our resources will be necessary for success. The issue will depend on the morale of the individual doctor and on his confidence that other doctors will not accept his patients on their lists. This confidence can easily be achieved if local groups get from those general practitioners who are unwilling to undertake not to enter the Service an assurance that they will not accept other doctors' patients on their lists while the fight is on. This assurance will be given by many who will not undertake to keep out of the Service. If this action is taken by local groups all over the country our victory is inevitable.—I am, etc.,

Brockley, S.E.4. WM. A. MACILRATH.

Enter and Improve

SIR,—The Council of the B.M.A., which should be able to speak with authority, believes that it is the whole-hearted desire of the medical profession to have a comprehensive health service available to everyone. The Acts of 1946 and 1947 are supported by all parties in Parliament, although details of these compromise measures are criticized. Our profession also must claim its right to criticize the National Health Service in its conception and operation, and to press for any alterations which it may consider desirable in the interest of the public and the profession. The present strong position of the profession results from its unity. The B.M.A. represents almost the entire profession.

We will weaken our position if we try to prevent the operation of the Acts by advising doctors not to join the Service. Such advice would not be accepted by the whole profession and would destroy our unity, which it is essential to maintain, and would appear to public opinion as an attempt to nullify the decisions of Parliament and so lose us support in our efforts to amend and improve the working of the Service.—I am, etc.,

Orpington, Kent. L. M. FRANKLIN.

Contracting Out of Service

SIR,—It is high time we congratulated the dentists on the stand they are making against the principle of "working down to a price instead of up to a standard," as motor-car makers say. As to ourselves, the Government is trying very hard to make us general practitioners undertake a great addition to the amount of work we do under the contract system. But there is implicit in all work done on this basis a principle disadvantageous to the sick man. The limitation and uniformity of reward tends to limitation of effort on the doctor's part and the elimination of rivalry and every other stimulus to the attainment of an increasing professional efficiency. Lost is "the spur that the clear spirit doth raise"—and more so still for the consultants. Under contract the advantage we derive is from the work we do not do. Our actual work is the burden. By convention we seldom refer to this aspect, and have schooled ourselves not even to think of it. It must have occurred to many that the possession of extra skill may turn out to be a definite drawback to its owner, carrying as it does an added responsibility. His rival who sends the case to hospital will get just the same monetary reward.

I suggest, therefore, that it is high time we made another effort on behalf of that section of the community which has in the past had our services privately. Many of these will wish to do so still, it is fair to assume, and the attempt to coerce them will give rise to a great wave of resentment as soon as they realize the implications of it. These people should be allowed to contract out of that part of the new Service which applies to the function of the G.P.s. The Government will have kept faith when it has provided the Service. That is all it "promised" to do. Compulsion is not only unreasonable but unfair. If applied at all, it should be only to those who are obviously unable to pay privately. Surely the depths of abysmal absurdity are reached when medical men are taxed in order to provide funds from which they are to be paid for doctoring not only each other but their own individual selves! We should add this contracting-out business to the list of principles on which we absolutely refuse to yield. We are under no obligation to give way on any of them. There should be no compromise. Every one of them is essential. No one will argue that it is proper to compromise on any of the time-honoured Ten Commandments, forming as they do the basis of all decent civilization.

Finally, we should not enter into any agreement with the Government until matters have been settled with the consultants. They may need our help. There is no real hurry. Another Government will carry on if this does not, and so will the healing art.—I am, etc.,

Doncaster. W. REGINALD WILSON.

Stop Fighting

SIR,—In your issue of March 6 you publish two letters, one from Dr. Stephen Taylor (p. 463) and one from Mr. Aleck Bourne (p. 464). I wish particularly to refer to Dr. Taylor's letter. I must say that in my opinion it is a good sound letter, well expressed, and with fair, reasonable sentiments. Naturally he favours and supports Mr. Bevan, and states clearly that in his opinion Mr. Bevan really favoured the profession when the final stages of the Act were under consideration in the House of Commons. He says that but for Mr. Bevan many points which we as a profession object to would still have been embodied in the Act. I am afraid that members of the profession have looked at the Act more from a political point of view than from what is really good in a medical service.

We as a profession have stated that we favour a comprehensive medical service provided we could agree with one that suits the profession as well as the public. In my opinion we should consider what is favourable and reasonable, and acceptable to the public, and not entirely what suits ourselves. Personally I think that the good points in the Act outweigh the "prickly points" which we allow to prick us. We ought to endeavour to come to an agreeable settlement, which ought to and will benefit the doctors and also those who are placed in our care. Surely the little points which we object to can be rectified. The higher qualities of man—namely, his intellect and his reason—should have predominant consideration rather than his lower ones, such as "fight" and "force." I believe that if we abandon these terms, so freely used in all our controversies, we shall succeed; for as Dr. Taylor states, referring to Mr. Bevan, "In any reasonable attempt to find a solution, and make a success of the Health Service, he will play fair; in battle, he will neither give nor ask for quarter." Let us therefore act upon our intellect and reason and abandon the spirit of fight and power, otherwise in the long run I am afraid we stand to lose.

I sincerely hope that a solution on these lines will be arrived at, and that a good medical service can be formulated and carried out in practice. The profession have asked for it for the past thirty years, and the public are clamouring for it, and naturally it is difficult to come to an agreement on all points favourable to us, and we must be prepared to give and take. Attempts have been made by former Ministers of Health and nothing has come of their efforts. I refer to Mr. Ernest Brown and Mr. Willink. In the present Act there is much that we can consider more favourable to us than unfavourable, and by reason we can and ought to eliminate those things which prick us. We have in our leaders all those accomplishments which are necessary, provided only that we drop the spirit of fighting and gaining victory. I do hope and pray that this will be so.—I am, etc.,

Cardiff. ARTHUR T. JONES.

Spectator in Eire

SIR,—May I as an interested spectator claim the honour of congratulating the B.M.A. on its gallant stand? It is heartening to us who may presently face the same set-up here to witness your all-out mobilization against this threat to submerge the profession in the State almighty.

If shackling the freedom of the doctor is justifiable on the grounds that he is a key man in the modern State, then what of the shopkeepers? Food, clothing, shelter are the basic needs of the citizen; after these comes medicine, but well down the list. If it is imperative to harness the doctor to the State machine it follows that all those who serve more essential needs must be roped in—namely, the grocer, the butcher, the baker, the draper, *et hoc genus omne*. This is but a logical extension of the new Health Bill. Hence the grocer must be salaried or put on a limited income, must open his shop where directed, be liable to dismissal without protection of the law courts, give up goodwill in his business as immoral, and in general renounce all freedom of human enterprise.

The average citizen sees nothing in this fight but a squabble between the Minister and the doctors about selfish interests. Many who are now complacent would think seriously if they realized that the doctor fights a menace to-day that will threaten them to-morrow. Our democracy is slipping. The continual shift to the left can end only in the Russian quality of democracy, that sombre way of life whereby man's honour and freedom on earth perish utterly.—I am, etc.,

Galway. C. CONOR O'MALLEY.

Basic Salary

SIR,—The one and only thing the whole profession appear to be united about is their fear of being converted into salaried State servants. Their dislike of basic salary arises chiefly from this fear. Surely, therefore, this is the main point to be settled, and it could be easily settled by the insertion into the Act of a clause making the basic salary permanent at £300, unless by the mutual consent of the Minister and the profession. Apart from this fear, judging from former expressions of opinion, there does not appear to be any deep dislike of the basic salary as such. Once this objection is settled the other points appear capable of settlement on similar lines. It is as well to realize that when this matter is settled it will probably be settled by compromise. It is up to the Minister to invite the B.M.A. to consult with him with a view to settling this dispute as quickly as possible.—I am, etc.,

Paignton, S. Devon. P. M. GARRY.

Whole-time Medical Officers

SIR,—I am very sorry to note from your leader (Feb. 28, p. 397) that you apparently approve of the objectionable references to whole-time medical officers in Prof. Dible's recent letter to *The Times*. If the B.M.A. has a good case against the N.H.S. Act it will not be improved by gratuitous attacks on a not unimportant branch of the profession. To say, as Prof. Dible does, that whole-time medical officers have, above all their other alleged deficiencies, no zeal is in my opinion an unnecessary insult and in my experience, untrue.

I should have thought that at this time at any rate Prof. Dible would have preferred to encourage a united professional front. He should not bolster up his case by belittling a body of men whose choice of work may not be his own but who nevertheless are carrying out their duty to their patients conscientiously and to the best of their ability. Whole-time service does not of itself necessarily mean a lack of professional enthusiasm. I challenge Prof. Dible to tell me where there is a more zealous body of medical men and women than are to-day to be found in the whole-time municipal hospital service of this and many another city.—I am, etc.,

Leicester. E. K. MACDONALD.

Plums and Patronage

SIR,—Taunts have been thrust at the B.M.A. for presuming to recommend the continuance of the sale and purchase of practices. Doctors have been called mercenary dealers in bodies and souls. Why the doctor, who dispenses medicines, should be so stigmatized any more than the grocer, who dispenses food, is difficult to understand. In each case the purchaser considers an expenditure that places him in the position of making a livelihood worth while. In neither case is compulsion brought to bear upon the clients to continue their patronage except in the matter of availability, which would apply equally were no payment for goodwill made. In both cases the situation has arisen by evolution in response to the law of supply and demand. It brings reward to the man who has been industrious, and checks exploitation of such industry by those who want to get something for nothing. Should remuneration in the Health Service be by capitation fee, the purchase and sale of practices could continue as before and provide the same safeguards.

Quite apart from what it would have saved me at the beginning of my career I entertained the feeling that their abolition was desirable, in that it would place the doctor on a higher ethical level than the business man in this matter, as already does the way the doctor handles his discoveries, which he does not patent but gives freely to the world. Second thoughts indicate that this feeling is idealistic rather than expedient. Even in the Health Service some of the practices that come to be relinquished will be plums compared to others. If they are going without money and without price, who is to get the plums? One can see the ropes being pulled in the allocation committees with various members working for their own protégés. As the committees can be filled almost entirely by the Minister, the plums would fall most naturally to the good Socialist or good Conservative, depending upon what Government happened to be in power. An opening would also be made for the unscrupulous receiving backhanders as *purchase price* for their votes and influence in favour of certain candidates, a practice not uncommon in other walks of life.

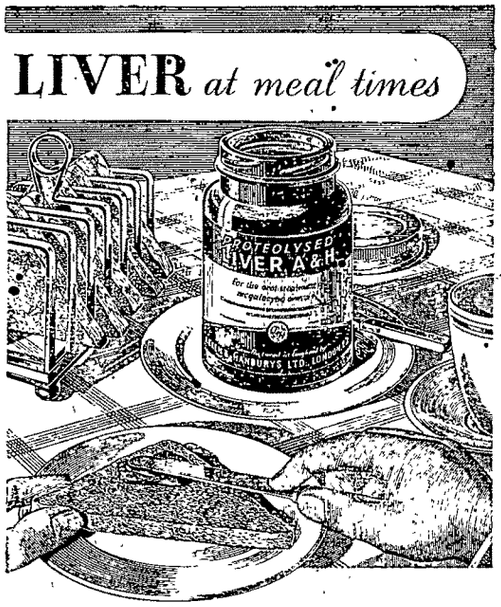
The continuance of sale and purchase, though it may have drawbacks, would seem to be less likely to stir up human resentments and more conducive to fair dealing than a situation which exposes the disposal of practices to the vagaries of the unscrupulous and the whims of political patronage.—I am, etc.,

Glasgow, S.3. W. MELVILLE CHRISTIE.

Public Opinion

SIR,—It is a heartening sight to see the members of the depressed or sweeper class of the profession at last moved to protest, and as a newly enrolled member of the League of Doctors' Wives may I put forward a fresh point?

You are no doubt aware that the general public is not, unfortunately, 100% behind the doctors in their opposition to the Act in its present form. As a professional lecturer I am bound to say I am not surprised, as the B.M.A.'s "publicity" has been, to say the least, confusing to the layman, and emphasis has been laid on the wrong points. The public does not care a Shinwell's cuss how a doctor is paid, or whether he is paid, and the words "buying and selling of practices" have loomed too large in the newspapers. The impression has grown that this is a financial squabble, and the public has suffered a rude shock to its ideals—for a doctor, as they well know, is a dedicated being with no interest save the fight against disease, and with a soul above such sordid details as remuneration. Nobody likes an idol to have feet of clay, and the Minister of Health is a sufficiently clever strategist to take full advantage of his public sense of disillusion.



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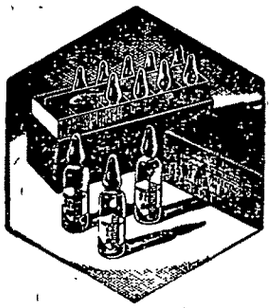

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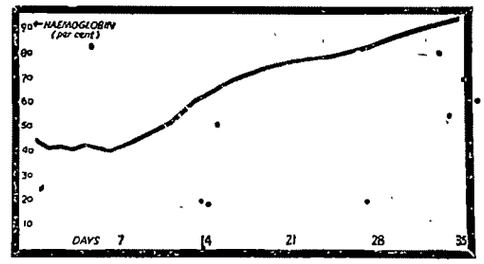

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On the other hand, the public is very much interested in the rights of a citizen, and in my humble and diffident opinion much more emphasis should have been laid on this aspect of the Act. For example, the notorious paragraph 42, which provides the tribunal for the dismissal of "any person . . . whose continued inclusion would be prejudicial to the efficiency of the service. . . ." No mention is made in this paragraph of *professional* efficiency or otherwise, and in its present form it provides an extremely handy weapon for political or racial tyranny of the worst order.

Is it too late for the publicity of the B.M.A. to take a slightly different line? One cannot expect doctors to know all the tricks of advertising agents, nor would one wish it; but in the present situation the full support of the public would make all the difference between certainty of success and the possibility (almost unthinkable) of being obliged to yield to financial blackmail.

Incidentally I have just returned from a lecture tour in which I spoke at the Education Offices in Ipswich. A large board in the main hall was attractively set out with anti-B.M.A. propaganda. The letterpress ended with a jubilant paragraph to the effect that doctors would be obliged to yield for financial reasons.—I am, etc.,

Scarborough. GWENDOLINE BAKER.

Branch Managers

SIR,—So now the doctors' wives are up in arms. Rightly so. Why should they be caretakers and dustwomen for businesses (that's all they will be) belonging to the State? The doctors in Northern Ireland (though some don't know it) will cease to own their practices on and after July 5. Are these doctors going to accept service as branch managers for a multiple concern and work 24 hours daily? No other employees are asked to do it. Should we? *Certainly not.*—We are, etc.,

E. J. A. DOUGAN.
Belfast. H. P. LOWE.

Passage of Vitamin E to the Human Foetus

SIR,—In the annotation (Feb. 28, p. 400) on the passage of vitamin E to the human foetus you make the following statement (now repeated so often that I suspect its elimination from textbooks will not become possible for two generations even should it be proved incorrect): "Evidence that it is required by human beings is still inconclusive. It has repeatedly been claimed that vitamin E is of use in the treatment of habitual abortion, but sceptics have pointed out that abortions are often followed by full-term gestation even without special treatment."

In support of these statements you give a reference to some publications between 1933 and 1939. Surprisingly enough you make no reference at all to a more recent publication in which precisely this point was considered. In 1940 I summarized all the published records about the treatment of habitual abortion with vitamin E and compared, on certain assumptions which I hope were clearly stated in the paper, those figures with the expectation of full-term delivery in a habitual abortant, as shown by Malpas's previously published figures. The conclusion reached was that there was an overwhelming probability against the successful gestation in the treated patients being due to chance and not to the vitamin-E therapy.

My arguments may or may not have been sound; to the best of my knowledge they have not been criticized in the intervening eight years. Had a valid criticism been sent to you, Sir, it would presumably have been published for reasons identical with those that led you to publish my own contribution to which I have just referred (*British Medical Journal*, 1940, 1, 890).—I am, etc.,

Greenford, Middlesex. A. L. BACHARACH.

The Posterior Pituitary and Labour

SIR,—Dr. G. W. Harris has summarized (Feb. 21, p. 339) the evidence relating to the theory that the posterior pituitary contributes to the processes of labour. I would like to record an observation which suggests that a discharge of pituitrin-like substance occurs with each uterine contraction of labour. In 1941 a woman who had borne one child and fed him until recently from the breast was in labour with her second child. She happened to develop a measles rash at the same time. While the rash was being looked at, beads of milk were seen to stand out on the nipples with each uterine contraction, as they do from a lactating breast during the "draught" (a process corresponding to the letting-down of milk in cows) or after injection of pituitrin. Since the "draught" is believed to be due to secretion from the posterior pituitary, the expulsion of the drops of milk was taken as evidence that a similar secretion was occurring with, or was preceding, each uterine contraction. An injection of pituitrin at the conclusion of the second stage in this case caused the expulsion of more drops of milk.

The fact that this visible expulsion of milk during labour is exceptional—and I have not seen it since—is perhaps because the breasts rarely contain enough free-flowing secretion at term. Its rarity does not therefore necessarily rule out the tempting conclusion that labour proceeds from a series of discharges of pituitrin-like substance which acts on the prepared uterus and which is rapidly rendered inactive.

If there is indeed a fresh discharge from the pituitary evoking each contraction it is curious that an injection of commercial pituitrin given during the first stage alters the whole course of labour. Possibly the extracted active substance is more stable than the form secreted physiologically, or the crescendo of labour is produced by some cumulative action.—I am, etc.,

Esher, Surrey. MAVIS GUNTHER.

Rectal and Vaginal Temperature

SIR,—May I offer some remarks in reply to the criticisms levelled against the use of the rectal temperature readings in the study of ovarian activity? During the past five years I have been using temperature readings whenever possible in thousands of cycles; some of the findings were published some time ago (*Lancet*, 1945, 2, 663). This procedure was chosen after extensive trials for several reasons.

1. Whereas it may be easier to persuade some types of patients to take an oral reading, there are an equal number who prefer to take a rectal reading as they are afraid of breaking the thermometer on the teeth. This particularly applies to hospital patients unused to employing thermometers.

2. Mouth-breathing at night, and even for a short time on waking, does lower the temperature and obscures the pattern of the temperature cycle in some women. This is not compensated, as suggested by Miss Joy L. James (Feb. 21, p. 368), by closing the mouth for five minutes before taking the reading, since this precaution delays the recording and may thereby involve a misleading reading through a rise from waking level.

3. The absolute level of the temperature is of importance, for it reflects the endocrine activity of the ovary, a matter of clinical importance quite apart from the diphasic nature of the curve.

If records by different workers are to be compared, it is essential that the discrepancies introduced by the different procedures and by the variable individual difference between rectal and oral readings should be eliminated.—I am, etc.,

London, W.1. MARY BARTON.

Scepsis Scientifica

SIR,—It seems to me that Prof. Geoffrey Jefferson, in his lecture "Scepsis Scientifica" (Feb. 28, p. 379), avoids the main problem in modern medicine, which is by what means and in what manner do we temper scientific thought with scepticism and at the same time avoid the paralysis of science by a completely pragmatist attitude. That the predominant influences in present-day medicine are crude forms of empiricism, relativism, and pragmatism there can be no doubt. Scepticism has by a one-sided and false development become elevated to the role of a scientific religion. It is useful to examine the historical origins of this situation and to attempt to reveal how this "hypertrophied" development of scepticism does in fact operate as a paralysing influence in medicine.

Woodger, in his inexplicably and unwisely neglected work *Biological Principles*, demonstrates that the main philosophy influencing biology as a whole is that of the so-called phenomenalists, Mach, Avenarius, Pretzoldt, Karl Pearson, etc., who have revived and extended the subjective-idealist scepticism of Bacon, Locke, Hobbes, and Hume. The phenomenalists argued that as our knowledge is only relatively true, since those things which are "true" to-day are no longer true to-morrow, and as our

imperfect senses are incapable of accurately reflecting objective reality, so we are excluded from the possibility of any real knowledge.

For such a philosophical standpoint carried to its logical conclusion, truth and untruth, objective fact and illusion, scientific knowledge and primitive superstition, are all equally valid, and the scientist accepting these views is automatically led to empiricism and pragmatism. With Dewey, he is forced to believe that knowledge is an instrument which depends on our interests and advantages, and he eventually develops a completely cynical approach to his subject. It is especially the great complexity, the enormous number of mutually interconnected processes in living matter, together with the comparative lack of success of medical investigation when superficially compared with the so-called exact sciences—physics, chemistry, and mathematics—which make the medical worker particularly liable to adopt such an attitude.

Thus there has arisen in biology on the one hand a neo-vitalism which claims that the living organism is "unknowable" and that all we can do is lead a despairing "hand-to-mouth" existence of accumulating more and more facts in a strictly empirical manner. On the other hand, the superficial appearance of exactness and logic of the physical sciences has stimulated some medical men to "impose" on medicine the principles and methodology of these sciences, in the mistaken impression, which Prof. Jefferson appears to share, that "the only sciences which have succeeded in producing immediate conviction and durable results are mathematics and those in which mathematics enters to a very great degree." The latter medical workers (among whom we cannot include Prof. Jefferson, in my opinion one of the truly great figures of contemporary medicine) seek to explain biological phenomena as mere extrapolations of physico-chemical phenomena, and mechanically attempt to reduce biology to physical, chemical, and mathematical terms. Thus we constantly see, for example, medical workers attempting to obtain from statistical assessments information which such procedures are incapable of producing. They forget that from statistics we are unable, by means of them alone, to come to any other than purely quantitative conclusions; that for conclusions which involve qualities other additional methods of investigation and reason are necessary. Unfortunately we have not sufficient space to illustrate further the exact manner in which the philosophical conceptions described above operate in present-day medicine, but we may profitably examine the epistemological basis of these conceptions.

Views such as those held by the phenomenalists and the pragmatists have as their basis the isolation and exaggeration of but one aspect of human knowledge—the fact that it is limited. Knowledge is limited and relative because it is an "endless approximation to external reality," and because every theory depends on the limits set by the historical experience of social practice. Knowledge advances in a contradictory manner, but scientific experience, handed down from one generation to another, is each time enriched by new scientific discoveries and is all the time increasing the possibility of adequate knowledge of objective reality. By exaggerating and isolating one aspect of knowledge—its limitations, its relativeness—the phenomenalists and pragmatists distort it and produce a sterile and despairing empiricism.

In fact, biological phenomena, sociological principles, etc., are no less real and "exact" because they cannot be expressed in terms of physic or mathematics. Biology, however, has considerably lagged behind the development of the latter sciences because, by reason of its subservience to outmoded philosophical systems, it has remained in the stage of the empirical collection of facts, a stage which physics, for example, has long since outstripped. All sciences proceed through this empirical stage in their development, but in order to make further advances they have also to construct fundamental principles, generalizations derived from the facts, which give to the science an operable theoretical basis. As Walshe has said, the season of synthesis of the innumerable available facts of medicine is long overdue, and one may add to this that this season will not appear until medicine rids itself of scientific pragmatism.

One last point: I strongly disagree with Prof. Jefferson's comparison between that giant of philosophy, Bacon, and Wilfred Trotter. The latter, whose philosophical stature has in my opinion been greatly exaggerated by medical men, has not written anything of which I am aware which can be compared either in originality of thought, lucidity of exposition, or logical development with Bacon's philosophical works. His eminence as a medical philosopher is mainly derived from "the flatness of the surrounding country."—I am, etc.,

London, S.W.3. A. MCPHERSON.

Pyopericardium

SIR,—Lieut.-Col. A. L. Wingfield (March 6, p. 451) concludes his interesting report of a case of pyopericardium treated with apparent success by aspiration and penicillin instillation by saying: "The final outcome remains conjectural, but eventual pericardial symphysis appears inevitable, although there are no signs of it at present."

This statement helps to perpetuate the great confusion of thought concerning chronic pericardial disease, for although it must be agreed that diffuse adherence (symphysis) between the two layers of serous pericardium is probably an inevitable sequel to recovery from a pyopericardium, such adhesions do *not* produce symptoms or signs during life.

I think it is probable that the author means that there are no signs of chronic constrictive pericarditis (Pick's syndrome), which is the best definition employed to describe thickening and loss of elasticity of the pericardium with consequent limitation of diastolic filling of the heart (chronic cardiac tamponade). Tuberculous infection, usually healed, is thought to be the most common cause of this syndrome, but there may well be a risk of its occurrence following suppurative pericarditis treated successfully by penicillin without drainage, although so far as I know it has not yet been reported. Further experience should decide this point: meanwhile it would appear unwise to dogmatize on the future of the operation of pericardiotomy.

"Adherent pericardium" is still used indiscriminately to describe (1) simple adhesions between the pericardial layers which do not cause symptoms or signs, (2) chronic constrictive pericarditis which causes chronic cardiac tamponade, and (3) mediastino-pericarditis (adhesions between the pericardium and the chest wall) which is supposed to cause massive enlargement of the heart but is probably not an entity at all.

It isn't fair on the student.—I am, etc.,

London, W.1. OSWALD S. TUBBS.

The Colonial Medical Service in Aden

SIR,—Of late much attention has been focused on health services. Having very recently returned from Aden, where we served in the R.A.F.V.R., we consider that a little open criticism of the backward conditions under which the Colonial Medical Service has to work in that colony should be laid before your readers. We do not desire that this should be interpreted as a deterrent to any doctors intending to join that service, but rather that it should stimulate rapid action in the matter of improvement or at the very least acquaint your readers with undoubted facts with which the Colonial Office cannot but be acquainted.

For a period of approximately six months we acted as surgeon and anaesthetist respectively at the Civil Hospital in Aden when that hospital possessed neither; and for the whole of our tour in Aden we were associated in many ways with the Colonial organization from our respective positions as officers in charge of the surgical and medical divisions at the R.A.F. Hospital. Let it be stated here that we do not gainsay our fortune in being allowed such access to medicine nor the friendly and co-operative way in which we were treated by all the staff at the Civil Hospital, who, working under dreadful conditions with difficult patients, did sterling work. We merely criticize existing inadequacies.

The population of Aden is in the neighbourhood of 80,000, a great increase having taken place during the recent war. Hospital accommodation was hopelessly small—so much so that even the acceptance of only emergencies necessitated patients being on the floor between beds. The existing "wards" were outdated, unequipped, and impossible to keep clean; one lavatory basin sufficed for roughly 70 patients. Lack of accommodation, inadequacies of design, and out-of-date equipment meant that even with the best will in the world the overworked staff could not keep the place or the patients clean. Dirt and flies abounded—the latter despite the fact that in other parts of Aden with similar surrounds flies were considerably less common than in this country. There were no out-patient departments worthy of the name, and the majority of surgical out-patients were seen outside and dealt with as well as such a situation permitted. When it was necessary to examine them more thoroughly they had to be laid on the operating table in the minor theatre, dirt and all. Patients waited in the sun. The main operating theatre was just adequate in size, but it was not until a strong letter was written by one of us that air-conditioning was instituted. Previously two fans over the table circulated the air, while an open window overlooking the dirty active town acted as a ventilator.

Equipment was limited, and essentials such as scalpel blades and rubber gloves were often missing and had to be borrowed from the R.A.F. It is reliably reported that a certain surgeon on one occasion had to use scissors to make his skin incision for an abdominal operation. There was no anaesthetic machine. For head-and-neck surgery a Heath-Robinson arrangement of borrowed equipment was used. A catheter was attached to rubber tubing and this in turn to a funnel. On to a piece of gauze wrapped over the funnel the ether was dripped. There was no alternative. There were no adequate resuscitative measures available except from R.A.F. sources. If we needed saline, plasma, or blood we had to supply them and the transfusion set. The local saline was so pyrogenic that it was unusable. Oxygen cylinders were supplied, but as there were no workable masks they were of limited value. Sterilization of all dressings was carried out by the R.A.F.

Ancillary medical services were elementary. A workable *x*-ray unit was only fitted some weeks before we left. Pathological services were limited to the most simple investigations, and more complicated procedures were carried out by the R.A.F. Practically all the public-health aspect of the work was done by the R.A.F. laboratory.

The control of endogenous diseases, considering the primitive sewage system and appalling housing conditions, appeared to be of little avail. Amoebiasis, for example, was widespread and tuberculosis common. Owing to the very limited accommodation available only a small number of cases of the latter disease likely to respond to conservative treatment were hospitalized. Advanced cases spread the disease.

We have made no attempt to list all the inadequacies—space does not permit—and while appreciating that some good has been done by the Colonial Medical Service in Aden nevertheless the general impression created is more than disappointing. Plans, we believe, have been prepared for some time for building a new hospital, but it should be obvious that many defections are unconnected with buildings. In concluding it is worth remembering that Aden is a "shop window" for Great Britain, and that a great many nationalities pass through the port. We felt that no poorer advertisement than the existing medical arrangements could be offered.—We are, etc.,

D. P. VAN MEURS,
W. D. WYLIE,
Late Wing Commanders, R.A.F.V.R.

Belmont, Surrey.

Pulmonary Embolism

SIR,—I welcome Mr. Reginald S. Murley's criticism (Feb. 28, p. 415) of my article "The Aftermath of Gastrectomy," which was of course no more than a brief summary of a huge subject. Even so I should have devoted more than six lines to an aftermath as serious as pulmonary embolism. However, I am not totally ignorant of modern views on the subject regarding the importance of deep peripheral thrombosis. When Mr. Murley says that my statement, "Thrombosis usually arises in the abdominal wall, or, as in two of these cases, from extension of the thrombosis of haemorrhoids . . ." is preposterous, I disclaim all responsibility and place it fairly and squarely on the shoulders of Nature, since these cases were proved by post-mortem examinations which I personally witnessed—the clots being traced respectively into the azygos and iliac veins (in one a mass of clot still projected into the superior vena cava from the vena azygos major). Nature has an awkward habit of being "preposterous" and oft-times interferes most inconsiderately with our ideas.

I should like to add that as a house-surgeon I was brought up to believe in the value of post-operative leg massage and exercises, introduced in those far-off days by Rutherford Morison, and this practice has been followed throughout my surgical life. However, as the figures in my article reveal, I have not been able to avoid pulmonary embolism by such simple measures. The modern extension of this idea and the introduction of reliable anticoagulants will it is hoped reduce the incidence of this dire complication, but I think I was right in saying that it still remains "a bugbear," which the O.E.D. gives as "an object of (needless) dread."—I am, etc.,

NORMAN C. LAKE.

London, W.1.

Bone Conduction in Otosclerosis

SIR,—The report in the *Journal* of Feb. 14 (p. 308) of a paper on bone conduction in otosclerosis, read by Dr. R. R. Woods at a meeting of the Section of Laryngology and Otology of the Royal Academy of Medicine in Ireland, focuses attention on the gain in bone conduction in the operated ear which occurs after the fenestration operation for otosclerosis.

In this connexion I would like to emphasize the considerable lengthening of bone conduction which may occur in the unoperated ear after a fenestration operation on the other ear. This lengthening of bone conduction is a matter of clinical importance, as the following case illustrates.

A man aged 47 consulted me for bilateral deafness getting steadily worse during the last three years. He complained of moderate buzzing noise in each ear. On testing the hearing of the right ear, conversational voice could not be heard distinctly at a distance greater than one-and-a-half feet; with the left ear loud conversation could only be heard occasionally at about one inch. On testing bone conduction with a 256 tuning fork it was found to be lengthened by a few seconds on the right mastoid bone and to be reduced by about 50% on the left mastoid bone. The ear drums were normal in appearance and the eustachian tubes were freely patent.

As a result of the reduced bone conduction in the left ear it was thought that there was likely to be a considerable degree of nerve deafness in this ear. On the other hand, the findings with the right ear indicated that a good result to the fenestration operation on this ear was likely. A right fenestration operation was therefore performed. During the second week after this operation the hearing to conversational voice with the right ear improved to hearing at a distance of about twenty feet. At the same time hearing to conversational voice with the left ear improved to about one foot, and bone conduction, using the same 256 tuning fork, was lengthened to normal for this fork.

In view of the improved bone conduction in the left ear it was decided to do a second fenestration operation on this ear. As there was very little giddiness this was done three-and-a-half weeks after the first operation. The patient began getting up four days after the second operation, as there was even less giddiness after this operation than after the first operation. During the second week after the operation the hearing with the left ear became as good as the hearing with the right ear.

The patient was discharged from hospital six weeks after the first operation, and was back on duty as a commercial traveller two weeks later. It is now six weeks since he left hospital, and all tinnitus has subsided and he is hearing conversational voice at about twenty-four feet in each ear.

The lengthening of bone conduction described above is one manifestation of a syndrome which I call contralateral concomitant auditory facilitation of the fenestration operation. Usually in the less marked cases of bilateral deafness the syndrome is marked by considerable improvement in hearing to conversational voice by the unoperated ear.—I am, etc.,

W. H. B. MAGAURAN.

London, W.1.

Calciferol in Tuberculosis

SIR,—Under dispensary conditions my experience with calciferol in tuberculous cervical adenitis has not been so satisfactory as that obtained by Dr. G. B. Bowling *et al.* (March 6, p. 430) treating cases in institutions. Over a period of four months seven out of eight cases given 100,000 units of calciferol daily by mouth showed a slow improvement which could easily have been due to the other general measures employed. In one case the glands broke down and operation for an abscess was required.

From this it would appear that once a case is under suitable conditions calciferol acts by giving a stimulus to the defence mechanism of the body. Such an action has been noted in six cases of advanced pulmonary tuberculosis. Three or four weekly intramuscular injections of 300,000 units of calciferol improved the general condition, reduced the degree of fever, and induced a gain in weight. No adverse toxic effects were seen in treating these cases of pulmonary tuberculosis.

One other case received 6,000,000 units by injection in 20 days. There were no deleterious effects, nor was any improvement noticed.—I am, etc.,

R. GRENVILLE MATHERS.

Wallasey.

Retroperitoneal Haemorrhage in Pregnancy

SIR,—Dr. J. Kenworthy Ogden's report of this case (Feb. 28, p. 389) is of great interest. It does not appear necessary to try to correlate the aetiology of retroperitoneal haematoma with toxaemia of pregnancy. The post-mortem findings confirmed the presence of massive spontaneous intraperitoneal haemorrhage with no definite bleeding point. The first reported case of this condition was by Barber in 1909. The patient, aged 32, collapsed two days after labour. At operation no definite

bleeding point was found. She recovered. There was no mention of toxaemia of pregnancy in this case.

In the absence of high blood pressure and arteriosclerosis the heart is incapable of raising the blood pressure sufficiently high to cause rupture of a normal artery, and some congenital or developmental defect must precede spontaneous rupture. Bruce (1937) suggested that the haemorrhage in this group may be due to rupture of a miliary aneurysm or a "junctional area." Bruce's suggestion was soon confirmed by Schuster (1937), who described a case of multiple aneurysms of the splenic artery which she believed were of congenital or developmental origin in a case of familial haemorrhage telangiectasis. Shallow, Herbut, and Wagner (1946) demonstrated defects in the muscle coat of the inferior pancreatico-duodenal artery associated with a ruptured congenital saccular aneurysm at the first bifurcation and three small fusiform dilatations in the more distal parts.

At post mortem it is often difficult to demonstrate the bleeding point in this type of massive spontaneous intraperitoneal haemorrhage. However, careful dissection of the affected part and sectioning of the neighbouring vessel will demonstrate the cause—a ruptured miliary aneurysm or congenital defect of the arterial wall.—We are, etc.,

A. C. BREWER.
R. MARCUS.

Liverpool.

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Cancer of the Lung

SIR,—With reference to recent correspondence I wish to draw your attention to the fact that in a small research (confined to males) carried out here it was found that the incidence of cancer of the lung fell more heavily on smokers than non-smokers—correction for age having been made. Unfortunately the number of cases investigated was too small to be statistically significant.

Our ignorance of the fundamental cause or causes of cancer is almost completely unrelieved. We know that in a small proportion of cases the inciting cause is the repeated application of a carcinogenic agent contained in tar, soot, oil, or other substance. The apparent increase in cancer has been almost entirely in cancers of inaccessible parts of the body.

Improved methods of diagnosis—of which radiology is the chief—are accountable in part for the greater frequency with which a diagnosis of cancer of the lung is now made. Also it is possible that more people develop cancer of the lung because more people live to the age at which cancer usually occurs. Gassing during the first world war and its sequelae apparently did not predispose to lung cancer.

Whether tars or other agents contained in tobacco act as carcinogenic agents in the lung is a disputed question. A complete statistical survey of smokers and non-smokers on this point has yet to be made. The quality and amount of tobacco consumed, the frequency of inhalation, age, sex, race, and all other relevant factors would have to be included in such an investigation.—I am, etc.,

G. C. F. ROE.

Public Health Department, Halifax.

Intervertebral Disk Lesions

SIR,—Dr. Michael Kelly (Feb. 28, p. 416) rightly draws attention to the well-known observation that pain is not a characteristic feature of lesions known to produce pressure on nerve trunks. As was shown by Lewis and Pochin,[1] in nerve paralysis from pressure touch fails early, motor power next, "fast" pain later, and delayed pain last. Before pain sensation is lost transitory hyperalgesia may occur, so that the earliest signs of nerve pressure are alternating periods of numbness and cutaneous tingling in the area of distribution. Pain such as that of the sciatic syndrome does not occur.

On page 424 of the same issue, however, your adviser's reply under "Any Questions?" follows traditional thought in suggesting that the sciatic pain of disk lesions is due to pressure or stretching of nerve-roots. That may be so, but there is at least some evidence that other factors are involved. Kellgren and Lewis[2] demonstrated that irritation of a deep somatic structure such as an interspinous ligament by injection of hypertonic saline resulted in pain throughout the corresponding sclerotome with accompanying muscle spasm. We can aver from personal experience and self-experiment that the pain produced by so stimulating the fifth lumbar interspinous ligament is clinically and subjectively indistinguishable from that occurring spontaneously in an L5-S1 disk lesion.

Now, primarily, herniation of the nucleus pulposus is a joint lesion which produces strains on surrounding ligamentous structures and may finally give rise to nerve-root or spinal compression. Such a joint disorder might reasonably be expected to produce pain throughout the corresponding sclerotome, *irrespective of whether or not nerve pressure occurs*. In fact, a large proportion of patients in whom the diagnosis is subsequently confirmed by operation never present any acceptable objective evidence of nerve pressure such as muscle weakness, anaesthesia, or loss of deep reflexes.

Before the phenomena are clearly understood two facts must be explained. (1) Application of a short plaster corset, even without preliminary extension, may rapidly relieve pain, although the area of anaesthesia persists or, as in one case under our observation, actually increases. Clearly such benefit cannot be due to relief from nerve pressure, but it may well be the result of immobilizing, at least partly, the grossly deranged spinal joint and thereby diminishing the deep segmental pain arising therefrom. (2) We have found that in many cases of undoubted disk prolapse temporary relief from pain follows injection of the corresponding interspinous ligament with 1% procaine solution. This cannot be the result of relief from nerve pressure though the change may be explicable upon the basis of the theory recently propounded by Cohen.[3]

The understanding of the pain mechanisms involved in these cases is a matter of some importance. In most instances the primary necessity of treatment is the relief from pain, a problem as yet incompletely solved. Fuller understanding of the manner in which pain is produced will surely pave the way to more universally satisfactory results.

It is generally accepted that on clinical evidence alone the level of a lumbar spine disk lesion cannot be confidently predicted. It may be that the present conception of sciatic pain as the result of root compression is responsible for this difficulty, and if it were regarded as a deep segmental pain due to joint disturbance this difficulty might be resolved. Oversimplified views of the pain mechanism in this condition are liable to follow a mechanical interpretation of the functions of the central nervous system.

The problem is a complex one and, clearly, many questions remain to be answered. We are at present engaged in an investigation of this subject and hope to communicate our findings in due course.—We are, etc.,

J. DONALDSON CRAIG.
A. W. LIPMANN-KESSEL.

London, W.2.

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1 *Clin. Sci.*, 1938, 3, 141.
2 Ibid., 1939, 4, 47.
3 *Lancet*, 1947, 2, 933.

The Extent of Neurosis

SIR,—Stimulated by the correspondence on this subject I decided to classify the patients I saw during a period of twelve weeks—from Nov. 9, 1947, to Jan. 31, 1948. Some of the facts and figures emerging may be of interest. The practice under review is a large mixed private and panel practice in a town of some 25,000 inhabitants, extending also to some of the neighbouring villages. It is run by four partners, who share the work as equally as possible, apart from the fact that nearly all the anaesthetics are done by one partner, and a very large proportion of the midwifery by another. This accounts for the rather disproportionately small showing of these two types of work in the figures following, since the work is that of one partner out of the four.

A total of 3,200 patients were seen; of these 1,744 were surgery attendances, 1,074 were visits to patients in their own homes, and 382 to patients in the local cottage hospital. 2,241 were "old patients," while 959 were first attendances.

Among the acts of service were included: minor surgery, 43; injections, 82; anaesthetics, 3; obstetric attendances, 43 (including 16 antenatal and 4 post-natal examinations); life insurance, 6; examination for entrance to Civil Service, etc., 10.

Not included in the total of acts of service above was the dispensing of medicine on 656 occasions and the making of 50 telephone calls on behalf of patients. Furthermore, the paper work in the course of this period, apart from record-keeping, included the writing of 1,034 prescriptions and the issuing of 879 certificates of various kinds, as well as the notifying of 21 cases of infectious

disease and the writing of 82 letters to consultants and hospitals concerning patients.

In all 70 patients were referred for a second opinion and 13 sent to hospital direct, as immediate emergencies. Of the visits, 16 were night-calls between 10 p.m. and 8 a.m.

An attempt has been made to classify the types of illness from which the patients were suffering, though it speedily became obvious that such a classification could, at best, be only a very rough one and that while certain categories could be clearly defined others tended to overlap considerably. A classification by systems of the body was also undertaken. The results are shown in tabular form below, excluding all midwifery.

Illnesses		Systems of the Body	
Acute general infections	25·8%	Cardiovascular system	9%
Acute local infections	12·7%	Respiratory tract	23·5%
Chronic infections	3·1%	Digestive tract	14·8%
Traumatic conditions	7·7%	Skin	10·5%
Degenerative conditions	13·9%	Bones and joints	7%
Constitutional diseases	23·2%	Muscles	4·1%
Organic nervous disease	2%	Central nervous system (including functional nervous disorders)	9·4%
Functional nervous illness	6·3%	Genito-urinary system	5·3%
Neoplasms	1%	Glands of internal secretion	1·5%
Allergic conditions	1·6%	Connective tissues	3%
Fibrositis and allied states	2·7%	Eyes	1·9%
		Ears	2·5%
		Throat	6·7%
		Haemapoietic system	0·5%

In respect of the original object of the survey—the estimation of the amount of neurotic illness—it rapidly became clear that quite apart from the clear-cut cases of almost pure neurosis a very large number of the patients suffering from a definite organic complaint were also affected by a strong subjective element, due to their anxiety about their health or anxiety about the effect of their illness on their economic conditions. In the table above the figure given for functional nervous disease of 6.3% tells only a part of the tale, as no patients with any demonstrable organic condition were included.

It seems obvious that the amount of neurotic illness seen by the general practitioner is very considerable, but that no reliable figure can be given inasmuch as standards of classification are almost impossible to set up, and the recognition of neurosis will in itself tend to vary with the outlook and temperament of the doctor himself.—I am, etc.,

Aldershot. H. BOLTON TIPLER.

True Hermaphroditism

SIR,—Dr. A. P. Cawadias (Jan. 31, p. 229) would appear to be under some misunderstanding concerning the nature of hermaphroditism in the animal kingdom. Even the humble hermaphrodite worm might turn at being described as a "double animal." In reply to Dr. J. R. Edisbury (Dec. 27, 1947, p. 1056) it must be said that the whole subject is a very large one and it cannot be dismissed in a few lines.

As is well known, the sex of an animal depends primarily upon its genetic constitution—i.e., the sex-chromosomes when these are known to exist. But for the full development of a functioning sexual animal the whole hormonal apparatus is essential. Hormones and other conditions, however, can override the original sex chromosomes and cause a sex-reversal.

A definition of terms might not be out of place here. There are three groups:

1. True permanent *hermaphrodites*, in which ovary and testis remain together and function throughout life—e.g., earthworm;
2. *Sex reversals* in which the animal starts as one sex and passes through a hermaphrodite stage to the other sex—e.g., the Buff Orpington hen (see below);
3. Those individuals with the gonads and sexual apparatus of one sex and some or all of the accessory organs and hence characters of the other sex—e.g., the *mammalian intersexes*.

Unisexuality is the primitive condition, and not hermaphroditism, as Dr. Cawadias suggests. For example, in the invertebrates it is the more specialized forms in any groups which exhibit this phenomenon, or where it occurs in a whole group this is entirely specialized. In the *Crustacea* the sessile barnacles are hermaphrodite and also many parasites. In general the phenomenon has evolved under conditions where fertilization would be difficult if unisexuality prevailed. It is not confined to such types, as is shown by the few vertebrate hermaphrodites such as the bony fish *Serranus*, where a testis is present in the wall of the ovary and self-fertilization takes place. These are all examples of Group 1 above.

Group 2 is illustrated by the now famous Buff Orpington hen which, after a blameless life of egg-laying and chick-rearing, at the age of 3½ years stopped laying, grew cock feathers, started crowing, and was successfully mated with a previously infertile Buff Orpington hen. At necropsy the ovary was found to be replaced by tumour tissue and a small amount of testicular tissue was present in the ovary. This tissue had produced the viable sperm and incidentally the secondary sexual characters. This same effect may be produced by outside agents. The crustacean parasite *Sacculina* is able to convert a male crab into one with female characters. It has been shown that in doing so it is able to use the products of the "female" crab's metabolism for its own ends.

In the case of the worm *Bonnelia*, Baltzer (1925) has shown that sex is determined by pure accident of situation. The larva at a certain stage sinks from the surface. If it falls near the proboscis of a female *Bonnelia* it becomes a male. If however it falls anywhere away from this influence it becomes a female. It has been shown that the female proboscis possesses a chemical substance which dominates the sexual character of the form which comes into contact with it.

Under Group 3 come all those cases in mammals, including man, which although predominantly of one sex do nevertheless exhibit certain characters of the other sex. In the case of cattle a co-twin to a male becomes a freemartin—i.e., a female which never becomes a functional one. This has been shown to be due to the earlier elaboration of the male sex hormones by the male twin *in utero* (Lillie, 1917).

In all higher vertebrates both male and female ducts are present during development. In most cases one develops more rapidly than the other and only vestiges of the opposite sex are left. This is not, however, always so, and in some cases, in which one may postulate a time factor, much more of the organs of the other sex develops, and even the gonad may do so. Hence the possibility of intersexes. These commonly occur in goats and pigs. In mice they are less common, and it may be suggested that here the sex-determining mechanism is more stable.

Goldschmidt (1931) in his work on moths has obtained evidence for the existence of "strong" and "weak" male and female genes. In his elaborate experiments he was able to breed types with varying grades of "maleness" and "femaleness." His theory suggests that sex and intersexuality are largely determined by a balance or lack of balance in the strength of these male and female genes. Whether this is applicable to vertebrates we do not know, but it may well be so.

Dr. Edisbury and others interested might consult any of the following books for a full account of this very large subject: Goldschmidt, R., *The Mechanism and Physiology of Sex Determination* (Methuen, 1923); Darlington, C. D., *Recent Advances in Cytology* (Churchill, 1937); Crew, F. A. E., *Sex Determination* (Methuen, 1933); Baker, J. R., *Sex in Man and in Animals* (Methuen, 1926).—I am, etc.,

King's College, Newcastle-upon-Tyne. MARY A. WOOD.

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Baltzer, F. (1925). *Publ. Staz. Zool. Napol.*, 6, 223.
Goldschmidt, R. (1931). *Quart. Rev. Biol.*, 6, 125.
Lillie, F. R. (1917). *J. exp. Zool.*, 23, 371.

SIR,—I am indebted to Dr. A. P. Cawadias (Jan. 31, p. 229) for his informative iconoclasm and also for directing my attention to his *Hermaphroditos*, which I regret to say I have not yet read. In extenuation, your annotator (Nov. 22, 1947, p. 828) seems to have been in the same lamentable position.

There does not seem any immediate prospect of a convenient qualitative test for human *y* chromosomes, or a roughly quantitative test for *x*, either of which would reveal the true or genetic sex. Perhaps someone who knows just what possibilities exist, if any, will write an article on the subject, not forgetting the forensic aspects—e.g., male heirs, etc.—I am, etc.,

Hooton, Cheshire. J. R. EDISBURY.

Homoeopathy

SIR,—My attention has just been drawn to Dr. D. W. Winnicott's letter (Feb. 14, p. 313) in which he states among other things that "homoeopathy has not been accepted by the profession on *scientific grounds*."

As a member of the profession who practises homoeopathy, may I point out to Dr. Winnicott that homoeopathy has never

been tested scientifically by "the profession," but has been rejected by it simply through prejudice without any proper trial. We homoeopathic physicians have repeatedly asked "the profession" to put the method to the test, and they have always refused.

We therefore welcome the opportunity which seems to be presenting itself in the near future of getting our method of therapeutics put to the test, which we have no doubt it will pass; and so the "over a million people" in this country who prefer homoeopathic treatment will be able to obtain it under the National Health Service Act.—I am, etc.,

London, W.1. ALVA BENJAMIN.

Juvenile Delinquency

SIR,—Dr. Eustace Chesser (March 6, p. 475) makes the statement that "virtually all juvenile delinquents are made, not born," and prescribes the omnibus remedy of "short and severe punishments, followed by psychological treatment," as an alternative to "three years of comparatively negative confinement in an approved school."

Such a view ignores increasing knowledge of genetics and of the hereditary factor in disorders of conduct. It also overlooks the active contribution that the approved schools are making to the study and understanding of the factors which lead to juvenile delinquency, quite apart from their role in re-establishing as normal members of the community a high proportion of the young people whose training and re-education they undertake.

The urgent necessity advocated by your leading article (Jan. 31, p. 203) for further investigation into the efficacy of different methods of treatment as judged by the after-histories of cases of different types should receive the full support of all scientific workers in the field as being a direct means of determining the underlying causes and hence contributing to the prevention of juvenile delinquency.—I am, etc.,

Liverpool. MURIEL BARTON HALL.

Child Guidance and Youth Organizations

SIR,—I have read with interest the letter of Dr. D. T. Maclay (Feb. 21, p. 368) on the need for liaison between psychiatric workers on the one hand and youth movements on the other. The London Union of Mixed Clubs and Girls' Clubs has now had for about three years the services of an honorary consultant psychiatrist and has found them of very great value. Our consultant visited clubs of different kinds and spent some time familiarizing herself with one in particular before undertaking to advise our leaders.

This organization has 22,000 boys and girls in its clubs in Greater London. Among them are naturally some "difficult" adolescents, but I would emphasize that it is not only the exceptional case that can benefit from psychiatric advice. We are still constantly learning how to make the wisest provision for normal young people growing up in our society.

All our students in training for leadership have had the advantage of lectures and tutorials from our consultant; and some of our best and most experienced leaders, too, have told me that it is a refreshment of spirit and an illumination of the mind to talk to our psychiatrist. Many people find club leadership as exhausting as it is rewarding, and the services of a psychiatric worker may be directly helpful to the leader as a person as well as in his or her professional capacity.—I am, etc.,

MARJORIE TAIT,
Organizing Secretary,
London Union of Mixed Clubs and Girls' Clubs.

London, S.W.4.

SIR,—I would like to protest against the suggestion implicit in Dr. D. T. Maclay's letter (Feb. 21, p. 368) in which he couples the increase in juvenile delinquency with the spread of child-guidance clinics, and accuses child-guidance clinics of ignoring youth organizations such as Boy Scouts, Church Lads, etc. He does not mention the war, but this has been and will be for many years the chief cause of the rise in delinquency. Broken homes, marital discord, and prolonged separation from parents, especially in the first six years of life, play a large part in inducing the delinquent frame of mind. In these circumstances the normal love relationship between child and parents is disturbed, so that the child lacks the incentive to model himself on his parents and accept his parents' standards. Less frequently the parental standards are themselves low so that the delinquent child is merely imitating his parents. The increased marital infidelity and divorce which occurs in wartime, and the separation necessitated by evacuation, is one of the commonest causes of delinquency now, and often the delinquency dates from evacuation or the return from it, a most difficult period for a child.

One of the functions of a child-guidance clinic is to re-establish a normal love relationship between the child and parents, so that the child can again derive pleasure from pleasing them. This is done by work with the parents, play therapy with the child to get rid of the child's resentful attitude, and of course by helping the child to find socially acceptable outlets for his energy, such as the clubs Dr. Maclay mentions. It is no use preaching to delinquents. They simply take no notice, like a girl of eleven I have recently seen, who regularly attends Sunday school and has made a practice of stealing money from the Sunday-school teacher's handbag after the service.

Unfortunately child-guidance clinics are far too few to cope adequately with this difficult problem, and I agree with Dr. Maclay that all encouragement should be given to youth clubs. It is however an odd point, as Healy and Bronner have shown, that delinquents are more often regular club members than their non-delinquent siblings. But I can assure Dr. Maclay that all good child-guidance clinics do co-operate with social clubs and youth organizations, and every encouragement is given to the children to join them.—I am, etc.,

London, W.11. FELIX W. BROWN.

School Ophthalmic Service

SIR,—I think from Mr. S. Black's reply (Feb. 21, p. 368) that he must have read my letter in somewhat of a hurry. I emphasized that every Devon County Council school child had a visual acuity test every year, the most important group being that of the school entrants. I am quite sure that Mr. Black would find that children of 4 to 5 years of age, when tested by reliable and scientific methods, are quite unable to attain the 6/6 standard when there is even a low error of refraction, and definitely not when there is a "fairly high error."

It is for this very reason that this group is considered so important, before gradually increasing close work has produced ciliary over-action in cases of hypermetropia, which cannot be spotted by visual acuity tests when the children reach 7 or more years. Youngsters who are too shy, dull, uncooperative, or unable to carry out the test are referred, with all those failing to attain the required standard, for full ophthalmic examination, of which the actual refraction is not the most important part.

My so-called defence of Devon County Council arises from the fact that the ophthalmic scheme in operation there is the one of which I have complete and intimate knowledge, and I am therefore in a position to refute Mr. Black's allegation at any rate as far as this area is concerned.—I am, etc.,

Exeter, Devon. MARGARET E. FOXWELL.

An Arab Custom

SIR,—We believe the following may be of interest to your readers. While visiting the newly built American Mission Hospital in Doha, capital city of the Qatar Peninsula, Arabia, we were informed of the following practice employed by the Arab women after parturition.

When the placenta has been expelled the vagina is packed with common salt for two to three days in an endeavour to produce contraction of the vagina to the nulliparous state. This is usually followed by fibrosis of the vaginal canal and often atresia of the vestibule. As a result subsequent labours prove difficult, usually necessitating episiotomy, which formerly the Arabs practised among themselves.

As the Arab is polygamous by nature, this practice is an attempt by the wife to retain her former position in the eyes of her husband.—We are, etc.,

F. S. PRESTON,
Surg. Lieut., R.N.V.R.
P. I. RUTHERFORD,
Surg. Lieut., R.N.V.R.

H.M.S. "Challenger," Persian Gulf.

POINTS FROM LETTERS

Stand Firm

Dr. J. R. SALMOND (Burton-on-Trent) writes: The profession has spoken in no uncertain voice. Now, B.M.A., stand firm! We are all behind you and expect a lead. Don't give way or compromise—it is too dangerous. Local study circles must be fully organized and must have a definite policy. Our patients look to us to refuse service under the Act as it stands and to maintain our professional freedom. Think of what public apathy cost Germany in the '30s. We must cling to our liberty. . . . One thing now is certain. Since we have shown very clearly that the whole of the profession is opposed to the Act as it now stands in this country, the B.M.A. must have ready some concrete proposals for a more reasonable health scheme which can be put forward to Mr. Bevan as an alternative in the knowledge that the doctors would willingly join together in working it to the common good of all.

Compensation after July 5

Dr. PETER E. MORRIS (Hayle, Cornwall) writes: Apart from the principles involved the financial worry of most of us is the fact that at present we must enter the scheme on or before July 5 or go without compensation even if we join in later on. If the Minister were prepared to buy our practices, or in other words if spot cash were offered for goodwill, *whenever a practice was incorporated in the N.H.S.*, there would be nothing for us to worry about on this score. One sees of course that this would destroy what the Minister hopes is a trump card, but his refusal to agree to it would be absolutely indefensible. . . .

Accepts Service

Dr. S. GILFORD (Reading) writes: I should like to apologize to Dr. R. H. Scott (Feb. 21, p. 360) for one mistake in my letter. In my *Medical Directory* for 1944 I found that a Dr. Ronald Hadley Scott, living in Hook, Basingstoke, was in the partnership of Cox, Scott, and Sharkey, of Basingstoke. Dr. J. A. Sharkey signed the letter, but I found that there was another Dr. R. H. Scott (Ronald Holford), of Newcastle-upon-Tyne, who has apparently settled in the district. . . . I should like to add a few words about the plebiscite. I did not answer A—"I approve of the National Health Service Act in its present form"—because it is evident that no one can approve of it without amendments in the future. I believe that a salaried service is the only form which will provide a satisfactory service when the health centres are established. Financial competition will make full co-operation impossible. I am willing to accept service under the Act in its present form and to hope for improvement in the future. I may add that any amendment of the Act now would invalidate the plebiscite and leave anyone who signed that plebiscite free to alter his mind before July 5.

Plebiscite Warning

Dr. T. J. CRONIN (Birmingham) writes: Services, permanent commissions, 16–1 against. This result, plus the figures for all salaried groups, must have surprised more G.P.s than myself. It surely is a grave warning against that type of service and should make even those who voted in favour think again. In the past temporary serving officers expressed their opinions on many subjects under a *nom de plume*. Some of their more experienced colleagues could do the profession a great service and stiffen our morale by giving us some of the "facts of life" in a State service just now. In the meantime I personally await with confidence further guidance from our Representative and Negotiating bodies. We have more to fear than loss of compensation—think of all the regulations yet to be inflicted on us. Dr. Thomas J. Agius (Feb. 21, p. 362) quotes from a sample.

Doctors' Wives

Mrs. D. FRASER (Droxford, Hants) writes: As soon as the goodwill of my husband's practice passes to the State (with or without compensation) I intend to discontinue my almost full-time unpaid job of administrative assistant to him. A railway engine-driver's wife takes no part in administering the railways any more than a Coal Board official's wife does in running the mines, and I feel that under the new dispensation I ought to be equally absolved from having to help in making Mr. Bevan's scheme a success. . . . I suggest therefore that this matter should be strongly represented to the Minister, whether or not further negotiations take place, and also that the delegates at the meeting of the Representative Body on March 17 should give some thought to it in deciding the future action of the Association.

Prickly Heat: A Simple Remedy

Dr. H. J. KINGSLEY (Bulawayo, Southern Rhodesia) writes: If Dr. C. J. Wilson (Jan. 10, p. 76) will refer to Martindale's *Extra Pharmacopoeia* (22nd edition, vol. I, p. 599) he will find that lotio hydrargyri perchlor., 1 in 1,000 solution with 2 in 1,000 hydrochloric acid, is recommended for prickly heat. I also have used this simple remedy with success, but can any reader tell me what is the effect of adding hydrochloric acid to the perchloride solution?

Relief of Nervous Tension

Dr. C. HORWITZ (London, N.1) writes: As an aftermath of the war there remains a great amount of residual nervous suffering among the population. That this is so is demonstrated by the frequent announcements over the wireless of the loss of dangerous drugs, mostly phenobarbitone, which are so largely prescribed as sedatives. I would like to draw attention to a method of relieving nervous strain and tension from which I myself and many of my patients have greatly benefited. It is by means of the method of progressive muscular relaxation as advocated by Dr. Edmund Jacobson, of Chicago, in his book on the subject published in 1929. Indeed, adequate training in muscular relaxation may be regarded as a prophylactic against the onset of a nervous breakdown for which rest is so often prescribed. But the patient must be taught how to rest and how to release the nervous tensions in various parts of his body. The method needs to be practised to become perfected, as one practises the piano or playing golf. To quote from an article from one of our leading psychologists and a great exponent of the method, Dr. William Brown: "The recuperating effects of rest and progressive muscular relaxation not only in mental and nervous disorders and diseases but also in physical illness, and in the normal stress and strain of life, have been admitted, indeed emphatically asserted, by medical practitioners throughout the ages."

The Blood Picture in Chicken-pox

Dr. H. ANGELL LANE (California, U.S.A.) writes: Dr. Thomas Parkinson's very interesting paper (Jan. 3, p. 8) prompts me to draw attention to an easily ascertainable fact, mention of which, however, I have not seen in the ordinary textbooks.

In the great majority of cases of chicken-pox will be found from the second to the seventh day of the rash only, (1) a "drift to the left" out of all proportion to the severity of the case, and (2) 2% to 7% Türk cells. These cells are generally smaller than those seen in cases of German measles and disappear from the picture after the seventh day, with the peak on the fifth (I have seen 12% then). I have found them rarely in cases of herpes zoster; in only one case, however, was this followed by chicken-pox in another member of the family.

Asthma and the Inhaler

Dr. A. W. PATERSON (Ipswich) writes: I have just seen with pleasure the letter by Dr. Paul Wingate (Jan. 31, p. 226) giving expression of his high appreciation of inhalations (for spasmodic bronchial asthma) of the bronchovydrin type. His letter represents almost exactly my own opinion regarding such of these preparations as I have used now for almost eleven years. Having read recently, and a few months ago, adverse opinions of such preparations on account of their effect on the bronchial mucosa and its cilia, I should like to support Dr. Wingate by stating the great benefit I have received during these eleven years without having observed any harmful affects whatever. Like Dr. Wingate, I feel the inhalations can to a great extent replace hypodermic injections, their effect being manifest in relieving an attack and in most cases aborting it in a few minutes. Prior to their use I had to rely on adrenaline injections, sometimes several times a day, and of course was thankful enough for them.

You may remember that I wrote to the *British Medical Journal* regarding the very great benefit I had received from these inhalations as I was anxious to share my means of relief with the many who suffer the extreme discomfort of severe asthmatic attacks. I felt that these bronchovydrin type inhalations, proprietary or not, should be more widely used and known.

Ovarian Cyst in an Infant

Dr. T. J. M. GREGG (Newbridge, Mon.) writes: When conducting a post-mortem examination recently on a five-months-old baby which proved to have died as a result of inhaling its own vomit, I discovered a very large thymus gland which completely covered the whole of the heart and was almost as large as one of the lungs.

I also discovered a pelvic cystic swelling which I thought might be of interest. This was a freely movable yellowish cyst about the size of a small hazel nut, situated near the end of the left Fallopian tube. The right tube was quite normal. I took the swelling to be an ovarian cyst. I have no access to advanced gynaecological literature and am unable to look up any references to previous similar findings, but I thought it worth my while to report my findings to you in case they may be of interest to other members of our profession.

The only other abnormality I detected was some engorgement of the blood vessels between the stomach and the transverse colon causing slight adhesion between these two organs.

Obituary

R. D. BEATSON HIRD, M.D., F.R.C.S.Ed.

When Robert Dennis Beatson Hird died on March 2 at the age of 67 the Midlands lost an outstanding figure in ophthalmology, a loss which will be felt keenly by colleagues, friends, and patients alike.

Beatson Hird received his medical education at the University of Birmingham. He and Sir Leonard Parsons were students together, and he graduated M.B., Ch.B. in 1905, proceeding M.D. a year later, and taking the F.R.C.S.Ed. in 1909. He was a native of Birmingham, and practically the whole of his professional life was spent in that city. He gave much of his time to public work, and among the many appointments that he held were those of honorary ophthalmic surgeon to the General Hospital and later to the Birmingham United Hospital; honorary surgeon to the Birmingham and Midland Eye Hospital; and ophthalmologist to the Birmingham Education Authority. He was also lecturer in ophthalmology to the University of Birmingham until 1945. During the war he served as Midland regional adviser in ophthalmology to the Ministry of Health.

A man of abounding energy and enthusiasm, he gave of his best at all times, both in his public appointments as well as in his private practice. From time to time he contributed articles to the medical journals, but it was in the clinical side of his work that his main interest lay. To this he brought keen observation and a meticulous attention to detail—a combination which rendered his work of the highest order and which was an example to those who worked under him. Nor was his view of ophthalmology a narrow one. He regarded it as only a part of the wider field of medicine, and in the sphere of medical ophthalmology his knowledge was unsurpassed. His opinion and advice were frequently sought by colleagues engaged in general medicine and surgery, and often his report gave the clue to diagnosis in difficult cases. He was a successful teacher, with a facility for imparting to his students a clear picture of the essentials of his subject. Many men now engaged in ophthalmic practice, not only in this country but in the Colonies, were once his house-surgeons and owe much to him for his advice and instruction at the outset of their careers.

His great enthusiasm for his work remained unimpaired throughout the years. In the early days of the war he suffered from a severe heart attack, but his enthusiasm and his strong sense of duty compelled him to return to full work after a few months. Nor did he then spare himself, and it would be difficult to overestimate his services to members of the Forces and to civilians who sustained eye injuries. Outside this profession he was a keen golfer until illness precluded active exercise, and among other hobbies was an interest in astronomy and a fondness for literature. There is no doubt, however, that his family life and his work were the main interests in his busy life. Beatson Hird will long be remembered both for his professional skill and for his sterling personal qualities.—C. R.

CHARLES H. RIVERS, M.D., M.R.C.P.

The march of events makes it improbable that provincial medicine will see again a man of the type or stature of Charles Rivers, who died on Feb. 28 at the age of 76.

Educated at King's College School and St. John's College, Cambridge, Rivers took the B.Sc. in 1894 and a second class in the natural science tripos in 1895. In the course of a distinguished undergraduate career in the medical school of Middlesex Hospital he held university and Broderip scholarships. He obtained the conjoint qualification in 1898 and was subsequently house-physician to Sir Richard Douglas Powell and Sir J. Kingston Fowler, and later demonstrator of pathology at the medical school. With a colleague he was co-founder of the *Middlesex Hospital Journal*. He took the M.R.C.P. in 1901, proceeded M.D. in the following year, and was later awarded the honorary degree of M.D. by Adelaide University.

After experience as a surgeon in the Boer War, Rivers worked in Australia from 1903–14 as honorary physician at the Adelaide Hospital and the Kalyra Sanatorium, and later as tutor in medicine, and examiner in forensic medicine at Adelaide University. During this period he made a close study of pulmonary tuberculosis, being among the pioneers of artificial pneumothorax therapy, and of haematology, and published some thirty papers on clinical and pathological subjects. It is of interest to note that he was treating myeloid leukaemia with x-rays in 1905. In 1914, despite an assured career in Australia, Rivers decided to return to England. After three years as tuberculosis officer to the Kent County Council he settled in general practice in Redruth in 1917, joined the staff of Redruth Hospital, and became part-time medical officer of health for the district.

He brought to general practice a rare and varied experience and a determination to apply it. He founded his own clinical laboratory and maintained its work for thirty years. He built up adequate physiotherapeutic and diagnostic x-ray equipment, and he started the diagnostic and therapeutic x-ray work at Redruth Hospital. An acknowledged authority on the silicosis of metal-miners, he combined in his person the offices of consultant and practitioner, physician, pathologist, radiologist, and hygienist, and filled them all with real competence. A lifelong student, it is typical that in his seventh decade he studied, and became proficient in, electrocardiography. Rivers possessed the gifts of orderly method and a capacity for sustained effort. He made decisions carefully, and did not alter them lightly. An individualist, he was fervent, even choleric, in controversy, but ever courteous and jealous for the dignity of his vocation.

Outside his work he was a man of wide culture and a good classical scholar. An accomplished musician, the foundation of the Cornwall Symphony Orchestra, which he directed and conducted personally, was an achievement he held dear. His fortitude in his final infirmity was as impressive as was his passion to work in spite of it. His colleagues will long respect the memory of one whose death marks an epoch and whose manifold attainments are unlikely again to come within the scope of one man. Their sympathy is extended to his widow and five sons, of whom one is a doctor.—L. W. H.

Dr. JOHN MCEWEN DALZIEL, who died in London on Feb. 21 at the age of 75, was born in India and educated at Dollar Academy and Edinburgh University. He graduated M.B., C.M. in 1895, proceeded M.D. in 1903, and took a B.Sc. in Public Health in the following year and also the diploma in tropical medicine. Dr. Dalziel joined the West African Medical Service and became finally deputy director of sanitary services on the Gold Coast. He wrote several books on the plant life of West Africa and also *A Hausa Botanical Vocabulary*.

Dr. WILLIAM MINTY BADENOCH, of Leyton, London, E., died on Feb. 22 at the age of 64 after a short illness. He was born in Banffshire, Scotland, and educated at Aberdeen University, where he graduated M.B., Ch.B. in 1908. After some experience of hospital work and of general practice he settled in Leyton in 1912. Two years later he joined the R.A.M.C. and saw service in France, Gallipoli, and Mesopotamia. He was mentioned in despatches on two occasions, was severely wounded, and left the Army with the rank of major. After the war he went back to Leyton and gradually built up a large practice. He was for many years the "J" Division police surgeon, and for six years he acted also as deputy coroner for the Metropolitan district of Essex. During the recent war his home was destroyed, and for some months afterwards he worked at a temporary surgery in part of the Leyton Vicarage. Dr. Badenoch was chairman of the South-west Essex Division of the British Medical Association in 1928–9. He was vice-chairman of the parochial church council for many years, and he acted as medical officer to the 35th City of London Battalion of the Home Guard. He is survived by a widow, a daughter, and a son, Dr. John Badenoch.

Dr. DOUGLAS ROBERTSON died at his home on March 6 at the age of 49, after a fall earlier in the day. He had been ill for about two years previously. Dr. Robertson graduated M.B., Ch.B. at Leeds in 1921, and was a son of the late Dr. H. M. Robertson, who was in practice in Roundhay, Leeds, for many years. For thirteen years after qualifying he practised in Longtown, Cumberland, where he was medical officer of health for the district. He had been in practice at Thornton-le-Dale since 1934. He was on the staff of the Malton Cottage Hospital, and was medical officer for the Allerston district.

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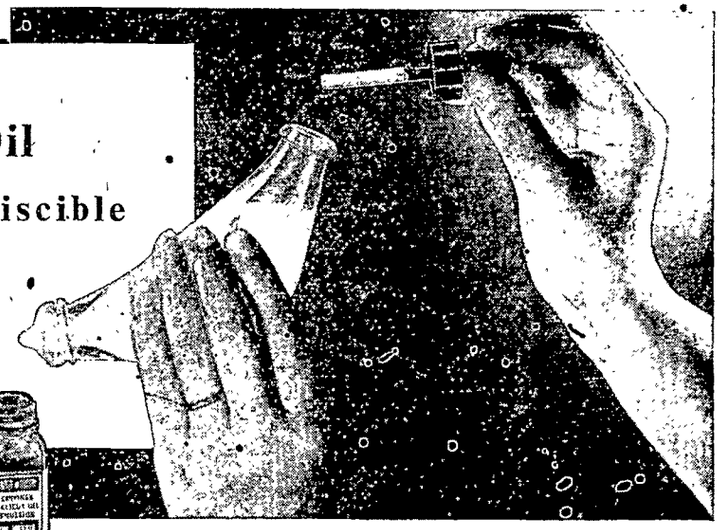

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Medico-Legal

LIBEL ACTION BY MR. MATTHIAS ALEXANDER

[FROM OUR MEDICO-LEGAL CORRESPONDENT]

In the Rand Division of the Supreme Court of the Union of South Africa, on Feb. 16, Mr. Justice Clayden began the hearing of an action for libel brought by Mr. Frederick Matthias Alexander, of London, against three medical men: Dr. Ernst Jokl, Physical Education Research Officer to the Union Education Department, Dr. E. H. Cluver, Director of the South African Institute for Medical Research at Johannesburg, and Dr. B. Maule Clark, of Houghton, Johannesburg, as editors of *Manpower*, a biannual scientific journal published in Pretoria by the Government Printer and circulating throughout the Union.[1]

Mr. Alexander alleges that the defendants published an editorial article and an introductory note, entitled "Facts and Phantasies," to a further article implying that he made false claims as to the scientific value of his technique, and that from the scientific point of view the technique was contemptible and nonsensical; that he was untruthful and dishonest, a charlatan and a quack; that he had given the public dangerous and criminally irresponsible advice; that for personal gain and to attract people he had held out false promises of the benefits to be derived from following his teachings; and that he was mentally deranged and unbalanced. He further alleges that he has for fifty years been carrying on for reward the profession of teaching and expounding his technique, and that from the offending publication he has suffered damages in the sum of £5,000. The defendants admit publication, deny defamation, and alternatively plead truth and fair comment in the public interest.

Mr. O. Pirow, K.C., appearing for the defendants, explained that the case for the defence was that the matter complained of represented an evaluation of Mr. Alexander's four books *Man's Supreme Inheritance*, *Constructive Conscious Control*, *Use of the Self*, and *The Universal Constant in Living*. These claimed to set out the plaintiff's philosophy and technique, and the defence alleged that the contents represented, in the main, testimonials and sales talk intended to advertise the teachings of his technique, but that they also contained, centring round his alleged discoveries of conscious and/or primary control, advice, claims, and statements which represented dangerous quackery.[2]

Case for the Plaintiff

Mr. H. J. Hansen, K.C., opening the case for Mr. Alexander, said that he had evolved a technique and ideas which had received favourable comment from such eminent persons as Sir Charles Sherrington, Mr. John Dewey, the American philosopher, Mr. Aldous Huxley, and Sir Stafford Cripps. Mr. Alexander had never pretended to be an expert physiologist, but was an educationist who had made certain observations in investigating the use and misuse of the body. In his four books he had developed the general theme that man in the course of thousands of years had developed from an unconscious creature, acting on instinct, toward a completely conscious being, that this process had been tremendously accelerated, especially in the last hundred years, and that to-day man had to rely more than ever before on a conscious reaction to his environment and the conscious use of his body. On the one hand he was to realize that there should be no conscious interference with such reflex or subconscious activities as digestion, and on the other he had consciously to understand what was the correct use and the misuse of the body, so that incorrect habits could be corrected. For instance, a man sitting for long periods at a desk would tend to hunch his shoulders and would in time come to regard that as a normal posture. To correct the error he would have to learn, on sitting down, consciously to resist the tendency to hunch the shoulders, and then consciously to obey instructions to assume a correct posture.

Dr. Jokl, one of the defendants, had met a teacher of the Alexander technique, had made some comments on the method as taught to children at the teacher's school, and had later referred to it in an address to the South African Association for the Advancement of Science. Finally came the article in *Manpower*. The general tone of the references to Mr. Alexander was scathing and derogatory, and they implied that he was a charlatan and a quack. Mr. Alexander was 80 years old; after all arrangements had been made for him to come to Johannesburg he had had a stroke and was now unfit to travel.

Mr. Pirow then submitted that the action had not been brought within the statutory period of twelve months, but the judge declined to decide that issue first.

Personal Testimony

Dr. Wilfred Barlow, giving evidence for Mr. Alexander, said that he had qualified in medicine in 1937 and had spent an extra year at Oxford on B.A. physiology. He had hurt his shoulder at sport and suffered from repeated dislocation; through following Mr. Alexander's methods he was at last able to prevent his shoulder blade from slipping out of its socket. He had become a student and later a qualified teacher of the Alexander method. What he had seen in the clinical wards of St. Thomas's Hospital had made him realize that Mr. Alexander had made an important discovery which could help in the treatment of bad muscular co-ordination or misuse. He quoted passages from a textbook issued by the Council of Physical Therapy of the American Medical Association which he said supported Mr. Alexander's theories on the effect of faulty body mechanics on health, and from articles in the *British Medical Journal*, the *Lancet*, the *Medical Press*, and the *Journal of the American Medical Association*, all of which he said were in appreciation of Mr. Alexander's work.

Cross-examined by Mr. Pirow, he said he believed, as an ideal, Mr. Alexander's argument that physical guidance by conscious control should in time make man immune from disease. Examples of how conscious control could benefit a man's health could be multiplied indefinitely. He would advise patients suffering from acute and operable cancer or appendicitis to be operated upon, and in all cases he would recommend a course of after-care instruction in proper body mechanics to improve the patient's use of his body and promote health. Mr. Alexander did not claim to cure disease but to promote its elimination.

Dr. Dorothy Drew, a London practitioner, said that she had been injured in a car accident as a student and that during the war, owing to heavy work and responsibilities, her health had deteriorated and broken down. She had become a pupil of Mr. Alexander in London, and as a result of his lessons her sinusitis and appendix trouble had cleared up, her injured arm did not bother her any more, and she felt fully healthy.

Mr. N. E. Coaker, K.C., of Johannesburg, the next witness, said that his son, when aged four, had fallen and sustained concussion and a minor skull fracture. One leg had dragged and an arm had been affected, and he had suffered from serious mental disturbances. After a course of the Alexander technique with a Johannesburg teacher the affected leg had thickened to the same size as the other, there had been no trace of drag or uncertainty, the hand and arm had returned to normal, and the temperament was strikingly stabilized. To-day the boy was outstanding both academically and in athletics. An elder son who had suffered from continuous attacks of bronchitis had gained perfect health through a re-educative course in body mechanics, and he had himself benefited from a similar course. He had been present at a demonstration of the Alexander technique by a local teacher at which Dr. Jokl had been examined. His own knowledge of the technique had shown him that the doctor's head was pulled back; he had a great roll of flesh at the back of his neck; one shoulder was slightly dropped, and he had a "Charlie Chaplin" walk. These conditions had been demonstrated to Dr. Jokl, and after manipulation he had acknowledged the improvement. An article by Dr. Jokl had been published in the *Transvaal Educational News* side by side with another setting out the Alexander view. Later he had seen an article

[1] *Johannesburg Star*, Feb. 16.
[2] *Cape Argus*, Feb. 17, 18, 19, 20, 23, 24, 25 and 26.

submitted by Dr. Jokl for publication in the *South African Scientific Journal* and had complained to the publications committee that it was "defamatory, untruthful, ill-informed, common, and vulgar."

In answer to cross-examination, he said that after a course in the Alexander technique his conscious use of his body and his psycho-physical condition were improved, and this had had a remedial effect on various complaints. He rejected the suggestion that the improvement might be due to faith-healing. Certain methods involving natural laws had been practised and had produced expected results. He could not agree with Mr. Alexander that prevention would be unfailing in time, but he did not think the claim outrageous.

Miss Irene Tasker, a teacher of the Alexander technique, said she was an honours graduate of Girton and had studied under Dr. Montessori. After seeing in 1916 the effects of the Alexander technique on one of her pupils, she had inquired into the method and had become an assistant to Mr. Alexander in London; she had started teaching his methods in South Africa in 1935. She would take no pupil who refused to see a doctor. She had first met Dr. Jokl in June, 1941, when he had expressed interest and asked her to lecture. About a year later he had telephoned to her saying he was a scientific inquirer and wanted to see what the technique was about, and that he had become particularly interested on hearing that Sir Stafford Cripps supported Mr. Alexander. At a later demonstration she had shown that Dr. Jokl "pulled himself down" to a seat. After one manipulation his condition had been improved, but when he had sat down again he had reverted to the old habit. He had written her a letter in which he had thanked her for the "most interesting and able demonstration" she had given, and had added, "I certainly feel that your system means a highly important contribution in the field of education in its widest sense, and am looking forward to learning more about it from you." She had later received a request from the doctor to take a course. She had asked him why, and he had replied that it was just a rhetorical question to test her reaction. She had suggested that he should see Mr. Alexander himself.

Sir Stafford Cripps's Experience

Mr. Hansen handed in evidence taken on commission in London from Dr. Whittaker, Dr. Peter McDonald, Lord Lytton, Sir Stafford Cripps, and two other doctors. Sir Stafford Cripps's evidence said that he had protested strongly to the High Commissioner for South Africa against what he considered a gross libel of himself in the article in *Manpower* published by the Union Government. Mr. Alexander's lessons had made him feel much freer in his movements and much more rested. At the end of a two-hours speech in the House made immediately after a lesson he had not felt in the least bit tired.

In cross-examination Sir Stafford said that he had adopted the Alexander technique and vegetarianism for colitis and various internal complaints. "The extraordinary thing is that when you experience it, you become perfectly convinced he is right." In re-examination he quoted from the offending article: "The best way to explain the amazing quackery is to look on it as a typical instance of group hystero-neurosis." His own and other names were mentioned, and there was a reference to "highly intelligent persons." The general tenor was obviously that anyone associated with this Alexander teaching was either a fool or a knave.

The Earl of Lytton, formerly Governor of Bengal and for a short time Viceroy, had said on commission that a young Indian civil servant whose health had broken down had returned from England "a new man, happy and cheerful" after treatment by Mr. Alexander. He himself had consulted Mr. Alexander on account of being much run down in health and having had a chronic headache for several years. Mr. Alexander had pulled him about and generally used his hands to put him in the position in which he wanted him; then he had said, "There, that is your place in nature now. If you always keep like that, you will always feel well." Lord Lytton had felt extremely uncomfortable and misshapen in that position, but had had very much better health. Mr. Alexander had emphasized that he was not a doctor and it was not his business to diagnose or remove complaints but to teach all his pupils to make the best use of themselves. Lord Lytton had encouraged him to start a school and training centre, of which he was still a trustee. This concluded the case for Mr. Alexander.

Views from Physiologists

Counsel for the defence read evidence taken on commission from Prof. Samson Wright, John Astor professor of physiology in the University of London, who said he had made a careful and unbiased study of Alexander's books. These made many assertions which if accepted would revolutionize the whole approach to medicine, but no records were given of any case-histories, nor of examinations of large numbers of patients, nor of findings based on these which would permit an impartial person to examine and judge for himself the value of the assertions. Unless Mr. Alexander could tell in detail the methods he used, readers were not justified in attaching any credence to his affirmations about "deceptive sensory appreciation." Statements on the function of certain organs, such as the lungs, were "just nonsense," as was a description of the chest and abdomen as resembling a stiff oblong rubber bag.

A detailed analysis of the books suggested that, possibly through lack of formal training in physiology, Mr. Alexander had not that standard of physiological knowledge which would enable one to take his affirmations on trust, and one must treat with the utmost scepticism any claims he made dealing with effects on respiration and circulation. The contention that conscious control could regulate every function of the body was quite out of keeping with what could be easily demonstrated. In this as in other claims the onus was on Alexander, seeing that his affirmations were entirely contrary to all the established evidence about the degree of control of the internal organs by the mind or will, to establish his case. Until he did so the gravest scepticism was called for in accepting his conclusions.

In the special field of the physiology of physical education and related subjects Dr. Jokl was probably one of the leading authorities in the world, and was eminently equipped by his knowledge and investigations to comment very competently on any physiological statements made by Mr. Alexander. What Sir Charles Sherrington had actually said about Mr. Alexander's work was: "Mr. Alexander has done a service to the subject by insistently treating each act as involving the whole integrated individual, the whole psycho-physical man." If that were all Mr. Alexander had said in his writings, it was, in Prof. Samson Wright's view, a very minor service; but as this thesis was combined with an immense amount of material which was entirely untrue and misleading and probably dangerous, he had, taking his writings as a whole, rendered a great disservice to the community.

Sir Henry Dale's evidence, also given on commission, said that he had found in Mr. Alexander's books "no intelligible account of any scientific discovery." They struck him as a mass of pretentious verbiage, and he would call the teaching quackery. A given paragraph was very much in keeping with the general style and tendency to vague assertion of advertisements of proprietary nostrums.

Evidence by the Defendants

Dr. E. H. Cluver, one of the three defendants, said in evidence that he had studied at Oxford under Sir Charles Sherrington, and in 1919 had been appointed professor of physiology at the Rand University on Sir Charles's recommendation. He had written two standard textbooks on practical physiology and one on public health in South Africa, and had been Secretary for Public Health in 1938. In November, 1943, a Member of Parliament had drawn his attention to an alleged cure by the Alexander method which, in accordance with his practice, he considered it his duty to investigate. He had studied the book *Constructive Conscious Control* and had glanced through others. The contents had seemed to him to be nonsense which could be left alone, something that only wealthy neurotics could fall for. The statements about wrong sensory perceptions showed no knowledge of the physiological facts and a wrong conception of the physiology of the human being. Any

student knew that man could not consciously control all muscular activity by the Alexander technique. His reaction had been that this matter fell into the same category as the alleged cures for cancer that he received. Later, however, he had heard that it was seriously proposed that this technique should be introduced into the schools of South Africa. He had regarded this as a most shocking proposal, a very serious threat to the health of school-children, a pernicious and dangerous proposal, and he had decided that something must be done to oppose it. He had heard that Dr. Jokl had already encountered the protagonists of the scheme, and told him that the matter was so serious that they should expose it in *Manpower*. Dr. Jokl had been most reluctant, but on being urged had eventually prepared the article as an acknowledged authority on the subject.

Cross-examined by Mr. Hansen, Dr. Cluver wrote down the name of the woman Member of Parliament who had claimed that "a pain in the back" had been cured by the Alexander method, and agreed that she was a person of considerable intelligence. He had not tried, beyond reading the books, to discover what the Alexander technique was. He understood that the general theme was that man could be given conscious control of his involuntary muscular system—"which is nonsense." If he were told that this was not Mr. Alexander's meaning, that might cause him to revise his ideas, but the statements in the books showed gross physiological misconceptions. He felt that this pernicious technique had to be exposed in the public interest. In using such epithets as "pernicious," "dangerous," and so on, he was quite dispassionate, his only object being to protect school-children. He knew of no harm caused by the technique, but there was potential harm.

The epithets "Australian actor," "Australian gym master," and "Australian immortal" were not intended as abuse but to show the background of the man who had made these amazing claims, as was right "in exposing quackery of this kind." He thought that most of the people, but not all, who supported Mr. Alexander or claimed to benefit from his technique were neurotics. He agreed that he had himself written in 1943 a non-technical book in which he had made the point that man's instincts were not adequate to cope with the change in man's physical and psychological state and environment and that education was essential, that much sickness could be prevented by proper methods, and that mental or psychological maladjustments often caused conditions which led to disease; and he had expressed the hope that in time most disease might be prevented. He asserted, however, that this differed very much from Mr. Alxander's concepts, which were based on quite different and physiologically quite erroneous foundations. In re-examination, he explained that his theme had been that if man's physical and psychological environment could be created with all the correct factors, medical treatment would become largely unnecessary and men should reach a much greater age than to-day. This had not the remotest connexion with Mr. Alexander's ideas.

Dr. E. Jokl said in evidence that he had been born in Breslau in 1907, had come to South Africa in 1933, and had been labour and manpower adviser to the Industrial Development Corporation. Since 1941 he had been a member of the National Advisory Council for Physical Education to the Union Government. He had been engaged in physical education research for over twenty years. When he had asked Miss Tasker to show him her methods he had been head of the Department of Physical Education for the Rand Technical College and had approached anyone who he thought might contribute to its studies. He had not been impressed with the demonstration and had never suggested that he was impressed. Later Miss Tasker had indicated that she could not give him lessons. As a scientific inquirer he had considered this curious and so had begun to read Mr. Alexander's books. He had felt it necessary to reply to an address on the Alexander technique given by a school inspector and later published in the Press. The trend of the articles for the Alexander method had been that the experts should now either accept or reject it. The challenge had been thrown out and he had accepted it. After criticisms of his *Manpower* article had appeared he had gone to England, where he had found that all the "top-notchers" in medicine were interested, and he had been inundated with offers of evidence in support of his statements about the technique. Sir Charles Sherrington had personally introduced him to Sir Henry Dale. Asked about Sir Stafford Cripps, he replied that colitis was "one of the notorious diseases which react in many people to suggestion treatment, faith cures, hocus-pocus."

Counsel put to Dr. Jokl a letter written by Sir Charles to Mr. Alexander in which the sentences occurred: ". . . I appreciate the value of your teaching and observations. . . . I know some of the difficulties which attach to putting your ideas across to those less versed in the study than yourself. Your disciples, however, can more and more disseminate them and multiply your call." After hearing of the publication of this private letter, Sir Charles had been disgusted and had told him he considered Mr. Alexander "a dangerous quack." The letter was one of conventional kindness, as had been his own letter to Miss Tasker. He had genuinely desired to have lessons from her to learn more about the method. He agreed, however, that letters written by him in 1943 included a bitter attack on Miss Tasker and a statement that he wished "to expose the Alexander technique and attack the racket." Most of the Alexander supporters were neurotics. They were all very clever people and there was nothing wrong with their intellect, but their emotional make-up was maladjusted. He quoted many passages from Mr. Alexander's books to support his contention that Mr. Alexander's "unqualified claims" included conscious control of the viscera. Re-examined, he said he had no quarrel with Mr. Alexander's claim to improve posture but with his claim that a particular method of attaining posture would ensure "unfailing health—curative, preventive, and promotive."

This completed the evidence for the defence, and counsel then addressed the Court.

(To be concluded)

Medical Notes in Parliament

National Assistance Bill

When the Report stage of the National Assistance Bill was taken in the House of Commons on March 5 Mr. JOHN EDWARDS moved to amend Clause 5 (Determination of Need for Assistance) by leaving out the words "pulmonary tuberculosis" and inserting "tuberculosis of the respiratory system." He said it was proposed to alter the wording to ensure that the Clause covered all infective forms of the disease.

Mr. SOMERVILLE HASTINGS asked what would happen in the case of a man who was discovered to be suffering from tuberculosis of the lungs after he had become so ill that he had had to leave his work. In that case he would not suffer loss of income by entering a hospital or sanatorium.

Mr. JAMES GRIFFITHS said the Ministry of National Insurance would prepare regulations to meet the kind of case referred to by Mr. Hastings.

The amendment was accepted, and on the motion that Clause 5 stand part of the Bill Mr. GRIFFITHS said that under this Clause the Board would be under an obligation to make special regulations in regard to blind persons and those suffering from tuberculosis of the respiratory system. The Clause as amended was ordered to stand part of the Bill. Amendments were made in further Clauses and the Bill was reported to the House.

Mr. STEELE moved that the Bill be read a third time. He took the opportunity to give an assurance that the National Assistance Board would include someone from Scotland and someone from Wales.

Mr. SOMERVILLE HASTINGS said that under the Bill one class of people would suffer. They were the district medical officers who administered medical assistance under the Poor Law. These officers were not in the true sense part-time officers. Although they were not employed whole-time they gave a twenty-four-hour service. Moreover, they were called "Senior Poor Law Officers" and could not be discharged by a local authority except with the consent of the Ministry. As they were permanent officers he asked Mr. Griffiths to be sure that justice was done to them in the grant of compensation.

Mr. JOHN EDWARDS, replying for the Government, did not take up the point raised by Mr. Hastings. The Bill was read a third time without a division.

Educational Psychology

On March 4 Mr. C. W. DUMPLETON drew attention to the Ministry of Education's Circular No. 146, which dealt with educationally subnormal children and with the selection and approval of medical officers in connexion with the certification of children and the determination of educability. The circular provided, under the heading of "Intelligence-testing for statutory ascertainments and reporting," that the authorities were required to consider the advice of their approved medical officers. In accordance with a previous clause of the circular an approved medical officer was one who had taken a course under the London University Extension and Tutorial Classes Council in conjunction with the National Association of Mental Health. This course was one of only three weeks. It was laid down that the form incorporating the advice of the medical officer must be completed entirely by him and that no part of the examination must be made or recorded by any other officer of the authority. This seemed to Mr. Dumpleton to brush aside the services of the educational psychologist and to deny to medical officers the right which medical men in other situations always had of calling in the aid of the specialist. Educational psychologists had to undergo years of training and were trained in educational work as well as in psychology. He suggested that a legal certificate could be signed by the medical officer and that the educational psychologist could still make an examination and fill up a separate form.

Mr. HARDMAN, replying for the Ministry of Education, said that the Ministry did not desire to belittle the work or status of educational psychologists nor to ignore their help in dealing with the educationally subnormal child. The paragraph in Circular 149 which said that the form must be completed in its entirety by the doctor made it difficult to use to the full the educational psychologist in the ascertainment of subnormal pupils. Because of that the Ministry would agree to amend this rule in such a way as to make it clear that the educational psychologist could play his full part. This would entail some revision of the statutory medical report form. Mr. Tomlinson was prepared to consult the Advisory Committee on handicapped children about this revision. At the same time the House had to remember that the law required a medical report, and this meant a report from a qualified doctor. The Courts would only recognize such a report, and to prepare it the doctor must make a mental and physical examination of the child. He must study its behaviour systematically as well as summarizing its general reaction. The intelligence test could be carried out by an educational psychologist who would accompany his record with comments in order to assist the reporting doctors. He agreed that for the majority of retarded children the educational problem was the primarily important one and that educational psychologists in co-operation with teachers were better equipped than doctors to diagnose the trouble and prescribe the treatment. At the same time the Ministry had to remember the right of the parents to appeal to the Minister, and it would be improper to take formal action without making a report which could be laid before the Minister. A way could be found by administrative action of utilizing the abilities of the educational psychologist.

Medical Manpower

When the Army Estimates were discussed on March 9 Dr. HADEN GUEST spoke of the atom bomb, bacteriological warfare, and new forms of chemical warfare. He hoped the House would discuss these subjects in a civil defence debate or on some special occasion. The atom bomb was expensive to produce, but bacteriological warfare was cheap. The resources of a good county public health laboratory were sufficient for manufacturing the deadliest germ weapons. The association between civil and military organizations would consequently have to be much closer. The problem as it applied to medical officers in the Services was an example of the difficulties to be faced. At present there was great difficulty in supplying the full quota of medical specialists to the Army and a lesser difficulty in the other Services. The difficulty would be greater in 1949 because from the beginning of that year the period of service would be one year only and it would be, for practical purposes, impossible to make the services of these officers available in distant theatres. As a rule the medical officer of an age which made him subject to calling up had not had time in which to take the higher specialist qualifications.

The National Service Act allowed the service of specialists to be deferred to a later age, but in effect the specialist who was called up would be a junior specialist. They could not expect the man under thirty to be capable of acting as consultant medical officer. Yet it was upon highly placed consultant officers that the efficiency of the medical service would depend. The difficulty was increased by the demands made on medical manpower in other fields. When the National Health Service Act came into operation it would demand an immediate increase in the number of specialists in many areas of this country and shortly afterwards would also demand an increase in the number of general practitioners. Demands were also rightly made on medical manpower for the Colonial Service. It had been necessary to make a special arrangement in West Africa and in another colony by which medical men recruited for what would normally have been military duty were allocated to service in the Colonies and that service was accepted as discharge of their military obligation. The expansion of civil defence which had been announced would be another large drain on medical manpower. Dr. Guest trusted that co-ordination of common services within the Forces could be carried out immediately. There was no sense in the medical services of the Navy, Army, and Air Force having different kinds of forms on which to report the same kind of disability. They should have the same forms and in their administration the same rules. The demands of the services for specialists and administrative officers could be met only by creating a large number of regular commissions or of short-term commissions for five years. Unification of the medical services of the three Services would bring an economy of medical personnel by between 5 and 10%. The three medical services co-operated in Malta and worked together in Hong Kong and other areas. During the war most of the hospitalization of casualties was carried out by the Army whether the casualties were from the Navy, the Army, the Air Force, or were civilians. He trusted that the whole of the medical services would be co-ordinated into one to include the National Health Service, general and special services, and also the Army, Navy, Air Force, and Colonial Services.

During the war the medical base for the treatment of casualties was largely in the hands of the Emergency Medical Service, a civilian organization whose good work had not yet been fully recognized. A unified medical service would make it possible for superannuation schemes to be interchangeable between one branch and another. It would give every medical man or woman a wider opportunity of choosing a career. This practical proposal had been discussed by many medical and military authorities. The same considerations applied in large measure to scientific and technical services of other kinds.

Replying to the debate Mr. STEWART said Dr. Haden Guest had a special knowledge of the medical services in the Army. Mr. Stewart admitted that there was a shortage of specialists and said it was difficult to see an immediate remedy. The Army was by no means the only sufferer. It was important to make the best use of the specialists which the Army possessed. An investigation in which Dr. Haden Guest had shared had concluded that the Army Council was acting rightly in that respect. As Dr. Guest suggested, further economies were possible by co-ordination between the medical services of the three defence Services. A recently appointed committee was working on that problem. Mr. Stewart hoped that it would help to provide a solution.

Improvised Health Centres

Sir ERNEST GRAHAM-LITTLE asked on March 9 whether Mr. Bevan knew that the East Sussex County Council proposed to improvise health centres out of premises orginally provided as maternity and child welfare clinics.

Mr. BEVAN said there was no question of improvisation. The County Council proposed to continue to use the premises for the maternity and child welfare service. He had no evidence that they were unsuitable for that purpose.

On March 10 Sir ERNEST GRAHAM-LITTLE asked Mr. Bevan if, in issuing his final invitation to individual doctors to join the new Health Service, he would make it clear, especially to general practitioners, that the provision of health centres was indefinitely postponed, and that with that postponement it would be impossible to supply the facilities for carrying out the numerous services detailed in Section 21, with the result that the young doctor commencing medical practice would have to find for himself the equipment necessary, by the appointed day.

Mr. BEVAN referred to the answer given on Feb. 10 to a previous question by Sir Ernest Graham-Little (*Journal*, Feb. 28, p. 421).

Hospitals Taken Over—Mr. BEVAN informed Mr. Linstead on March 11 that he had advised all hospitals which appeared to him liable to be taken over. He added that he was deciding, with the help of the Regional Boards, which hospitals it would be proper to disclaim.

Grants for Medical Students.—On March 11 Mr. TOMLINSON told Dr. Santo Jeger that at present 2,540 grants from the Ministry of Education for medical students were in force. Of these, 2,509 provided for the payment of full fees and a maintenance grant, 6 for a maintenance grant only, 3 for full fees only, and 22 for part fees only. Local Education Authorities also gave grants to medical students, but figures for these were not available.

Mental Hospital Officers.—Mr. BEVAN told Mr. Dumpleton on March 11 that he would not amend Regulation 29, in respect of mental health officers under the National Health Service Act, so as to give the same treatment to all mental health officers with regard to their previous service. Mr. Dumpleton alleged discrimination between staffs of the Mental Hospital Service and the Certified Institution Service. Mr. Bevan added that he was considering whether it would be possible to amend the basis as regards the officers of mental deficiency institutions to enable them to get a just measure of benefit in respect of their future service.

Extra Rations for Invalids.—Asked on March 11 why the Minister of Food had refused to grant additional rations to a boy whose own medical adviser had given a certificate that the boy had intermittently suffered from asthma for seven years, Dr. SUMMERSKILL said the Ministry's medical advisers never undertook to examine applicants for special rations, but always accepted the diagnosis of the patient's own medical adviser. Their unwelcome task was to advise on the relative needs of different groups of invalids bearing in mind the limited amounts of rationed food available. The need of uncomplicated cases of asthma for extra rations was not such as to justify a claim on this limited supply.

Universities and Colleges

UNIVERSITY OF OXFORD

In a Congregation held on Feb. 28 the degree of B.M. was conferred on Elizabeth A. Bevan John.

UNIVERSITY OF CAMBRIDGE

The following medical degrees were conferred on Feb. 28:

M.D.—G. E. Ffrench, C. P. Petch, W. H. H. Jebb, G. M. Barrett, J. W. Bromley, J. N. Horne, W. Warren.

M.B., B.CHIR.—*R. C. Roxburgh, *E. H. Griffiths, *J. P. D. Thomas, *F. G. Tomlins, A. H. Jones.

* By proxy.

UNIVERSITY OF DUBLIN

SCHOOL OF PHYSIC, TRINITY COLLEGE

The following medical degrees were conferred on March 10:

M.B., B.CH., B.A.O.—W. B. Alcott, Brenda M. Charles, J. F. Connolly, Sheila Davies, G. W. Keating, J. D. Keatley, J. W. McCaw, K. McIntyre, C. M. Marcus, D. J. J. Waugh.

UNIVERSITY OF LONDON

The examinations for the M.B., B.S. degrees in October, 1948, April, 1949, and October, 1951, will start one week later than the dates laid down in the Regulations, provided the necessary accommodation is available.

For examinations in and after 1949 the external and general internal first examinations for medical degrees will be held one week earlier—i.e., beginning the last Monday in June.

UNIVERSITY OF MANCHESTER

The Council of the University has accepted a gift of £1,000 made by Mrs. Lapage to establish in memory of her husband, the late Dr. C. Paget Lapage, a prize which will be offered annually for award on the paediatrics section of the final examination for the degrees of M.B., Ch.B. Dr. Lapage, who was a graduate of the University and a member of the University Court, was for many years on the staff, being since 1934 Reader in the Diseases of Children.

ROYAL COLLEGE OF PHYSICIANS OF LONDON

The Royal College of Physicians of London has arranged a course of postgraduate lectures in medicine to be given from May 3 to June 25, at 5 p.m. There will be approximately 26 lectures. The full programme is not yet complete but preliminary details can be obtained from the College (Pall Mall East, London, S.W.1). The inclusive fee for the course is £7 7s. and the total entry will be limited to 200. Fees are payable in advance and must be received by April 19.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

At an ordinary meeting of the Council of the College, held on March 11, with Sir Alfred Webb-Johnson, Bt., President, in the chair, Mr. C. Gill-Carey, Mr. T. P. McMurray, and Mr. S. A. S. Malkin were elected Fellows of the College. The appointment of Sir John Anderson, F.R.S., and Sir Henry Dale, F.R.S., as Trustees of the Hunterian Collection was reported. Dr. A. D. Marston was elected the first Dean of the Faculty of Anaesthetists in the College. A Hunterian Professorship was awarded to Dr. Shafik Shalaby, of Cairo.

The following hospitals were recognized in respect of the resident surgical posts required of candidates for the Final Fellowship examination: Royal Infirmary, Oldham (assistant resident surgical officer); St. Luke's Hospital, Guildford (senior house-surgeon); Altrincham General Hospital (resident surgical officer for a period of two years in the first instance); Royal Northern Infirmary, Inverness (recognition now to be made permanent).

Diplomas of Fellowship were granted to the following successful candidates:

G. R. C. Peatfield, A. D. Messent, C. McK. Craig, P. J. Blaxland, H. H. Renyard, N. S. Slater, D. H. G. Walker, N. W. Gill, G. M. Lunn, J. H. Tasker, W. A. Hamer, R. N. Jones, A. E. Wall, A. J. M. Rains, A. G. Ellerker, W. Waugh, S. S. Bassi, L. D. C. Austin, H. A. Oatley, N. A. A. Cust, A. N. H. Peach, E. K. Gardiner, L. C. McCarthy, F. W. Taylor, J. A. Aylwin, P. O. Dawson, D. W. Fleming, M. E. Hall, R. G. R. Langford, J. M. Sanderson, A. R. Wakefield, H. Bolton, D. B. Duffy, V. G. Walker, R. B. Welbourn, P. R. Wright, J. W. F. Macky, A. V. Pollock, A. L. El-Bedri, U. D. Nagarkatti.

A Diploma of Membership was granted to S. Basu.

A Diploma in Public Health was granted, jointly with the Royal College of Physicians of London, to A. W. Mearns.

SCOTTISH CONJOINT BOARD

The following candidates, having passed the final examinations, have been granted the diploma of L.R.C.P.Ed., L.R.C.S.Ed., L.R.F.P.&S.Glasg: G. G. Allan, S. I. Arendse, A. J. Barr, Mary H. Bruce, G. Cameron-Mowat, Margaret G. R. Davidson, Mary A. Hamilton, G. J. C. Herd, S. Hopfan, Nora A. Howie, P. Katz, C. Kopet, J. T. Lees, J. D. C. Lyons, J. McCulloch, I. McLeod-Baikie, Mary C. MacRae, Jeanne G. Marshall, Rosabelle J. B. Purves, Catherine J. A. Robertson, S. S. Ross, J. N. Shea, J. B. Thompson, J. E. H. Tullis, W. F. Watson, H. Weiss, B. Winocour.

The Services

Surgeon Lieutenant-Commanders G. E. M. Benson and G. L. Foss, R.N.V.R., have been awarded the R.N.V.R. Decoration.

Air Vice-Marshal P. C. Livingston, C.B., C.B.E., A.F.C., has been appointed Director-General of Royal Air Force Medical Services in succession to Air Marshal Sir Andrew Grant, K.B.E., C.B.

AUXILIARY ROYAL ARMY MEDICAL CORPS FUNDS

The annual general meeting of the members of the Auxiliary Royal Army Medical Corps Funds will be held at 11, Chandos Street, London, W., on Monday, April 5, at 5.30 p.m., when the report and accounts for 1947 will be presented and officers and auditors elected for 1948.

DEATHS IN THE SERVICES

Squadron-Leader MICHAEL JOHN CAHALANE died in hospital on Feb. 20. He was born in July, 1892, and was a student at Glasgow University. He graduated M.B., Ch.B. in 1919 and acted as house-surgeon at the Royal Maternity Hospital, Glasgow. He was then commissioned in the Royal Army Medical Corps, in which he served until August, 1920, when he transferred to the Medical Branch of the Royal Air Force. On relinquishing his temporary commission in 1934 he was appointed civilian medical officer at the London Recruiting Depot of the Royal Air Force. In this capacity he continued to serve until June, 1940, when he was again granted a commission as flight-lieutenant in the R.A.F.V.R. He was promoted to the rank of squadron-leader in January, 1943, and in recent years had been employed in this country on medical board duties.

The National Baby Welfare Council (29, Gordon Square, London, W.C.1) has issued a pamphlet entitled *Antenatal and Post-natal Exercises*. It is obtainable from the Council for 1d. and 1d. postage. Simple diagrams illustrate the exercises, and notes attached to each describe how and when they should be carried out.

No. 9

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended Feb. 28.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are for: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever ..	34	2	16	6	1	74	9	29	2	1
Deaths		—	1				2	—		
Diphtheria	173	13	38	11	8	186	15	46	16	6
Deaths	1	1	—	—	—	5	1	2		—
Dysentery	145	12	65	—	—	92	16	16	—	—
Deaths				—	—					—
Encephalitis lethargica, acute	—	—	1	—	—	2	—	—	—	—
Deaths		—					—			
Erysipelas			46	8	2			44	13	1
Deaths		—					1			
Infective enteritis or diarrhoea under 2 years				21					41	
Deaths	59	8	10	5	1	83	12	16	11	2
Measles*	7,312	932	732	136	35	13,337	656	255	30	194
Deaths†			2	—	—	25	—	2		3
Ophthalmia neonatorum	47	1	9	—	—	67	3	8	1	—
Deaths										
Paratyphoid fever ..	3	—	—	—	1 (B)	—	—	—	—	—
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal ..	732	37	8	12	3	981	54	22	15	8
Deaths (from influenza)‡	20	3	—	—	1	121	32	6	2	1
Pneumonia, primary ..			276	37				277	21	
Deaths	274	41		13	6		92			18
Polio-encephalitis, acute	1	—				2	—			
Deaths							—			
Poliomyelitis, acute ..	24	5	1	3	—	8	—	2	4	—
Deaths§	3	—					—			
Puerperal fever			10		1		1	11		—
Deaths										
Puerperal pyrexia‖ ..	95	5	10	1	—	109	12	8	1	4
Deaths		—					—			
Relapsing fever ..	—	—			—	—	—			—
Deaths										
Scarlet fever	1,710	81	357	26	46	1,167	84	228	30	38
Deaths†			—	—	—	2	—	—		—
Smallpox	—	—	—	—	—	5	—	—	—	—
Deaths				—	—					—
Typhoid fever	—	—	1	15	1	5	—	—	—	—
Deaths	—	—	—	1	—	—	—	—		—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—					—
Whooping-cough*	2,631	158	47	37	17	2,290	224	384	86	21
Deaths	8	—	—	—	—	15	—	4	10	—
Deaths (0–1 year) ..	430	58	59	27	11	627	83	99	70	15
Infant mortality rate (per 1,000 live births)										
Deaths (excluding still-births)	5,569	908	634	201	119	8,352	1412	917	403	182
Annual death rate (per 1,000 persons living)			12·8	12·6				19·1		
Live births	8,784	1493	1051	383	258	10,520	1706	1219	501	304
Annual rate per 1,000 persons living ..			21·2	24·0				24·6		
Stillbirths	215	20	34			300	42	43		
Rate per 1,000 total births (including stillborn)			31					34		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

EPIDEMIOLOGICAL NOTES

Discussion of Table

In *England and Wales* a rise occurred in the incidence of whooping-cough 79 and measles 103, while decreases were recorded for scarlet fever 118, acute pneumonia 56, and dysentery 46.

The largest rises in the notifications of measles were: London 166, Northamptonshire 137, and Middlesex 99; the largest falls were Lincolnshire 99 and Monmouthshire 92. The only large variation in the returns for whooping-cough was an increase of 100 in Yorkshire West Riding, an increase which was spread over the whole county.

Decreases in the incidence of scarlet fever were reported in Middlesex 38, London 37, Norfolk 30, and Glamorganshire 26; the only large rise was that of Yorkshire West Riding 50. No change of any size occurred in the local trends of diphtheria. A small fall in the incidence of acute pneumonia was recorded in every region except that of the south Midlands, where there was a slight increase.

The largest returns of dysentery were: Lancashire 41 (Blackpool C.B. 12), Yorkshire West Riding 38 (Bradford C.B. 10, Sheffield C.B. 19), and London 12. Only three counties had more than one notification of acute poliomyelitis—Middlesex 5 (Heston and Isleworth M.B. 3), London 5, and Sussex 3 (Cuckfield R.D. 2).

In *Scotland* a decreased incidence was recorded for measles 116 and for diphtheria 21, and an increased incidence was reported for acute primary pneumonia 52 and scarlet fever 30. The fall in the incidence of diphtheria was due to a decrease throughout the western area. Notifications of dysentery declined in the north-eastern area but rose in Edinburgh and Glasgow, where 23 and 17 cases, respectively, were notified during the week.

In *Eire* an increase in the notifications of measles 54 and decreases in scarlet fever 18 and whooping-cough 18 were reported. The rise in the incidence of measles was contributed by three areas—Donegal (Donegal R.D. 31), Dublin (Dublin North R.D. 13), and Galway (Galway R.D. 14). Of the 15 cases of typhoid 10 were notified in Louth, Dundalk U.D.

In *Northern Ireland* increases were reported in the notifications of measles 16, scarlet fever 10, and whooping-cough 6. These rises were due to the experience of Belfast C.B.

Travellers to Saudi Arabia

The Epidemiological Bureau at Alexandria states that the Kingdom of Hedjaz no longer requires anti-cholera inoculation certificates from travellers coming from Egypt.

Week Ending March 6

The notifications of infectious diseases for England and Wales during the week included: scarlet fever 2,069, whooping-cough 3,067, diphtheria 200, measles 8,788, acute pneumonia 794, cerebrospinal fever 42, acute poliomyelitis 22, dysentery 184, paratyphoid 2, and typhoid 5.

Medical News

Medical Society of London

The 168th Anniversary Dinner of the Society was held on March 11 at Claridge's Hotel, London, with the President, Mr. W. E. Tanner, F.R.C.S., in the Chair. The toast of the Society was proposed by the Marquis of Reading and responded to by the President, who observed that the Society had among its members all sections of the medical profession. Whatever might happen with the National Health Service Act, Mr. Tanner said, the voluntary principle would never disappear. The health of the guests was proposed by Mr. G. Armitage, F.R.C.S., and responded to in a characteristically witty speech by Sir Alfred Webb-Johnson. Sir Alfred observed that we were living in times when the freedom of the professions was in danger. The medical profession happened to be the first in the assault. He referred to the supremacy of the law over the executive as the palladium of our liberties and said that the freedom of the profession was involved in the freedom of the peoples.

Lecturing in Poland and Czechoslovakia

Dr. E. A. Carmichael, Director of the M.R.C. Neurological Research Unit, is lecturing in Poland until March 31 and then going for a week each to Czechoslovakia and Austria on behalf of the British Council. He is speaking on the dynamics of the cerebrospinal fluid in man, fatigue and impairment of muscle function in man, and epilepsy.

Ophthalmological Society Award

The Council of the Ophthalmological Society of the United Kingdom has awarded the Treacher Collins Prize to Hugh S. Stannus, M.D., Ph.D., F.R.C.P., for an essay on nutritional eye disease.

Irish Honours for European Scientists

Dr. Gunnar Dahlberg, professor of human genetics in the University of Uppsala, and director of the Swedish State Institute of Human Genetics and Race Biology, has been appointed honorary director of the Lomeshie Research Centre for Anthropology and Race Biology at Londonderry. Dr. Ernst Krueger, an authority on tropical diseases, has been elected an honorary consultant and adviser to Section C (Medicine) of the centre.

Yellow Fever Inoculation at Dundee

Inoculation against yellow fever may be obtained free of charge at the Bacteriological Department, University of St. Andrew's, 60, Small's Wynd, Dundee. Applications (preferably in writing) should be made to Prof. W. J. Tulloch at that address. Sessions are normally held on Mondays, at 2 p.m.

Vaccination

A memorandum on vaccination against smallpox issued by the Ministry of Health recently is being distributed to public vaccinators. It recommends the "multiple pressure" technique which has been in general use for some years in the United States. Copies may be obtained from H.M. Stationery Office, price 2d. or post-free 3d.

Wills

Dr. Charles Bolton, C.B.E., F.R.S., who was director of pathological studies and research at University College Hospital, left £50,880. Dr. Arthur Willoughby Tibbetts, of Pedmore, Worcs, left £25,087. Dr. Charles James Boucher, of Co. Down, left £3,544. Dr. John Evans, of Walton-on-Thames, Surrey, left £16,058.

COMING EVENTS

Honyman Gillespie Lectures

A series of Honyman Gillespie Lectures has been arranged, in association with the Edinburgh Postgraduate Courses, to be held in the West Medical Theatre, Edinburgh Royal Infirmary, on Thursdays at 4.30 p.m. from April 15 to May 27. Details will be published in the diary column of the *Journal* week by week. The lectures are open to all graduates and senior students.

Contraception

A practical demonstration of contraceptive methods will be given by Dr. Marie Stopes and Dr. Beddow Bayly on Thursday, April 1, at 2.30 p.m. Medical practitioners should apply for tickets well in advance to 108, Whitfield Street, London, W.1.

Edinburgh Lectures

In connexion with the postgraduate courses in medicine and surgery a series of open lectures on subjects of wide biological interest has been arranged by the Edinburgh Postgraduate Board for medicine to be given in the West Medical Lecture Theatre of the Royal Infirmary on Tuesdays, April 20, May 4 and 25, and June 15 and 29, at 5 p.m. All graduates and students are invited to attend. Details will be published in the diary column of the *Journal* for the appropriate weeks.

Health Congress at Harrogate

Lord Inman has accepted office as president of the Health Congress of the Royal Sanitary Institute, which is to be held at Harrogate from May 24 to 28. Eight sections have been arranged for the congress, as follows: preventive medicine; engineering and architecture; maternal and child health; veterinary hygiene; food and nutrition; housing and town planning; tropical hygiene; and hygiene in industry. In addition there will be conferences of medical officers of health, engineers and surveyors, sanitary inspectors, and health visitors. The following members of the medical profession are among the presidents of sections and conferences: Prof. G. S. Wilson, Prof. P. A. Buxton, F.R.S., Prof. Andrew Topping, Prof. R. E. Lane, and Dr. F. Hall. The food and nutrition section of the congress will be held jointly with the Food Group of the Society of Chemical Industry, whose chairman, Dr. E. B. Hughes, will act as president of the joint meeting. The programmes for the sections and conferences are nearing completion and details will be issued later by the institute (90, Buckingham Palace Road, London, S.W.1).

Industrial Medicine

The Institute for Occupational Health of the Long Island College of Medicine is presenting a postgraduate course in Industrial Medicine from April 5 to 16. The fee is 75 dollars. Inquiries should be addressed to Dr. Thomas D. Dublin, Department of Preventive Medicine and Community Health, 248, Baltic Street, Brooklyn 2, New York.

SOCIETIES AND LECTURES

Saturday

MEDICAL SOCIETY FOR THE STUDY OF VENEREAL DISEASES, 11, Chandos Street, London, W.—March 20, 2.30 p.m. General meeting. *"Venereal Affections of the Eye,"* by Mr. R. Lindsay-Rea.

Monday

MENTAL AFTER CARE ASSOCIATION.—At Burlington House, Piccadilly, London, W., March 22, 4 p.m. Annual meeting. Address by the Rt. Hon. Mr. Justice Birkett, P.C. The annual report will be presented by Dr. Henry Yellowlees, chairman of the association.

Tuesday

UNIVERSITY COLLEGE LONDON: DEPARTMENT OF PHYSIOLOGY, Gower Street, W.C.—March 23, 5 p.m. *"Some Aspects of General Physiology,"* by L. E. Bayliss, Ph.D.

Wednesday

EGYPTIAN EDUCATION BUREAU.—At 4, Chesterfield Gardens, Curzon Street, London, W., March 24, 6 p.m. *"Some Observations on the Surgery of Peripheral Vascular Disease,"* by Prof. A. M. Boyd.

ROYAL MICROSCOPICAL SOCIETY.—At B.M.A. House, Tavistock Square, London, W.C., March 24, 6.30 p.m. for 6 p.m. Section of Industrial Microscopy. *"The Microscopy of Food,"* by Mr. H. L. Shipp, B.Sc., A.R.I.C.

SOCIETY OF CHEMICAL INDUSTRY: FOOD GROUP.—At Burlington House, Piccadilly, London, W., March 24, 6 p.m. Joint meeting of Nutrition Panel and British Dietetic Association. *"Special Dietary Requirements in Sickness and Convalescence,"* by Dr. D. P. Cuthbertson and Miss R. M. Simmonds, S.R.N.

APPOINTMENTS

BOWMAN, A. K., M.B., Ch.B., Senior Administrative Medical Officer, Scottish Western Regional Hospital Board.

DEWAR, ROBERT S., M.D., D.P.H., Resident Physician Superintendent, County Infectious Diseases Hospital, Motherwell.

DODD, R. R., M.B., B.S., Medical Director, Mass Radiography Service, Northumberland County Council.

MANCHESTER ROYAL INFIRMARY.—*Honorary Assistant Physician (with special interest in Neurology):* G. G. E. Smyth, M.D., F.R.C.P. *Honorary Assistant Physicians:* H. T. Howat, M.R.C.P., and A. Morgan Jones, M.R.C.P.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Arthur.—On March 8, 1948, at Port Stanley, Falkland Islands, to Robina (*née* Hayward), wife of G. D. Arthur, M.R.C.S., L.R.C.P., Colonial Medical Service, a son.

Ferguson.—On Feb. 18, 1948, at Cloverley Nursing Home, to Dr. and Mrs Alan Ferguson (*née* Kathleen Smethurst), 13, North Park Drive, Blackpool, a son.

Oldham.—On Feb. 27, 1948, at Maternity Unit, Carmarthen Infirmary, to Valerie (*née* Williams), wife of William Oldham, M.B., Ch.B., a daughter.

Welch.—On March 5, 1948, at Elvet House, Dean Road, South Shields, to Dr. and Mrs. H. D. Welch, a son.

MARRIAGE

Parker—Davies.—On Feb. 28, 1948, at Speen, Newbury, Berks, William Shepherd Parker, M.B., Ch.B., D.P.H., to Margaret Beryl Davies, M.B., Ch.B., D.P.H.

DEATHS

Atkinson.—On March 2, 1948, at Queen Mary's Hospital, Roehampton, Albert Alexander Atkinson, M.B., Ch.B.Ed., of 19, Riverview Gardens, Barnes, S.W.

Dawson.—On March 4, 1948, at 27, Queen's Road, Bromley, Kent, Kathleen Alice Dawson, M.D.

Hallam.—On March 4, 1948, at Stogursey, Bridgwater, Philip Hallam, M.B., Ch.B.Ed., aged 68.

Hamilton.—On March 5 1948, at Beaconsfield, Bucks, Dyddgu Hamilton, L.S.A., aged 81.

Heiser.—On March 4, 1948, at 3, Dane Road, St. Leonards-on-Sea, Arthur Lewis Heiser, M.R.C.S., L.R.C.P., late of Colnbrook, Bucks.

Hird.—On March 2, 1948, at Trevose, Somerset Road, Edgbaston, Birmingham, Robert Beatson Dennis Hird, M.D., F.R.C.S.Ed., aged 67.

Lean.—On March 1, 1948, at Edinburgh, George Lean, M.B., Ch.B., aged 76.

McIlraith.—On March 3, 1948, at 44, Half Moon Lane, Herne Hill, S.E., Charles Hugh McIlraith, M.D.Glas.

Middlebrooke.—On March 2, 1948, at Dyreham, Brookway, Friars Cliff, Christchurch, Herbert Edwin Middlebrooke, L.M.S.S.A., D.P.H., dearly loved husband of Mary Ethelwyn Middlebrooke.

Phillips.—On March 1, 1948, at Wotton-under-Edge, Glos., George Charles John Phillips, M.D., aged 83.

Russell.—On March 7, 1948, at Grant Lodge, Caterham, Surrey, James Russell, M.D.Ed., aged 84.

Speck.—On March 6, 1948, Simon Speck, M.R.C.S., L.R.C.P., of 241, South Lambeth Road, London S.W., aged 44.

Symes.—On March 2, 1948, William Johnston Symes, M.B., B.S., of 4, Glenleigh Avenue, Bexhill-on-Sea, Sussex.

Thomson.—On March 1, 1948, at The Fives Court, Pinner, Middlesex, John Duncan Thomson, M.B., C.M.

Wade-Evans.—On March 2, 1948, at South London Hospital, Clapham Common, S.W., Elizabeth Palmyre Wade-Evans, M.B., Ch.B.Glas., of Cane Hill Hospital, Coulsdon, Surrey.

White.—On March 3, 1948, at a Guildford nursing home, Charles Francis Orr White, M.R.C.S., L.R.C.P., D.M.R.E., aged 69.

Williams.—On March 3, 1948, at Monmouth, William Humphrey Williams, M.R.C.S., L.R.C.P., aged 67.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Recurrent Attacks of Lobar Pneumonia

Q.—*Can anything be done to prevent children who have recovered from a first attack of lobar pneumonia developing fresh attacks at intervals of a few months?*

A.—It is possible in such cases that resolution has not been complete, or that the pneumonia was associated with the blocking of a bronchus and collapse of a portion of the lung. *X*-ray studies indicate that the latter explanation is the more probable, and "unresolved pneumonia" is being less used nowadays as a term in children's work. In either case, a change of air, breathing exercises, and letting the child run about and expand the lungs fully will all help, and, indeed, many children with collapse of the lung get perfectly well on this programme. If radiographs show that a collapse is persisting, then the question of further measures to induce re-expansion arises. These would include postural drainage, "slapping" the chest in a more intensive attack by physiotherapy, and possibly the use of iodides to promote pulmonary secretion. If these measures fail, then bronchoscopy should be undertaken, with or without previous bronchography.

Since the question says "recovered," it may be assumed as a second alternative that no apparent pathological change persists as proved by *x*-ray study. In this case measures to raise general and specific immunity should be considered. The state of the child's upper respiratory tract, especially the nasal sinuses, should be investigated and any disease process dealt with. Finally, the epidemiology of the recurrent attacks might be considered. Is there a "carrier" in the house or school?

Achondroplasia

Q.—*Can you give me particulars about achondroplasia, or, as some call it, chondrodystrophy? Is it related to dwarfism in certain animals, such as the conditions we find in the Ancon sheep and the dachshund? It is generally considered to be a Mendelian dominant: is that so? Does it affect the sexes equally? Can it be traced to an endocrine deficiency?*

A.—The essential pathological feature of achondroplasia is a disturbance of endochondral ossification, especially at the ends of the long bones. There is not a failure of development of the cartilage, as the name might imply, but an arrest of bone formation in cartilage. Bones formed in membrane are little if at all affected. Clinically, therefore, the most striking manifestations are present in the long bones and base of the skull. The spine is also affected, though to a less extent. Certain animals have characteristics which are thought to be related to achondroplasia, but there are many aspects of the problem that are not fully understood. Thus in the dachshund the limbs are achondroplasic but not the head; while in the pug-dog the reverse is the case. Matings of pure-bred Dexter cattle (a diminutive breed) result in a high proportion of non-viable monsters having skeletal changes closely resembling those of achondroplasia.

In the case of the Dexter cattle referred to above the incidence of the achondroplasic condition suggests that it is a Mendelian dominant character. The same is probably true of the human disorder. It is interesting to note that attempts made by Catherine de' Medici to raise a race of achondroplasic dwarfs by arranging their intermarriage were unsuccessful. This may have been largely due to the fact that spontaneous delivery of a living child by an achondroplasic woman is often impossible owing to the extreme narrowing of the pelvic inlet. Achondroplasia affects the two sexes equally. Its cause remains unknown. It has not been traced definitely to an endocrine deficiency, and no histological changes in the endocrine glands have been consistently demonstrated. Nevertheless an insufficiency of the anterior pituitary secretion during development is regarded by some as the most likely cause of the condition.

Diasone in Leprosy

Q.—*What are the dosage, mode of action, and toxic reactions of diasone in the treatment of leprosy?*

A.—The dosage of diasone in the treatment of leprosy is 0.33 g. daily for the first two weeks and then a gradual increase to 1 g. daily. It is given by mouth and may be continued for long periods. The mode of action is similar to that of sulphonamides in streptococcal infections. Diasone is a derivative of diamino-diphenyl sulphone, and is closely related to the sulphonamides, such as sulphanilamide. The toxic reactions which occur in 1–5% of those treated are increased erythema nodosum with fever, dermatitis, gastric intolerance, haematuria, anaemia, and iridocyclitis.

Stilboestrol and Dienoestrol

Q.—*Is there any evidence that stilboestrol and dienoestrol may be carcinogenic? What are the dangers of taking dienoestrol for menopausal rheumatism?*

A.—So far as the human being is concerned the evidence is only presumptive in nature. All oestrogens, natural or synthetic, are powerful epithelial stimulants acting especially on the tissues of the breast, uterus, Fallopian tubes, vagina, and vulva. They cause endometrial hyperplasia, and many pathologists believe that this condition can itself lead to carcinoma. Some of the natural oestrogens have a chemical formula similar in type to that of the carcinogenetic tars. In animals skin cancer has been produced by repeated local applications of oestrogens, and this hormone has been shown to favour the development of breast carcinoma in strains of mice which are not otherwise susceptible, and in male animals. However, oestrogens have never been shown to cause carcinoma in the human being, and there is probably little risk of this provided ordinary dosage is used and treatment is not continued for an indefinite period. Nevertheless there is good reason for caution when dealing with a patient who has a precancerous lesion in the genital tract (e.g., leucoplakia vulvae, chronic cervicitis) or who has a strong family history of malignant disease. For further details reference might be made to an article, "Oestrogens and Carcinoma of the Uterus," by A. A. Gemmell and T. N. A. Jeffcoate (*J. Obstet. Gynaec. Brit. Emp.*, 1939, **46**, 985).

The dangers of taking dienoestrol for menopausal rheumatism depend on how much is given and for how long. The dose should not exceed 0.3 mg. daily, and should be gradually reduced with a view to completing the course of treatment in two or three months. Even with this dose uterine bleeding may occur. With uncontrolled and prolonged dosage the chief risks are endometrial hyperplasia, uterine haemorrhage which may require curettage if only to exclude other causes, and severe menopausal symptoms following sudden cessation of treatment.

Penicillin and Procaine

Q.—*Can you tell me whether 3% "novutox," or any of the accessory preservative substances which this proprietary local analgesic contains, would be likely to inactivate penicillin if used as a solvent for intramuscular injection?*

A.—Novutox contains procaine and *iso*-octylhydrocupreine hydrochloride. It is known that penicillin is not inactivated when procaine is mixed with it, but there is no information on the effect of octylhydrocupreine. The only way to determine whether novutox inactivates penicillin is to prepare mixtures and to have them assayed. It is likely that if the mixture is not alkaline the penicillin will not be inactivated. There will shortly be put on the market a compound of procaine and penicillin in oil for intramuscular injection. A new crystalline penicillin has been prepared by combining procaine with penicillin G; the crystals have a solubility of approximately 7,000 units per ml. in oil, oil-and-water emulsion, or physiological saline; they contain not less than 90% penicillin G with a potency of 940 units per mg. (1,040 units per mg. theoretical). In the oil suspension at least 50% of the total weight of the

particles are 50 μ or more in length. When intramuscular injections of procaine penicillin in cotton-seed oil were given to patients it was found that they had blood levels of 0.062 to 0.496 units per ml. after injections of 1 to 4 ml. There was no local or systemic reaction. It is suggested that the slower absorption of this form of penicillin is due to the larger size of the particles. The importance of particle size for slow absorption has been demonstrated by Dowling *et al.* (1947) and Welch *et al.* (1947). The presence of wax has been the cause of a number of local reactions. The relevant papers are: Sullivan, N. P., *et al.*, *Science*, 1948, **107**, 169; Dowling, H. F., *et al.*, and Welch, H., *et al.*, *Meeting of Syphilis Study Section, Washington, D.C.*, Sept. 24, 1947.

Breast Development

Q.—*Is hormone therapy a safe method for increasing breast measurements? What is the optimum dose of oestrin and progesterone when used for this purpose?*

A.—Inadequate development of the breasts may be due to a general lack of endogenous oestrogen and progesterone, but more usually it is due to a local refractoriness to a normal stimulus. Therefore local inunction with oestrogens increases the concentration of stimulation at the site and may be successful. A useful ointment is one containing 2 mg. of oestradiol benzoate per g. put up in 18-g. tubes, which can be used over a 14-day period and continued for some months. Such local treatment is unlikely to prove disturbing. If progesterone is also given by injection it should be administered only in the ten days preceding menstruation.

Scrotal Eruption

Q.—*What is the most likely cause of a chronic scaly irritating eruption, confined to the scrotum, in a patient free of phthiriasis and other local causes of irritation? Is it likely to be related to athlete's foot, which coexists; and what line of treatment is suggested?*

A.—The lesion described might be due to fungus, but the details given are not sufficient to allow a serious opinion to be expressed. The only certain method of arriving at a diagnosis in this regard is by examining scrapings in liquor potassae under the microscope and attempting to culture the fungus. If the lesion is of fungus origin it should respond readily to Whitfield's ointment or dithranol ointment. The affection may be unrelated to ringworm of the foot and may be a chronic eczematous or seborrhoeic dermatitis, in which case tar therapy may be most helpful.

Scrotal Hernia

Q.—*Would the presence of a scrotal hernia which is more comfortable in the scrotum than when held in the abdomen by a truss cause sterility in the affected testicle by the continued, though slight, pressure and by the increased temperature of the bowel loop adjacent to that organ?*

A.—Theoretically, the testicle on the affected side would be subject to increased warmth and pressure, but its fertility would not be likely to be seriously impaired. In any case the testicle on the opposite side would not be affected, and an occasional semen analysis would be a more reliable guide than theoretical considerations.

Assessment of Disability

Q.—*What is the percentage disability allowed in the case of a labourer for the loss of (1) thumb, (2) index, (3) middle, (4) ring, and (5) small finger, right hand? It is assumed that the scar is on the dorsal aspect and that the amputation is full, not partial. Is there any way of finding out if the scar is painful, other than taking the patient's word for it?*

A.—The problem of compensation in cases of hand injury is somewhat complicated because of the number of factors that must be taken into consideration. Apart from the nature of the man's occupation, important factors are age, whether the major or the minor hand is affected, and whether or not there is pain or tenderness. An award for permanent disability is based on decreased earning power, and is intended to help in the support of the patient and his dependants until he has adapted himself to his new environment. Strictly, it is not compensation for loss of a part, though it may be assessed on the basis of loss of parts.

An average disability assessment in the case of a general labourer for loss of digits would be: thumb, 15%; index finger, 8%; middle finger, 6.5%; ring finger, 5%; little finger, 3.5%. There is no satisfactory objective test to determine whether or not a scar is painful.

Iritis and Ulcerative Colitis

Q.—*Is there any connexion between ulcerative colitis and iritis? A female patient has suffered from ulcerative colitis for the past 18 months; about 12 months ago she developed an acute iritis with all its symptoms—lasting three months. The usual treatment was prescribed: atropine sulphate drops 1% and heat applications. Now another attack of iritis has developed in the same eye, and after five weeks there is no appreciable change. What is the accepted modern treatment of iritis?*

A.—Little is known of the aetiology of either ulcerative colitis or iritis; an association of the two conditions is not established, but it cannot be excluded that in a particular patient both affections may have the same underlying cause. A full investigation of the patient is highly desirable. The treatment of iritis is still largely symptomatic and does not extend beyond the measures indicated in the question. Refinements in the application of atropine consist in the subconjunctival injection of mydricaine (a specially prepared solution of atropine sulphate 1/60 gr. (1.1 mg)., cocaine hydrochloride 1/10 gr. (6.5 mg.), and adrenaline 1/600 gr. (0.11 mg.) to 5 minims (0.3 ml.). Such injections can be given daily in doses of 5 to 7 minims (0.3–0.4 ml.), and sometimes help in breaking down recently formed adhesions in cases where atropine has failed. Heat may be applied by means of short-wave therapy given by an expert physiotherapist.

Pyloric Stenosis

Q.—*What is the best way to prescribe atropine methyl nitrate in a case of congenital pyloric stenosis? I have seen it recommended as 3 to 5 ml. of a freshly prepared 1 in 10,000 solution, or as 0.6% in alcohol (4 drops). Which preparation would keep better, and for how long?*

A.—The alcoholic solution keeps better and longer. Four drops of it are required to 1 ml. of the watery solution. But many children's physicians prefer to use the "linguella" for placing under the tongue and securing, apparently, maximum absorption. Each one contains the equivalent of 1 ml. of the 1 in 10,000 watery solution. If stored in a dry place and at room temperature (and in the manufacturer's "cellophane" wrapper) these keep more or less indefinitely.

Intra-arterial Penicillin

Q.—*Has the arterial injection of penicillin been tried? Since osmotic pressure tends always to attract water, and since if it is lowered the power of the blood to retain fluid is diminished, with resultant exudation, would the injection of a hypotonic solution of saline in which the penicillin is dissolved be better than an isotonic solution? Further, since tissue activity is the controlling factor in tissue-fluid formation, would it not be advantageous to advise free movement of the limb immediately after the injection? Finally, is the practice of arterial injection too painful to merit its use?*

A.—The intra-arterial injection of penicillin has been discussed twice in this *Journal* quite recently—in an annotation on Dec. 27, 1947 (p. 1040), and in a letter from G. M. Din (Feb. 7, 1948, p. 274). The use of a hypotonic solution would be unlikely to have the effect described unless the volume was large and stasis was produced for a long period; there would also be some risk of haemolysis. It is also doubtful whether active movement would make much difference to the effect. The usual method of ensuring diffusion from the vessels is to raise the pressure in them by occluding venous return for a short period. Intra-arterial injections are decidedly painful, but evidently not too painful in view of the experiences quoted.

Blood from the Umbilical Cord

Q.—*Will blood taken from the maternal side of the umbilical cord following delivery give a positive reaction to the Wassermann and gonococcal complement-fixation tests in the case of mothers suffering from syphilis and gonorrhoea?*

A.—Yes, blood taken from the maternal end of the umbilical cord may give positive reactions to the Wassermann and gonococcal complement-fixation tests, just as would blood taken from an arm or other vein of the mother. It must be remembered, however, that a negative W.R. does not exclude syphilis and that a positive G.C.F.T. is usually obtained only when the gonococcal infection is well established or has been the cause of complications.

Oedema of Foot and Ankle

Q.—*A patient who twisted her left foot eight months ago now has persistent pitting oedema of the left foot and ankle. This becomes very marked after standing or walking. The swelling is not tender; ankle movements are full and free, and radiographs show no bone injury or abnormality. There are no varicose veins; albumin is absent from the urine; and there is no other obvious pelvic abnormality. Can you suggest a line of investigation and treatment?*

A.—This patient should wear an elastic anklet or stocking to control the swelling and should also have regular massage, contrast baths, and exercises for the calf and the intrinsic muscles of the foot. It is possible that the injury has left behind a flat foot or some slight restriction in full joint movement. In the former case the use of an arch support or a wedged shoe is occasionally necessary, and in the latter manipulation under thiopentone. A progressive lymphoedema sometimes follows a sprained ankle, and elastic support is the proper treatment for this.

Menopausal Blood Donors

Q.—*A woman suffering from severe menopausal symptoms—in particular hot flushes, cold shivers, etc.—but with no vaginal bleeding, wishes to enrol as a blood donor. Assuming the severity of the syndrome is due to hormonal imbalance, could the altered oestrogen level of the blood adversely affect the recipient?*

A.—No; neither the low oestrogen level nor the compensatory high gonadotrophin level which is characteristic of a climacteric disturbance would have any noticeable effect on the recipient of the blood. Even if the amounts of hormones in circulation were grossly disturbed a single administration would not produce symptoms. The hormones would be quickly utilized, inactivated, or excreted. If it were otherwise then surely care would be necessary to distinguish male and female blood for transfusion purposes, and also to grade female blood according to the time in the menstrual cycle at which it was withdrawn.

Persistent Oxaluria

Q.—*An otherwise healthy young man has persistent oxaluria in spite of restriction of oxalate-containing foods. He has crises every few months, with right renal pain and oxalate crystals, red cells, and albumin in the urine. Radiographs are negative. What treatment do you suggest?*

A.—It may be difficult to control the attacks in patients with the "oxalic acid diathesis." Some psychiatrists have claimed that such attacks are a symptom of overweening ambition. Only part of the oxalate excreted in the urine is exogenous; this can be diminished by excluding from the diet the oxalate-containing foods: spinach, rhubarb, gooseberries, carrots, oranges, red-currants, and strawberries. The other aim of treatment is to increase the solubility of oxalates in the urine by increasing its acidity, lowering its calcium content, and raising the quantity of magnesium excreted. This is most likely to be effected by a high-protein diet with a relatively small quantity of carbohydrate and by the administration of acid sodium phosphate.

NOTES AND COMMENTS

The Doctors' Dilemma.—Mr. Ritchie Calder, science editor, complains of comments we made on his article entitled "The Doctors' Dilemma" appearing in the *News Chronicle* of Jan. 28. We withdraw any imputation of deliberate misrepresentation of the facts by Mr. Calder or any unintentional reflection on his professional integrity and accuracy as a science writer.

Phosphaturia.—Dr. G. H. DAVY (London, W.) writes: In answer to the question whether there is any relation between phosphaturia and acne rosacea, fibrositis, insomnia, or other nervous disorders ("Any Questions?" Feb. 28, p. 426), no mention is made of the fact that the condition is a very frequent symptom of any anxiety state. In fact it is a not uncommon presenting symptom—patients coming up with the fear that the condition is spermatorrhoea, to which they attribute their debility. I have seen it in peptic ulcer, where it may be due to the general anxiety of the diathesis. In other cases it is due to excessive doses of alkalis. It may be seen in many patients with conscious worry and anxiety.

It is sometimes the cause of sharp pain at the end of micturition which may last for a few moments after the completion of the act. As this complaint is only made by the male it is obviously due to noticing the whiteness of the flow of urine, which rouses fear that there is something wrong with this important part.

Rectal Prolapse.—Dr. T. S. GOODWIN (St. Leonards-on-Sea) writes: In the treatment of an obstinate case of rectal prolapse in an old lady of 88, which was 6 inches long and of frequent appearance during the last six years, I have had complete success from the method mentioned by Dr. Philip Jabkovitz (Dec. 27, 1947, p. 1066) of introducing a ring of silver wire subcutaneously round the anus.

Under general anaesthesia the wire was introduced on a large needle and adjusted to admit the passage of one finger comfortably. There has been complete cure since, with no relapse these two months.

Demodex Infestation.—Dr. R. P. LAWSON (Collingham Bridge, nr. Leeds) writes: Under "Any Questions?" (Feb. 21, p. 376) you publish a question about demodex infestation. My two dogs have recently been infested, one heavily and both for several weeks before the cause of their mange was diagnosed.

On the advice of a veterinary surgeon I bathed them every other day until they had had five baths, and followed each bath by lathering them while still wet with "tetmosol," 1 part to 3 parts of water. This was then allowed to dry on them. For some days afterwards they were full of scurf and lost even more hair, and required thorough brushing and combing. They did remarkably well and there has been no sign of recurrence since the treatment, which was in November. I used 18 oz. of the undiluted tetmosol in all on the two dogs, a terrier and a cocker.

Thorium X for Treatment of Baldness.—Dr. BERNARD GREEN (London, W.) writes: I have used thorium X for a variety and large number of dermatoses over the course of many years and have yet to see any ill effects from its application. Pigmentation sometimes follows, but usually disappears in a few months. Whilst agreeing that for ordinary types of masculine baldness it has no effect and for cases of alopecia totalis and universalis the results have been disappointing, for cases of alopecia areata the results have been gratifying. In controlled experiments (Corsi, *Lancet*, 1947, 2, 506), the conclusion arrived at was that if the hair was going to grow the application of thorium X hastens its recovery. I was in charge of the thorium X clinic at St. John's Hospital. There, cases of naevus flammeus were treated with 1,000 E.S.U. at weekly, fortnightly, and monthly intervals for many months. I followed up all these cases for over four years and in no case had I seen any ill effect.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone unless the contrary be stated.

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B.M.A. SCOTTISH OFFICE: 7, Drumsheugh Gardens, Edinburgh.

SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY MARCH 20 1948

HEARD AT HEADQUARTERS

In Lieu of Emoluments

The London County Council, as part of its policy of consolidating salary scales, has been looking into the question of allowances in lieu of emoluments which are made when it is impracticable to provide the emoluments to which a member of the staff is entitled. Certain deputy medical superintendents will henceforth receive a residential allowance of £175 instead of £150, which has been the figure hitherto; others, as well as senior "resident" surgeons, physicians, obstetricians, and anaesthetists, will receive £160 instead of £130, and all other medical staff entitled to the residence emolument £150 instead of £120. The working out of allowances in lieu of meals on duty provides some amusing examples of the nicely calculated less and more. If, for example, you are a medical officer with a salary of over £1,750 a year, your allowance for breakfast will be 1s. 1d., for lunch 1s. 3d., for dinner 1s. 5d., for tea 5d., and for supper 1s. 1d. Your less fortunate colleague who receives a salary of between about £900 and £1,300 will receive exactly the same amounts in lieu of four of the meals, but for supper he will receive only 10d. He is evidently expected to go a little hungrier to bed. The highest salaried post carries a laundry allowance nearly three times as high as the lowest, but all alike receive the same allowance for medical attendance—namely, £4 a year.

Correspondence

Enlarged Thyroid: A Correction

SIR,—I write to correct erroneous impressions which may have been derived from a report (Feb. 28, p. 36) of a lecture I gave to the East Yorkshire Branch of the B.M.A.

I stressed the difficulty of deciding when the thyroid gland could be considered enlarged. I quoted from an American work, and also some figures of my own relating to the incidence of thyroid enlargement in diabetes mellitus. In diabetes mellitus 8% of the patients attending a large clinic had palpable enlargement of the thyroid gland. I considered, however, these figures misleading because of (1) the preponderance of women in the clinic, (2) the fact of the presence of another endocrine disease—namely, diabetes mellitus. I did, however, stress the importance of this fundamental fact because the main difficulty in the diagnosis of thyrotoxicosis was not in the severe cases but in the milder cases. Anxiety states were often associated with symptoms almost identical with those of a mild degree of thyrotoxicosis. If patients with anxiety symptoms had a palpable gland it was very easy to say that the diagnosis was one of thyrotoxicosis and overlook the fundamental disability—namely, that of an anxiety state.

I stated that surgery still affords the patient the best chance of a complete cure. It was essential, however, that surgery should be performed by a surgeon who was regularly engaged in this special branch. The results from the Means Clinic in America, probably the most efficiently organized clinic for the study of thyroid diseases, showed that the rate of mortality for surgically treated cases was of the order of 2% and that the chances of complete cure were of the order of 70%. Taking the figures from a teaching hospital where general surgeons of considerable competence merely operate upon the odd case during the year, the mortality rate for thyroidectomy was of the order of 10%, and the percentage of patients cured only of the order of 50%. Therefore I stressed the need, when considering surgery, to refer the patient to a surgeon experienced in the technique of thyroidectomy and preferably to a centre where a surgeon and physician were working in close co-operation.

I doubted the value of thiouracil for the long-term treatment of all cases of thyrotoxicosis. There was, however, no doubt as to its value in preparing the serious case, and particularly the cardiac case, for operation. Thiouracil had reduced the operative risk in the severe cases to that of a mild to moderately severe case.—I am, etc.,

Department of Medicine,
University of Leeds.

R. E. TUNBRIDGE.

Medical Staff Representative Committee

SIR,—A Medical Staff Representative Committee has recently been formed at the Sutton Emergency Hospital with the following objects and aims:

(1) The Committee shall consist of members elected by the medical and dental staff so as to provide a balanced representation of the different grades among the medical and dental staff of the hospital.

(2) The Committee shall meet regularly once a month, with intermediate meetings as required. At appropriate intervals it shall report back to a meeting of members. The Committee shall consist of members elected annually. Casual vacancies shall be filled at meetings of the staff.

(3) The general aim of the Committee shall be one of constructive service to the hospital and the promotion of co-operation among the medical and dental staff, and between them and the other groups of staff.

(4) Subject to the exclusion of matters which call for negotiation between the organizations of employees and the employing bodies, there shall be free discussion among the members of the Committee and with the appropriate officers of the hospital of any matter affecting the work and efficiency of the medical and dental staff and their general well-being. All matters appertaining to the treatment and comfort of patients should be legitimate matters for consideration by the Committee.

(5) The Committee shall, as a result of such discussions, put forward recommendations to the Medical Superintendent and, where desirable, to the appropriate committee.

(6) The Committee shall endeavour to promote co-operation between this hospital and other hospitals in the Region.

(7) This Constitution may be added to, altered, or rescinded by a meeting of the members of the medical and dental staff after due notice has been given.

We understand that similar medical representative committees are already in existence in some hospitals within the S.W. Metropolitan Region. Others may well be proposed. The Committee would welcome any news of such activities, actual or intended, in the general aim of forming a S.W. Metropolitan Regional Hospitals Association similar to that already established in Liverpool and proposed in the N.E. Metropolitan Region. The Secretary, Dr. A. R. Samuel, at Sutton Emergency Hospital, Brighton Road, Sutton, Surrey, would be glad to hear from those interested.—We are, etc.,

D. SHAW,
Chairman.
D. E. BUNBURY,
Vice-Chairman.
A. R. SAMUEL,
Secretary.

Sutton, Surrey.

PANEL FOR POOR LAW MEDICAL RELIEF

In view of difficulties experienced in obtaining a district medical officer for the Chiswick medical relief district, the Middlesex County Council has decided, subject to the sanction of the Minister of Health, that arrangements should be made with general practitioners in the district to attend any persons in receipt of poor-law relief. All such practitioners will be circularized by the county council and invited to submit their names for inclusion on a panel of doctors willing to attend any persons referred to them by the Council's relieving officers.

The remuneration will be on the basis of 2s. a surgery consultation and 4s. a visit to the patient's own home, plus a temporary addition of 20% in respect of increased practice expenses. The fees are those which are used annually by the county council when calculating the salaries to be paid to district medical officers for the ensuing financial year. In this payment the cost of any necessary medicines or dressings is not included, the council paying for any such requirement prescribed by the doctor at N.H.I. rates to any dispensing chemist selected by the patient. The Minister of Health, so it was reported at the meeting of the council on Feb. 25, has not yet given his sanction to the suggestion, but has asked to have a draft of the proposed scheme for consideration.

RELEASE OF SERVICE MEDICAL OFFICERS

The Central Medical War Committee has received notification of the following arrangements for release of medical officers in Class A during the second quarter of 1948:

Royal Navy

April 1–June 30: No release.

Royal Army Medical Corps

General Duty Medical Officers.—April: Group 67; May: Group 68; June: Group 69.

Specialists in Medicine, Surgery, and Diseases of Women and Children.—April 1–30: Group 62; May 1–14: Group 63; May 15–31: Group 64; June 1–14: Group 65; June 15–30: Group 66.

All other Specialist Medical Officers.—April 1–14: Group 60; April 15–30: Group 61; May 1–14: Group 62; May 15–31: Group 63; June 1–14: Group 64; June 15–30: Group 65.

Royal Air Force

April: No release; May: Group 69; June: No release.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization:

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

Members of the staffs of many hospitals have in the last few weeks passed by large majorities resolutions against serving under the N.H.S. Act as it stands. The hospitals include the following: Margate General Hospital; Birmingham and Midland Hospitals for Women; Barnet Wellhouse Hospital; Royal Buckinghamshire Hospital; Herefordshire General Hospital; Gordon Hospital, S.W.1; South London Hospital for Women and Children; Blackburn and East Lancashire Royal Infirmary; Chelsea Hospital for Women; Croydon General Hospital; North Devon Infirmary; Huddersfield Royal Infirmary; Kent and Sussex Hospital; Middlesex Hospital; Royal Free Hospital; South London Hospital; Stirling Royal Infirmary; Sutton and Cheam General Hospital; Warwick Hospital; King Edward VII Hospital, Windsor; Worcester Royal Infirmary; Northampton General Hospital; Carshalton, Beddington, and Wallington District Hospital; Hospital of St. John and St. Elizabeth, N.W.8; Queen Mary's Hospital for the East End; National Temperance Hospital.

Association Notices

DIVISIONS IN NORTHERN IRELAND BRANCH

Notice is hereby given by the Council to all concerned:

(1) That a new West Down Division of the Northern Ireland Branch be formed with the following area:

That part of County Down lying to the west of, but including, Magheralin, Dromore, Castlewellan; that part of County Armagh south of, but including, Newtownhamilton and Bessbrook.

(2) That the Portadown and West Down Division be renamed the County Armagh Division, comprising the area of County Armagh north of, but excluding, Newtownhamilton and Bessbrook.

(3) That the area of the Belfast Division be redefined as follows:

The City of Belfast; that part of County Antrim south of, but excluding, Toomebridge, Ballymena, Carnlough; that part of County Down lying east of, but excluding, Magheralin, Dromore, Castlewellan.

CHARLES HILL,
Secretary.

Diary of Central Meetings

24 Wed. **Council**, 10 a.m.

Branch and Division Meetings to be Held

BIRMINGHAM: CENTRAL DIVISION.—At 154, Great Charles Street, Birmingham, Tuesday, March 23, 8.15 p.m. Clinical meeting conducted by Dr. D. Evan Bedford.

NORTH OF ENGLAND BRANCH.—At Royal Victoria Infirmary, Newcastle-upon-Tyne, Thursday, March 25, 7.15 p.m. Clinical demonstration by Mr. W. A. Hewitson: Carcinoma of the Breast; 8.45 p.m. Address by Prof. G. Grey Turner: Some Considerations in the Surgery of the Mouth and Jaws.

Meetings of Branches and Divisions

DUMFRIES AND GALLOWAY DIVISION

A meeting of the Division was held on March 7, with Dr. A. Kellie Brooke in the chair. The following instructions were given to the representatives appointed to attend the Representative Meeting at Edinburgh on March 10 and the Special Representative Meeting in London on March 17:

(1) That we, as a Division, put in the forefront of the instructions to our representatives that the retention of the ownership of our practices is a vital point. (2) That in no circumstances do we accept a basic salary. (3) That while we dissociate ourselves from the principle of a basic salary we recognize that payment on a capitation basis to rural practitioners would be inadequate. (4) That an increased mileage grant is the most equitable way of balancing up the payments to rural practitioners as against urban practitioners. (5) That we are strongly opposed to any diminution in the capitation fee as a practice increases in size. (6) That we should press for full remuneration in accordance with the recommendations of the Spens Committee Report. (7) That we are opposed to any form of direction by His Majesty's Government. (8) That we should press for the right of appeal to the courts of law. (9) That we should ask for the timeous publication of the B.M.A. Council's plan of action which it proposes to put into effect if further negotiations with the Minister of Health break down.

EDINBURGH AND SOUTH-EAST OF SCOTLAND BRANCH

Sir Ernest Rock Carling, speaking on March 5 on "Hazards of the Atomic Bomb, and Casualty Service in Civil Defence," prefaced an instructive summary of the effects of atomic bombing with the assurance that adequate shelters are a good defence against the atomic bomb as at present known. Lantern slides of bomb damage and casualties at Hiroshima gave grim visual emphasis to his description of the effects of blast, flash burn, fire, and radiation, and indicated the vast medical resources required to cope with such casualties. Radiation effects were estimated to have caused 7% of total casualties, and were limited to two miles, although persistent radioactivity would be much more widespread from a bomb detonated on soil or water. Protection from radiation effects was afforded by 18 inches of concrete. The effects might be early or delayed, and were agranulocytosis, haemorrhages, stomal ulceration and gangrene, epilation, anaemia, wasting, and death, or recovery in milder cases. Treatment was very limited, and included intensive blood transfusion with whole blood, penicillin to combat secondary infection, and high vitamin and calorie intake. Genetic effects had not yet been fully estimated, although there was a great increase of miscarriages and premature births in the affected areas.

Civil Defence would have to be based on adequate shelters and warning systems, dispersal, and the organization of aid to come from outside the target areas. Defence services should be staffed by a highly skilled nucleus, aided by a widely organized second line of semi-skilled personnel, assisted at need by the total population as unskilled workers. Throughout history a defence against new weapons was always forthcoming and there was no reason for panic.

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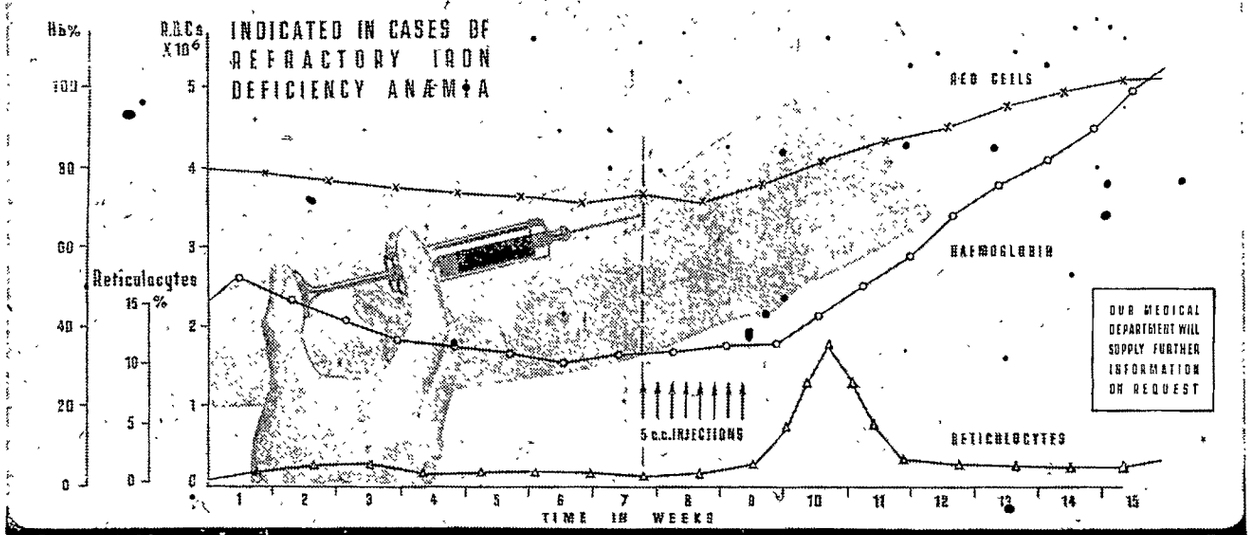

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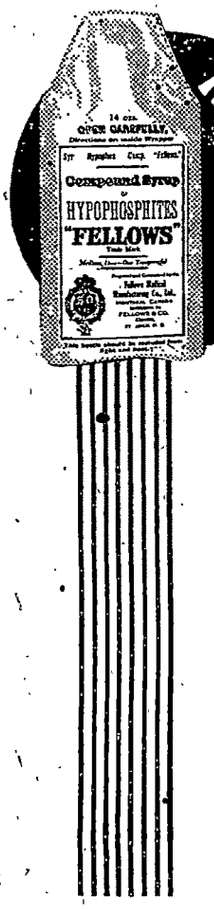

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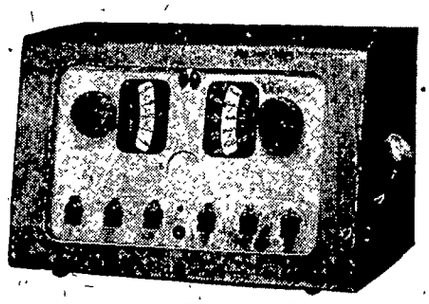

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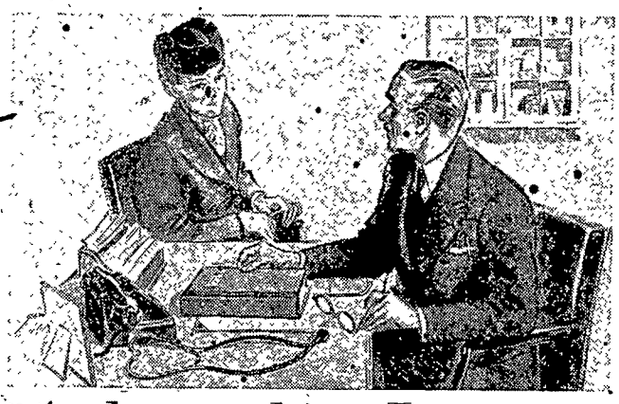

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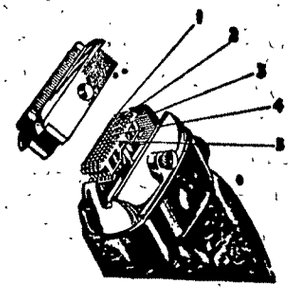

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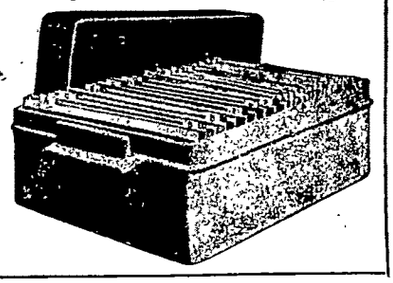

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W—Women practitioners.

EASTER, 1948

PLEASE NOTE

The Advertisement Manager will make every endeavour to ensure insertion of APPOINTMENTS provided they are received not later than the date mentioned below:

For issue	Not later than
April 3	March 24

APPOINTMENTS

CIVIL SERVICE COMMISSION

Applications are invited from registered medical practitioners for permanent pensionable appointments on the staff of the Ministry of Health as follows:—

PRINICPAL MEDICAL OFFICER. Salary scale £1,600 by £50 to £1,800 per annum inclusive (London).

MEDICAL OFFICERS. Salary scale £1,150 by £30 to £1,300 by £50 to £1,500 (London).

The minimum of the Medical Officer's scale will be linked to age 38 with deductions below that age of £30 per annum and additions of £30 per annum up to age 40. There is one vacancy in the Principal Medical Officer grade which will be concerned with the regional work in connexion with the Health Services with Headquarters in London. Candidates for this post must be of high professional standing with organising ability and wide experience of public health administration. There will be at least four vacancies in the Medical Officer grade. Applicants for both grades must have been qualified for at least ten years and should have held an appointment in the Public Health Service or have had other comparable administrative experience. Forms of application with further particulars of the appointments may be obtained from the Secretary, Civil Service Commission, 6, Burlington Gardens, London, W.1, quoting No. 2145; completed application forms must be received by him by April 21, 1948.

KING EDWARD MEDICAL COLLEGE
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Applications are invited for the permanent posts of:—

(1) PROFESSOR OF ANATOMY
(2) PROFESSOR OF PHARMACOLOGY, and
(3) PROFESSOR OF PATHOLOGY AND BACTERIOLOGIST

to West Punjab Government at the King Edward Medical College, Lahore (Pakistan). No restriction of nationality. Persons of Non-Pakistan domicile will be appointed on five years' contract in the first instance. Candidates must possess (a) high post-graduate qualifications in the branches concerned, (b) Capacity to organise, direct and conduct research work, (c) Considerable experience in teaching, (d) Knowledge of English essential. Age: Not more than 45 years on December 31, 1947, relaxable for those who have special experience or outstanding qualifications. Pay: Rs. 800 by 50 to 1,500 p.m., initial pay according to age, qualifications and experience, plus oversens pay at £25 to £30 p.m. The advantage of passage for overseas candidates will also be admissible. Apply immediately to the High Commissioner for Pakistan, 16, Fitzhardinge Street, London, W.1.

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Wanted for a private Government aided Women's Hospital in Lahore a woman doctor with F.R.C.S., or M.S. and considerable practical experience of higher type of operative and gynaecological work. The appointment will be on five years' contract and will carry pay in the scale of Rs. 500 by 50 to Rs. 1,000 p.m. (£450 to £900 per annum). Free house will be provided. Private practice allowed. Applications to Inspector General of Civil Hospitals, West Punjab, Lahore, Pakistan.

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The University of Hong Kong invites applications for the following appointments:

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Basic pay: £1,075 by £50 to £1,325. Expatriation pay: £475, i.e. from £1,550 to £1,800. At present a variable high cost-of-living allowance is paid at the rate of £300 a year. Information about the University and on the nature of the appointments may be had from the Secretary, Universities Bureau of the British Empire, 8, Park Street, London, W.1. Closing date for receipt of applications is April 16, 1948.

MINISTRY OF HEALTH
INDUSTRIAL MEDICAL OFFICER

Applications are invited from medical practitioners with experience in industrial medicine for appointment to a Medical Interviewing Committee which is being established at the East Suffolk and Ipswich Hospital, Ipswich, to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable for session of 1½ to 2½ hours £2 12s. 6d. plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Senior Medical Officer, Ministry of Health Regional Offices, 12, Queen Anne Terrace, Cambridge.

MINISTRY OF HEALTH
INDUSTRIAL MEDICAL OFFICER

Applications are invited from medical practitioners with experience in industrial medicine for appointment to a Medical Interviewing Committee which is being established at the Ministry of Pensions' Hospital, Childwall, Liverpool, to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable for session of 1½ to 2½ hours, £2 12s. 6d. plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Senior Medical Officer, Ministry of Health Regional Offices, Sunlight House, Quay Street, Manchester, 3.

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RESIDENT MEDICAL OFFICER (male)

Applications are invited for the post of Resident Medical Officer (male) in the hospital. Appointment will be made for six months at a salary of £250 per annum, but is renewable. Duties to commence May 1, 1948. Full board, lodgings and laundry. Apply, The President, Public Health Committee, General Hospital, Jersey.

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Departments of Physiology and Anatomy
PROFESSORS IN PHYSIOLOGY AND ANATOMY

Applications are invited for the appointment of Professors in Physiology and Anatomy, who will be in charge of these departments. The appointments will take effect at a date as soon after October 1, 1948, as can be arranged. Teaching of medical students will begin in October, 1949. Professors will be expected to assist in the planning and organizing of their own and related departments. Construction of permanent buildings will begin shortly. The salary is £1,500 per annum, provision is made for superannuation contribution; children's allowance is payable. Staff residence will shortly be available at a rent of 5 per cent of the salary. Applications, in triplicate, giving full particulars of qualifications and names of four referees, should be lodged before June 1, 1948, with the Secretary of the Special Committee of the Senate on Higher Education in the Colonies, University of London, Senate House, London, W.C.1, from whom further particulars can be obtained.

POLISH MEDICAL UNIT, BALLOCHMYLE HOSPITAL, Mauchline, Ayrshire
HOUSE PHYSICIAN (B2)

Applications are invited from Poles for the following appointment, vacant on April 1, 1948. House Physician (B2). The duration of the appointment will be limited to six months. Salary is at the rate of £278 per annum consolidated, with full residential emoluments. Application forms, which must be lodged by March 28, 1948, may be had from the Department of Health for Scotland (Room 103), St. Andrew's House, Edinburgh, 1.

GLASGOW ROYAL CANCER HOSPITAL AND GLASGOW AND WEST OF SCOTLAND RADIUM INSTITUTE
HONORARY RADIOLOGIST

Applications are invited for the post of Honorary Radiologist to the Glasgow Royal Cancer Hospital and Glasgow and West of Scotland Radium Institute. The Radiologist will be responsible for all X-ray diagnosis in these Institutions. Applications, with names of three referees, should be sent to H. Muir Lawson, Esq., C.A., 156, St. Vincent Street, Glasgow, C.3.

GLASGOW ROYAL CANCER HOSPITAL AND GLASGOW AND WEST OF SCOTLAND RADIUM INSTITUTE
HONORARY CONSULTING DERMATOLOGIST

Applications are invited for the post of Honorary Consulting Dermatologist to the Glasgow Royal Cancer Hospital and the Glasgow and West of Scotland Radium Institute. Applications should be sent to H. Muir Lawson, Esq., C.A., 156, St. Vincent Street, Glasgow, C.3.

MINISTRY OF HEALTH
INDUSTRIAL MEDICAL OFFICERS

Applications are invited from medical practitioners with experience in industrial medicine for appointment to Medical Interviewing Committees which are being established in connexion with St. Helier Hospital, Carshalton; Queen Mary's Hospital, Roehampton; The London Hospital and The Prince of Wales Hospital, Tottenham, to examine disabled persons and advise the Disablement Resettlement Service of the Ministry of Labour and National Service. Fee payable for session of 1½ to 2½ hours £2 12s. 6d. plus 10s. 6d. if appointed as Chairman. Applications and requests for further information should be made to the Secretary, Room No. 21G, Ministry of Health, Whitehall, S.W.1.

UNIVERSITY OF BRISTOL
REGISTRAR
to the University Neurosurgical Unit based on Frenchay Park Hospital

The University of Bristol, in conjunction with the City and County of Bristol, invites applications for the post of Registrar to the University Neurosurgical Unit based on Frenchay Park Hospital. The appointment is for one year and renewable. The salary will be on a scale from £500 to £750 per annum according to qualifications and experience. There is a University Scheme for Children's Allowances. Applications, giving full names, age, qualifications, details of education and experience together with the names of not more than three referees and copies of not more than three recent testimonials, should reach the undersigned, from whom further particulars may be obtained, on or before April 6, 1948.—Winifred Shapland, Secretary and Registrar, University of Bristol, Bristol, 8.

UNIVERSITY OF BRISTOL
Specialist Ex-Service Appointment
SURGEON TO THE THORACIC UNIT
at Frenchay General Hospital

Applications are invited from ex-Service persons for the appointment of an additional Surgeon to the Thoracic Unit at Frenchay General Hospital. This appointment has been approved by the Ministry of Health under the scheme for the interim appointment of Specialists (Circular 202/46). The appointment is full-time and the salary £1,000 per annum. Applications stating war service should reach the undersigned not later than April 3, 1948.—Winifred Shapland, Secretary and Registrar, University of Bristol, Bristol, 8.

MANCHESTER REGIONAL HOSPITAL BOARD
Mental Health Services
REGIONAL ADVISER IN PSYCHIATRY

The Board invites psychiatrists of senior consultant status, desirous of being considered for the part-time salaried post of Regional Adviser in Psychiatry, to submit particulars of their qualifications and experience not later than April 16, 1948, to the Senior Administrative Medical Officer, Third Floor, Sunlight House, Quay Street, Manchester, 3, from whom further information may be obtained. In the case of an officer not holding a whole-time post, the salary will be at the appropriate proportion of £2,000 per annum. Whole-time officers may be seconded by arrangement with their present employers.

ASSISTANT SENIOR MEDICAL OFFICER

Applications are invited for the whole-time post of Assistant Senior Medical Officer at a salary of £1,450 by £50 to £1,650 per annum, subject to 6% deduction for superannuation purposes. Applicants should have had clinical and administrative experience of mental diseases and mental deficiency. The successful candidate will be required primarily to devote as much time as may be necessary to the administrative aspects of the Mental Health Services under the general direction of the Senior Administrative Medical Officer, and he may be required to undertake other administrative duties in connexion with the hospital and specialist services. Applications, with particulars of qualifications and experience, together with the names of three referees, should be submitted to the undersigned not later than April 16, 1948. Further particulars on request.—J. Gibbon, Secretary of the Board, Third Floor, Sunlight House, Quay Street, Manchester, 3.

CITY OF NORWICH
ISOLATION HOSPITAL
ASSISTANT MEDICAL OFFICER OF HEALTH, ASSISTANT SCHOOL MEDICAL OFFICER, AND RESIDENT MEDICAL OFFICER

Applications are invited for the post of Assistant Medical Officer of Health, Assistant School Medical Officer, and Resident Medical Officer at the Isolation Hospital. Salary £675 per annum (including emoluments valued at £150 per annum) rising to £875 per annum, plus bonus. For particulars apply to the Medical Officer of Health, 68, St. Giles' Street, Norwich, by whom applications for the post must be received not later than April 10, 1948.

SOUTH-EAST METROPOLITAN REGIONAL HOSPITAL BOARD
ASSISTANT SENIOR MEDICAL OFFICER

Applications are invited for the whole-time appointment of Assistant Senior Medical Officer to the South-East Metropolitan Regional Hospital Board at an inclusive salary of £1,500 by £50 to £1,700. The appointment is subject to the provisions of the National Health Service (Superannuation) Regulations, 1947. The officer appointed will be required to devote his time mainly but not wholly to the tuberculosis services and will be subject to the general direction of the Senior Administrative Medical Officer. Clinical and administrative experience in tuberculosis and thoracic diseases is essential. Applications, giving particulars of qualifications and experience, together with the names of three referees, should be addressed to the Senior Administrative Medical Officer, South-East Metropolitan Regional Hospital Board, 27, Queen Anne Street, London, W.1, to reach him not later than April 3, 1948.

WEST RIDING OF YORKSHIRE HOSPITALS BOARD
PINDERFIELDS HOSPITAL, Wakefield
RESIDENT HOUSE SURGEON (A or B2) for Orthopaedic Centre.
RESIDENT THORACIC HOUSE SURGEON (A or B2).
RESIDENT HOUSE PHYSICIAN (A or B2)
RESIDENT HOUSE SURGEON (A or B2). Fracture Unit and Casualty Department.

Applications are invited from registered medical practitioners for the above appointments now vacant at the Pinderfields Hospital. Applicants for A appointments may include practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months, otherwise it will be for a period not exceeding one year. Applicants for B2 positions may include R practitioners who now hold A posts. If held by an R practitioner they will be limited to six months, otherwise they will be for a period of one year. The salary payable will be, in the case of an A appointment, £150 per annum and for a B2 appointment at £250 per annum, together with full residential emoluments. The hospital accommodates acute medical and surgical Service and civilian patients and, in addition to the Orthopaedic Centre, has a special Thoracic Surgery Unit (112 beds). Total beds 1,436. Applications, with full particulars, should be forwarded to the Medical Superintendent, Pinderfields Hospital, Wakefield, forthwith.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

WEST RIDING OF YORKSHIRE MENTAL HOSPITALS BOARD
WADSLEY MENTAL HOSPITAL, near Sheffield
PHYSICIAN

Applications are invited for the permanent position of Physician in the Mental Hospitals Board's Service at the above hospital. The scale of salary in the case of a resident officer will be £875 rising by annual increments of £25 to a maximum of £975 inclusive. Emoluments, consisting of board, apartments, washing, coal, light and attendance, will be valued for superannuation purposes at £200 per annum. For a non-resident officer the scale of salary will be £905 rising by annual increments of £25 to a maximum of £1,005 inclusive. The sum of £200 per annum is payable in cash to non-resident officers in lieu of the above-named emoluments An unfurnished house will be available, if required, for which an inclusive rental of £72 per annum will be charged. The commencing salary at the discretion of the Board will be fixed within the above scales according to qualifications and experience. Applicants should have had at least 10 years experience in psychiatry, experience in general medicine and the diagnosis and treatment of mental disorders and should possess the D.P.M. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909 (Class I) in accordance with which deductions will be made from total salary and emoluments at the rate of three per cent in respect of contributions. Applications with copies of not more than two recent testimonials should be forwarded as soon as possible to the Medical Superintendent, Wadsley Mental Hospital, Sheffield 6. There is no printed form of application.—G. L. Banner, Clerk of the Board, Board Office, Wakefield.

CITY OF PLYMOUTH
CITY GENERAL HOSPITAL (400 beds)
ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from duly qualified and registered medical practitioners for the appointment of Assistant Medical Officer (B2) at the City General Hospital, including suitably qualified R practitioners now holding A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it will be renewable for a further period of six months, terminable by one month's notice on either side at any time. Salary will be at the rate of £300 per annum, plus cost-of-living bonus and with full residential emoluments. All fees other than this, received by the officer, must be refunded to the Council. The duties of the post will be on the medical side of the hospital and will include the care and treatment of sick children. Further information of this appointment may be obtained from the Medical Superintendent. Applications should be sent to the undersigned immediately.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF PLYMOUTH
CITY ISOLATION HOSPITAL
SENIOR ASSISTANT MEDICAL OFFICER
(Male, Non-Resident)

Applications are invited for the above post. The duties consist of the clinical care of both fever and tuberculosis patients, together with certain venereal diseases clinics, under the general direction of the Medical Superintendent. A junior resident medical officer is employed. Applicants should have had considerable residential experience of infectious diseases and a knowledge of venereal diseases and tuberculosis will be an advantage. The successful applicant will be required to live near the hospital, and should be able to drive a car which is provided by the Corporation. The post is whole-time and superannuable. Any fees received must be refunded to the Corporation. Salary is at the rate of £675 per annum, rising by annual increments of £25 to £875 per annum plus cost-of-living addition. Further particulars may be obtained from the Medical Superintendent, City Isolation Hospital, Plymouth, and all applications should be sent to the undersigned as soon as possible.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF PLYMOUTH
ASSISTANT MEDICAL OFFICER OF HEALTH AND ASSISTANT SCHOOL MEDICAL OFFICER

Applications are invited from registered medical practitioners, male and female, under the age of 40, or 45 if at present employed by a local authority, who have had at least three years' experience since qualification, for the above whole-time permanent appointment. The salary scale is £675 per annum, rising by annual increments of £25 to a maximum of £875 per annum, plus cost-of-living addition, and previous service in a similar capacity will be taken into account in fixing the commencing salary within this scale. Forms of application and conditions of appointment may be obtained from the undersigned, to whom all applications should be sent not later than March 31, 1948.—T. Peirson, Medical Officer of Health, Seven Trees, Lipson Road, Plymouth.

CITY OF SHEFFIELD
Public Health Department
ASSISTANT CLINICAL PATHOLOGIST

Applications are invited from clinical pathologists with experience in bacteriology who have served with H.M. Forces, for the position of Assistant Clinical Pathologist (non-resident) at the Public Health Laboratory at the City General Hospital which has 1,050 beds. The laboratory, in addition to its general public health work, provides services for all municipal hospitals. The appointment will be made under the terms of Ministry of Health Circular 202/46. The salary will be £1,000 per annum, inclusive of bonus. Applications to be despatched to the undersigned.—Llewelyn Roberts, Medical Officer of Health, Town Hall, Sheffield, 1.

CITY OF BATH
ST. MARTIN'S HOSPITAL (800 beds)
JUNIOR HOUSE SURGEON (A)

Applications are invited for appointment as Junior House Surgeon (an A post for which practitioners within three months of qualification who are liable under the National Service Acts may apply). Salary £200 per annum, plus cost-of-living bonus and full emoluments. The appointment is for six months, and it is hoped that the person appointed will commence duty as soon as possible. About half the beds are in the E.M.S. Hospital and there is excellent scope for medical work. Applications should be sent to the Resident Medical Superintendent, St. Martin's Hospital, Bath.—J. Basil Ogden, Town Clerk, Guildhall, Bath.

CITY OF LEEDS
Health Department
ASSISTANT MEDICAL OFFICER

Applications are invited from qualified and registered medical practitioners for the post of Assistant Medical Officer for Maternity and Child Welfare. Applicants must have had postgraduate experience, including experience in General Medicine and Surgery, and special experience in obstetrics and antenatal work, and in the treatment of children's diseases and diseases of women. Additional qualifications such as the D.P.H., or the D.C.H., will be a recommendation. Under the present grading scheme of the Corporation the commencing salary will be not less than £650 per annum and subject to satisfactory service will rise by annual increments of £25 to a maximum of £850. The salary will, however, be subject to variation in the light of any provision of the Askwith Scale which may be approved by the City Council. A cost-of-living bonus is also payable at present. In determining the commencing salary due consideration will be given to previous experience and qualifications. The first increment will take effect on April 1, following the completion of six months' service. The person appointed will be required to pass a medical examination and to contribute to the Superannuation Fund established under the Local Government Superannuation Act, 1937. Form of application and particulars as to the duties of appointment may be obtained from the undersigned. Applications, endorsed "Maternity and Child Welfare Medical Officer," together with copies of three recent testimonials or the names of three persons to whom reference may be made, must be delivered at the Health Department, 12, Market Buildings, Vicar Lane, Leeds, 1, not later than 10 a.m., on March 27, 1948. Canvassing in any form, either directly or indirectly, will be a disqualification.—I. G. Davies, Medical Officer of Health.

CITY OF LEEDS
Public Health Department
KILLINGBECK SANATORIUM
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Resident Medical Officer (B1) at the above sanatorium. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and rejected by the R.A.M.C., may apply. The duties include the treatment of pulmonary tuberculosis and some previous experience in this work is desirable. The candidate will also be expected to undertake such other general medical duties as may be assigned to him by the Medical Superintendent. The commencing salary is £455 and the maximum £555 per annum (subject to amendment or consideration of Ministry of Health Circular 12/48), plus a cost-of-living bonus, together with board, residence and laundry, these emoluments being valued for superannuation purposes at £120 per annum. There is no accommodation for married men. Applications, endorsed "R.M.O., Killingbeck," to be forwarded to the undersigned not later than Saturday, March 27, 1948.—I. G. Davies, Medical Officer of Health, School Medical Officer, Public Health Department (Hospitals Administration Section), 12, Market Buildings, Vicar Lane, Leeds, 1..

CITY OF LIVERPOOL
WALTON HOSPITAL, Rice Lane, Liverpool, 9
(1,474 beds)
Second RESIDENT OBSTETRICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the above appointment. Applicants should have held house appointments and had considerable experience in obstetrics. Preference will be given to candidates holding a qualification of the Royal College of Gynaecologists. Suitably qualified R practitioners holding B2 appointments and practitioners released from the Services are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected for military service. Salary is at the rate of £555 per annum, together with cost-of-living bonus and residential emoluments valued at £130 per annum All fees received in connexion with the appointment to be handed over to the City Council. The appointment will be made subject to the Standing Orders of the City Council, and will be determinable by one calendar month's notice on either side. Applications, stating whether R practitioner, qualifications (with dates), should be endorsed "Resident Obstetrical Officer," and sent to the undersigned not later than Monday, March 29, 1948.—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool, 2.

CITY OF LIVERPOOL
BELMONT ROAD HOSPITAL
Liverpool, 6 (1,930 beds)
Resident ASSISTANT MEDICAL OFFICERS (B2)

Applications are invited from registered medical practitioners for the above appointments, including R practitioners who now hold A posts. If held by an R practitioner, the appointments will be limited to six months, otherwise, it will be for a period of twelve months. The hospital is largely for the treatment of chronic sick and infirm. There is a considerable staff of visiting specialists. The salary is at the rate of £350 per annum with full residential emoluments and cost-of-living bonus. All fees received in connexion with the appointment to be handed over to the City Council. The appointment will be subject to the Standing Orders of the City Council and determinable by one month's notice on either side. Applications, stating whether R practitioner, age, nationality, qualifications (with dates), details of present and previous appointments together with copies of recent testimonials, should be endorsed "R.A.M.O." B2, Belmont Road Hospital, and sent to the undersigned not later than Monday, March 29, 1948.—Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool.

CITY OF LIVERPOOL
ALDER HEY CHILDREN'S HOSPITAL
Eaton Road, Liverpool, 12
(University Department of Child Health)
MEDICAL REGISTRAR AND TUTOR (B1)

Applications are invited from registered medical practitioners for the above appointment in the Alder Hey Children's Hospital with duties in the University. Applicants should have held house appointments. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless the applicants have been rejected for military service. Salary is at the rate of £455 per annum, rising by annual increments of £25 to £555 per annum, together with cost-of-living bonus and full residential emoluments. The modification of the Interim revision of the Askwith Memorandum is under consideration. All fees received in connexion with the appointment to be handed over to the City Council. The appointment will be made in accordance with the Standing Orders of the City Council. Applications, stating whether R practitioner should be endorsed "Medical Registrar and Tutor," and sent to the undersigned not later than 10 a.m. on Monday, March 29, 1948 —Thomas Alker, Town Clerk, Municipal Buildings, Dale Street, Liverpool, 2.

Have you read the notice at top of page 12 ?

Have you read the notice at top of page 12?

CITY OF COVENTRY
ASSISTANT SCHOOL MEDICAL OFFICER AND ASSISTANT MEDICAL OFFICER OF HEALTH
(male or female)

The Coventry Education Committee invite applications for the above post from registered medical practitioners. The possession of a Diploma in Public Health will be an advantage. The duties are mainly in connexion with the medical inspection and clinic treatment of school children, and such other duties as the School Medical Officer may from time to time direct. The inclusive salary will be £735 rising by annual increments of £25 to a maximum of £935 per annum. In deciding the commencing salary, account will be taken of previous experience and qualifications. The successful candidate will be required to pass a medical examination as to fitness and to contribute under the Local Government and Other Officers' Superannuation Act, 1937, as amended by the Coventry Corporation Act, 1936, in regard to annuities to Widows, and to the Coventry Municipal Officers' Widows' and Orphans' Pensions Fund. Applications (no forms provided) enclosing copies of two recent testimonials, should reach the undersigned not later than March 31, 1948. —Charles Barratt, Town Clerk, The Council House, Coventry.

CITY OF MANCHESTER
ASSISTANT MEDICAL OFFICERS OF HEALTH FOR MATERNITY AND CHILD WELFARE

Applications are invited from registered medical practitioners for appointments as Assistant Medical Officers in the Maternity and Child Welfare Section of the Health Department. Applicants should have obstetric experience and will be required to undertake duties in ante-natal and child welfare clinics. Possession of the D.P.H. or D.C.H. qualifications will be an advantage. The consolidated salary scale is £735 to £910 per annum. The recommendations in Ministry of Health Circular 12/48 are under consideration. Successful candidates will be required to pass a medical examination and to contribute to the Manchester Corporation Superannuation Fund. A form of application can be obtained on request, and must be sent with copies of three recent testimonials, in an envelope marked "Assistant Medical Officer, Maternity and Child Welfare" to me only, and not to any member of the Council, not later than April 3, 1948. Canvassing in any form, oral or written, direct or indirect, is prohibited.—Philip B. Dingle, Town Clerk.

CITY OF EDINBURGH
HOUSE PHYSICIAN (A or B2)

Required for Northern General Hospital for six months' period commencing April 1, 1948. Hospital has at present 100 general medical beds, including research unit (30 beds) for rheumatic diseases, under direction of Professor of Medicine. Hospital being up-graded to form part of University Medical Teaching Unit and will comprise 180 beds. Salary if an A appointment £120; if B2, £200. R practitioners within three months of qualification may apply for the A appointment and R practitioners holding A posts may apply for the B2 appointment. Applications should be lodged, as soon as possible, with the Medical Officer of Health, Johnston Terrace, Edinburgh, 1.

CITY OF EDINBURGH
RESIDENT MEDICAL OFFICER (B1)

Required immediately for Glenlockhart Institution. Accommodation for approximately 300 aged and infirm. Temporary post suitable for medical man studying for higher qualification. Salary £350 plus bonus £60 and emoluments valued at £100. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should be sent as soon as possible to the Medical Officer of Health, Johnston Terrace, Edinburgh, 1.

CITY OF OXFORD
DEPUTY MEDICAL OFFICER OF HEALTH

Applications are invited for the post of Deputy Medical Officer of Health and Deputy School Medical Officer at a basic salary of £877 10s. by £25 to £977 10s. revised Askwith Memorandum. A car allowance will also be made. Further particulars can be obtained from me together with application forms which must be returned by March 31, 1948. Canvassing of members of the Oxford City Council either directly or indirectly in connexion with this appointment will disqualify the candidate.—Harry Plowman, Town Clerk, Town Hall, Oxford.

COUNTY BOROUGH OF BIRKENHEAD
BIRKENHEAD MUNICIPAL HOSPITAL
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, for the above post, including R practitioners now holding A posts. If held by an R practitioner, the appointment will be limited to six months, otherwise it will be for a period of twelve months. The duties attached to the post are both medical and surgical and will include the administration of anæsthetics. Salary £300 per annum, plus bonus and full residential emoluments. Application forms to be obtained from the Medical Officer of Health, 9, Hamilton Square, Birkenhead, to whom they should be returned as soon as possible after completion.—E. W. Tame, Town Clerk.

CORPORATION OF GLASGOW
Public Health Department
NON-RESIDENT CASUALTY SURGEON
at Southern General Hospital, Govan, Glasgow

Applications are invited from specialists who have served in H.M. Forces for the post of full-time, non-resident Casualty Surgeon at Southern General Hospital, Govan, Glasgow. Applicants should have postgraduate experience in surgery and should possess a higher surgical degree. Salary, £1,000 per annum. The appointment is being made in accordance with a scheme announced by the Department of Health for Scotland, and the appointment and conditions attached to it are to be subject to review once the National Health Service is established. It is a condition of appointment that the holder does not engage in private practice. Applications, accompanied by copies of not more than three recent testimonials or the names of three referees, should be lodged with the undersigned not later than April 3, 1948, in an envelope marked "Appointment of Casualty Surgeon, Southern General Hospital."—William Kerr, Town Clerk, City Chambers, Glasgow.

COUNTY OF CORNWALL
ASSISTANT MEDICAL OFFICERS OF HEALTH AND DISTRICT MEDICAL OFFICERS
(Combined appointments)

Applications are invited from registered medical practitioners holding the Diploma in Public Health or its equivalent, for the combined appointment of Assistant County Medical Officer of Health and Medical Officer of Health for each of the undermentioned Areas:—

Area II.—Comprising Helston Borough, Camborne-Redruth Urban District, Kerrier Rural District.

Area III.—Comprising Truro City, Falmouth Borough, Penryn Borough, Truro Rural District.

Area IV.—Comprising Fowey Borough, Lostwithiel Borough, St. Austell Urban District, Newquay Urban District, St. Austell Rural District.

Area VII.—Comprising Liskeard Borough, Saltash Borough, Looe Urban District, Torpoint Urban District, Liskeard Rural District, St. Germans Rural District.

In the following two Areas, with smaller populations, the successful candidates will also be required to perform the duties of Assistant School Medical Officers:—

Area V.—Comprising Bodmin Borough, Padstow Urban District, Wadebridge Rural District.

Area VI.—Comprising Launceston Borough, Bude-Stratton Urban District, Camelford Rural District, Stratton Rural District, Launceston Rural District.

The salary for a combined appointment will be at the rate of £1,040 a year, in addition to which a cost-of-living bonus of £59 16s. a year is at present payable. As Assistant County Medical Officers of Health, the officers will be on the staff of the County Medical Officer and will be required to perform such duties as may be from time to time prescribed; but as regards their duties as District Medical Officers of Health, the officers will be subject to the control and direction of the District Councils concerned. The persons appointed will be required to undertake not to engage in private practice and to reside at suitable centres within the areas of their appointments. Office accommodation and clerical assistance will be provided and the successful candidates will receive travelling allowances in respect of the use of their own cars. The appointments will be terminable by three months' notice on either side and in the event of an officer vacating one post of a combined appointment, he shall relinquish all the posts of that appointment. A combined appointment is superannuable under the Local Government Superannuation Act, 1937, and the successful candidates will be required to pass a medical examination. Canvassing either directly or indirectly will disqualify and the candidates must disclose in their applications whether to their knowledge they are related to any member of the Authorities concerned, or to the holder of any senior officer under the Authorities. Applications, together with the names of three persons to whom reference may be made, should be addressed to the County Medical Officer, County Hall, Truro, not later than April 3, 1948.—E. T. Verger, Clerk of the County Council, County Hall, Truro.

COUNTY BOROUGH OF DERBY
ASSISTANT MEDICAL OFFICER (male)

Applications are invited for the post of Assistant Medical Officer in the Public Health and School Medical Department. Salary £735 per annum, rising by annual increments of £25 to £935 per annum. Applicants must be duly qualified registered medical practitioners, and the possesion of the D.P.H. or D.C.H. is desirable though not essential. The duties of the post are the medical inspection of school children, the carrying out of work under the maternity and child welfare scheme, and such other duties as may be required by the Council. The officer appointed will be required to devote his whole time to the duties of the post, to act under the instructions of the Medical Officer of Health, and to reside within the Borough. The appointment is subject to the Local Government Superannuation Act, 1937, and the selected candidate will be required to pass a medical examination. Age of applicant must not exceed 40 years. The appointment will be held during the pleasure of the Council, and is terminable by two months' notice on either side. Applications (no form issued) endorsed "Assistant Medical Officer" should be forwarded at once to the Director of Education, Council House, Corporation Street, Derby.—C. Ashton, Town Clerk.

COUNTY BOROUGH OF BARROW-IN-FURNESS
Assistant MEDICAL OFFICER OF HEALTH
(Child Guidance Centre)

Applications are invited for the above appointment at an inclusive salary at the rate of £675 per annum rising subject to satisfactory service by annual increments of £25 to £875 per annum plus cost-of-living bonus. Commencing salary will be determined in the light of individual qualifications and experience. Candidates must be fully qualified registered medical practitioners (male or female) and preference will be given to those possessing the D.P.M. and/or experience enabling him/her to act as part-time Child Psychiatrist at the Child Guidance Centre. The other duties will be in connexion with the School Health and Maternity and Child Welfare Services and any other duties required by the Medical Officer of Health. The appointment is subject to the Corporation's general service conditions and the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Forms of application and particulars of duties may be obtained from the Medical Officer of Health, Town Hall, Barrow-in-Furness. Completed applications endorsed "Assistant Medical Officer of Health" accompanied by copies of not more than three recent testimonials must be returned to my office within fourteen days of the appearance of this advertisement. Canvassing is strictly prohibited and will disqualify and no candidate summoned for interview who is not prepared to accept the position without qualification whether it be offered to him or not will be paid his expenses.—W. Lawrence Allen, Town Clerk.

COUNTY OF DORSET
DEPUTY COUNTY MEDICAL OFFICER

Applications are invited for the appointment of Deputy County Medical Officer of Health and Deputy School Medical Officer. Applicants must be registered medical practitioners possessing the Diploma of Public Health, and experience in the work of the School Medical and Maternity and Child Welfare Services, with the administration of which the successful applicant will be expected to assist under the direction of the County Medical Officer. The possession of experience in the classification of educationally subnormal and maladjusted children, and in the examination of mental defectives will be an advantage, as also would be experience in the organization of health education campaigns. The salary will be at the rate of £1,000 per annum, rising by annual increments of £25 to £1,150 per annum (cost-of-living bonus consolidated). Travelling and subsistence allowances will be in accordance with the County scale in force for the time being. The appointment will be terminable by three months' notice on either side and will be subject to the provisions of the Local Government Officers' Superannuation Act, 1937. The successful candidate will be required to pass a medical examination. Applications on the prescribed form, which may be obtained from the undersigned, must be forwarded so as to be received not later than April 10, 1948.—C. P. Brutton, Clerk of the County Council, County Hall, Dorchester.

COUNTY BOROUGH OF IPSWICH
DEPUTY MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

Applications are invited for the appointment of Deputy Medical Officer of Health and School Medical Officer in the Public Health Department. Applicants must be registered medical practitioners holding the Diploma of Public Health. The person appointed will be required to devote the whole of his time to the duties of the office under the direction of the Medical Officer of Health. The appointment is subject to the Provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination. Salary scale will be £960 per annum rising by annual increments of £50 to £1,160. A car allowance will be paid. Application forms and conditions of service, which can be obtained upon application to me, must be returned to me not later than April 9, 1948. Canvassing will disqualify.—J. G. Barr, Town Clerk, Town Hall, Ipswich.

COUNTY BOROUGH OF PRESTON
Sharoe Green Hospital (260 beds)
Junior RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (female) for the appointment of Junior Resident Medical Officer (A). The appointment will be for six months but may be renewed for a further period of six months. Salary will be fixed at a rate between £200 and £300 per annum with full residential emoluments, according to qualifications and experience. Applications should be sent as soon as possible to the Medical Superintendent, Sharoe Green Hospital, Fulwood, Preston.—W. E. E. Lockley, Town Clerk, Municipal Building, Preston.

COUNTY BOROUGH OF CROYDON
WARLINGHAM PARK HOSPITAL
(for Nervous and Mental Disorders)
Warlingham, Surrey
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (ladies and gentlemen), including R practitioners holding A posts, for the appointment of House Physician (B2) for a period of six months. Opportunity for experience in all branches of psychiatry, including out-patient work with psychoses, psychoneuroses, industrial psychiatry, delinquency and child guidance. Salary at the rate of £300 per annum with full residential emoluments, plus war bonus. Apply to the Medical Superintendent.

COUNTY OF WARWICK
WARWICK HOSPITAL (440 beds)
EAR, NOSE AND THROAT REGISTRAR (B1)

Required (post now vacant). Applicants should have had previous experience in Ear, Nose and Throat Surgery, and the appointment is for a period of twelve months. The department is a well equipped unit of 40 beds and is recognized as a Class "A" E.N.T. Centre under the Emergency Hospital Scheme. Salary £500 per annum plus cost-of-living bonus. Residential accommodation will be provided at the hospital or a living out allowance of £100 per annum in lieu. Suitably qualified R practitioners holding B2 appointments, those holding B1 and ineligible for H.M. Forces, also practitioners who have completed their term of military service, are invited to apply. The Warwick Hospital is approved for the postgraduate education of medical officers on release from H.M. Forces. Forms of application obtainable from H. J. Kotch, Shire Hall, Warwick, to whom they should be returned as early as possible. Further particulars may be obtained from the Medical Superintendent of the hospital (telephone: Warwick 760).

COUNTY OF WARWICK
SOLIHULL HOSPITAL (200 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male and female) for the appointment of Resident Medical Officer (B1), vacant March 31. The appointment will be limited to a period of one year and the salary is at the rate of £350 per annum, plus cost-of-living bonus, together with the usual residential emoluments. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C., or have completed their term of military service. Applications, on forms obtainable from H. J. Kotch, Shire Hall, Warwick, should be returned to him as early as possible.

COUNTY BOROUGH OF ROTHERHAM
MUNICIPAL GENERAL HOSPITAL
Resident ASSISTANT MEDICAL OFFICER (A)

Applications are invited from fully registered medical practitioners (including practitioners within three months of qualification and who are liable for service under the National Service Acts), for the above appointment. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, together with full residential emoluments and a temporary cost-of-living bonus in accordance with the Council's scale. Forms of application may be obtained from the Medical Superintendent, Municipal General Hospital, Moorgate, Rotherham, and must be returned to the undersigned, endorsed "Resident Assistant Medical Officer," as soon as possible.—John S. Wall, Town Clerk, Municipal Offices, Rotherham.

COUNTY BOROUGH OF DERBY
DERBY CITY HOSPITAL
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident Medical Officer (B2), including R practitioners who now hold A posts. If held by an R practitioner the appointment will be limited to six months, otherwise it may be extended to twelve months. The salary is at the rate of £200 per annum with full residential emoluments, plus war bonus. The vacant post is for a House Physician. The hospital is an acute general hospital with a normal complement of 312 beds for acute medical and surgical cases, and with a large obstetrical department. Applications should be sent to the Medical Superintendent, City Hospital, Derby, as soon as possible.—C. Ashton, Town Clerk, Town Hall, Derby.

COUNTY BOROUGH OF WARRINGTON
WARRINGTON GENERAL HOSPITAL
(340 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (male or female) for the post of House Physician (B2). Salary £225 per annum, together with board, residence and laundry. There are five other full-time Medical Officers, together with a Visiting Consultant Physician. Good opportunity for experience in medicine. R practitioners who now hold A posts may apply, when the appointment will be limited to six months; otherwise one year. Applications stating date available to commence duties to be sent forthwith to Stuart F. Allison, Medical Officer of Health, Health Department, Sankey Street, Warrington.

COUNTY BOROUGH OF WARRINGTON
WARRINGTON MATERNITY HOME
RESIDENT FEMALE MEDICAL OFFICER

Applications are invited from registered medical practitioners (female) for the post of Resident Obstetric Officer (B2). The appointment will not exceed one year. The person appointed may also be required to perform occasional duties at the Warrington General Hospital. Preference will be given to candidates who have held a resident post in a recognised Obstetrical Unit. Salary £225 per annum, together with board, residence and laundry. Applications stating date available to commence duties should be sent forthwith to the undersigned.—Stuart F. Allison, Medical Officer of Health, Health Department, Sankey Street, Warrington.

COUNTY BOROUGH OF HUDDERSFIELD
ASSISTANT MEDICAL OFFICER OF HEALTH
(female) for Maternity and Child Welfare purposes

Applications are invited for the above appointment from candidates who have had special experience in ante-natal work and in the care of infants. Salary in accordance with the revised Askwith Scale. Position subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination before being appointed. Applications should be sent to the Medical Officer of Health, Public Health Department, Huddersfield, not later than March 31, 1948. Application forms are not provided.—Harry Bann, Town Clerk, Town Hall, Huddersfield.

BUCKS COUNTY COUNCIL
SLOUGH EMERGENCY HOSPITAL
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, including those within three months of appointment who are liable under the National Service Acts, for the post of Casualty Officer (A). The appointment is of a tenure of six months and the salary is at the rate of £200 per annum together with full residential emoluments. Applications should be made to the Medical Superintendent.

CORNWALL COUNTY COUNCIL
ASSISTANT CLINICAL TUBERCULOSIS OFFICER

Applications are invited from registered medical practitioners for the whole-time appointment on the established staff of an Assistant Clinical Tuberculosis Officer. The person appointed will be required to work under the direction of the County Medical Officer and the County Clinical Tuberculosis Officer. He must devote his whole time to the duties of the office, and undertake such other work as he may be required to do from time to time. Candidates should have special experience in tuberculosis, including Dispensary and Sanatorium work. The commencing salary will be within the modified Askwith Interim Grade of £675 by annual increments of £25 to £875, to which is at present added a cost-of-living bonus of £59 16s. a year. A car is essential and there will be a travelling allowance in accordance with the County Scale. In fixing the initial salary of the selected candidate, consideration may be given to previous experience. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. The Regional Hospital Board has been consulted and approves of this appointment. Canvassing, either directly or indirectly, will disqualify, and every candidate must disclose in his application whether to his knowledge he is related to any member of the Council or to the holder of any senior office under the Council. Applications should reach the County Medical Officer, County Hall, Truro, not later than March 27, 1948.—E. T. Verger, Clerk of the County Council, County Hall, Truro.

DERBYSHIRE COUNTY COUNCIL
SCARSDALE HOSPITAL, Chesterfield (616 beds)
HOUSE PHYSICIAN (A)

Applications are invited from female registered medical practitioners for appointment as House Physician (A) at the above hospital. The salary is at the rate of £250 per annum, plus full residential emoluments. The appointment will be in the first instance for six months. Applications together with copies of two testimonials should be sent to the Clerk of the County Council, County Offices, St. Mary's Gate, Derby.

DIVISIONAL ADMINISTRATION OF PREVENTIVE MEDICAL SERVICES IN THE ADMINISTRATIVE COUNTY OF THE WEST RIDING OF YORKSHIRE
JOINT APPOINTMENT OF DEPUTY MEDICAL OFFICERS OF HEALTH AND DEPUTY DIVISIONAL MEDICAL OFFICERS
To the Kirkburton, Meltham, Denby Dale, Holmfirth and Colne Valley Urban District Councils and the West Riding County Council
To the Maltby Urban, Kiveton Park Rural and Rotherham Rural District Councils and the West Riding County Council

The Deputy Medical Officer of Health will work under the direction of the Divisional Medical Officer, who is responsible for the day to day administration and execution of all, or practically all, public health matters in the Division, and the post is suitable for medical officers who hold the Diploma in Public Health and who wish to get some administrative experience in the public health services. The salary attached to the post is at present £650 to £850 plus cost-of-living bonus according to the County Council Scale, in respect of the duties to be carried out as Assistant County Medical Officer, and with an additional £100 per annum in respect of the duties of Deputy Medical Officer. The modification of the Interim Revision of the Askwith Memorandum is under consideration. Travelling and subsistence allowances are in accordance with the County Council Scales. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination as to his physical fitness. Forms of application may be obtained from the undersigned and should be forwarded to the County Medical Officer, Public Health Department, County Hall, Wakefield, not later than March 31, 1948.—Fraser Brockington, County Medical Officer.

DIVISIONAL ADMINISTRATION OF THE PREVENTIVE MEDICAL SERVICES IN THE ADMINISTRATIVE COUNTY OF THE WEST RIDING OF YORKSHIRE
MEDICAL OFFICER OF HEALTH AND DIVISIONAL MEDICAL OFFICER
to Thorne Rural District Council and the County Council of the West Riding of Yorkshire

Applications are invited from registered medical practitioners who must also be registered in the medical register as the holder of a Diploma in Sanitary Science, Public Health or State Medicine, for the above-mentioned whole-time appointment. The effect of the joint appointment will be to secure that the planning day to day administration and execution of all, or practically all, public health matters of the division will be in the hands of one person; the Medical Officer of Health locally. A divisional public health office with necessary staff will be provided. There are to be 31 such divisions within the Administrative County. The salary attached to the post is £1,200 per annum plus cost-of-living bonus according to the County Council Scale, advancing subject to satisfactory service, by annual increments of £50 to a maximum of £1,350 per annum. In addition there will be a travelling and subsistence allowance of £100 per annum. The appointment will be made jointly by the District Council and the County Council, and the person appointed will not be permitted to engage in private practice and will be required:—

(a) to reside in the Thorne Rural District or within such distance therefrom as may be approved.

(b) As Medical Officer of Health of the Thorne Rural District to act under the control and direction of the district council, and to perform all the duties imposed on a Medical Officer of Health by the relevant Acts and Orders.

(c) As Divisional Medical Officer, to act as Administrative Officer for County Council Services including Child Welfare and School Medical Services in the same district for which he is Medical Officer of Health.

(d) To undertake such other duties, not being incompatible with the above, as the Councils may jointly decide upon.

The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination as to his physical fitness. Forms of application and terms and conditions of service may be obtained from Dr. Fraser Brockington, County Medical Officer, County Hall, Wakefield, to whom completed forms must be delivered not later than March 31, 1948. Applications are invited from medical practitioners at present serving in H.M. Forces. Canvassing of members of the appointing bodies, directly or indirectly, will disqualify any candidate for the appointment.—P. Lambert, Clerk to the Thorne Rural District Council; Fraser Brockington, County Medical Officer.

EAST SUSSEX COUNTY COUNCIL
SOUTHLANDS HOSPITAL
Shoreham-by-Sea (450 beds)

Applications are invited from registered medical practitioners for the following appointments:—

PATHOLOGIST

A newly established laboratory is nearly completed and the successful candidate will have the opportunity of helping to equip it.

RADIOLOGIST

The department has modern equipment and is diagnostic only. There are two radiographers.

The above posts are both non-resident and the salary in each case is £1,000 per annum, plus £150 living-out allowance. Cost-of-living bonus will be payable in addition to salary, in accordance with the scale approved by the County Council from time to time, the present rate in the case of non-resident staff being £59 16s. per annum. The appointments will be subject to the provisions of the Local Government Superannuation Act, 1937, and a candidate to be successful must pass a medical examination. The appointments will be full-time and subject to (a) three months' notice on either side and (b) such conditions of service as may from time to time be approved on behalf of the County Council. Application forms may be obtained from and should be returned to the Medical Superintendent, Southlands Hospital, Shoreham-by-Sea, as soon as possible.—H. S. Martin, Clerk of the County Council, County Hall, Lewes.

HERTFORDSHIRE COUNTY COUNCIL
HAYMEADS HOSPITAL, Bishop's Stortford, Herts
RESIDENT HOUSE SURGEON (A or B2)

Applications are invited from registered medical practitioners, including R practitioners within three months of qualification and R practitioners holding A posts, for the appointment of Resident House Surgeon (A or B2) at Haymeads Hospital, Bishop's Stortford, Herts, vacant April. Salary £150 or £240 per annum, according to experience. Appointment for six months. General surgery and fractures. Applications with copies of three testimonials (or references) to the Medical Superintendent of the Hospital.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

KINGSTON UPON HULL CORPORATION
HEALTH DEPARTMENT
BEVERLEY ROAD HOSPITAL (432 beds)
JUNIOR HOUSE OFFICER (MEDICAL) (A)

Applications are invited from registered medical practitioners of either sex, including those now serving in H.M. Forces, for the appointment of Junior House Officer (Medical) (A) tenable for one year. Salary £250 per annum, plus cost-of-living bonus and plus full residential emoluments. If non-resident, the salary is plus £150 per annum, in lieu of residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Forms of applications, conditions of appointment, etc., may be obtained from, and the form should be returned duly completed to, the Medical Officer of Health, Guildhall, Kingston-upon-Hull, as soon as possible.

KINGSTON UPON HULL CORPORATION
Health Department
ANLABY ROAD HOSPITAL (581 beds)
JUNIOR HOUSE OFFICER (A)

Applications are invited from registered medical practitioners of either sex, including those now serving in H.M. Forces, for the non-resident appointment of Junior House Officer (A), tenable for one year. Salary £250 per annum, plus cost-of-living bonus and plus £150 per annum in lieu of residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Forms of application, conditions of appointment, etc., should be obtained from, and the form should be returned duly completed to the Medical Officer of Health, Guildhall, Kingston upon Hull, as early as possible.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
RESIDENT OBSTETRICAL AND GYNAECOLOGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the above appointment, which is tenable for a period of twelve months. Applicants must have had previous experience. There are approximately 1,400 confinements in the hospital per annum. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary is at the rate of £550 per annum, together with cost-of-living bonus and the usual residential emoluments. The appointment is subject to medical examination and is superannuable. Form of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to who all applications must be returned not later than Monday, March 29, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE SURGEON (B2) (E.N.T.)

Applications are invited for the above appointment from registered medical practitioners (male and female) including R practitioners who now hold A posts. The hospital is approved for the D.L.O. If held by an R practitioner, the appointment will be limited to a period of six months. Otherwise the succesful applicant will be eligible for re-appointment for a further period of six months. Salary is at the rate of £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, April 5, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE PHYSICIAN (B2)

Applications are invited for the above appointment from registered medical practitioners, male and female, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to a period of six months. Otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary £250 per annum, plus cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, March 29, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
RESIDENT OBSTETRICAL AND GYNAECOLOGICAL HOUSE SURGEON (B2)

Applications are invited for the above appointment, from registered medical practitioners, male or female, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to a period of six months. Otherwise the successful applicant will be eligible for reappointment for a further period of six months. Salary £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, March 29, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

LONDON COUNTY COUNCIL
Consultant and Specialist Service
CONSULTANT DERMATOLOGISTS

Applications are invited for appointment as Consultant Dermatologist—(a) at St. Mary Abbots Hospital, Kensington, for one short session a fortnight (duration of one hour or less); (b) at St. Leonard's Hospital, Shoreditch, for one session a fortnight (duration of 1½ to 2½ hours). Remuneration (a) £2 12s. 6d. a session, (b) £4 4s. a session, with mileage allowance in each case. Application forms giving further particulars and conditions of appointment and service, obtainable from the Medical Officer of Health (S.D.6), The County Hall, S.E.1 (stamped addressed foolscap envelope necessary) are returnable by April 1, 1948. Canvassing disqualifies. (588).

MID-WALES COUNTIES MENTAL HOSPITAL
Talgarth, Brecon
MEDICAL SUPERINTENDENT

The Visiting Committee invite applications for the post of Medical Superintendent of this Hospital (403 beds). Salary commencing £1,000 rising by annual increments of £50 to £1,200 per annum with, in addition, the following emoluments valued for Superannuation purposes at £220 per annum: Partly furnished house, laundry, coal and light, garden produce, milk and the privilege of purchasing from the hospital stores at contract prices. A war bonus of £39 17s. 4d. is also payable. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Candidates must be fully qualified medical practitioners. They should have had extensive experience in the practice of psychological medicine, including resident appointments in Mental Hospitals. Applications, stating experience and posts held with dates, to be sent to the undersigned not later than April 10, 1948.—G. Lewis, Clerk to the Visiting Committee.

MANCHESTER CORPORATION
WITHINGTON HOSPITAL
West Didsbury, Manchester, 20
HOUSE SURGEON (B2)
to the Orthopaedic Wards

Applications are invited from registered medical practitioners, including those serving in H.M. Forces and R practitioners who now hold A posts, for the above-mentioned appointment. If held by an R practitioner the appointment will be for a period of six months, otherwise it will be for a period of twelve months. The post is one giving considerable experience in orthopaedic and fracture work of in-patients and out-patients. Salary £280 per annum with board, residence and laundry in addition valued at £150 per annum, subject to the Manchester Corporation conditions of service. Applications stating the full name, age (giving date of birth), nationality, professional qualifications (with dates), particulars of present appointment and past hospital appointments are to be addressed to the Medical Superintendent, Withington Hospital, West Didsbury, Manchester 20, as soon as possible. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

MANCHESTER CORPORATION
BOOTH HALL HOSPITAL, Manchester, 9
THREE HOUSE OFFICERS (A)

Applications are invited from registered medical practitioners (male or female) for the above-mentioned appointments, including those within three months of qualification who are liable to serve under the National Service Acts. If held by practitioners who are liable under these Acts, the appointments will be for a period of six months, otherwise they will be for a period of twelve months. The posts will become vacant during May, 1948, and the duties of two of the posts are mainly medical and the remaining post mainly surgical. The basic salary is £230 per annum with board, residence and laundry in addition, subject to the Manchester Corporation conditions of service. Applications, stating the full name, age (giving date of birth), nationality, professional qualifications (with dates), particulars of present appointment and past hospital appointments, are to be addressed to the Medical Superintendent, Booth Hall Hospital, Manchester 9, and should reach him not later than April 10, 1948. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester, 2.

METROPOLITAN BOROUGH OF LEWISHAM
ASSISTANT TUBERCULOSIS OFFICER

Applications are invited from registered medical practitioners for the appointment of Assistant Tuberculosis Officer. The officer to be appointed will be expected to possess the minimum qualifications required by the Local Government (Qualifications of Medical Officers and Health Visitors) Regulations, 1930, for the appointment of Tuberculosis Officer and will be required to devote the whole of his time to the duties of the office. The salary will be £850 per annum, rising by one annual increment of £25 to a maximum of £875 per annum, plus bonus in accordance with the recommendation of the London District Council for Local Authorities' Administrative, Professional, Technical, and Clerical Services. Applicants should have had experience of all modern methods of investigation and treatment. The appointment will be subject to the rules and regulations of the Council from time to time in force relating to officers; to the provisions of the Local Government Superannuation Act, 1937; to termination by three months' notice on either side; and to the successful candidate passing satisfactorily a medical examination by the Council's Medical Officer of Health. Forms of application may be obtained from me and should be returned, accompanied by copies of not more than three recent testimonials, addressed to me in an envelope endorsed "Assistant Tuberculosis Officer" and must be received not later than Saturday, April 3, 1948. Canvassing, either directly or indirectly, will be a disqualification. —Alan Milner Smith, Town Clerk, Lewisham Town Hall, Catford, S.E.6.

MIDDLESEX COUNTY COUNCIL
NORTH MIDDLESEX COUNTY HOSPITAL
Edmonton, N.18
BACTERIOLOGIST

Bacteriologist required. Good general knowledge of pathology and considerable experience in bacteriology and immunology, also higher degree or diploma in medicine. General scope of duties arranged by Medical Director, may include teaching. Required to act as Deputy Medical Director if called upon. Inclusive salary £1,100 plus any temporary bonus (now £60 per annum) by £100 to £1,700 per annum; on proof of outstanding achievement, increments of £50 to £2,000 per annum may be granted. Exceptional circumstances may justify appointing above minimum. Any fees received to be paid to the County Council. Whole-time, established, pensionable, subject to medical examination. Non-resident but required to live near hospital. Further details from Medical Director. Applications with copies of up to two recent testimonials and referees to the undersigned by April 3, 1948 (quoting D.828. B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL
Edgware, Middlesex

(a) **CASUALTY OFFICER (B1) (male, resident)**, required May 1. Considerable all-round experience. R practitioners holding B2 posts eligible, those holding B1 posts ineligible unless rejected for H.M. Forces. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash).

(b) **SENIOR HOUSE SURGEON (B2) (Resident, male)**, required May 1.

(c) **PAEDIATRIC HOUSE PHYSICIAN (B2) (Resident)**, required May 8.

(b) (c) R practitioners holding A posts eligible. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash). Board, lodging, laundry. All six months' appointments. Applications (no forms) to Medical Director of Hospital by April 3, 1948 (quoting D.830, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
HILLINGDON COUNTY HOSPITAL
near Uxbridge, Middlesex
CHIEF ASSISTANT IN BACTERIOLOGY

Chief Assistant in Bacteriology required immediately. Good general knowledge of pathology and experience in bacteriology and immunology. General scope of duties arranged by Medical Director. Inclusive salary according to experience in scale £750 by £50 to £900 plus any temporary bonus (now £60 per annum). Any fees received to be paid to County Council. Non-resident, but required to live near hospital. Further details from Medical Director. Applications (no forms) to the undersigned by March 27, with copies of two recent testimonials and two referees (quoting D.770, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth, Middlesex
ASSISTANT PATHOLOGIST

Assistant Pathologist required, non-resident, whole-time appointment. Medical men or women with experience in and good knowledge of pathology but with leanings towards bio-chemistry. General scope of duties, may include teaching, arranged by Medical Director. Two to five years' appointment, subject to medical examination. Inclusive salary £750 by £50 to £950 per annum, plus any temporary bonus (now £60 per annum). Any fees received to be paid to County Council. Applications (no forms) to the undersigned by March 24 (quoting D.771, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth, Middlesex
SENIOR HOUSE OFFICER (B2)

Required immediately at West Middlesex County Hospital, Isleworth, Middlesex, for duty in Psychiatry Department. R practitioners holding A posts eligible. Mental experience desirable but not essential. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash). Board, lodging, laundry. Six to twelve months' appointment (six months only for an R practitioner). Application to Medical Director of Hospital by March 30, 1948 (quoting D.829, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
ASHFORD COUNTY HOSPITAL
Ashford, Middlesex
RESIDENT HOUSE SURGEON (A) (male)

Resident House Surgeon (A), male, required April 12, at Ashford County Hospital, Ashford, Middlesex, for general surgical wards. Registered medical practitioners with three months of qualification and liable for National Service are eligible. Salary £150 per annum, plus any temporary bonus (now £30 per annum cash), board, lodging, laundry, six months' appointment. Applications (no forms) to Medical Director of Hospital by March 27 (quoting D.772, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL, Enfield, Middlesex
VISITING EAR, NOSE AND THROAT SURGEON
(Two sessions per week)
VISITING DERMATOLOGIST

to attend as and when required. Wide experience in their specialty. Remuneration 4 guineas per session of from 1½ to 2½ hours. Unestablished. No pension rights. General scope of duties arranged by Medical Director, may include teaching. Applications (no forms) to undersigned, with copies of up to two recent testimonials and referees by April 7 (quoting D.802, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

NOTTINGHAMSHIRE COUNTY COUNCIL
EAST RETFORD BOROUGH AND EAST RETFORD RURAL DISTRICT COUNCILS
JOINT MEDICAL OFFICER

The Nottinghamshire County Council and the East Retford Borough and Rural District Councils jointly invite applications from duly qualified and registered medical practitioners including those now serving in H.M. Forces for the joint whole-time appointment of a Medical Officer to act as :—

(a) Assistant Medical Officer of the County Council; (b) Medical Officer of Health of the Borough and Rural Districts of East Retford.

The salary attached to the position will be £960 by £50 to £1,160 per annum, plus cost-of-living bonus. The recommendations in Ministry of Health Circular 12/48 are under consideration. The person appointed will be required to reside within a radius of three miles of the Borough of East Retford. Applicants must have had at least three years' professional experience since qualifying, must be conversant by experience in the duties of a Medical Officer of Health, Medical Officer for Maternity and Child Welfare and School Medical Officer and must possess a Diploma in Public Health. Experience in the examination of Defective children is desirable. As regards his duties under the County Council the officer will act under the general control and supervision of the County Medical Officer and will be required to perform such duties either as Assistant School Medical Officer or otherwise as may be from time to time prescribed. As regards his duties as Medical Officer of Health of the Borough of East Retford the Officer will also be required to act as Medical Officer for Maternity and Child Welfare. The appointment is subject to superannuation and the selected candidate will be required to pass a medical examination. Forms of application and conditions of the appointment may be obtained from my Office, and applications accompanied by copies of not more than three recent testimonials must be forwarded to reach me not later than March 31, 1948.—K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

NOTTINGHAMSHIRE COUNTY COUNCIL
HUCKNALL URBAN DISTRICT COUNCIL
JOINT MEDICAL OFFICER

Applications are invited from registered medical practitioners, including those now serving in H.M. Forces, for the joint whole-time appointment of an Assistant County Medical Officer and Medical Officer of Health of the Urban District of Hucknall. Salary £960 by £50 to £1,160 per annum plus cost-of-living bonus. (Recommendations in Circular 12/48 are under consideration). A house will be available to rent. Applicants must have at least three years' professional experience since qualifying, be experienced in the duties of a Medical Officer of Health and School Medical Officer, and possess a Diploma in Public Health. Experience in the examination of defective children is desirable. Forms of application together with conditions of appointment may be obtained from my Office and must be returned to me accompanied by copies of not more than three recent testimonials by April 11, 1948. Canvassing will disqualify.—K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

NOTTINGHAM CITY COUNCIL
NOTTINGHAM CITY HOSPITAL (1,020 beds)
RESIDENT HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (A), at the City Hospital, Nottingham, for General Surgical and Orthopaedic duties. Salary at the rate of £250 per annum, plus half cost-of-living bonus and full residential emoluments. The appointment will be for six months. Practitioners within three months of qualification and liable under the National Service Acts may apply. Applications to be sent to the Medical Superintendent, City Hospital, Hucknall Road, Nottingham.—J. E. Richards, Town Clerk, The Guildhall, Nottingham.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM GENERAL HOSPITAL
(Regional Orthopaedic Centre—440 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Otherwise it will be for a period of twelve months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM GENERAL HOSPITAL
(Regional Orthopaedic Centre—440 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident Medical Officer (B2). The duties will include those of Anaesthetist. R practitioners who now hold A posts may apply, when appointment will be limited to six months; otherwise it will be for a period of one year. The salary is at the rate of £300 per annum, with full residential emoluments. In addition to the orthopaedic work, a large amount of general surgery is carried out. Applications should be sent to the undersigned.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Senior Resident Medical Officer (B1). Previous experience in paediatrics essential. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment to be for one year from July 1, 1948, in the first place, the holder being eligible for re-appointment. Salary £450 per annum, with residential emoluments. Applications to reach the Secretary, 9, Sciennes Road, Edinburgh, 9, not later than April 30, 1948.

STAFFORDSHIRE COUNTY COUNCIL
Public Health Department.
COUNTY PSYCHIATRIST

Applications are invited from registered medical practitioners possessing a Diploma in Psychological Medicine for the above-mentioned post, and the candidate appointed will be on the staff of the County Medical Officer of Health, to whom he will be responsible for the organization of the mental health services under the National Health Service Act, 1946, and, in addition, will undertake duties in connexion with the School Health Service. The salary scale will be in accordance with the modified interim Askwith Award, i.e. £975 per annum, rising by biennial increments of £50 and a final increment of £37 10s. to £1,162 10s. per annum, plus a cost-of-living bonus. The candidate appointed will be required to provide a car and will be paid allowances in accordance with the County Council's scale. The appointment, which will be terminable by three months' notice in writing on either side, will also be subject to the Local Government and Other Officers' Superannuation Act, 1937, in which connexion the successful candidate will be required to pass a medical examination and produce his or her birth certificate. Applications should reach the undersigned not later than April 5, 1948. Canvassing, directly or indirectly, will disqualify, and all applicants must state whether, to their knowledge, they are related to any member or senior officer of the County Council.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford.

STAFFORDSHIRE COUNTY COUNCIL
WORDSLEY EMERGENCY HOSPITAL
near Stourbridge (total beds 450)
RESIDENT SURGICAL OFFICER (B2)

Applications are invited from suitably qualified registered medical practitioners for the above-mentioned post, which is now vacant, the duties of which will be in connexion with the general surgical, orthopaedic and plastic surgery wards. The appointment, which will be subject to one calendar month's notice in writing on either side, will be for a period of six months with salary at the rate of £250 per annum with full residential emoluments. R practitioners now holding A appointments may apply. Applications must reach the undersigned by April 5, 1948.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford.

SURREY COUNTY COUNCIL
EPSOM COUNTY HOSPITAL
Dorking Road, Epsom (450 beds)
Resident ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the above appointment. The duties will be mainly in the medical unit but will also include general duties as required by the Medical Superintendent. Candidates must have had previous experience in a house appointment. Commencing salary £250, £350, £400, or £450 per annum, according to qualifications and experience, plus bonus and full residential emoluments. Appointment is for six months, renewable for a second period of six months. Suitably qualified R practitioners now holding B2 posts may apply but applications from R practitioners now holding B1 appointments cannot be considered unless they have completed a period of service with H.M. Forces or have been rejected for such service. Enquiries relating to the appointment should be made to the Medical Superintendent of the Hospital to whom applications by letter should be sent by March 30, 1948.

SURREY COUNTY COUNCIL
BROOKWOOD HOSPITAL
Knaphill, near Woking
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners for the post of House Physician (B2) at the above Mental Hospital. The appointment, which provides facilities for gaining experience in Psychiatry and the modern methods of treatment, is tenable for six months in the first instance, and may be renewed for a further period of six months unless held by an R practitioner. The salary is at the rate of £350, £400 or £450 per annum, according to previous experience, plus cost-of-living bonus of £59 16s. per annum, with full residential emoluments. Applications to be sent to the Physician-Superintendent, Brookwood Hospital, Knaphill, Woking, Surrey, as soon as possible.

BROCKHALL CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Langho, near Blackburn, Lancashire
SECOND ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (men or women) including R practitioners holding B2 and (if ineligible for H.M. Forces) those holding B1 appointments, for a post of Second Assistant Medical Officer (B1). Salary £715 per annum, with full residential emoluments valued at £200 per annum, plus the current cost-of-living bonus, £50 per annum is paid in addition to the holder of the D.P.M. or equivalent. A commodious flat (furnished or unfurnished) is available for a married man. Unfurnished, valued at £60 per annum as an emolument, the remainder of the emolument value being paid in cash. If furnished, a reasonable deduction will be made for the use of furniture, etc. The appointment is pensionable and the successful applicant will be required to pass a medical examination. The Institution is modern, fully equipped and accommodates 1,996 patients. Applicants should have had previous mental deficiency or mental hospital experience. Application by letter should be sent to the Medical Superintendent as soon as possible.

BAGULEY EMERGENCY HOSPITAL
RESIDENT MEDICAL OFFICER (B1)
Plastic and Maxillo/Facial Unit

Applications are invited for this vacancy from suitably qualified medical practitioners. Applications may be submitted from R practitioners now holding B2 appointments. Those holding B1 appointments may also apply, provided they are ineligible for the R.A.M.C. Preference will be given to candidates who have had some surgical experience. The post offers facilities for working on and gaining experience in all types of plastic surgery and is full-time in the Emergency Medical Service under the Ministry of Health. It is on a salary range of £522 to £628 per annum payable by the Ministry of Health. Salary is assessed on a non-resident basis and will be at the rate of £100 per annum less if full board and lodging are provided at the expense of the hospital. The appointment is terminable by one month's notice on either side. Applications stating present appointment, if any, giving full details of experience and accompanied by copies of two testimonials, should be addressed to the Surgeon-in-Charge, Plastic Unit, Baguley Emergency Hospital, near Altrincham, Cheshire, and be received not later than March 27, 1948.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary is at the rate of £225 per annum, plus full residential emoluments. Applications should be forwarded as soon as possible to C. E. Lowndes, Secretary.

Have you read the notice at top of page 12 ?

Have you read the notice at top of page 12 ?

BIRMINGHAM AND MIDLAND EYE HOSPITAL (148 beds)
RESIDENT SURGICAL OFFICER (B2) (male)

Applications are invited for the above-mentioned post from medical officers who have held house appointments and have had surgical experience. Salary £200 per annum, with full residential emoluments. The appointment will be for an initial period of six months and will commence on April 1, 1948.

HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the post of House Surgeon at the above-mentioned hospital. The appointment, which commences on April 1, 1948, will be for a period of not less than twelve months, to enable the successful candidate to prepare for the D.O.M.S. Salary £130 per annum, rising to £150 at the end of six months, with full residential emoluments. Applications should be sent immediately to the House Governor, Birmingham and Midland Eye Hospital, Church Street, Birmingham, 3. Applications from R practitioners holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(Also Incorporating the Queen's Hospital 1840-1941)
RESIDENT CLINICAL PATHOLOGIST

Applications are invited for the post of Resident Clinical Pathologist at the Queen Elizabeth Hospital, Birmingham. Previous experience is not essential, but applicants should have held a resident hospital appointment. The appointment is for twelve months, renewable. Salary at the rate of £150 per annum, rising to £200 per annum after six months' service. Further particulars can be obtained from the Director of Clinical Pathological Services. Applications to be sent to the undersigned as soon as possible. Successful candidates if liable for service with H.M. Forces will require the approval of the Central Medical War Committee.—G. Hurford, Secretary, The Queen Elizabeth Hospital, Birmingham, 15.

BRADFORD JOINT HOSPITALS COUNCIL
VISITING ANAESTHETISTS

Applications are invited for three posts of Visiting Anaesthetists to the Bradford Group of Hospitals, including the Royal Infirmary, St. Luke's Municipal Hospital, the Royal Eye and Ear Hospital, and the Bradford Children's Hospital. These appointments will each carry an honorarium of £800 per annum and will involve attendances at the hospitals in the group as may be arranged. Applicants must be registered medical practitioners and must hold the Diploma in Anaesthetics. Private practice solely as Anaesthetist is permissible. Applications, with names of three referees, should be sent to the undersigned at the Royal Infirmary, Bradford, not later than April 19, 1948.—H. Trusson, Honorary Secretary, Bradford Joint Hospitals Council.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for this appointment, vacant March 27, 1948. Salary is at the rate of £225 per annum with full residential emoluments. Practitioners within three months of qualification may also apply when the appointment will be for six months. Applications should be sent immediately to Arthur L. Bourne, Secretary-Superintendent.

BEDFORD COUNTY HOSPITAL (Voluntary)
FOURTH HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the post of Fourth House Surgeon (A), now vacant, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BEDFORD COUNTY HOSPITAL (Voluntary)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners F.R.C.S. (male) for the post of Resident Surgical Officer (B1) vacant immediately, including R practitioners who now hold B2 posts. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £500 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BIRKENHEAD GENERAL HOSPITAL
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, including R practitioners who hold A appointments, for the following resident appointment, vacant on April 22, 1948. Casualty Officer (B2). Salary £200 per annum, with full residential emoluments. Membership of a Medical Defence Society is a condition of appointment. Applications should be sent to the undersigned immediately.—H. Hewitt Cooke, Secretary-Superintendent.

BIRKENHEAD GENERAL HOSPITAL
HONORARY DERMATOLOGIST

Applications are invited from registered medical practitioners for the post of Honorary Dermatologist. It is preferable that applicants should possess the qualification of M.D. or M.R.C.P., or give an undertaking to obtain one of them within two years. The appointment will be an annual one, and the holder will be eligible for re-election. Applications, together with the names of three persons who would be willing to give a reference, should be addressed to the undersigned immediately.—H. Hewitt Cooke, Secretary-Superintendent.

BIRKENHEAD GENERAL HOSPITAL
JUNIOR HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following resident appointment, vacant on April 1, 1948. Junior House Surgeon (A). Salary £150 per annum. The appointment is with full residential emoluments, and in the first instance for a period of six months, terminating on September 30, 1948, but this may be extended by mutual arrangement. Membership of a Medical Defence Society is a condition of appointment. Applications should be sent to the undersigned immediately.—H. Hewitt Cooke, Secretary-Superintendent.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(also Incorporating the Queen's Hospital 1840-1941)
RESIDENT ANAESTHETISTS (B2)

Applications are invited from registered medical practitioners, male or female, for the appointments of Resident Anaesthetist (B2), including R practitioners who now hold A posts. The appointments are for six months from May 1 and are recognized Resident Anaesthetist posts for the purpose of taking the Diploma in Anaesthetics. Candidates from the Forces will be specially considered. Salary £100 to £120 per annum according to experience, with full residential emoluments. Applications, stating present post, should be sent to the undersigned at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

BOLTON ROYAL INFIRMARY
(245 beds plus auxiliary hospital 43 beds)
(Resident Medical Staff of 7)
Assistant RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B1) to become vacant on April 10, 1948. Applicants should have held house appointments and had surgical experience. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Salary £275 per annum, with full residential emoluments. Applications to be forwarded to the undersigned.—H. P. Travis, General Superintendent.

BURTON-ON-TRENT GENERAL INFIRMARY
(Voluntary Hospital—235 beds)
SURGEON (Full-time, Temporary)

Surgeon (Full-time, Temporary) required for a period of not less than three months, from May 15, during the absence abroad of a Senior Surgeon. F.R.C.S. essential, and experience of fracture and orthopaedic work an advantage. Salary according to qualifications and experience, minimum £500 per annum, with residential emoluments. This post offers an excellent opportunity for suitably qualified surgeon for experience in a busy provincial hospital. Applications to J. E. Smith, Superintendent and Secretary, as soon as possible.

BUCHANAN HOSPITAL
St. Leonards-on-Sea (104 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for six months. Salary £250 per annum, with board residence and laundry. Applications to be sent to the undersigned.—H. A. Froggatt, House Governor and Secretary.

BRIDGWATER AND DISTRICT GENERAL HOSPITAL
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the appointment of Resident House Surgeon (B2). Salary at the rate of £250 per annum, with full residential emoluments. It is desirable that the successful applicant should commence duties on April 19, 1948. Applications should be sent as soon as possible, to the Secretary, Bridgwater and District General Hospital, Bridgwater, Somerset.

BOOTLE GENERAL HOSPITAL, Liverpool, 20
HONORARY ASSISTANT PHYSICIAN

The Board of Management invite applications for an Honorary Assistant Physician. Candidates must be Fellows or Members of one of the Royal Colleges of Physicians of the United Kingdom. Application, giving full details of professional experience, should be sent to the undersigned by March 27, 1948.—A. J. Cooper, Superintendent.

BRADFORD ROYAL INFIRMARY

Applications are invited from registered medical practitioners (male, single), including R practitioners who hold A posts, for the following:—

HOUSE PHYSICIAN (B2)
HOUSE SURGEON (B2)

Six months' appointment commencing May 1, 1948. Salary £200 per annum with full residential emoluments. There are 372 beds and 13 resident officers. Applications should be sent immediately to Hy. Trusson, House Governor and Secretary.

BIRMINGHAM MATERNITY HOSPITAL
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (B2), including R practitioners who now hold A posts. The appointment is for six months from May 1, 1948. Salary at the rate of £100 per annum with full residential emoluments. Applications to be sent immediately to Bernard Sylvester, House Governor.

CALDERSTONES CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Whalley, near Blackburn
ASSISTANT MEDICAL OFFICER (B1)

The Committee of Management invite applications from registered practitioners, who are not liable for service with H.M. Forces, for the appointment of Assistant Medical Officer (B1). The salary scale for a resident post is £473 per annum, rising by annual increments of £25 to £573 per annum, plus residential emoluments valued at £200 per annum, together with bonus at present £29 18s. per annum. For a non-resident post the salary is £673 by £25 to £773 per annum, with bonus at present at the rate of £59 16s. per annum, with an additional £50 to holders of the D.P.M. In the event of the successful applicant being married, an unfurnished flat is available, when the salary will be reduced by £60, the emolument value. Applicants must not be over the age of 41 years unless they have had service with H.M. Forces. The appointment will be subject to the provisions of the Asylums and Certified Institutions (Officers' Pensions) Act, 1918, and the successful candidate will be required to pass a medical examination. The institution is modern, fully equipped, and has a total of 2,378 beds. Suitably qualified R practitioners holding B1 (if ineligible for H.M. Forces), or B2 appointments are invited to apply. Applications, with names and addresses of three referees, should be forwarded to the Medical Superintendent not later than 9 a.m. on Monday, April 5, 1948.

CARDIFF CITY MENTAL HOSPITAL
Whitchurch, Cardiff
PSYCHIATRIST AND DEPUTY PHYSICIAN SUPERINTENDENT

Applications are invited for the post of Psychiatrist and Deputy Physician Superintendent at a salary of £1,200 per annum, with emoluments consisting of house, light, fuel and laundry, valued for the purposes of the A.O.S. Act, 1909, at £200 per annum. The successful candidate will be required to pass a medical examination. Applications will normally be entertained only from candidates possessing wide psychiatric experience, the ability to undertake modern forms of psychiatric and psychotherapeutic treatment and possessing a higher medical qualification and a Diploma in Psychological Medicine or its equivalent. Knowledge of Child Psychiatry will be considered an advantage. The hospital undertakes all modern forms of treatment, includes a Neurosis Centre, a hostel for maladjusted children, staffs out-patient clinics, is associated for teaching purposes with the Welsh National School of Medicine and has in being departments of Neuro-psychiatric Research under a whole-time Director of Research. Forms of application to be obtained from the Physician Superintendent to whom they should be returned by March 30, 1948, with the names of two referees and, if desired, copies of recent testimonials.

CARDIFF CITY MENTAL HOSPITAL
Whitchurch Cardiff
ASSISTANT PSYCHIATRIC PHYSICIAN (B1)

Applications are invited for the post of Assistant Psychiatric Physician (B1). Preference may be given to applicants with some previous experience. Salary on the scale of £472 10s. by £25 to £572 10s. per annum, plus full residential emoluments valued at £150 per annum and cost-of-living bonus. An additional £50 per annum is payable if the applicant holds the D.P.M. No married quarters available in the hospital. R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces may apply. Forms of application to be obtained from the Physician Superintendent, to whom they should be returned by March 30, 1948, with the names of two referees and, if desired, copies of recent testimonials.

CHARING CROSS HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited for the post of House Physician (A) at the hospital annexe at Mount Vernon Hospital, Northwood, including practitioners within three months of qualification, who are liable for service under the National Service Acts. If held by an R practitioner the appointment will be for six months. Salary £120 and usual residential emoluments. Applications, together with the names of three referees, to be submitted to the undersigned not later than first post Monday, March 29, 1948.—George J. Jones, House Governor, Charing Cross Hospital, Agar Street, W.C.2.

CARDIFF CITY MENTAL HOSPITAL
Whitchurch, Cardiff
PSYCHIATRIC HOUSE PHYSICIAN (A)
(Two vacancies)

Applications, including those from practitioners within three months of qualification who are liable under the National Service Acts, are invited for the post of Psychiatric House Physician (A), (two vacancies). Salary £300 per annum with full residential emoluments. R practitioner appointments limited to six months, otherwise, in certain circumstances, may be renewable for a further six months. The successful applicant will have an opportunity of acquiring knowledge in every branch of psychiatry including Psychoses, Neuroses (in-patient and out-patient), Child Psychiatry and methods of Neuro-psychiatric research. Forms of application from the Physician Superintendent to whom they should be returned by March 30, 1948, with the names of two referees and, if desired, copies of recent testimonials.

CHARING CROSS HOSPITAL

Applications are invited for the following resident appointments:

HOUSE SURGEON (A) to the Orthopaedic and Ear, Nose and Throat Departments.

HOUSE PHYSICIAN (A) to the Radiological Department.

HOUSE SURGEON (B2) to the Gynaecological Department.

The last named post is at the Hospital Annexe, Mount Vernon Hospital, Northwood.

Practitioners within three months of qualification who are liable for service under the National Service Acts may apply for the A posts and R practitioners who hold A posts may apply for the B2 post. If held by R practitioners the posts will be limited to six months.

Applications, together with the names of three referees, to be submitted to the undersigned not later than first post Monday, March 29, 1948.—George J Jones, House Governor, Charing Cross Hospital, Agar Street, Strand, W.C.2.

CHILDREN'S HOSPITAL
King Edward VII Memorial, Birmingham, 16
MEDICAL REGISTRAR (B1)

Applications are invited for the appointment of a Medical Registrar (B1) of this hospital, vacant on June 1, 1948. The appointment is tenable for one year in the first instance, but is renewable for three years. The position is non-resident and carries with it a salary of £500 to £600 per annum according to experience. Demobilized medical officers are invited to apply, and preference will be given to candidates who are members of the Royal College of Physicians and/or hold the Diploma in Child Health. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces may apply. Applications, stating age, nationality, qualifications and experience, together with the names of two referees to whom reference may be made, should be sent to the undersigned by March 31, 1948.—N. R. Winwood, House Governor.

CHILDREN'S HOSPITAL
King Edward VII Memorial, Birmingham, 16
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), vacant on July 1, 1948. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Diploma of F.R.C.S. Suitably qualified R practitioners holding B2 appointments, those holding B1 and ineligible for H.M. Forces and demobilized medical officers are invited to apply for the appointment. The salary is at the rate of £350 per annum with the usual residential emoluments, and the appointment is tenable for one year. Applications should be sent to the undersigned by March 31, 1948.—N. R. Winwood, House Governor.

COVENTRY AND WARWICKSHIRE HOSPITAL

Applications are invited for the following positions (male or female):—

HOUSE SURGEON (B2) to the Gynaecological and Obstetric Dept., vacant April 30, 1948.

HOUSE SURGEON (B2) to the General Surgical Depts., vacant April 30, 1948

HOUSE SURGEON (B2) to the Fracture and Orthopaedic Dept., vacant April 23, 1948.

HOUSE SURGEON (B2) combining Ear, Nose and Throat duties, vacant April 13, 1948.

HOUSE PHYSICIAN (B2), vacant April 1, 1948.

R practitioners who hold A posts are invited to apply. Each appointment is for six months. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL
RESIDENT SURGICAL REGISTRAR (B1)

Applications are invited for the post of Resident Surgical Registrar (B1), vacant about May 20, 1948. Candidates must hold the Diploma F.R.C.S. and should have had previous surgical experience and have held hospital house appointments. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months in the first instance; salary at the rate of £500 per annum, with full residential emoluments. Applications should be addressed to the undersigned.—S. Cecil Hill, House Governor and Secretary.

CHESTER ROYAL INFIRMARY (225 beds)
OPHTHALMIC REGISTRAR (B1)

Applications are invited from registered medical practitioners for the post of Ophthalmic Registrar (B1), non-resident. Salary £650 per annum, with lunch and tea. Appointment in the first instance for one year, to commence duties on April 25, 1948. Suitable qualified R practitioners holding B2 appointments, also those holding B1 posts and ineligible for H.M. Forces, may apply. Applications should be sent immediately to P. R. J. Arnold, General Superintendent and Secretary.

CREWE AND DISTRICT MEMORIAL HOSPITAL, Crewe
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the post of Resident House Surgeon (B2) which becomes vacant April 1, 1948. Salary from £200 to £350 per annum, according to experience and qualifications. Applications, stating sex, should be sent to reach the undersigned within one week of the publication of this advertisement.—Stanley W. Johnson, Secretary-Superintendent, Crewe and District Memorial Hospital, Crewe.

COUNTY MENTAL HOSPITAL, Gloucester
Resident ASSISTANT MEDICAL OFFICER (B1)

Assistant Medical Officer (B1) required. Salary (inclusive of bonus) £640 per annum, with additional £50 for possession of D.P.M. plus emoluments consisting of board, residence, and laundry, valued at £104 per annum (for superannuation purposes. (Married quarters are not available). The appointment will be a permanent one and 3% deduction will be made under the Asylums Officers' Superannuation Act, 1909. Applications should be sent to the Medical Superintendent as soon as possible.

CARDIGANSHIRE GENERAL HOSPITAL
Aberystwyth
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of House Surgeon, including R practitioners who hold A posts. Salary is at the rate of £250 per annum, plus emoluments (resident). The appointment in the first place will be for six months. Applications should be addressed to the Secretary, to be received not later than fourteen days after the appearance of this advertisement.

CORBETT HOSPITAL, Stourbridge, Worcestershire
(106 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male and female) for the appointment of a House Surgeon (B2) to become vacant shortly, including R practitioners who now hold A posts. The appointment will be for a period of six months. Salary will be at the rate of £200 per annum, with full residential emoluments.—W. G. H. Weston, House Governor and Secretary.

CUMBERLAND INFIRMARY, Carlisle (289 beds)
ASSISTANT PATHOLOGIST

Applications are invited from Service candidates for the appointment of an additional Assistant Pathologist, which will be made in accordance with the Ministry of Health Circular No. 202/46, and in the first instance will be limited to the period until the effective date of the National Health Service. Applications or the names of three referees should be submitted to the undersigned as soon as possible.—K. C. Booker, Secretary-Superintendent.

CHELMSFORD AND ESSEX HOSPITAL
London Road, Chelmsford (170 beds)
CASUALTY OFFICER (B2)

Applications are invited for the post of Casualty Officer (B2) with experience, male or female, including R practitioners who hold A posts, to commence April 1. Salary £175 per annum, plus board, lodging and laundry. Apply with recent testimonials to the undersigned.—R. G. Morrish, House Governor and Secretary.

CHELMSFORD AND ESSEX HOSPITAL
London Road, Chelmsford (170 beds)
HONORARY PATHOLOGIST

Applications are invited for the post of an Honorary Pathologist. The present acting pathologist is an applicant for the post. Applications to be sent to the undersigned.—R. G. Morrish, House Governor and Secretary.

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital, 200 beds)
RESIDENT ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic Officer (B2), including R practitioners who hold A posts. Salary £300 per annum, with full residential emoluments. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited from medical practitioners (male and female) for the post of Senior Resident Medical Officer (B1), for a period of six months in the first instance, from May 1, 1948. Salary £350 per annum with full emoluments. Candidates must have experience in paediatrics and higher qualifications are desirable. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces may apply. Applications to be sent by April 7, 1948, to Louise Gillespie, Secretary.

DARLINGTON MEMORIAL HOSPITAL
(210 beds—Complement: 6 House Officers)
HOUSE SURGEON (A)
to the Orthopaedic Department

Applications are invited from registered medical practitioners, including practitioners within three months of qualification, who are liable under the National Service Acts, for the above appointment, vacant immediately. Salary £175 per annum, with full residential emoluments. Applications should be sent as soon as possible to G. W. Beckwith, Secretary-Superintendent.

DARLINGTON MEMORIAL HOSPITAL
(210 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners for the above appointment, vacant March 28, or earlier by arrangement if necessary. Suitably qualified R practitioners may apply. Salary at the rate of £150 per annum, including full residential emoluments. The appointment will be for a period of six months.—G. W. Beckwith, Secretary-Superintendent.

DISTRICT INFIRMARY
Ashton-under-Lyne, near Manchester
(Voluntary Hospital, normally 200 beds)

Applications are invited for the following resident posts, including R practitioners who hold A posts, viz.:

CASUALTY OFFICER (B2). Salary £250 to £350 according to qualifications and experience.

HOUSE PHYSICIAN (B2), with some surgical duties. Salary £200.

The customary emoluments in addition, in each case.—Frank Oliver, General Superintendent.

DURHAM COUNTY HOSPITAL
North Road, Durham City (120 beds)
RESIDENT HOUSE SURGEON (B2) (male)

Applications are invited from registered medical practitioners for the appointment of a Resident House Surgeon (B2) (male), including R practitioners who hold A posts. The appointment is for six months, duties to commence on April 1, 1948. Salary at the rate of £250 per annum, with full residential emoluments. Applications to be sent immediately to the Secretary-Superintendent.

EAST HAM MEMORIAL HOSPITAL
Shrewsbury Road, London, E.7 (138 beds)
HONORARY ASSISTANT PHYSICIAN

The Board of Governors invite applications for the appointment of Honorary Assistant Physician. Candidates must hold a Degree in Medicine of a University of the British Empire and in addition be a Member of the Royal College of Physicians of London. Applications should be forwarded to the undersigned as soon as possible, and should include the names of two referees. Candidates will be expected to send a copy of their application to, and call upon, 15 members of the Honorary Staff, a list of whom will be forwarded by the undersigned, on receipt of the original application.—Reginald Perry, Secretary-Superintendent.

ELSIE INGLIS MEMORIAL MATERNITY HOSPITAL
Abbeyhill, Edinburgh, 8 (70 beds)
REGISTRAR AND CLINICAL ASSISTANT (B1)

Applications are invited from registered medical practitioners, female, for the post of Registrar and Clinical Assistant (B1) at the above hospital, including R practitioners who hold B2 posts. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary £300 per annum, with full residential emoluments. Applications to be sent to the Secretary, 1, Bruntsfield Crescent, Edinburgh, 10.

EAST SUFFOLK AND IPSWICH HOSPITAL
(369 beds)
RESIDENT ANAESTHETIST AND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners liable to service under the National Service Acts and within three months of qualification for the post of Resident Anaesthetist and Casualty Officer (A). The casualty duties are from 9 a.m. to 1 p.m. only. The post is vacant March 21, 1948. Appointment for six months. Salary at rate of £250 per annum with full residential emoluments.—Arthur Griffiths, Secretary, The Hospital, Ipswich.

GENERAL HOSPITAL, Nottingham
(589 beds, including "The Cedars" Branch Hospital)
HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (B1), duties to commence on April 12, 1948. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for a period of twelve months. The salary is at the rate of £400 per annum, with full residential emoluments. Applications to be sent to Henry M. Stanley, House Governor and Secretary.

Have you read the notice at top of page 12?

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ELIZABETH GARRETT ANDERSON HOSPITAL
144, Euston Road, N.W.1
OBSTETRIC ASSISTANT

Applications are invited from registered women practitioners for the post of an additional Obstetric Assistant. Duties to commence April 12. Appointment for six months, salary at the rate of £130 to £150 per annum, according to experience, with full residential emoluments. Applications to be sent to the Secretary by March 31.

ELLESMERE PORT AND DISTRICT HOSPITAL
(50 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable to service under the National Service Acts, for the appointment of House Physician (A). The appointment will be for a period of six months. Salary is at the rate of £350 to £400 per annum with full residential emoluments. Applications should be sent immediately to H. Roberts, Secretary-Superintendent.

GRANTHAM AND KESTEVEN GENERAL HOSPITAL, Manthorpe Road, Grantham, Lincs.
(125 beds—Medical, Surgical and Maternity; busy Out-Patient Departments)
SENIOR RESIDENT HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident House Surgeon (B1), becoming vacant on May 1, 1948. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Fellowship of one of the Royal Colleges or who are reading for a Fellowship. Suitably qualified R practitioners holding B2 appointments or B1 appointment if rejected for H.M. Forces are invited to apply. Salary will be at the rate of £450 per annum, plus furnished apartments, board and laundry at the hospital. Applications should be sent to the undersigned.—John E. Ray, House Governor and Secretary.

GRANTHAM AND KESTEVEN GENERAL HOSPITAL, Manthorpe Road, Grantham, Lincs
(125 beds—Medical, Surgical, and Maternity)
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of a Junior Resident Medical Officer (A), including practitioners within three months of qualification who are liable under the National Service Acts. Facilities for giving anaesthetics with or without supervision are available. Post becomes vacant on June 1, 1948. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be addressed to the undersigned at the hospital.—John E. Ray, House Governor, The Hospital, Grantham, Lincs.

GLOUCESTERSHIRE ROYAL INFIRMARY
(250 beds)
ORTHOPAEDIC HOUSE SURGEON (A)
(vacant April 6, 1948)
HOUSE SURGEON (A)
(vacant now)

Applications are invited from registered medical practitioners (male or female), including practitioners within three months of qualification who are liable for National Service under the National Service Acts, for the above posts. The appointments are for six months in the first instance, and the salary in each case is £200 per annum, with full residential emoluments. Applications to C. J. Adams, House Governor and Secretary, Royal Infirmary, Gloucester.

GLOUCESTERSHIRE ROYAL INFIRMARY
RESIDENT ANAESTHETIST (A)

Applications are invited from registered medical practitioners (male or female), including R practitioners who hold A posts, for the post of Resident Anaesthetist/Assistant Casualty Officer (A) which will become vacant on April 1. The salary will be at the rate of £200 per annum with full residential emoluments and the appointment is for six months in the first instance. Applications should be sent to C. J. Adams, House Governor and Secretary, Gloucestershire Royal Infirmary, as soon as possible.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)

RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty as soon as possible. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150 with full residential emoluments.

HOUSE SURGEON (A) required to commence duty as soon as possible. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

GUY'S HOSPITAL, S.E.1
ASSISTANT SURGEON

Applications are invited for the appointment of Assistant Surgeon to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent to whom letters of application (twenty copies), together with names of three referees, should be submitted not later than May 1, 1948, and from whom any further information desired can be obtained.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
RESIDENT MEDICAL REGISTRAR AND PATHOLOGIST (B1)

There will be a vacancy for a Resident Medical Registrar and Pathologist (B1) on June 1, 1948. The appointment, which is renewable, is tenable in the first instance for twelve months; salary £300, rising to £350 per annum after the first year. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Full particulars, with form of application, which must be returned not later than Monday, April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
FIRST ASSISTANT ANAESTHETIST (Part-time)

There is a vacancy for a First Assistant Anaesthetist (Part-time). The appointment, which is renewable, is tenable in the first instance for twelve months; salary £300 per annum. Applicants must be registered medical practitioners, practising solely as Anaesthetists and must hold the Diploma of Anaesthetics. Selected applicants will be required to call upon members of the Visiting Medical Staff and to furnish them with copies of their applications, supported by three testimonials given specially for the purpose. Further particulars and form of application, which must be returned not later than April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
HOUSE PHYSICIAN (B2)
HOUSE SURGEON (B2)

There will be vacancies for a House Physician (B2) and a House Surgeon (B2) on May 15, 1948. The appointments are tenable for six months at a salary of £100 per annum, with full residential emoluments. R practitioners now holding A posts, and practitioners, of either sex, ineligible for military service or rejected by the R.A.M.C. may apply. Further particulars and form of application, which must be returned not later than April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HARLOW WOOD ORTHOPAEDIC HOSPITAL
near Mansfield, Notts
(355 beds—E.M.S. and Civilian)
Regional Orthopaedic Centre
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2), including R practitioners who now hold A posts. Appointment will be for a period of six months. Salary, with full residential emoluments, at the rate of £300 per annum. The hospital is recognized under the Government's scheme for the Postgraduate Education of Medical Officers released from the Forces and falling within Classes I and III, where applicable. Applications to be sent to the undersigned.—D. Roberts, Secretary-Superintendent.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
HONORARY ASSISTANT RADIOLOGIST

The Council of Management invites applications for the office of Honorary Assistant Radiologist. Candidates are required to be medical practitioners engaged solely in consulting practice in this specialty holding a special diploma in medical radiology and able to attend on four full half days each week, namely, Tuesday, Wednesday and Thursday afternoons and Saturday mornings. Private practice in the department is permitted in accordance with regulations laid down. Applications, giving full details with the names of three referees, must reach the undersigned by April 5, 1948, from whom full particulars should be obtained in the first instance. By Order of the Council of Management, Kenneth A. F. Miles, House Governor.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), now vacant. Salary £175 per annum, plus residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications to E. Barber, Secretary

HALIFAX GENERAL HOSPITAL (450 beds)
PAEDIATRIC HOUSE PHYSICIAN (A)

Applications are invited for the post of Paediatric House Physician (A), including practitioners within three months of qualification who are liable under the National Service Acts. Six months' appointment. £150 per annum. Resident appointment. Applications should be made as soon as possible to the Medical Superintendent.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3.
HOUSE SURGEON (B2)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who hold A posts, for the resident posts of House Surgeon (B2) and House Physician (B2), vacant June 1, tenable for six months. Salary £133 per annum, with board, lodging and laundry. Application on the prescribed form, with copies of three recent testimonials, to be returned by April 6. —Kenneth A. F. Miles, House Governor.

HULL ROYAL INFIRMARY

Applications are invited for the following posts (male), vacant April:

ORTHOPAEDIC HOUSE SURGEON (B2).

HOUSE SURGEON to Ophthalmic and Ear, Nose and Throat Department (B2).

HOUSE SURGEONS (B2) at Sutton Branch Hospital (two posts).

Suitably qualified R practitioners who now hold A posts may apply.

CASUALTY OFFICERS (A) (two posts; one vacant May). Practitioners within three months of qualification who are liable for service under the National Service Acts may apply.

Salary for each of the above posts £200 per annum, with full residential emoluments. The appointments will be for six months in the first instance, but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

KING EDWARD MEMORIAL HOSPITAL, Ealing
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners including practitioners within three months of qualification and liable under the National Service Acts for the appointment of House Surgeon (A) to the Second Surgeon and Ear, Nose and Throat Surgeons, to become vacant on April 17, 1948. Six months' appointment. Salary at the rate of £175 per annum, with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned by April 5, 1948.—R. A. Mickelwright, House Governor

KIDDERMINSTER AND DISTRICT GENERAL HOSPITAL
CASUALTY HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of Casualty House Surgeon (A), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. Practitioners within three months of qualification who are liable under the National Service Acts may apply, when the appointment will be limited to six months. Applications should be sent immediately to C. M. Smith, House Governor and Secretary.

KING'S COLLEGE HOSPITAL
Denmark Hill, S.E.5
ASSISTANT PHYSICIAN
to the Children's Department

The Committee of Management invite applications for the post of Assistant Physician to the Children's Department. Twelve copies of applications, giving the names of three referees, should be sent before March 31, 1948, to the undersigned, from whom particulars of the duties may be obtained. Candidates must be Members of the Royal College of Physicians of London.—S. W. Barnes, House Governor.

LLANDUDNO AND DISTRICT HOSPITAL
Llandudno (70 beds)
HOUSE SURGEON (A) (male or female)

House Surgeon (A) (male or female), now vacant. Salary £200 per annum, full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply, when the appointment will be limited to six months. Applications to Secretary.

LONDON LOCK HOSPITAL
SECOND FULL-TIME MEDICAL OFFICER

Applications are invited from registered medical practitioners (male) for a Second Full-time Medical Officer (six months), to commence June 1. Salary at the rate of not less than £350 per annum, non-resident. Applications must be in the hands of the undersigned (from whom further information can be obtained) not later than March 31.—J. F. Morton, Secretary, 91, Dean Street, W.1.

LYMINGTON AND DISTRICT HOSPITAL
Hampshire (107 beds)
HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Appointment for six months. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Salary £175 per annum, full residential emoluments. Applications immediately to N. P. Wood, Secretary.

LUTON AND DUNSTABLE HOSPITAL
(214 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the above post, vacant now. This post is recognized for the D.A. Salary £250 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—R. E. Lingard, Secretary.

LUTON CHILDREN'S HOSPITAL
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the appointment of House Surgeon (B2), vacant mid-April, 1948. Salary at the rate of £200 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be for six months, otherwise renewable for further six months. Applications should be submitted by March 25, 1948.—Bart. Milner, House Governor.

LOWESTOFT AND NORTH SUFFOLK HOSPITAL (108 beds)
TWO HOUSE SURGEONS (A)
(one Senior and the other Junior)

Applications are invited immediately from registered medical practitioners (male or female) for the appointment of two House Surgeons (A)—one Senior and the other Junior—to fill vacancies on April 1 and May 1 next respectively. Salary for the Senior post at the rate of £250 per annum, and for the Junior post at the rate of £200 per annum, and in each case with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for six months. Applications to be sent to the Honorary Medical Superintendent.

LEICESTER ROYAL INFIRMARY
ORTHOPAEDIC HOUSE SURGEON (B2)

Applications are invited for the post of Orthopaedic House Surgeon (B2), required for April 1. Salary £200 per annum. Applications should be R practitioners holding A posts may apply, forwarded immediately to the House Governor and Secretary.

MANSFIELD AND DISTRICT GENERAL HOSPITAL (245 beds)
CHIEF ASSISTANT
to the Accident and Orthopaedic Services

Applications are invited for the post of Chief Assistant to the Accident and Orthopaedic Services. 52 beds are allocated to this work and there are numerous Out-patient Clinics and a special Rehabilitation Centre. The appointment will be full-time non-resident and private practice will not be permitted. Commencing salary will be £1,000 per annum and the appointment in the first instance will be for the period up to the establishment of the National Health Service in accordance with the terms of the Ministry of Health Circular 202/46. Candidates must be Fellows of a Royal College of Surgeons and preference will be given to those with previous experience in Traumatic as well as Orthopaedic Surgery. Applications, giving names of three referees, should be forwarded as soon as possible to the undersigned.—A. Ashworth, House Governor and Secretary.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required as soon as possible for busy department. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

METROPOLITAN HOSPITAL
Kingsland Road, London, E.8

Applications are invited from registered medical practitioners for the following posts:—

HOUSE SURGEON (A)
CASUALTY OFFICER AND DEPUTY RESIDENT ANAESTHETIST (Combined post)

The salary for each post will be £150 per annum with full residential emoluments. Appointments will be held for six months, and practitioners within three months of qualification and liable under the National Service Acts may apply. The posts will fall vacant in the second week of April, and applications should reach the undersigned not later than March 31, 1948.—Frank Chambers, House Governor and Secretary.

MERTHYR GENERAL HOSPITAL (120 beds)
RESIDENT SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a Resident Second House Surgeon (A), male, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for a period of six months. Salary at the rate of £200 per annum, with board and lodging. Applications to the Secretary, Merthyr General Hospital, Merthyr Tydfil.

MOTHERS' HOSPITAL OF THE SALVATION ARMY, Clapton, E.5 (Maternity—107 beds)
SENIOR RESIDENT MEDICAL OFFICER (B1)

Vacant May 1, 1948. The appointment is for six months and recognized for M.R.C.O.G. Salary £220 per annum with board, residence and laundry. Women practitioners now holding B2 posts may apply. Applications, with testimonials, to be sent to the Secretary-Superintendent as soon as possible.

MOTHERS' HOSPITAL OF THE SALVATION ARMY, Clapton, E.5 (Maternity—107 beds)
JUNIOR RESIDENT MEDICAL OFFICER (B2)
(Female)

Vacant April 24, 1948. Salary £150 per annum, board, residence and laundry. Appointment for six months and recognized for M.R.C.O.G. Applications as soon as possible to Secretary-Superintendent.

NATIONAL HOSPITAL FOR NERVOUS DISEASES, Queen Square, London, W.C.1
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). The appointment will be for one year in the first instance, the successful applicant being eligible for reappointment for a maximum period of three years. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. Candidates should have a higher surgical qualification and should have experience in neuro-surgery. Applications are invited from demobilized members of H.M. Forces. The proportion of salary payable by the hospital will be at the rate of £300 per annum with full residential emoluments. Applications to be sent to the undersigned not later than March 31, 1948.—H. Ewart Mitchell, Secretary.

NOTTINGHAM CITY HOSPITAL
Hucknall Road, Nottingham
Resident ASSISTANT OBSTETRIC AND GYNAECOLOGICAL OFFICER (B1)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident Assistant Obstetric and Gynaecological Officer (B1). Applicants should have held previous house appointments and have had experience in obstetrics and gynaecology. The post is approved for the M.R.C.O.G. Salary £455 to £555 per annum, plus half cost-of-living bonus with full residential emoluments. The recommendations in Ministry of Health circular 12/48 are under consideration. The appointment is for twelve months in the first instance. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces, may apply. Applications to be sent immediately to the Medical Superintendent, City Hospital, Hucknall Road, Nottingham.—J. E. Richards, Town Clerk, The Guildhall, Nottingham.

NORTH ORMESBY HOSPITAL
Middlesbrough (196 beds)

Applications are invited from registered medical practitioners for the following appointments:—

RESIDENT HOUSE SURGEON (A), including practitioners within three months of qualification who are liable for service under the National Service Acts.

RESIDENT HOUSE SURGEON (B2), including R practitioners who hold A appointments.

Salary at the rate of £200 and £275 per annum respectively with full residential emoluments. The appointment is for a period of six months. Applications to the Secretary-Superintendent. This is a General Hospital with a busy Out-patient Department with four established Resident House Posts.

NORTH STAFFORDSHIRE ROYAL INFIRMARY
Stoke-on-Trent (475 beds)

The Committee invites applications from registered medical practitioners for the following appointments to the Visiting Staff to become vacant on March 31 on the retirement, according to rule, of the present holders:

ONE VISITING PHYSICIAN
ONE VISITING OPHTHALMIC SURGEON

Candidates, who must hold a higher qualification, will be required to devote their whole time to consulting practice. An honorarium will be attached to the posts. The Election Committee will proceed to make the appointments on Thursday, April 15. Applications should reach the House Governor, by Thursday, April 8, 1948.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, London, N.W.1
HONORARY ASSISTANT DIAGNOSTIC RADIOLOGIST

The Board of Management invite applications for the office of Honorary Assistant Diagnostic Radiologist. Candidates are required to be medical practitioners, engaged solely in consulting practice, and to possess a higher Diploma in Medical Radiology. Candidates will be expected to do two or three attendances weekly. Applications, giving full details, with names of three referees, must reach the Secretary and House Governor not later than first post Monday, March 31, 1948.

NORFOLK AND NORWICH HOSPITAL
Norwich
HOUSE SURGEON (B2)
to Ear, Nose and Throat, and Ophthalmic Depts.

Applications are invited for the post of House Surgeon (B2) to Ear, Nose and Throat, and Ophthalmic Departments. Salary £250 per annum with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months. Applications should be sent as soon as possible to F. L. Gatfield, House Governor and Secretary.

NORFOLK AND NORWICH HOSPITAL
Norwich
ASSISTANT DIAGNOSTIC RADIOLOGIST
(full-time)

Applications are invited for the post of Assistant Diagnostic Radiologist (full-time). Salary according to qualifications and experience, but will be not less than £1,000 per annum. The successful applicant may be required to undertake duties in associated hospitals. Applications to be sent as soon as posible to the undersigned.—F. L. Gatfield, House Governor and Secretary.

OLDCHURCH COUNTY HOSPITAL, Romford
TEMPORARY SPECIALIST MEDICAL OFFICER (ORTHOPAEDIC SURGEON)

Applications are invited for the above temporary post which will be limited to approximately three months' duration. This modern hospital, of 828 beds, with specialist departments, is well served by rail and road transport services. Applicants should have higher qualifications in surgery. Salary will be at the rate of £17 17s. a week, subject to a deduction of £2 2s. a week if resident. Applications, stating position in regard to National Service, should be forwarded to the Medical Superintendent as soon as possible.

OLDHAM ROYAL INFIRMARY
ASSISTANT Resident SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B2), becoming vacant on March 31. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £250 per annum with board, residence and laundry. To R practitioners, the appointment will be limited to six months. Applications should be sent to the undersigned immediately.—P. W. Barnett, House Governor and Secretary.

Have you read the notice at top of page 12 ?

Established 1885

THE Medical Defence Union

MUSeum 1337

Annual Subscription £1 **MEMBERSHIP EXCEEDS 31,500** *Assets exceed £170,000*

THE cost of litigation and the damages awarded to successful litigants are steadily rising. The Union's subscription remains at its pre-war figure. Can you afford to remain outside?

SEVERAL MEMBERS have applied for assistance only to find to their discomfiture that the current subscription is unpaid; the completion of a "Banker's Order" avoids this oversight.

IMMUNITY from medico-legal actions, from slander or the receipt of accusatory letters does not exist; the Union proffers financial assistance, legal advice and defensive measures at a minimal annual cost.

EVERY active practitioner is vulnerable in a legal sense. No one can tell from what quarter an accusation may emanate calling for the skilled help, legal advice and financial protection of The Union.

Protection is also provided on special terms to Medical and Dental practitioners resident and practising overseas.

Full particulars from the Secretary (Dr. Robert Forbes), The Medical Defence Union, Ltd., 49, Bedford Sq., London, W.C.1.

Have you read the notice at top of page 12 ?

OLDHAM ROYAL INFIRMARY (203 beds)
HOUSE SURGEON (A)
to the Gynaecologist, Aural Surgeon, and Ophthalmic Surgeon

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Gynaecologist, Aural Surgeon, and Ophthalmic Surgeon. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OLDHAM ROYAL INFIRMARY (203 beds)
HOUSE SURGEON (A)
to the Orthopaedic Department, etc.

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Orthopaedic Department, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
RESIDENT ASSISTANT PATHOLOGIST (B1)

Applications are invited for the post of Resident Assistant Pathologist (B1) at the above hospital. Salary £350 per annum, with full residential emoluments. Candidates should have held the post of House Physician in a major hospital. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Previous laboratory training not essential, but the post will provide excellent training for anyone considering making clinical pathology his career. Applications stating age, qualifications, and experience with the names of two referees, should reach the undersigned by April 3, 1948.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), vacant March 31, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent.

PRINCE OF WALES'S HOSPITAL, Plymouth
CASUALTY OFFICER (A)
(Ear, Nose and Throat)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (A), with Ear, Nose and Throat, vacant March 17, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable under these Acts, the appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PRINCE OF WALES'S HOSPITAL
Greenbank Road, Plymouth
ASSISTANT PATHOLOGIST (Whole-time)

Applications are invited for the post of Assistant Pathologist (whole-time) at the above hospital. Salary £1,200 per annum. Candidates should have extensive experience in all branches of clinical pathology. Applications, stating nationality, age, qualifications and experience, with the names of two referees, should reach the undersigned by April 3, 1948.—Arthur R. Cash, General Superintendent, Head Office, Greenbank Road, Plymouth.

PADDINGTON GREEN CHILDREN'S HOSPITAL (Inc.), London, W.2
HONORARY ASSISTANT SURGEON

Applications are invited for the appointment of Honorary Assistant Surgeon. Candidates must be Fellows of the Royal College of Surgeons, England. Applications (4 copies) stating the names of three referees, should reach the undersigned not later than April 3, 1948.—E. W. Stockwell, Secretary-Superintendent.

PAPWORTH VILLAGE SETTLEMENT
Cambridge
REGISTRAR to the General Thoracic Surgical Unit

Applications are invited for the post of Registrar to the General Thoracic Surgical Unit. The appointment is for six months, with the possibility of renewal. Salary £400 to £600 per annum according to experience. Enquiries should be addressed to the Secretary, Papworth Hall, Cambridge.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
HOUSE SURGEON
to the Orthopaedic Fracture and Traumatic Dept. and SENIOR CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of House Surgeon to the Orthopaedic Fracture and Traumatic Department and Senior Casualty Officer (B1), which becomes vacant on April 13. Applicants should have held house appointments and had surgical experience. Salary £350 per annum, plus full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, are invited to apply. Applications should reach the undersigned as soon as possible.—J. C. Burdett, Director and House Governor.

PRINCE OF WALES'S GENERAL HOSPITAL
London, N.15
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners, male, including practitioners within three months of qualification and liable under the National Service Acts, for the appointment of Casualty Officer (A), which becomes vacant on April 26. The appointment will be for a period of six months. The salary is at the rate of £120 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. C. Burdett, Director and House Governor.

PRINCE OF WALES'S GENERAL HOSPITAL
Tottenham, N.15
ASSISTANT

An Assistant is required for the Department of Morbid Anatomy and Histology. The appointment is full-time and its holder will be expected to undertake Postgraduate teaching. Applicants should also have some general experience of the other branches of Pathology. Salary £800 per annum. Applications should be sent to the Director and House Governor, The Prince of Wales's General Hospital, Tottenham, N.15, not later than Saturday, April 10, 1948.

PEMBROKE COUNTY WAR MEMORIAL HOSPITAL, Haverfordwest
(Voluntary Hospital, 120 beds)
HOUSE SURGEONS

Applications are invited from registered medical practitioners for the following appointments, which will become vacant in May, 1948:

HOUSE SURGEON (B2). Salary at the rate of £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months.

HOUSE SURGEON (A). Salary at the rate of £225 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications in writing to be sent to the undersigned as soon as possible.—Griff. C. Morgan, Secretary-Superintendent.

PARK PREWETT MENTAL HOSPITAL
Basingstoke
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners who wish to specialize in psychiatry, for the post of Assistant Medical Officer (B1). Suitably qualified R practitioners holding B2 appointments and also those in B1 posts and ineligible for H.M. Forces are invited to apply. Salary including bonus £484 18s. per annum by £32 10s. to £614 18s., plus full residential emoluments valued at £224 18s. In addition £50 per annum for D.P.M. The recommendations in Ministry of Health circular 12/48 are under consideration. Applications to be forwarded to Medical Superintendent.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
HOUSE SURGEON (B2) (Eye and E.N.T. Depts.)

Applications are invited from suitably qualified medical practitioners for the appointment of House Surgeon (B2) to the Eye and E.N.T. Department. Duties under Specialist Surgeons. Salary at the rate of £250 per annum, plus usual residential emoluments. The post is recognized for the D.O.M.S., and D.L.O. examinations. R practitioners holding A appointments may apply. Six months' appointment. Applications should be sent to the Superintendent, Royal Infirmary, Preston.

PRESTON AND COUNTY OF LANCASTER ROYAL INFIRMARY
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (B2) falling vacant on April 1, 1948. R practitioners holding A posts may apply. Salary £200 per annum, with full residential emoluments. Appointment for six months. Applications to be sent as soon as possible to the Superintendent, Royal Infirmary, Preston.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, E.2, Shadwell, E.1, Banstead Wood, Surrey
EAR, NOSE AND THROAT REGISTRAR

Applications are invited for the post of Ear, Nose and Throat Registrar (half-time). Candidates must have had experience in this speciality. Appointment will be for one year in first instance. Salary £350 per annum. Applications should reach the undersigned not later than April 5 1948.—Charles H Bessell, General Secretary, Hackney Road, E.2.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, E.15
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) including R practitioners. Salary will be at the rate of £200 per annum with residential emoluments, lodging being provided temporarily outside the hospital pending the extension of residential accommodation. The appointment will be for a period of six months. Candidates should send their applications to the undersigned as soon as possible.—M. J. Huntley, House Governor and Secretary.

ROYAL BERKSHIRE HOSPITAL, Reading
HONORARY ASSISTANT OPHTHALMIC SURGEON

The Board of Management invite applications for the appointment of Honorary Assistant Ophthalmic Surgeon. Candidates must be Fellows of one of the Royal Colleges of Surgeons of the British Empire or Surgical Graduates of one of the Universities of the British Empire and their names entered on the *Medical Register*. The elected candidate will be required to reside in or near Reading. Canvassing on the part of a candidate or on his behalf will disqualify him. Candidates are required to provide six copies of their applications and testimonials, which must be addressed to the House Governor, and reach him not later than 9 a.m. on Saturday, March 27, 1948. No testimonials will be required from candidates who are members of the existing medical staff. The election will be held on Tuesday, April 6 1948.—H. E. Ryan, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Anaesthetist (B2), vacant immediately. Salary is at the rate of £200 per annum, with full residential emoluments. It is a recognized Resident Anaesthetist post for the purpose of taking the D.A. R practitioners who now hold A posts may apply when the appointment will be limited to six months Applications, stating present post, should be sent to H. E. Ryan, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
HOUSE SURGEON (A) to the Accident Dept.

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A) to the Accident Department, vacant immediately. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL DEVON AND EXETER HOSPITAL
Exeter
(324 beds, 7 Resident Medical Staff Employed)
HOUSE SURGEON (A)
Ear, Nose and Throat Department

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A) Ear, Nose and Throat Department, and to act as Casualty Officer during mornings, non-resident, vacant now, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary is at the rate of £300 per annum. Applications, with copies of two recent testimonials, should reach the undersigned immediately.—L. Parkhouse, Secretary and Manager.

RUNWELL HOSPITAL, near Wickford, Essex (East Ham and Southend-on-Sea Joint Mental Hospital) (1,032 beds)
SENIOR RESIDENT PHYSICIAN

Applications are invited for the post of Senior Resident Physician at the above-named hospital. Salary £750 per annum, rising by £25 to £850 plus cost-of-living bonus at present £49 16s. 8d. with emoluments consisting of house, light, fuel and garden produce valued at £159 19s. 4d. per annum. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Application forms, together with further particulars, obtainable from the Physician Superintendent.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a House Surgeon (A), now vacant. Salary £150 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for a period of six months; otherwise it may be extended for a further period. Applications should be sent to the undersigned as soon as possible.—A. Stanley Brunt, General Superintendent and Secretary.

ROYAL SUSSEX COUNTY HOSPITAL
Brighton
HONORARY MEDICAL REGISTRAR

Applications are invited for the appointment of Honorary Medical Registrar from candidates who possess the necessary medical qualification. Under the hospital's present rule, the successful candidate may be appointed for a term of three years. Applications must reach the Secretary-Superintendent by April 5, 1948.

ROYAL SURREY COUNTY HOSPITAL
Guildford (228 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable to service under the National Service Acts, for the post of House Physician to become vacant on April 3. Salary at the rate of £225 per annum with full residential emoluments; an additional £25 per annum will be paid if the successful applicant has previously held a house appointment since qualification, but such applicants must not be liable for National Service. Applications should reach the Secretary-Superintendent as soon as possible.

ROYAL SURREY COUNTY HOSPITAL
Guildford (228 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including those within three months of qualification who are liable to service under the National Service Acts, for the post of House Surgeon to become vacant on March 31, 1948. The appointment is recognized in connexion with the F.R.C.S. examination. Salary at the rate of £225 per annum with full residential emoluments, an additional £25 per annum will be paid if the successful applicant has previously held a house appointment since qualification but such applicants must not be liable for National Service. Applications should reach the Secretary-Superintendent as soon as possible.

ROTHERHAM HOSPITAL
Doncaster Gate, Rotherham
(General Voluntary Hospital)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited for the post of Resident Surgical Officer (B1), vacant on March 20, 1948. This is the senior resident appointment of the hospital, and preference will be given to candidates holding a higher qualification in surgery or studying to obtain one. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary according to qualifications and experience, but not less than £400 per annum to commence, with full residential emoluments. Applications to be sent forthwith to the Secretary-Superintendent.

ROYAL EYE AND EAR HOSPITAL, Bradford
(Voluntary Hospital, 102 beds)
RESIDENT AURAL HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male, including R practitioners who hold A appointments, for the appointment of Resident Aural House Surgeon (B2) to take up duty as soon as possible. If held by an R practitioner, the appointment will be for a period of six months. This post offers exceptional opportunity for training in all branches of E.N.T. work, and the hospital is recognized by the R.C.S. for the D.L.O. Salary is at the rate of £220 per annum, with full residential emoluments. Applications should be sent in immediately to Ernest S. Heap, Secretary-Superintendent.

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road, London, S.W.3
ASSISTANT PATHOLOGIST

Applications are invited for the post of Assistant Pathologist, at a salary of £900 per annum with annual increments to £1,200 subject to deductions under the F.S.S.U. These should state fully the applicant's previous experience in pathology, especially in pathological anatomy and museum work, and should be sent not later than first post Monday, April 12, to the undersigned, from whom further details of the post may be obtained.—Victor H. Pinkham, Secretary.

ROYAL HOSPITAL, Wolverhampton (500 beds)
(Incorporated under Royal Charter)
General Branch (310 beds)
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners (male) for the appointment of Casualty Officer (B2), vacant now, including R practitioners who hold A posts. If held by an R practitioner, the appointment will be limited to six months. Salary is at the rate of £250 per annum with full residential emoluments.—W. Cockburn, House Governor.

ROYAL WEST SUSSEX HOSPITAL, Chichester
HONORARY ANAESTHETIST

The Board of Management invite applications for the appointment of Honoray Anaesthetist to the hospital from practitioners holding the Diploma in Anaesthetics and willing to share in the emergency anaesthetic work of the hospital. Applications giving the names of three referees should be received by the Chairman of the Board of Management not later than April 15, 1948.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM
(Whole-time Temporary Assistant Medical Officer of Health (male).)

CITY AND COUNTY OF BRISTOL SOCIAL WELFARE COMMITTEE
(District Medical Officer.)

METROPOLITAN BOROUGH OF FULHAM
(Assistant Medical Officer and Second Resident Medical Officer, Maternity Home.)

By Order of the Council,
CHARLES HILL,
March 16, 1948. Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (330 beds)
HOUSE PHYSICIAN (B2)
to the Paediatric Department

Applications are invited from registered medical practitioners (men or women) for the post of House Physician (B2) to the Paediatric Department, vacant May 1, 1948. Salary at the rate of £220 per annum with full residential emoluments. The appointment is for six months in the first instance and preference will be given to applicants wishing to specialise in paediatrics. R practitioners holding A posts may apply, when appointment will be limited to six months. Applications should be sent to R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (330 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (men or women) for the appointment of House Physician (A), vacant immediately. Salary at the rate of £175 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts, may also apply, when appointment will be for a period of six months. Applications should be sent to R. Morrison Smith, C.A., F.H.A., Superintendent and Secretary.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (323 beds)
Second HONORARY OPHTHALMIC SURGEON

Applications are invited from registered medical practitioners for the post of Second Honorary Ophthalmic Surgeon. Applicants must possess the D.O.M.S. The successful candidate will be assistant to the Senior Honorary Ophthalmic Surgeon, and will be responsible for the duties allocated to him in the ophthalmic unit. Applications must reach the undersigned by March 31. The Honorary Clinical Assistant is an applicant for the post.—R. Morrison Smith, Superintendent and Secretary.

ROYAL MASONIC HOSPITAL
Ravenscourt Park, London, W.6
Vacancies on the Medical and Surgical Staff

The Board of Management of the Royal Masonic Hospital give notice that there are the following vacancies on the visiting medical and surgical staffs of the hospital, owing to retirement of former members:—

(a) An EAR, NOSE AND THROAT SURGEON
(b) TWO ANAESTHETISTS

Applications for the post of E.N.T. Surgeon are invited from candidates who are Fellows of the Royal College of Surgeons of England, and who are attached to the full staff of a recognized London teaching or special hospital. Applications for the post of Anaesthetist are invited from gentlemen who are engaged full-time in the practice of anaesthesia. The retiring age for these posts is 60, and the number of beds in the hospital is approximately 180. Applications should be sent in by the end of March, 1948.

ROYAL VICTORIA AND WEST HANTS HOSPITAL, Bournemouth (374 beds)

Applications are invited immediately from registered medical practitioners for the following appointments:

HOUSE SURGEON (A) (for General work).
HOUSE SURGEON (A) (for Orthopaedic and Casualty work).

Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. The appointments will be for a period of six months, salary £175 per annum, with full residential emoluments. Applications, stating age, qualifications, nationality, whether single or married, and accompanied by copies of three recent testimonials, to be sent within seven days of the appearance of this advertisement to Gordon M. Saul, Secretary.

ROYAL VICTORIA AND WEST HANTS HOSPITAL, Bournemouth (374 beds)
RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Medical Officer (B1). Commencing salary £300 per annum, with residential emoluments. Applicants should have held house appointments and had good experience. Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply. Applications should be sent within seven days of the appearance of this advertisement to Gordon M. Saul, Secretary

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A), including practitioners within three months of qualification, who are liable to service under the National Service Acts. Appointment will be for six months and duties include Casualty, E.N.T. and Orthopaedic work. Salary at the rate of £200 per annum, together with full residential emoluments. Post vacant now. Applications should be sent immediately to the Secretary-Superintendent.

ROYAL CORNWALL INFIRMARY, Truro
(Voluntary General—280 beds, 7 resident(s))
HOUSE SURGEON (B2)
to the General Surgical Department

Applications are invited for the post of House Surgeon (B2) to the General Surgical Department, which falls vacant on April 20, 1948. Salary at the rate of £200 per annum, with full residential emoluments. R practitioners now holding A posts may apply. Applications should be sent to the Acting Secretary, Royal Cornwall Infirmary, Truro, not later than March 31, 1948.

ROYAL LANCASTER INFIRMARY, Lancaster
(226 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male and female, for the post of House Surgeon (A). Salary £225 per annum with full residential emoluments. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply. The appointment will be limited to six months. Vacant April 26, 1948. Applications should be sent to the undersigned.—Frank A. Miles, Superintendent-Secretary.

(Continued on page 28)

Have you read the notice at top of page 12?

THE MEDICAL PROTECTION SOCIETY LIMITED

Founded 1892. **Assets exceed £100,000.**

Members receive advice and assistance in all matters affecting the practice of their profession and are afforded COMPLETE INDEMNITY against costs and damages in cases undertaken on their behalf.

Subscription £1. **No entrance fee to those joining within twelve months of registration.** **Entrance fee, 10/-.**

Full Particulars from the Secretary, VICTORY HOUSE, LEICESTER SQUARE, W.C.2. Gerrard 4553 and 4814.

EASTER, 1948
PLEASE NOTE

The Advertisement Manager will make every endeavour to ensure insertion of APPOINTMENTS and CLASSIFIED advertisements provided they are received not later than the date mentioned below:

For issue	Not later than
April 3	March 24

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

DO PLEASE WRITE ADVERTISEMENTS CLEARLY, NAME AND ADDRESS SHOULD BE IN BLOCK LETTERS.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, *Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To **all other** advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 15s. (minimum); or 24 words, 18s. 6d.; or 30 words, 22s.; and 3s. 6d. for each six words or less thereafter.

(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, including name and address, 24s. (minimum); or 30 words, 30s.; or 36 words, 36s.; and 6s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 25s. (minimum); or 24 words, 31s.; or 30 words, 37s.; and 6s. for each six words *or less* thereafter.

(4) **Educational, Lectures, Hospitals, Public Health Appointments, Nursing Homes,** 20s. per insertion for four lines (minimum charge) and 5s. per line thereafter.

(5) To **ALL** advertisers the charge for each insertion under the headings **Consulting Rooms, Duplicating, Typing, Houses, Miscellaneous, Motor Cars** is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Announcements, per insertion: 24 words 24s. (minimum). Extra words 6s. each insertion for six words or less.

***ADVERTS OF PRACTICES.** Name and address of owner and of firm negotiating the sale must accompany the advertisement. This information is for office use only.

Every effort is made to ensure the accuracy of advertisements appearing in the Journal. No recommendation is implied by acceptance, and the British Medical Association reserves the right to refuse or interrupt the insertion of any advertisement.

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.

Telephone; Euston 2111.

Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 12

PERSONAL

WANTED, ADDITIONAL TUTORS for postal tuition in Medicine for M.R.C.P. London and M.R.C.P. Edinburgh examinations.—Address: U.E.P.I., 17, Red Lion Square, London, W.C.1.

WANTED, M.B., B.Ch. HOOD AND GOWN in good condition.—Box 9750, B.M.J.

ONE THOUSAND POUNDS for a **Short Story.** Full details in the Sunday Dispatch.

FOR AN ENJOYABLE SWISS HOLIDAY join one of the following proposed parties: May 6 to 20, Lugano and Lucerne; June 16 to 30, Pontresina in Engadine; June 30 to July 14, Zermatt; Aug. 5 to 19, Lauterbrunner (for Murren, Wengen and Jungfrau Joch) and Kiental; Aug. 17 to 31, Kiental and Saas-Fee; Sept. 1 to 15, Oberhofen (on Thun Lake) and Wengen; Sept. 1 to 11, Bernese Oberland Walking Party; Dec. to Jan., Winter Sports at Saas-Fee. Also **DEVONSHIRE OVER EASTER:** Torquay Party, March 24 to 31. Good Hotel. Write C.T.U. (Estd. 1913, Dr. C. F. Fothergill), Chorley Wood, Herts. (Phone Chorley Wood 24.)

FRENCH PHYSICIAN SEEKS FOR SON, aged 17, **HOLIDAY EXCHANGE,** August to September. Slight preference London, Coast.—Box 9701, B.M.J.

WOULD ANY DOCTOR BE KIND ENOUGH to loan 16 mm Sound Films of general interest to cine enthusiast?—Box 9725, B.M.J.

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

Ex-I.M.S OFFICERS, CANADIAN.—Retired Canadian officers of the Indian Medical Service, in or passing through the U.K., are advised to contact the Senior Canadian Air Force Liaison Officer, 11, Hill Street, London, W.1, regarding employment in Canada with the Royal Canadian Air Force.

GENERAL HOSPITAL, Nottingham.—A RE-UNION of all past and present members of Medical and Nursing Staffs will be held at Lenton Grove Rheumatism Clinic, Beeston Lane, Nottingham, on Saturday, June 5, 1948. Please notify the House Governor as soon as possible, or in any event not later than May 1, of your intention to be present, stating whether hospitality will be required.

THE CLINICAL RESEARCH ASSOCIATION, LIMITED, Watergate House, 15, York Buildings, Adelphi, W.C.2, and South Road, Haywards Heath, Sussex.—A complete pathological service is provided for the medical profession, hospitals, and public health authorities. Specimens may be collected either at the Watergate House consulting rooms, the patient's house, or at a nursing home. Cardiographic, x-ray, and Basal Metabolic Investigations arranged. Telephones: Temple Bar 8993-4-5-6; Haywards Heath 576. Telegrams: "Tubercle, Rand, London."—I. Hollis, Secretary.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

WANTED FOR A LARGE TEA GARDEN PRACTICE IN ASSAM, PRINCIPAL MEDICAL OFFICER. Salary Rs.1,500 per month, plus allowances. Full particulars will be given to applicants by Alex. Lawrie & Co., Ltd., 8-10, Brown's Buildings, St. Mary Axe, London, E.C.3.

EXAMINING SURGEONS: FACTORIES ACT, 1937. The following appointment as Examining Surgeon under the Factories Act, 1937, is vacant: Staveley, in the County of Derby. Applications, which should be received not later than April 6, 1948, should be sent to the Chief Inspector of Factories, 8, St. James's Square, London, S.W.1.

MEDICAL OFFICERS, MALE GENERAL PRACTITIONERS. Vacancies exist for **TEMPORARY SERVICE** approximately six months with large Company operating in the Middle East. Should be under 40 years of age. Salary £100 sterling per month, plus generous allowance in local currency. Free furnished bachelor accommodation. Apply stating age, qualifications and experience to Box 9784, B.M.J.

NUFFIELD FOUNDATION TRAVELLING FELLOWSHIP SCHEME IN MEDICINE open to medical men and women who are Nationals of Australia.—The Nuffield Foundation is offering in 1948 and in the subsequent six years three fellowships a year in Medicine to men or women who are nationals of Australia and hold an Australian medical qualification. The Fellowships are of one year's duration and are tenable in the United Kingdom only. They are intended for persons in any field of medicine or surgery whose ultimate aim is to return to Australia and take up an academic appointment in medical teaching or research. The selection of applicants for Fellowships is to be made by a medical committee in Australia. Applications from Australians now resident in Great Britain should be forwarded to the Secretary, Nuffield Foundation, 12 and 13, Mecklenburgh Square, London, W.C.1, from whom application forms and particulars may be obtained. Applications for Fellowships to be taken up on October 1, 1948, must be received by April 1, 1948.—L. Farrer-Brown, Secretary.

DEPARTMENT OF CHILD HEALTH, UNIVERSITY OF DURHAM AND CHILDREN'S DEPARTMENT, ROYAL VICTORIA INFIRMARY, Newcastle-upon-Tyne, 1. FIRST ASSISTANT.—Applications are invited for the above post which will become vacant in the near future. The appointment is a whole-time one for year, renewable, carrying responsibilities in research, teaching, and clinical work. Salary £1,000 per annum. Duties to commence May 1, 1948, or as soon thereafter as possible. Further particulars can be obtained from Professor J. C. Spence, Children's Department, Royal Victoria Infirmary, Newcastle-upon-Tyne, 1, and applications, together with a curriculum vitae and the names of three referees, should be submitted to the undersigned not later than April 10, 1948.—G. R. Hanson, Registrar of King's College.

UNIVERSITY OF ABERDEEN. LECTURESHIP IN BACTERIOLOGY.—Applications are invited for the post of Lecturer in the Department of Bacteriology. Salary £600 to £750 according to qualifications and experience. Persons desirous of being considered for the office should be graduates in medicine and have experience of general hospital bacteriology. Applications should reach the Secretary to the University (from whom forms of application and conditions of appointment may be obtained) not later than March 27, 1948.—H. J. Butchart, Secretary, The University, Aberdeen.

UNIVERSITY OF EDINBURGH. DEPARTMENT OF SURGERY. SECTION OF ANAESTHETICS.—Applications are invited for the appointment of **FULL-TIME CLINICAL TUTOR.** Candidates must hold the Diploma in Anaesthetics. The salary will be at the rate of £450 to £550 per annum (non-resident), according to experience and qualifications. Applications, with names of three referees, should be sent to the Dean of the Faculty of Medicine, University New Buildings, Edinburgh, 8, before April 1, 1948.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE. Coleg Prifathrofaol Deheudir Cymru a Mynwy.—The Council of the College invites applications for the following posts in the Department of Physiology:

LECTURER IN BIOCHEMISTRY, commencing salary £700.

TWO DEMONSTRATORS, 1 in Biochemistry, 1 in Physiology. Salary £500 per annum.

Further particulars may be obtained from the undersigned, to whom six copies of application and testimonials should be forwarded by April 30, 1948.—Louis S. Thomas, Registrar, Cathays Park, Cardiff.

UNIVERSITY OF LONDON.—The Senate invites applications for the **CHAIR OF MEDICINE** tenable at St. Thomas' Hospital Medical School (salary not less than £2,000). Applications must be received not later than May 10, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **CHAIR OF BIOCHEMISTRY** tenable at St. Mary's Hospital Medical School (salary £1,500). Applications must be received not later than May 13, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **CHAIR OF BACTERIOLOGY** tenable at St. Mary's Hospital Medical School (salary £1,750). Applications must be received not later than May 12, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

EDUCATIONAL

F.R.C.S.(Edin.)
POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

HAMPSTEAD GENERAL AND NORTH WEST LONDON HOSPITAL, POSTGRADUATE MEDICAL SOCIETY, The Green, Hampstead, N.W.3.—An EXTENDED REFRESHER COURSE for General Practitioners and ex-Service Medical Officers will be held at the Hampstead General Hospital on Thursday afternoons from April 1 to June 17, 1948, inclusive. The fee for the course is 5 guineas. Financial assistance is available for demobilized practitioners and National Health Insurance practitioners. Applications for places and for particulars of the Course to K. A. F. Miles, Secretary to the Society.

CRANLEIGH SCHOOL, SURREY. ENTRANCE SCHOLARSHIPS, £120—£30. **INSTRUMENTAL** and **CHORAL,** £50—£30, are offered in March and June. At each examination one close Scholarship of not less than £50 per annum will be awarded to the son of a member of the Medical or Dental profession. Details from Bursar.

LONDON TEACHING HOSPITAL ASSISTANTS will undertake **PRIVATE COACHING** in anatomy and surgery, medicine and neurology for surgical, medical and psychiatric examinations including F.R.C.S. and D.P.M.—Box 9695, B.M.J.

EDINBURGH POSTGRADUATE BOARD FOR MEDICINE

BASIC SCIENCES

A three months' course in Applied Anatomy, Physiology, Pathology, Bacteriology and Biochemistry will begin on July 5, 1948. This course is suitable for postgraduates wishing to take the Primary Fellowship examination. The number attending will be limited to 40. Fee 30 guineas.

OBSTETRICS AND GYNAECOLOGY

A four weeks' course in Obstetrics and Gynaecology has been arranged for July 19 to August 13, 1948. It will be conducted in the Edinburgh Royal Infirmary and the Simpson Memorial Maternity Pavilion by the Senior Staff and the Clinical Teaching Staff, and will consist of approximately 80 hours lectures, operating sessions, clinical work and pathological demonstrations. The class will be limited to a minimum of 12 and a maximum of 20. Only those with considerable postgraduate experience in Obstetrics and Gynaecology should apply as the course is intended for those wishing to specialize and is not a General Refresher Course. Fee 20 guineas.

INTERNAL MEDICINE

The course lasting 12 weeks, suitable for graduates wishing a refresher course, or to specialize in Medicine, which begins on Monday, April 12, 1948, is full. A similar class commences on October 4, 1948. These courses consist of 300 hours' instruction comprising lectures, clinical demonstrations and ward visits. Fee 30 guineas.

GENERAL SURGERY

The five months' course of Postgraduate Surgery arranged to start on Monday, March 29, 1948, is full. A similar course will begin on Monday, October 18, 1948, and is suitable for surgeons requiring a refresher course in the current outlook on General Surgery, or for graduates preparing to specialize in Surgery; approximately 280 hours of instruction are provided. Fee 35 guineas.

REFRESHER COURSE FOR GENERAL PRACTITIONERS

The Twelfth General Fortnight Refresher Course, primarily for demobilized Medical Officers (Class II) and for Insurance Practitioners, will commence at 9 a.m. on Monday, May 3, 1948. 20 hours are devoted to lectures covering a wide range of subjects, with emphasis on recent advances in treatment. 50 hours are allotted to clinical demonstrations and ward visits. A similar course may be held in September, 1948. Fee for graduates not claiming expenses from Government sources, 10 guineas.

PAEDIATRICS AND OPHTHALMOLOGY

Short courses of instruction in Paediatrics and Ophthalmology are run in conjunction with the courses in Medicine and Surgery. They are primarily intended for those who wish additional experience in these subjects. A small fee is charged and the numbers are limited.

Applications for enrolment to Director of Postgraduate Studies, University New Buildings, Edinburgh, 8. Applicants for courses in Basic Sciences, Obstetrics and Gynaecology, Internal Medicine and Surgery, should supply particulars of qualifications and postgraduate experience.

EXPERIENCED COACHING IN PHYSIOLOGY, Pathology and Medicine by M.D., M.R.C.P., B.Sc. (Physiol.), all exams.—Box 8577, B.M.J.

INSTITUTE OF UROLOGY (University of London) In association with ST. PETER'S and ST. PAUL'S HOSPITALS.—POSTGRADUATE COURSES OF UROLOGICAL INSTRUCTION will be held as follows: April to July, September to December. These courses will include systematic lectures covering the whole subject of Urology, out-patient sessions, ward visits, operation sessions and tutorial demonstrations. All postgraduates taking the course are expected to attend lectures and may attend all tutorial demonstrations. They will be allotted individually to certain out-patient sessions, ward visits, and operation sessions. The fee for this three months' course is fifteen guineas. In addition, an intensive course of two weeks duration for students taking higher examinations will be held in September and March. Fee for this course is ten guineas. A certain number of Clinical Assistants are appointed in January and July of each year. Applications should be made to the Secretary, St. Peter's Hospital for Stone, Henrietta Street, W.C.2 and envelopes clearly marked "Postgraduate." Lectures will be held at 5 p.m.—Director of Studies, A. Clifford Morson, Esq., O.B.E., F.R.C.S. Joint Deans, A. W. Badenoch, Esq., M.D., Ch.M., F.R.C.S., A. R. C. Higham, Esq., T.D., M.B., F.R.C.S. Secretary, John R. Hopkins.

POSTAL COACHING for all Medical Examinations. Examination Successes, 1901-47; M.D.Lond., 454; M.B., B.S.Lond., Final, 436; F.R.C.S.Eng., Primary, 411; F.R.C.S.Eng., Final, 308; M.R.C.P., Lond., 427; M.R.C.S., L.R.C.P., Final, 891; D.A (1936-47), 143; F.R.C.S.Edin., D.Obst.R.C.O.G., M.R.C.O.G., D.C.H., D.L.O., many successes. Assistance with M.D. Thesis. Medical prospectus (24 pp.) gratis, along with list of Tutors, etc., on application to the Secretary.—University Examination Postal Institution, 17, Red Lion Square, London, W.C.1. 'Phone: HOLborn 6313.

POSTGRADUATE STUDY. Diploma in Anaesthetics; Diploma in Psychological Medicine; Diploma in Ophthalmology; Diploma in Radiology; Diploma in Laryngology; Diploma in Child Health; F.R.C.S.Eng. and all Surgical Examinations; M.R.C.P.Lond. and all Medical Examinations; M.D. Thesis of all Universities; Courses for all Qualifying Examinations. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested. Address: Secretary, Medical Correspondence College, 19, Welbeck St., London, W.1.

PATHOLOGY TUTOR with access to material required by member to cover ground for **PRIMARY FELLOWSHIP** before taking a later course.—Box 9726, B.M.J.

RHEUMATIC DISEASES, March 19, 20, and 21. Friday afternoon, all day Saturday and Sunday. Rheumatic Unit, St. Stephen's Hospital. Apply, Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

SOCIETY OF APOTHECARIES OF LONDON.—Surgery: April 12, May 10, June 14. Medicine and Pathology: April 19, May 18, June 21. Midwifery: April 20, May 18, June 22. Mastery of Midwifery: May and November. Diploma in Industrial Health: July and December. For regulations apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

SOCIETY OF APOTHECARIES OF LONDON.—DIPLOMA IN INDUSTRIAL HEALTH.—The next Examination will begin on Monday, July 5, 1948. The following Examination will be held in December, 1948. For regulations, apply Registrar, Apothecaries' Hall, Black Friars' Lane, London, E.C.4.

SOUTH EASTERN HOSPITAL FOR CHILDREN, London, S.E.26.—POSTGRADUATE TEACHING will recommence on May 1. Details of the Summer Course and application forms can be obtained from the Director of Postgraduate Studies, South Eastern Hospital, Sydenham, S.E.26.

THE ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE.—THE CERTIFICATE AND THE DIPLOMA IN PUBLIC HEALTH AND THE DIPLOMA IN INDUSTRIAL HEALTH.—The next **COURSE OF INSTRUCTION** for the Certificate in Public Health (C.P.H.) will commence on Tuesday, March 23, 1948, for the Preliminary Examination of the Conjoint Board of the Royal Colleges of Physicians and Surgeons. The Courses, both for the Certificate and for the Diploma in Public Health, can be taken either whole- or part-time. A Course of Instruction, part-time or whole-time, is also provided for the Diploma in Industrial Health. Part I is the same as, and commences concurrently with, the C.P.H. Course. Those already holding a Certificate in Public Health are exempt from that part. A Course for Part II (D.I.H.) commences in July, 1948. Prospectuses, enrolment forms, and full details of both may be obtained from the Secretary, 28, Portland Place, W.1. (Telephone: LANgham 2731-2).

THE COMBINED HOSPITALS POSTGRADUATE SCHOOL OF OBSTETRICS AND GYNAECOLOGY, ROYAL NORTHERN AND CITY OF LONDON MATERNITY HOSPITALS (OBSTETRICS); SOHO AND SAMARITAN HOSPITALS (GYNAECOLOGY).—A Course of training for M.R.C.O.G., M.D., etc. is being given by Prof. F. J. Browne and the Staffs of the above hospitals. Next term begins April 13. Details from Prof. F. J. Browne, Hospital for Women, Soho Square, London, W.1

TUTORING IN NEUROLOGY, NEURO-ANATOMY and PSYCHOLOGY for D.P.M., etc. Private or classes. Apply Box 9462, B.M.J.

UNIVERSITY OF SHEFFIELD. Department of Child Health.—A POSTGRADUATE COURSE in CHILD HEALTH will be held at the Children's Hospital, Sheffield, from April 1 to June 30, 1948. The Course will include ward clerking, out-patient and in-patient teaching, lecture demonstrations and seminars, and will be full-time. The fee will be 15 guineas. Applications, with details of experience, qualifications, and proposed future career, should be forwarded immediately to the Dean of the Faculty of Medicine, 358, Mushroom Lane, Sheffield, 10.—A. W. Chapman, Registrar.

UNIVERSITY OF GLASGOW. DIPLOMA IN PUBLIC HEALTH.—As it is anticipated that the number of applications for the D.P.H. Course commencing in October, 1948, will exceed the number of places available, those who desire to begin this Course are requested to apply for admission forms to the undersigned. These forms must be lodged between April 15 and 30, 1948.—Robert T. Hutcheson, Registrar.

ASSISTANTSHIPS

VACANT

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Wanted, Assistant for mixed practice, West of England town. Salary £850, including £50 car allowance. Furnished flat available to rent, with use of very nice garden.—Box 9752, B.M.J.

Wanted, Assistant (male or female), with or without View to Partnership, outskirts Derby. Panel 3,500. Car essential. Furnished flat provided. Salary £750, petrol allowance £50.—Box 9753, B.M.J.

Wanted, Outdoor Assistant, country practice, Cottage Hospital, possible View to keen willing worker, £800 to £900 per annum, according to experience, small unfurnished house can be rented.—Box 9073, B.M.J.

Wanted, Outdoor Male Assistant, South West Wales, rooms available to rent. Car essential. Inclusive salary £800.—Box 9704, B.M.J.

Wanted, Assistant, male, single, outdoor, experienced, for rural practice N. England.—Box 9705, B.M.J.

Wanted, Assistant, Indoor or Outdoor, with or without View, N.E. England. Car preferred but not essential. Outdoor salary to include motoring expenses up to £1,000 to commence.—Box 9707, B.M.J.

Wanted, end of May, Assistant with View Partnership, interested Christian work, semi-rural Essex practice 25 miles London. Small bungalow, car available. Salary by arrangement.—Box 9732, B.M.J.

Wanted, Outdoor Assistant, single, in large mixed practice in South Yorks. Good accommodation available. Must be driver. Own car an advantage. —Box 9788, B.M.J.

Wanted, Male Assistant for mixed practice in South West Lancashire. Salary £700 per annum, plus £50 car allowance and rent-free unfurnished house.—Box 9789, B.M.J

Wanted, Assistant for practice in Yorkshire city. No view to purchase. Salary by arrangement.—Box 9786, B.M.J.

Assistant wanted for large semi-rural practice, market town Eastern England, preferably English nationality. Unfurnished flat and £800 salary (to include car allowance) offered.—Box 9755, B.M.J.

Assistant required, Welsh speaking. House available, furnished or unfurnished. Suit young married man, able drive car. Good prospects.—Box 9751, B.M.J.

Assistant required in busy industrial practice, preferably young and single. Own car an advantage. Salary by arrangement.—Box 9426, B.M.J

Assistant with early View Partnership, industrial practice Tyneside area. Unfurnished house probably available. Salary £800.—Box 9782, B.M.J.

Assistant wanted to two partners, Surrey, 15 miles London. Part house available. Opportunity to work in two hospitals. Possible View small share in partnership.—Box 9756, B.M.J.

Assistant with early View to 1/3rd share Partnership in urban and rural private and panel practice with great scope, Essex. Should be young, keen and British.—Box 9783, B.M.J.

Assistant, preferably married, with or without View, mixed non-dispensing practice. Country town, Sussex Coast, near Brighton. Salary by arrangement. Car provided Accommodation allowance.—Box 9706, B.M.J.

British Columbia. Assistantship with View Early Partnership in established practice offered young well qualified physician (membership desirable), with principal (F.R.C.S.Ed.) share control 60 bedded modern hospital, equipped X-ray, inductotherm, electrocardiograph, etc. Scottish background valued. Exceptional opportunities and conditions. Apply immediately Air Mail or telegram (or transatlantic telephone—Smithers 23) to Dr. M. M. Greene, Box 39, Smithers, B.C., Canada, or telephone SLO 3126.

North Wales Coast. Assistant wanted for town and country practice. Own car essential. Welsh speaking desirable. Salary £600, living and car allowances by agreement.—Box 9754, B.M.J.

N.W. London, Male, married Assistant wanted, light work. Suit man reading. Unfurnished flat available. Remuneration by arrangement.—Box 9787, B.M.J.

Part-Time Outdoor Assistant wanted immediately, South West area. Suit semi-retired, single practitioner. Work very light. Small car essential. Permanent appointment if suitable.—Box 9785, B.M.J.

Two Christian doctors require Long-Term Assistant busy mixed practice urban and rural, Birmingham area. Unfurnished house available.—Box 9731, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments—Write, A Shaw, Medical Agent, Premier Buildings, 88, Church, Street, Liverpool, 1.

WANTED

Wanted, Assistantship with or without View, by ex-R.N.V.R., 31, married. Own car. Accommodation essential.—Box 9007, B.M.J.

Wanted, Short Assistantship with View or Partnership. Good hospital and G.P. experience. Married (wife M.R.C.O.G.) and one child. House to rent preferred. Own car, furniture and capital available.—Box 9686, B.M.J.

Wanted, Assistantship by young Scots graduate, married, one child, one year hospital, 2½ years R.A.M.C., furnished accommodation essential.—Box 9759, B.M.J

Wanted by experienced woman doctor (war widow) Light Post in rural or small town, non-industrial practice in exchange for board and small salary. Take charge when required.—Box 9743, B.M.J.

Wanted, Part-time Work, London area, by post-graduate, M.B., Ch.B., British, aged 34, married. Own car. Available immediately.—Box 9709, B.M.J.

Wanted by lady doctor, experienced anaesthetist, Part-time Work, preferably dental anaesthetics, in Central London.—Box 9710, B.M.J.

Wanted, Assistantship, woman, aged 26, M.B. (Glas.), 2½ years' hospital experience. Free now.—Box 9711, B.M.J.

Wanted, Assistantship with or without View, Scot, ex-R.A.M.C., aged 33, married. Hospital, anaesthetic, obstetric, G.P. experience. References. Car owner Accommodation desirable. Available May.—Box 9712, B.M.J.

Wanted, Evening Surgeries in London by doctor, experienced G.P., hospitals, R.A.M.C. Non-driver. Could learn if long term.—Box 9733, B.M.J.

Assistantship, with or without View, wanted by M.B., Edin. early May, aged 46, married, well experienced G.P. with anaesthetics, midwifery and local hospital. Own car. Good references. Unfurnished accommodation.—Box 9760, B.M.J.

Assistantship wanted, young married doctor. Free April 1. Hospital experience and knowledge of G.P. work. Driver.—Box 9758, B.M.J.

Assistantship, preferably with View, wanted with partnership of two or more, country or country town Southern England. Aged 30, married, one child. Qualified 1942 (Guy's), Hospital, R.A.M.C., and sixteen months' G.P. experience. Own car. Free April.—Box 9727, B.M.J.

Assistantship, preferably with View, wanted by M.B., Ch.B., age 27, married, no family. Hospital and G. P. experience. Own car. Accommodation essential.—Box 9467, B.M.J.

Assistantship wanted by woman doctor, Scot. M.B., Ch B. 1942. Hospital, G.P. experience. Able to drive. Surrey, Sussex, Hampshire.—Box 9406, B.M.J.

D.O.M.S. wants Assistantship with View, in ophthalmic practice, preferably South West England or Wales.—Box 9761, B.M.J.

Energetic male G.P., eight years qualified, English, available Part-time Work, Locums, London area, Home Counties. Car available.—Box 9708, B.M.J.

Experienced M.D. available Surgeries, week-ends, local Locums, travelling distance Ealing. 'Phone, Perivale 1976 or write Box 9734, B.M.J.

M.B., Ch.B. (Aberd.) 1942, single, 2 years hospital, 4 years Army, desires Assistantship in Scotland. Car available. Free after April. Would undertake locums until settled.—Box 9687, B.M.J.

St. Thomas's man, 40, ex-Service, resident near Sloane Square, would undertake Surgeries, London area. Own car.—Box 9757, B.M.J.

Woman doctor requires Part-time Work Guildford area (infant welfare clinics, morning or evening surgeries, etc. Telephone. Car available.—Box 9790, B.M.J.

LOCUMS

VACANT

Wanted, an Indian Locum urgently for approximately three months. Doctor East London suburb, going home early April.—Apply Box 9735, B.M.J.

Wanted, reliable and experienced Locums for town and country practices. State full particulars —British Medical Bureau, 33, Cross Street, Manchester, 2.

Locum wanted, Stoke-on-Trent, about June 3 to 20. No midwifery. 2 guineas daily.—Box 9762, B.M.J.

Locum wanted for country practice in nice district from May 8 to 22 inclusive. Car provided. Midwifery essential. £10 10s. per week.—Box 9764, B.M.J.

Locum, June 5 to 18. Accommodation for wife if required.—Box 9791, B.M.J.

Lady Locum wanted first fourteen days in May for practice in Yorkshire dale. Own car preferable but not essential.—Box 9763, B.M.J.

Locum Tenens Medical Officer required at St. George's Hospital, Morpeth, Northumberland from March 23 for at least four weeks. Knowledge of psychiatry desirable but not essential. Salary 10 guineas weekly with usual residential emoluments. Letters should be addressed to the Medical Superintendent.

AVAILABLE

Wanted. Two weeks Locum in Cornish coast town by experienced G.P. September or early October.—Box 9792, B.M.J.

Experienced G.P., male, Scottish, desires Locums, S.W. district preferred, not essential. Free now. Own car.—Box 9794, B.M.J.

Experienced retired G.P. available for Short Locums or "on call" for Surgeries, M.D. Own car. North or North-West London areas.—Reply Box, 9713, B.M.J.

Experienced practitioner, M.B., B.Ch., B.A.O., F/R.C.S.(Ed.), L.M. (Rotunda Hospital, Dublin) desires Hospital or G.P. Locum. Ex-I.M.S. officer, aged 40.—Box 9765, B.M.J.

Locum Services Offered for the month of August in sea town in return for house accommodation for wife and family.—Box 9688, B.M.J.

Locum engagements wanted by experienced practitioner, preferably S.E. England. Excellent testimonials. London hospital. Church of England. Own car.—Box 9745, B.M.J.

Locum or Assistantship, View, required London area, preferably South Thames, M.D. (N.U.I), medicine and obstetrics, 30 years. Hospitality wife. Free June 1. Own car.—Box 9736, B.M.J.

M.D., F.R.C.S.E., aged 30, experienced hospital and general practice, requires Locum with hospitality for wife and 2 children. Maid available. Own car. Seaside preferred. Last two weeks in July.—Box 9793, B.M.J.

M.R.C.S., 1942, free now, Locums, Assistantship or Surgeries. Single, male. Excellent testimonials. Cardiff preferably, or London. State requirements.—Box 9766, B.M.J.

PARTNERSHIPS

OFFERED

Wanted, almost immediately, Partner for three-partner town and country practice, North Midlands. Net income for available 1/4 share approximately £2,500 (audited figures). Price two years net. Scot, married and Protestant preferred. House to rent. Capital required. Senior partner retiring ill health.—Box P9769, B.M.J.

Outer Suburbs East London. 1/3 Share worth over £2,000 in old established progressing Practice. House for sale or rent. Premium 2 years' purchase. —Box P9795, B.M.J.

Partner wanted rapidly growing non-industrial practice, Kent, within 20 miles London. Half share of over £2,000, followed later by succession. Great scope for well qualified man. Hospital 200 beds.—Box P9768, B.M.J.

Partnership Offered. Nr. Lincs. town, half share at £1,500 gross, 1½ yrs. purchase. Panel 1,500. Scots or English, ex-Service preferred.—Box 9482, B.M.J.

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Wanted, Assistantship early View Partnership share, premium not in excess £2,200, by ex-Service, young, married, child, own car, furniture. Free now. Rented accommodation essential.—Box P9770, B.M.J.

Ophthalmic Partnership or Assistantship with View, by M.B., B.Ch., D.O.M.S. (Eng.), operative and general experience. Hospital essential. Capital. —Box P9738, B.M.J.

MEDICAL POSTS

VACANT

Clinical Assistant wanted, latter end of March (male or female), group of psychiatric nursing homes, advantage if conversant with E.C.T. Six months' appointment, with possibility of extension. Salary £450 per annum, with full board and resident accommodation. Apply immediately, with testimonials, Medical Director, Arthington, Barton Road, Torquay.

North Kensington Women's Welfare Centre, (Gynaecological and Birth Control Clinic), 12, Telford Road, Ladbroke Grove, W.10. Applications are invited for the post of Medical Officer, (women doctors only) at the above Centre. One Birth Control Session weekly, Tuesday 6 p.m. to 7.30 p.m. Applications, accompanied by full particulars and testimonials, should be forwarded to the Superintendent at the above address as soon as possible. Fee £2 5s.

Royal Berkshire Hospital, Reading.—Applications are invited from registered medical practitioners for the post of Bacteriologist. Candidates are required to have had previous experience in Bacteriology. The duties will be mainly bacteriological but the person appointed will be expected to undertake some general clinical laboratory duties at the request of the Director of the Laboratory. Salary will be according to experience but not less than £1,000 per annum. Applications stating age, qualifications and experience and accompanied by copies of not less than three recent testimonials to be sent to the undersigned as soon as possible.—H. E. Ryan, House Governor

Royal Hampshire County Hospital, Winchester (323 beds). Biochemist required to take charge of the Biochemical section of the Clinical Laboratory and to be responsible to the Honorary Pathologist. Science degree in chemistry, preferably Branch E of F.R.I.C Salary not less than £500 per annum according to qualifications and experience. Applications to the undersigned as soon as possible.—R. Morrison Smith, Superintendent and Secretary

The Royal Hospital, Wolverhampton (500 beds) (Incorporated under Royal Charter). General Branch (310 beds).—Wanted immediately for Pathological Laboratory a Grade B Technician, commencing salary in accordance with the Joint Committee recommendations on salaries and wages for hospital staffs. Must be qualified and experienced, and have not less than four years' experience of Laboratory work, and should have passed an examination of the standard of the Final Examination of the Institute of Medical Laboratory Technology or its equivalent. Applications, with copies of testimonials, to the House Governor, The Royal Hospital, Wolverhampton.

WANTED

Industrial Medical Post, part-time, required by medical woman experienced in industrial medicine, preferably West London.—Box 9767, B.M.J.

PRACTICES

FOR SALE

Country Practice, Yorks-Lincs border. Panel 2,500. Average receipts last three years £4,200. Modern house, garages. Purchase price 1½ years. House at valuation.—Box P9443, B.M.J.

Death Vacancy, North East Scotland. Partnership in long established General Practice with large panel. Offers over £7,500. Modern well-equipped house available at valuation. Address 0535, Wm. Porteous & Co., Glasgow.

For Immediate Sale. Old-established Industrial Practice in key position housing estate, large Yorkshire town. Panel 2,900 approx. Income £3,300. Charming newly decorated modern house with garden, owner going abroad. Premium Practice 1½ years' purchase. House £4,000.—Box P9716, B.M.J.

For Sale. Practice, mostly private, small panel, Bournemouth area. R.C. preferred but not essential £2,500 per annum approx. Good house and garden, freehold. Two years' purchase required. Cash settlement.—Box P9715, B.M.J.

For Sale. Old established urban and rural Practice, 3 miles north-west coastal resort. Panel over 1,000. Good private returns. Excellent house, separate entrance to surgeries. Large garages.—Apply Box P9696, B.M.J.

For immediate Sale, South East Kent, Small House and Nucleus. Takings £900, rapidly increasing, unlimited scope.—Box P9773, B.M.J.

For Sale, old-established Panel and Private Practice, industrial and rural, Monmouthshire. Gross income about £3,500, delightful freehold house for sale, large garage and garden. Cash £8,000 practice and house.—Box P9771, B.M.J

For Sale.—Old-established Private and Panel (2,100) Practice in busy industrial town five miles from Birmingham Receipts 1947 £2,600 to £2,700 audited. Excellent house to rent £110 per annum. Premium 1½ years purchase.—Box P9775, B.M.J.

For sale in April. Old established country town practice in picturesque locality. Gross receipts 1947, £3,296. Panel £1,471 Transferable appts. £130. Charming large country house in excellent repair, all modern conveniences. Large garden with tennis court. Grammar school. All country sports House, practice, large supply drugs, some surgery fittings and furniture. Price £11,000 cash.—Box P9477, B.M.J

Lancs. Town. Old established Practice. Panel 3,000. Income £6,000. Two appointments. Two houses available (one for rent). 1½ years' purchase. Can be run by one, but would suit two.—Box P9797, B.M.J.

Mixed Panel, Private Practice, West Riding Yorkshire. Receipts over £4,000. Panel 3,000. Large house, large grounds, surgery, to rent. Smaller detached house for sale. Price 1½ years' purchase.—Box P9774, B.M.J.

Near South Coast. Part of Large Practice for sale. To include approximately 2,000 panel units. P.M.S. value £350 p.a., and associated goodwill which is very considerable and offers unlimited scope. Modern flat and surgery premises with most complete equipment, drugs, etc. Premium for whole, £10,000.—Box P9798, B.M.J.

N.W. Lancs. Old-established Mixed Practice Panel 1,600. Income £4,500 audited figures. Central consulting room, garage, living accommodation if required.—Box P9412, B.M.J.

Old established Industrial and Urban Practice for Sale, Cheshire. Panel 2,000. Gross income over £2,500. Good house with garage available. 1½ years' purchase.—Box P9694, B.M.J.

Ophthalmic. Old-established Practice, large provincial city and neighbouring towns, less than 120 miles north of London. Early hospital vacancies. Owner retiring. Premium £1,000.—Box P9739, B.M.J.

Practices and Partnership Shares for sale in Midland and Northern Counties. Full details free on request.—British Medical Bureau, 33, Cross Street, Manchester 2.

Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool. Telephones: Royal 8816 and Royal 7480. Telegrams: "Organic," Liverpool.

Sound old-established Practice for Sale, West London Suburb. Receipts 1946-47 £2,400. Panel 550. Excellent detached corner house (freehold), 2 reception, 5 bedrooms, 2 bathrooms, professional rooms, garden, garage, for sale at valuation. Premium one year's purchase.—Box P9772, B.M.J.

Wirral. Established Private and Panel working-class Practice for disposal. Panel over 1,900 units. Total gross income approx. £2,500 p.a. Good house to rent. Further particulars write: A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

PRACTICES

WANTED

Wanted. Practice in London suburb or environs, including about 1,000 panel. Capital available.—Box P9063 B.M.J.

Wanted Immediately, Practice, panel, private or nucleus. London area, Surrey or Sussex. House wanted to purchase. Capital available.—Box P9693, B.M.J.

Wanted, Town Practice. Panel 1,500 to 2,500. Capital available, confidential, all letters answered. —Box P9800, B.M.J.

Wanted urgently. Private and Panel Practice. Income £1,500 to £3,000. West London suburb or within seven miles of Uxbridge. Ample capital for house and practice.—Box P9799, B.M.J.

Wanted in Twickenham, Whitton, Feltham or Hampton Hill area. Panel, Branch Practice, or Nucleus.—Box P9722, B.M.J.

Wanted, Practice or Partnership by M.B., Ch.B. 1941 (Scot). Commencing May. Country or small town. £1,500 to £2,000 per annum. House essential. Capital available.—Box P9717, B.M.J.

Wanted, Mixed Practice, rural area South Mid-lands or Sussex. Income about £2,000. House, five to six bedrooms essential. Good garden, outbuildings an advantage.—Box P9721, B.M.J.

Experienced practitioner with capital desires to purchase new Practice and House in congenial town. Income £2,000 upwards.—Box P9718, B.M.J

M.B., Ex-Major, R.A.M.C., urgently requires Practice. Income £1,500—£2,000. Panel 1,000 upwards. Ample capital available for immediate purchase.—Box P9474, B.M.J.

M.B., Ch.B., Edin., aged 31, ex-Major R.A.M.C., married, desires Practice, Partnership or Assistantship with View, Scotland. Capital available.—Box P9778, B.M.J.

Non-industrial Panel and Private Practice re-quired immediately. Income £1,200 to £2,000, in small seaside or country town, Southern or South-Western Counties preferred. Modern house and garden.—Box P9720, B.M.J.

Practice wanted in Durham County or Northum-berland, with panel about 1,500 to 2,000. Full particulars in strictest confidence to Box P9776, B.M.J.

Practice wanted, seaside resort preferred but not essential. Partnership considered. Capital available. Replies in confidence to W. G. Richards, M.B., B.S., M.R.C.O.G., 65, Wentworth Avenue, Southbourne Hants.

Practice with scope, anywhere south or south-west of Birmingham. Keen ex-Service doctor, 28, married, well qualified, recent hospital (obstetrics and gynaecology) and G.P. experience, with excellent references and capital.—Box P9019, B.M.J.

Practices and Partnerships wanted anywhere, England, Scotland, Wales. Purchasers waiting. Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

Small Practice wanted within four miles of Car-shalton. Replies treated confidentially. Ample capital available.—Box P9777, B.M.J.

Southampton practice, partnership or assistantship wanted by well-qualified experienced doctor. Urgent.—Box P9447, B.M.J.

Scotland. Practice in country town. House with garden to purchase. Cash settlement. Extensive G.P. and hospital experience.—Box P9719, B.M.J.

DIETITIANS, DISPENSERS, NURSES,

VACANT

Wanted, Dispenser-Bookkeeper in pleasant seaside and country practice. Furnished accommodation available.—Dr. C. S. Lewis, Cawsand, near Plymouth.

Assistant Dispenser required immediately in country practice, young, qualified, interested in laboratory work. Experience not essential.—Sir Kaye Le Fleming and Partners, Wimborne, Dorset.

Bookkeeper and Bookkeeper-Dispenser urgently wanted by firm of two doctors. Part-time or whole-time services. Phone King's Langley 7129 or write Box 9740, B.M.J.

Experienced Lady Dispenser wanted for G.P. in Croydon. Apply stating age, experience, and full particulars.—Drs. Hudson and Lane, 391, Lower Addiscombe Road, Croydon. Addiscombe 2100.

Lady Dispenser required by doctor practising in Hampstead. Hours 9.15 a.m. to 12 noon, and 4.30 p.m. to 6 p.m. No Sunday duty.—Box 9723, B.M.J.

London College of Pharmacy for Women supplies Dispenser-Bookkeeper or Laboratory Technician. Training for Apothecaries' Hall Assistants' Examination, and in Clinical Pathology.—Secretary, 7, Westbourne Park Road, W.2. (Bayswater 0969).

Qualified Dispenser Required in April for busy mixed practice.—Drs. Watson, Stockwell, Leek, Staffs.

Secretary-Dispenser required for small private sanatorium, light post. Would live in Nurses Home.—Apply, Sister-in-Charge, S. Michael's Home, Axbridge, Somerset. State full particulars.

Young lady Dispenser required. Country practice, S. Coast. Secretary and another dispenser kept. Some evenings and week ends off—Box 9692, B.M.J.

AVAILABLE

Dispenser, 23, Hall Certificate, desires Locums for summer months. Hospital experience. Free immediately.—Box 9742, B.M.J.

Lady Dispenser-Bookkeeper (Hall) desires change. Fifteen years' experience.—Box 9728, B.M.J.

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

Wanted, woman as Technical Secretary, with some knowledge of medicine or biology, and also of French and German. Salary £300 to £400 per annum, according to qualifications.—Apply Professor-in-Charge, Department of Pharmacology, Oxford.

Immediate vacancy, Educated Receptionist for Harley Street, preferably able to type. Alternate Sunday afternoon and one evening a week additional duty.—Box 9780, B.M.J.

Nursery Nurse with Light Receptionist Duties required by doctor in N.W. London. GLA 1616.—Box 9698, B.M.J.

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

AVAILABLE

The Control of Engagement Order, 1947, provides that the services of any advertiser under this heading may only be engaged through the medium of the Local Employment Exchange or approved Employment Agency, unless he or she is over the age of 50 or 40 respectively, or otherwise excepted from the provisions of that Order.

Wanted, position as doctor's or specialist's Recep-tionist. Age 31. Efficient typist. Able to drive a car. Certificate from the Medical and Dental Receptionists Institute, Ltd.—Box 9685, B.M.J.

All types Receptionists, Secretaries, Dispensers, Med. Aux., etc., wanted and supplied. No fee to employer.—Medical Services Employment Bureau, 23, Mount Park Road, W.5. Tel.: Perivale 1976.

Clinical Stenographer-Typist free now. First-class references, gynaecological, orthopaedic and surgical. Hospital or private. Will go anywhere. Apply: Miss M. Jones, Vicarage, Calthorpe Road, Banbury.

Doctor's daughter, 23, seeks Part-time Temporary post as Secretary-Receptionist London. Previous medical experience. Available April.—Box 9781, B.M.J.

Doctor's Receptionist seeks new post. Excellent references.—Box 9724, B.M.J.

Speed and Accuracy in all varieties of Type-writing. Temporary staff supplies.—Rae Secretarial Services, 29, Monmouth Road, London, W.2. Tel. Bayswater 7768.

Lady seeks Post as Medical Receptionist, ex-perience in both clinical and private practice.—Box 9729, B.M.J.

Medical Secretaries supplied permanently, temporarily and by the hour. Professional papers copied. Highest references.—Cavendish Secretarial Service, 13, Princess Street, Cavendish Square, W.1 MAYfair 2772.

Secretary, knowledge medical terms, offers Part-time Assistance, including bookkeeping in exchange small Unfurnished Flat. London area.—Box 9746, B.M.J.

Typewriting, copying, duplicating, all branches secretarial work. Speedy, accurate and confidential service.—Curzon Secretarial Bureau, 2, Queen Street, Mayfair, W.1. Gros. 4670.

MISCELLANEOUS

PRIVATE

Wanted. Lantern Slides Fundus Oculi, coloured preferred. Phones NOR 3115, LAB 1295.—Box 9741, B.M.J.

For Sale. Leitz Microscope, eyepieces ×6 ×10, objectives 2/3, 1/6, 1/12 oil immersion, £40.—Box 9747, B.M.J.

For Sale. Postgraduate Surgery (Maingot), 3 Vol., 1936. As new, original paper wrappers. Offers.—Box 9744, B.M.J.

For Sale. Two good strong Plinths, horse-hair padded, Rexine covered, adjustable end. Also combined table, almost new.—Nestle, 27, Jubilee Place, Chelsea, S.W.3. Flaxman 8834.

For Sale, "British Encyclopedia of Medicine" by Rolleston, perfect condition, £30.—Box 9730, B.M.J.

For Sale, Spencer Microscope, two eyepieces, objectives 2/3, 1/6, 1/12 oil immersion, mechanical stage, condenser, focusing substage, mahogany case, perfect condition £45.—Dr., 2 Linksview Road, Hampton Hill, Middlesex.

For Sale. McKesson Nargraf gas oxygen machine with nasal attachment. Excellent condition.—Write Dr. Ball, White Horses, Barton-on-Sea.

Examination Couch, pigmoid, value £6. Micro-scopic Medical Slides, 175, perfect condition. Best offer.—Box 9702, B.M.J.

Instruments for Sale, new condition, complete with spares. Perurethral prostatic hot-loop resectoscope; Wolf-Schindler flexible gastroscope with inflatable balloon; peritoneoscope. Offers—Box 9697, B.M.J.

Refrigerator, Electric, 4 ft. capacity (approx.). Completely overhauled, re-sprayed, first-class condition, owner bought 13 ft. model. Nearest £78.—Cwm House, Castle Street, Worcester.

For Sale. Victor self-rectified 30 m.a./90 k.v.p. x-ray set, single focus tube, in perfect condition. Offers invited for the set, expertly dismantled, on site.—Apply, Hon. Secretary, East Cornwall Hospital, Bodmin.

TRADE

Wanted, Second-hand Surgical Instruments, furni-ture for surgery and consulting room, blood pressure apparatus electric diagnostic sets, ophthalmoscopes, auriscopes, microscopes, etc.—Particulars to A. Fleming & Co. (Succrs.), 51, Mortimer Street, London, W.1. (Telephone: Mus. 6292.)

American Magazines posted to you from U.S.A. We can accept prepaid subscriptions to most American Journals. S.A.E. for list. Dept. D 14, Rees Beavan, Ltd., 130, Brompton Road, London, S.W.3

Doctors' Watches.—Franklands can still supply your requirements in watches. Write for particulars.—E. J. Frankland & Co., Ltd., Marle House, South Godstone, Surrey; or London Showroom, New Bridge Street House, 30-34, New Bridge Street, Ludgate Circus, E.C.4.

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold-resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire.

For regular delivery of the magazines "Time," "Life," and "Fortune," apply to Joseph Murphy, 4, Clare Street, Dublin.

Good Microscope wanted for cash, Binocular or Monocular.—Canister Lodge, Forty Hill, Enfield, Middlesex

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept., B.M.J.), 3, Railton Road, London, S.E.24.

Queen Non-Irritant Toilet Range for prescription in allergic cases. Leaders of the profession have found these of great use as an alternative to beauty preparations and cosmetics suspected of giving rise to allergic symptoms or other irritants. Small supplies of "QUEEN" non-allergic skin soap are now available, 1s. 6d. tablet.—Boutalls, Ltd., 150, Southampton Row, London, W.C.1.

Microscopes Readily turned into Cash. Highest prices paid for modern instruments and accessories. Send apparatus for valuation to Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. MAYfair 7511

Selling Jewellery or Silver? We pay £15 to £35 for cultured pearl necklaces; £15 to £25 for 18ct. pocket watches and chains; £3 to £7 for 22ct. wedding rings; £15 to £75 gold cigarette cases; £25 to £150 diamond eternity rings and watches; £20 for £5 gold pieces; £5 to £15 solid silver sports cups; £15 to £60 solid silver tea-sets; up to £1,000 for diamond or coloured stone rings, brooches, bracelets and earrings, etc. Valuations by qualified expert (Fellow Gemmological Assen.). Register your parcels (we send cash or offer per return) or call at M. Hayes & Sons, Ltd., 106, Hatton Garden, London, E.C.1, HOLborn 8177. Telegrams "Golcase, Smith London."

Wigmore's, Ltd., 63, Baker Street, London, W.1. (Welbeck 5668). Dispensing Opticians by appointment to Western Ophthalmic Hospital, Marylebone Road, London, N.W.1. Doctors' prescriptions accurately dispensed.

APARTMENTS, BOARD, ETC.

AVAILABLE

Bed and Breakfast, 15s. daily, from 3 gns. weekly.—10, Welbeck Street, London, W.1.

Bushey, Herts. Gentlewoman offers comfortable part board-residence to one or couple. Large garden. Convenient for station.—Box 9748, B.M.J.

Harley Street Flat, very large room 2nd floor to be disposed. Six years' lease. Suitable as bed-sitting-room. C.H.W., bathroom. Can be used also as consulting room. Services. Waiting room. Receptionist. Telephone. Light meals. Rent £150 per annum. Near large clinic.—Tel. WEL 2296 for viewing.

Hampstead Heath, Bed, Breakfast, well furnished rooms. Collector's unique quiet house. On heath 300 ft. up, magnificent views.—50, Parliament Hill, N.W.3. Hampstead 8844.

Retired Doctor's House, beautiful part Surrey, would accept Paying Guests or Consider Letting Semi-furnished Upper Flat. Five rooms and offices. —Box 9690, B.M.J.

WANTED

Doctor would be grateful to hear of Accommodation for son (fourth year Bart's Medical Student). Bed-sitting room essential, morning and evening meals, all meals Sunday. Reasonable terms. —Write, 42, Maidenhead Road, Stratford-on-Avon.

Medical woman, retired, urgently seeks accommodation within about ten miles W.C. district, preferably two unfurnished rooms in nurse's house. —Box 9749, B.M.J.

R.A.M.C. Officer on release leave starting postgraduate appointment London, urgently requires Accommodation. Wife, child 9 months. House or flat, furnished or unfurnished. London or near.—Box 9143, B.M.J.

HOTELS

"A Model Hotel in Miniature" (Press). Chequers, Pulborough, Sussex. One hour London, 20 minutes coast, near station. Unusual comfort, old-world charm. Delightful centre, good bus services. Farm and garden produce. Varied and appetizing meals (invariably warmly commended). Excellent golf, tennis (hard courts), riding, fishing Lovely walks. Licensed. Telephone: Pulborough 86.

Convalescents specially catered for at The Bournemouth Hydro, West Cliff, sea front. Every comfort and convenience, excellent service and cuisine.—'Phone, Manager, 341.

Old Red Lion Hotel, Stow-on-the-Wold, Glos. (Tel.: 66). Cotswolds, easily reached by train, well heated, good cooking, own poultry, garden, magnificent country, restful. Winter terms from 3½ gns. Summer 5 to 6½ gns.

St. Ives Bay Hotel, St. Ives, Cornwall, is situated over the Bay and commanding glorious scenery. The Winters are mild allowing visitors to be out in the wonderful air. The Hotel is central heated, individual heating in bedrooms. H. and C. water in all rooms, large lounges with open fires. Excellent cuisine and attendance given. Bookings taken now for the winter months. Tel.: St. Ives 106.

South Cornwall, Pendower Hotel, Rum High Lanes, near Truro, for quiet holidays. Large garden, with path to private beach and bathing pool in Gerrans Bay. A comfortable, well-appointed hotel, where the cooking is excellent.

Seaton, S. Devon, Seaton Beach Hotel, A.A.**,** R.A.C. Just the place for Easter and Spring. Faces due South on sea front. Cheerful, warm and very comfortable—it's one of Devon's best hotels Cocktail lounges and bar. Billiards, golf. Tel. 17.

St. Ives, Cornwall, Porthminster Hotel. Winter at sunny St. Ives and enjoy the charm and first-class service and comfort at this noted hotel, from 6 gns. for extended visits Overlooks sea. Fully licensed. Tel.: 321.

HOUSES, CONSULTING ROOMS

Consulting Room, near Marble Arch, whole or part-time, view after 6 p.m.—Box 9779, B.M.J.

For Houses and Consulting Rooms in Harley Street and the medical area apply to C. E. Bedford & Co., Ltd., 80, Wigmore Street, W.1. Telephone. Langham 3927 and 3928.

Share in Furnished Consulting Room to let. Suitable general practitioner. Central. Shop premises N.W.1 district.—Box 9700, B.M.J.

MOTOR CARS

MILHALL MOTOR CO., LTD.

1946 (first regis'ered) Rolls Royce Phantom III. semi-razor edge 7-seater limousine Mulliner. 6,500 miles only.

1940 M.G. 2.6-litre Sports Saloon.

1940 Morris 10 h.p. Saloon. Speedometer reading 25,000.

1939 Ford V.8 30 h.p. Saloon. Small mileage.

1938 Rover 20 Sports Saloon.

1933 Rolls Royce 20-25 Sports Saloon, Thrupp and Maberly.

Showrooms: 5, ST. JAMES'S STREET, S.W.1 (Whitehall 1952-4).

Service: 55-57, South Edwardes Square, W.8 (Western 2269)

Gentleman urgently requires 1946/7 car, earlier model considered if condition exceptional.—Cutmore, 34a, Burnt Ash Hill, London, S.E.12. (Imperial 3527).

Morris 10 Grey Saloon 1938. Mileage 33,000, almost new tyres. In exceptional condition. £400 or near.—Kennish, Woodcroft, Totteridge Green, N.20. Tel. Hillside 2592.

Morris 14, 1937. New Tyres and batteries, rebored, £500 or near offer Phone Farnborough 1018.—Box 9699, B.M.J.

Motourists (London), Ltd., of Great North Road, East Finchley Station, N.2, urgently require late model cars of all makes, any h.p. Representative will call by appointment. Tudor 2301-2.

Rolls Royce Saloon (1935) without division. 25 h.p. 51,000. Chauffeur kept. Every conceivable refinement in use. Seen London.—Box 9689, B.M.J.

Rolls Royce, 25 h.p., 1933, 76,000 miles, type GHW59, owner-driver Sports Saloon, black, excellent condition £1,550.—Brooking Clark, Catcott, Somerset.

1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

NURSING HOMES

A few Vacancies available in Nursing Home, best part of Streatham. All medical facilities available. Ladies and gentlemen. Fees from 5 guineas. —Box 8734, B.M.J.

Holly Hill Maternity Nursing Home, Holly Hill Drive, Banstead, Surrey. 'Phone Burgh Health 2117. Open for maternity cases. Situated in six acres of lovely grounds, 600 ft. above sea level. All modern equipment, adequate trained staff, reasonable fees. —Miss M. Newton, S.R.N., S.C.M.

Nursing Home run like first-class private house. Resident medical man and wife. Certificated nurses. Rest cures, neurasthenics and convalescent (not certified, malignant nor tubercular). Guests also received. Lounge hall, large dining room, lovely drawing room. Own poultry Very private garden. Beautiful country. Shops 4 minutes. London 40 minutes. Very comfortable. Quiet. Good catering and cooking. Consultants and other medicals can visit their own patients.—C. F. Fothergill, M.B., B.Ch., "Hensol," Chorley Wood, Herts. (Phone: Chorley Wood 24).

Montana Hall, Montana, Switzerland. Sunniest Alpine Resort. Only British Sanatorium in Switzerland. Ample supplies streptomycin available. Terms from £12 15s. 4d. weekly.—Apply, Medical Secretary, Medical Director, Hilary Roche, M.D., M.R.C.P., M.R.A.C.P., T.D.D., F.A.C.C.P.

Plas Amherst, Harlech, N. Wales. Residential Nursing Home for convalescent and medical cases and aged people. Facing sea. H. & c., central heating. Resident doctor. From six guineas.—Apply Secretary. Tel.: 2.

FOR SALE

Hampstead. Convalescent Home, run by State registered nurse, 11 rooms, 2 bath, usual offices. Weekly income £42, accountants' figures £800 profit. 5½ years' lease at £350. £2,500 with option to purchase freehold at £7,200.—Stokes and Quirke, 85, Duke Street, Grosvenor Square, W.1. Mayfair 3113/5775.

APPOINTMENTS

(Continued from page 23)

Have you read the notice at top of page 12 ?

CONNAUGHT HOSPITAL, Walthamstow, E.17

Applications are invited from registered medical practitioners (male) for the following position now vacant.

CASUALTY OFFICER (B2)

R practitioners who now hold A posts may apply. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £200 per annum, with full residential emoluments Applications should be sent to R. Halton Harrison, General Secretary.

SUTTON AND CHEAM GENERAL HOSPITAL
Sutton, Surrey (103 beds normal, 10 E.M.S.)
(Hospital approved under Section 23 (B) Royal College of Surgeons)

JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male, for the appointment of Junior Resident Medical Officer (A), vacant April 1, 1948, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the Secretary immediately

ST. MARY'S HOSPITAL, London, W.2
MEDICAL REGISTRAR (B1)

Applications are invited for the post of Medical Registrar (B1). Candidates must be registered medical practitioners, and Fellows, Members or Licentiates of the Royal College of Physicians, or Graduates in Medicine of a University in the British Empire. Suitably qualified R practitioners now holding B2 posts may apply. R practitioners now holding B1 appointments cannot be considered unless they have been rejected by the R.A.M.C. The appointment is for a first period of twelve months as from May 20, 1948, at a salary of £400 per annum. Applications, stating nationality, permanent address, age, qualifications with dates, previous appointments and names and addresses of three referees, should reach the undersigned by Wednesday, April 7, 1948. —W. Parkes, House Governor.

SURBITON GENERAL HOSPITAL
Ewell Road, Surbiton, Surrey
RADIOLOGIST (DIAGNOSTIC)

Applications are invited from registered medical practitioners for the appointment of Radiologist (Diagnostic). The successful candidate will be required to attend three sessions weekly. Salary £600 per annum. The appointment will be without prejudice to the basis and scale of remuneration to specialists after the appointed day under the National Health Service Act, 1946. Applications, accompanied by particulars of appointments held and names of two referees, to be addressed to the undersigned not later than fourteen days from the date of this advertisement.—W. J. Toovey, Secretary-Superintendent.

SURBITON GENERAL HOSPITAL
Ewell Road, Surbiton, Surrey
RESIDENT CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Resident Casualty Officer (A), including practitioners within three months of qualification who are liable for service under the National Service Acts The appointment will be for six months. Salary £150 per annum with full residential emoluments. Position vacant April 1, 1948. The appointment will be without prejudice to the basis and scale of remuneration under the National Health Service Act, 1946 Apply W. J. Toovey, Secretary-Superintendent.

ST. THOMAS'S HOSPITAL, S.E.1
SENIOR ASSISTANT MEDICAL OFFICER
(two vacancies)

Applications are invited for the post of part-time, three days a week, Senior Assistant Medical Officer (two vacancies) in the Tuberculosis Department for a period of one year in the first instance. Salary £700 per annum. M.D. or M.R.C.P. qualification is required Previous experience in chest-diseases, and pneumothorax therapy is desirable. Applications stating age, qualifications with dates, and experience and the names and addresses of three referees, should be sent by March 31, 1948, to the Clerk of the Governors.

ST. THOMAS' HOSPITAL, S.E.1
HONORARY SURGEON

Applications are invited for the post of Honorary Surgeon to the Hospital. One of the present surgeons to Out-patients will be a candidate and, if he is appointed, there will be a vacancy for an **HONORARY SURGEON** to Out-patients. Candidates must be Fellows of the Royal College of Surgeons of England. Twenty copies of applications, which should include details of age, qualifications and experience, and the names and addresses of three referees to whom the Hospital may write, should be sent by April 14, 1948, to the Clerk of the Governors, to whom any inquiries should be addressed.

ST. GEORGE'S HOSPITAL, S.W.1
(In Association with the Victoria Hospital for Children, Tite Street, Chelsea)
HONORARY ASSISTANT SURGEON
to the Ear, Nose, and Throat Department

Applications are invited for the combined post of Honorary Assistant Surgeon to the Ear, Nose, and Throat Department of St. George's Hospital, and the Victoria Hospital for Children, Tite Street, S.W.3. Applications, with the names of three referees, should be sent to the undersigned, from whom further information can be obtained, not later than April 10, 1948.—P. H. Constable, House Governor.

SUNDERLAND ROYAL INFIRMARY (312 beds)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable to serve under the National Service Acts, for the following resident appointment, which is tenable for a period of six months:—

HOUSE SURGEON (A), vacant immediately. This hospital is recognized by the Royal College of Surgeons for the Fellowship. Salary £175 per annum with full residential emoluments. Applications to be forwarded to F. Dagnall, House Governor and Secretary, Royal Infirmary, Sunderland.

SOUTHEND MUNICIPAL HOSPITAL
Rochford, Essex
RESIDENT HOUSE MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident House Medical Officer (A). Salary is at the rate of £200 per annum with full residential emoluments, valued at £100 per annum, plus current cost-of-living bonus. The person appointed will be liable to pay superannuation contributions if the provisions of the Local Government Superannuation Act are applicable. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be tenable for a period of six months, otherwise one year. Application forms obtainable from the Medical Superintendent, Southend Municipal Hospital, should be returned to him not later than April 7, 1948.—Archibald Glen, Town Clerk, Municipal Buildings, Southend-on-Sea.

SWANSEA GENERAL AND EYE HOSPITAL

Applications are invited from registered medical practitioners, male or female, for the appointment of

TWO HOUSE SURGEONS (A) now vacant.

Including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by practitioners who are liable under these Acts, the appointments will be for a period of six months. Salary for each appointment at the rate of £200 per annum with full residential emoluments. Applications should be forwarded to the undersigned.—O. C. Howells, Secretary-Superintendent.

STOCKTON AND THORNABY HOSPITAL
Stockton-on-Tees (135 beds, 3 Residents)
HOUSE PHYSICIAN alternating CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the above post becoming vacant April 1, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts, when appointment will be for a period of six months. Salary £200 per annum with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. Wilkinson, Secretary-Superintendent.

SALFORD ROYAL HOSPITAL (256 beds)
HOUSE SURGEON (B2) to Orthopaedic Dept.
HOUSE SURGEON (B2) to Special Departments (Ear, Nose and Throat and Gynaecology)
RESIDENT ANAESTHETIST (B2)

R practitioners who hold A posts are invited to apply. Salary £175 per annum, plus full residential emoluments. Appointment for six months. Applications should be made at once on a special form obtainable from the undersigned, accompanied by copies of three testimonials.—H. B. Shelswell, General Superintendent and Secretary.

ST. BARTHOLOMEW'S HOSPITAL, Rochester
(Voluntary Hospital 201 beds, 5 R.M.O.s)
HOUSE SURGEON (B2)

Applications are invited for above post vacant in April, including R medical practitioners who now hold A posts, when the appointment will be for six months. Salary £200 per annum with full residential emoluments. Applications to be forwarded to the Superintendent-Secretary as soon as possible.

SKIN HOSPITAL, Birmingham
John Bright Street, Birmingham, 1
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident Medical Officer (B2), to become vacant on May 5, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Otherwise, at the expiration of six months, the question of further re-appointment might be considered. Salary is at the rate of £200 per annum, with full residential emoluments. Applications as soon as possible to the undersigned.—T. E. Murtagh, House Governor and Secretary.

SALISBURY GENERAL INFIRMARY
(270 beds)
RESIDENT ANAESTHETIST (B2)

Resident Anaesthetist (B2) vacant now. R practitioners holding A posts may apply. Appointment for six months. Salary £200 per annum, full residential emoluments. Applications should be made to the Superintendent and Secretary immediately.

THE LAWN, Lincoln
(Registered Hospital for Mental and Nervous Diseases—100 beds)
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Assistant Medical Officer (B1). Experience in mental work preferable but not essential. Salary £500 per annum, together with emoluments including board, flatlet, and laundry. R practitioners should not apply unless ineligible for H.M. Forces. Applications should be addressed to the Chairman of Governors, The Lawn, Lincoln.

VICTORIA HOSPITAL, Worksop, Notts.
(150 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners, including those in H.M. Forces, for the appointment of Resident Surgical Officer (B1), vacant now. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £350 per annum with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and ineligible for H.M. Forces may apply. Applications should be sent as early as possible to the Secretary-Superintendent.

VICTORIA HOSPITAL, Blackpool
HOUSE SURGEON (B2) Orthopaedic Dept.

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (B2) Orthopaedic Department (vacant May 10, 1948), including R practitioners who now hold A posts. The appointment is for a period of six months and the salary is at the rate of £200 per annum, with full residential emoluments, plus £150 per annum in the case of the successful candidate being a medical officer released from H.M. Forces who desires postgraduate education and rehabilitation as recommended by the Ministry of Health. Applications, stating present post, should be sent immediately to Walter R. Smith, General Superintendent.

VICTORIA HOSPITAL FOR CHILDREN
Tite Street, Chelsea, S.W.3
PART-TIME CASUALTY OFFICER

Applications are invited from registered medical practitioners (male or female) for the appointment of part-time Casualty Officer, to attend six mornings per week from 9.30 a.m. to 12.30 p.m. Salary at the rate of £200 per annum. The appointment is for a period of six months, commencing May 1, next. Applications should be sent to the Secretary not later than first post Wednesday, April 7, 1948.—D. St. John Bamford, Secretary.

VICTORIA HOSPITAL FOR CHILDREN
Tite Street, Chelsea, S.W.3
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A) to become vacant on May 1, next, including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointment is for a period of six months. Salary at the rate of £150 per annum. Applications should reach the Secretary not later than the first post on Wednesday, April 7, 1948.—D. St. John Bamford, Secretary.

VICTORIA HOSPITAL, Pettits Lane, Romford
RESIDENT SURGICAL OFFICER (B2)

Resident Surgical Officer (B2) wanted immediately. Salary £200 per annum. Full residential emoluments. R practitioners who hold A posts may apply when appointment will be limited to six months. Applications should be forwarded to the Secretary.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
Resident ASSISTANT SURGEON AND TUTOR

Applications are invited from qualified registered medical practitioners (male), preferably unmarried, for the post of Resident Assistant Surgeon and Tutor. Candidates should hold one of the higher Surgical qualifications. Salary will be at the rate of £650 per annum with usual residential emoluments. Four weeks' holiday a year. The appointment is for one year, from June 1 next, terminable by three months' notice either side, and, subject to annual re-election, may be extended to not more than three years. The duties will include deputising for the Visiting Surgeons, teaching in the Medical School; and, as Senior Resident Officer, the candidate appointed will be responsible for certain administrative duties. Applications accompanied by the names of two referees should reach me not later than Tuesday, April 6. Selected candidates will be asked to attend for interview by the Medical Council and House Committee, and, if so notified, also attend a meeting of the Board of Management on Thursday, May 13, at 5.30 p.m., when the appointment will be made.—C. R. Lockhart, Secretary.

WESTMORLAND GENERAL HOSPITAL
Kendal (82 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2), non-resident, to become vacant at end of March. Salary £450 per annum. R practitioners who now hold A posts may apply, when appointment will be limited to six months; otherwise may be extended. Applications should be sent without delay to J. M. Somervell, Hon. Secretary.

WORCESTER ROYAL INFIRMARY

Applications are invited for the following positions:—

HOUSE PHYSICIAN (A), vacant May 1.
HOUSE SURGEON (A), vacant April 1.

Including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by R practitioners the appointments will be limited to six months. Salaries at the rate of £170 per annum with full residential emoluments. Applications should be addressed to J. S. Rippier, House Governor.

WESTMINSTER CHILDREN'S HOSPITAL
Vincent Square, London, S.W.1
FULL-TIME PATHOLOGIST

Applications are invited for the office of Full-time Pathologist. Salary up to £1,200 per annum. Special experience in the pathology of diseases of children will be an advantage. The successful candidate will be required to undertake the pathological work of the Westminster Children's Hospital, and to assist with the general pathological work of the Westminster Centre under the Director of Pathology. Seventeen copies of applications, together with three recent testimonials, should be submitted to the undersigned within three weeks of the publication of this advertisement.—Charles M. Power, House Governor and Secretary.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
Watford, Herts (206 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners for the post of House Physician (B2), vacant April 1. R. practitioners who hold A posts may also apply when appointment will be limited to six months. Salary will be at the rate of £200 per annum with full residential emoluments. Applications, with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M. Maskell, Administrator.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
Watford, Herts (206 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A), vacant immediately. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when appointment will be limited to six months. Salary is at the rate of £200 per annum with full residential emoluments. Applications, together with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M. Maskell, Administrator.

WEST SUFFOLK GENERAL HOSPITAL
Bury St. Edmund's

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following appointment:—

HOUSE SURGEON (A) with responsibility for E.N.T. and general surgery. Immediate vacancy. Salary £200 per annum. Appointment normally for six months. Applications to be addressed to the Secretary, E. E. Hardwicke, F.H.A.

WREXHAM AND EAST DENBIGHSHIRE WAR MEMORIAL HOSPITAL, Wrexham
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, for the following six months' appointment of Resident House Surgeon (B2), primarily to the Ear, Nose and Throat Department, and Eye Department to commence at once. Salary is at the rate of £350 per annum, with full residential emoluments. R practitioners holding A posts may apply. Applications to Leslie Spencer, Secretary.

WEST KENT GENERAL HOSPITAL
(Incorporated) Maidstone (135 beds)
CASUALTY OFFICER (A or B2)

Applications are invited from registered medical practitioners (male and female), including practitioners within three months of qualification and R practitioners who hold A posts, for the appointment of Casualty Officer (A or B2), vacant April 5. The appointment will be limited to six months. Salary at the rate of £200 per annum with full residential emoluments. Applications should reach the undersigned forthwith.—Edward J. Gregg, House Governor and Secretary.

WEST CORNWALL HOSPITAL
Penzance (116 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) vacant now. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent to K. I. Newell, Secretary-Superintendent.

WALSALL GENERAL HOSPITAL (181 beds)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1). Vacant April 1. Salary £300 per annum plus full residential emoluments. Applicants should have held house appointments and had surgical experience. Suitably qualified R practitioners holding B2 appointments and those holding B1 and ineligible for H.M. Forces may apply. Applications should be forwarded to the House Governor and Secretary.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

SKIPTON AND DISTRICT HOSPITAL
Skipton Yorks (64 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of House Surgeon (B2), including R practitioners who hold A posts. The appointment is for six months. Salary £250 per annum, with full residential emoluments. Applications to be sent as soon as possible to C. Lawson, Secretary-Superintendent.

WARNEFORD GENERAL HOSPITAL
Leamington Spa
CASUALTY OFFICER AND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the post of Casualty Officer and House Surgeon (A) to the Orthopaedic Surgeon and to the V.D. Officer. Salary is at the rate of £175 per annum with full residential emoluments. Applications should be addressed to W. A. James, House Governor and Secretary.

WILLESDEN GENERAL HOSPITAL
Harlesden Road, N.W.10
CASUALTY OFFICER (B2)

Applications are invited for the post of Casualty Officer (B2), including R practitioners who hold A appointments. Salary at the rate of £200 per annum, with full residential emoluments. Appointment for six months from May 1, 1948. Applications should be sent at once to J. N. Drake, Secretary.

WESTMINSTER CHILDREN'S HOSPITAL
(Formerly The Infants' Hospital)
Vincent Square, S.W.1
CASUALTY OFFICER (A or B2)

Applications are invited for the office of Casualty Officer (A or B2). Appointment tenable for six months at salary of £150 per annum with full residential emoluments. Applications by March 26, 1948, to Charles M. Power, House Governor and Secretary, Westminster Hospital, S.W.1.

YORK COUNTY HOSPITAL (222 beds)
HOUSE SURGEON (B2)
mainly Eye, Ear, Nose and Throat Department

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) whose main duties are in the Eye, Ear, Nose and Throat Department (37 beds, with busy Out-patient Clinics), but who will share in the general work of the hospital and in casualty duty, including R practitioners who now hold A posts. If held by an R practitioner appointment will be for a period of six months. Salary is at the rate of £175 per annum, with full residential emoluments. This post is recognized for D.O.M.S. and D.L.O. examinations and becomes vacant on April 1, 1948. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

HOMES

ASHENDENE, BAYFORD
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An attractive and comfortable PRIVATE HOME beautifully situated in its own grounds, 400 ft above sea-level. Exceptionally healthy air and position affords every facility for convalescence. Treatment for Ladies and Gentlemen suffering from Insomnia, Functional, Nervous Disorders, Alcohol and Drug Habits, Chronic Heart and Kidney Disease, also Elderly and Convalescing Cases.—Apply J. C. Baker, M.B. Telephone: Bayford 262. Station: Bayford (L.N.E.Ry.).

CHEADLE ROYAL, CHEADLE, CHESHIRE

A registered Hospital for MENTAL DISEASES, and its Seaside Branch, GLAN-Y-DON, Colwyn Bay, N. Wales. The object of this Hospital is to provide the most efficient means for the treatment and care of Patients of both Sexes suffering from MENTAL and NERVOUS DISEASES. The Hospital is governed by a Committee appointed by the Trustees of the Manchester Royal Infirmary. VOLUNTARY, TEMPORARY, AND CERTIFIED PATIENTS RECEIVED. For terms and further information apply to the Medical Superintendent Telephone: Gatey 2231.

CRICHTON ROYAL, DUMFRIES
For Nervous and Mental Disorders
Vacancies for recent cases only

CASES OF ALCOHOLISM and DRUG ADDICTION admitted. General amenities of highest standard. Every facility for all forms of treatment, including insulin and prefrontal leucotomy. Terms moderate. Physician-Supt., P. K. McCowan, J.P., M.D., F.R.C.P., D.P.M., Barrister at Law. Telephone: Dumfries 1900.

The Psychoneuroses and Neurasthenia

BOWDEN HOUSE
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Diagnostic Week.—All patients are put through a routine series of clinical, pathological and radiological tests, as well as undergoing a session of narco-analysis. For this an inclusive fee of 25 guineas is charged. There is no commitment on either side for further treatment.

Medical Director: H. Crichton-Miller, F.R.C.P.

ST. ANDREW'S HOSPITAL, NORTHAMPTON
For Nervous and Mental Disorders

President: The Most Hon. the MARQUESS of EXETER, K.G., C.M.G., A.D.C. Medical Supt.: Thomas Tennent, M.D., F.R.C.P., D.P.H., D.P.M. This Registered Hospital is situated in 130 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or who wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in Hospital or in one of the numerous villas in grounds of the various branches can be provided.

WANTAGE HOUSE.—This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped with all the apparatus for the complete investigation and treatment of Mental and Nervous Disorders by the most modern methods; insulin treatment is available for suitable cases. It contains special departments for hydrotherapy by various methods, including Turkish and Russian baths, the prolonged immersion bath. Vichy Douche, Scotch Douche, Electrical baths. Plombières treatment, etc. There is an Operating Theatre, a Dental Surgery, an X-ray Room, an Ultra-Violet Apparatus, and a Department for Diathermy and High-frequency Treatment. It also contains Laboratories for biochemical, bacteriological, and pathological research. Psychotherapeutic treatment is employed when indicated.

MOULTON PARK.—Two miles from the main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres. Milk, meat, fruit, and vegetables are supplied to the Hospital from the farm, gardens, and orchards of Moulton Park. Occupational therapy is a feature of this branch, and patients are given every facility for occupying themselves in farming, gardening and fruit-growing.

BRYN-Y-NEUADD HALL.—The seaside house of St. Andrew's Hospital is beautifully situated in a park of 330 acres at Llanfairfechan amidst the finest scenery in North Wales. On the North-West side of the Estate, a mile of sea-coast forms the boundary. Patients may visit this branch for a short seaside change or for longer periods. The hospital has its own private bathing house on the seashore. There is trout-fishing in the park.

At all the branches of the Hospital there are cricket grounds, football and hockey grounds, lawn tennis courts (grass and hard courts), croquet grounds, golf courses, and bowling greens. Ladies and gentlemen have their own garden, and facilities are provided for handicrafts such as carpentry, etc.

For terms and further particulars apply to the Medical Superintendent (Telephone Nos.: 2356 and 2357 Northampton), who can be seen in London by appointment.

HAYDOCK LODGE
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Tel.: Wootton, Ashton-in-Makerfield.
'Phone: Ashton-in-Makerfield 7311.

For the reception and treatment of PRIVATE PATIENTS of both sexes suffering from mental and nervous disorders, alcoholism and drug addiction, either voluntarily, temporarily, or under Certificate Patients are classified in separate buildings according to their mental condition.

Situated in park and grounds of 400 acres. Self-supported by its own farm and gardens, in which patients are encouraged to occupy themselves. Every facility for indoor and outdoor recreation. For terms, prospectus, etc., apply Medical Superintendent.

THE MAGHULL HOMES FOR EPILEPTICS (INC.), MAGHULL, near LIVERPOOL

Open air occupation and recreation for patients, farming, gardening, football, cricket, tennis, bowls, etc. School recognized by Ministry of Education. Fees: 1st class (men only), from £3 3s. per week; 2nd class (men and women), from £2 2s. per week; 3rd class (men and women) supported by Public Assistance Committees, from 35s. per week; Education Committees, from 41s. 6d. per week; private, from 23s. 6d. per week. For further particulars apply to the Secretary, G. Millington, A.L.A.A., The Thomas Bartlett Home, Liverpool Road South, Maghull, near Liverpool.

HEIGHAM HALL, NORWICH

PRIVATE MENTAL HOME for Nervous and Mental Illness. All types of treatment available. Fees from 5 gns. per week upwards, according to requirements. Vacancies occasionally exist at reduced fees on the recommendation of the patient's own physician. Apply to Dr. J. A. Small.

Telephone: Norwich 20080

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A Registered Hospital for the TREATMENT of MENTAL DISORDERS of the Educated Classes. Cases under certificate, voluntary and temporary patients, received for treatment. Modern methods of treatment available. Terms moderate.—Apply Medical Superintendent. Tel.: Exeter 2642.

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Telegrams: "Alleviated, London."
Telephone: Rodney 2641-2642

A Private Mental Hospital for Ladies and Gentlemen suffering from Nervous and Mental Illness, where the amenities of a comfortable home are combined with full investigation and every well-established modern treatment. Terms from 5 guineas weekly. Illustrated Prospectus may be obtained from the Physician-Superintendent.

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A Private Hospital for the treatment and care of Nervous and Mental Disorders in both sexes. Voluntary, Temporary, and Certified patients received Apply to E. Howard Kitching, M.D., M.R.C.P., D.P.M. Tel.: Buxton 130.

LAVERSTOCK HOUSE, nr. SALISBURY, WILTS

Private Mental Home for Certified and Uncertified Ladies and Gentlemen. Lovely house and garden (18 acres). ESTABLISHED 200 YEARS. MODERN TREATMENTS. Illustrated brochure may be obtained from Dr. Horace Hill, M.R.C.P., Physician-Superintendent Tel.: Salisbury 2612.

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The Pioneer Hospital, opened 1796, for the humane treatment of those suffering from Nervous and Mental Disorder.

This Hospital of 230 beds, administered by a Committee of the Society of Friends, combines what is best in the investigation and treatment of nervous illness with a sympathetic and friendly atmosphere. During 1947 346 patients were admitted, of whom no fewer than 280 were voluntary cases. Much curative work is accomplished in our mental hospitals to-day, and the recovery rate compares very favourably with that of our general hospitals.

For information and terms of admission apply to the Physician-Superintendent, Arthur Pool, M.R.C.P., D.P.M. (Tel.: York 54551.)

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For treatment of ALCOHOLISM and NEUROSIS Beautifully situated country mansion in Warwickshire. Extensive grounds for therapeutic occupations. (See Medical Directory p. 2505). Illustrated brochure from Resident Med. Supt., A. E. Carver, M.D., D.P.M. Phone: Nuneaton 2841.

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DARTFORD, KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of £3 3s. and upwards.

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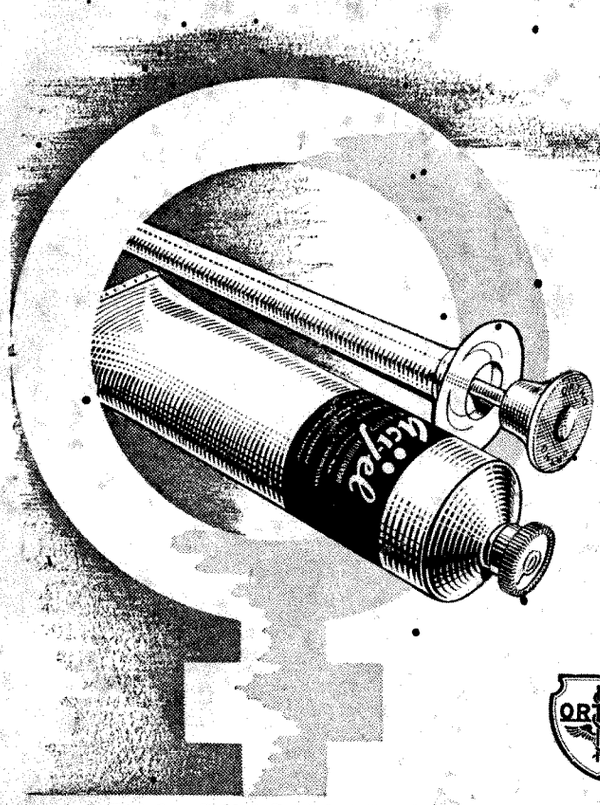

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ORTHO

1. Am. J. Obst. E. Gyn., 45:1, 1943.
2. Texas State J. Med., 39:1, 1943.
3. J. Tennessee M.A., 35:455, 1942.
4. Med. World, 58:562, 1940.
5. Am. J. Obst. E. Gyn., 52:1, 1946.

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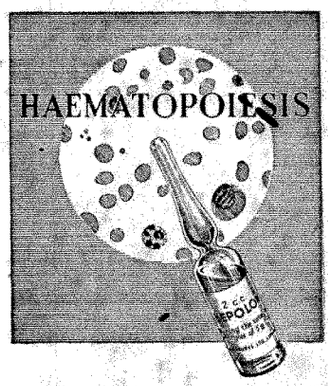

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Hepolon not only passes the highest clinical tests for potency against pernicious anæmia but contains Whipple's factor, Wills's factor, riboflavine, nicotinic acid, and the hæmatinic minerals of liver; it gives no reactions for histamine or undesirable protein matter.

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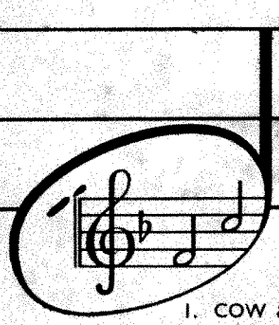

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BRITISH MEDICAL JOURNAL

LONDON SATURDAY MARCH 27 1948

DE FORMATIONE OVI ET PULLI

BY

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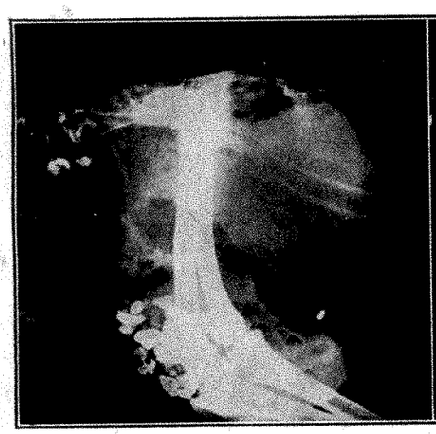

FIG. 1.—6½ hours.

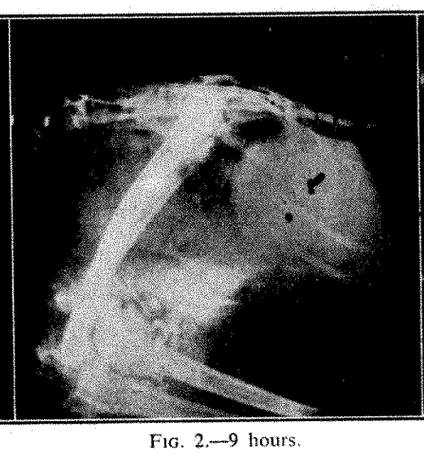

FIG. 2.—9 hours.

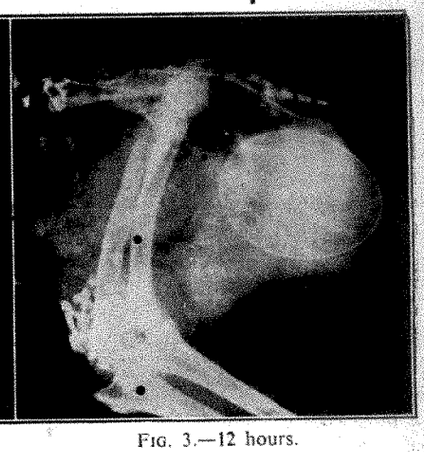

FIG. 3.—12 hours.

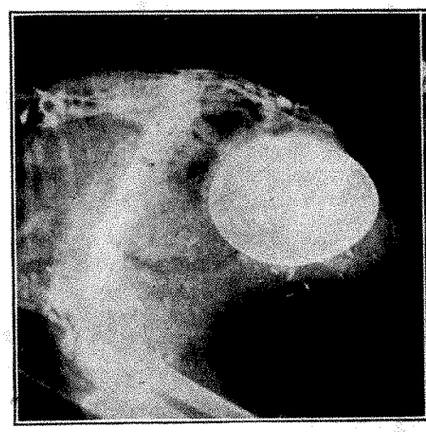

FIG. 4.—23½ hours.

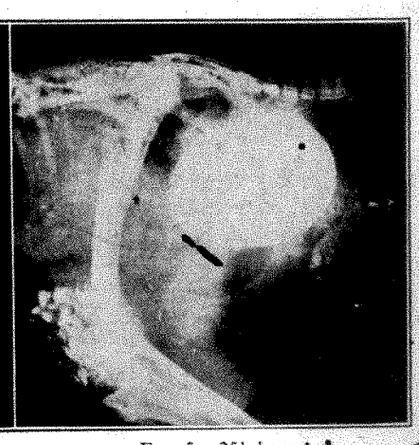

FIG. 5.—25½ hours.

The year 1621 saw the publication at Padua of a most elaborate treatise on "The Formation of the Egg and of the Chick" by "late the very celebrated anatomist of Padua, Hieronymus Fabricius of Aquapendente," who died in 1619. In 1942 Howard B. Adelmann, Professor of Histology and Embryology in Cornell University, published his scholarly translation with a facsimile edition in the Latin of the two classical works of Fabricius, *De Formatione Ovi et Pulli* and *De Formato Foetu*. This book is a magnificent contribution both to the history and to the philosophy of medicine.

The school of anatomy at Padua produced a rate of giants—Alexander Benedictus, Andreas Vesalius, Realdus Columbus, and Fallopius. The death of Fallopius in 1562 was followed by three years of temporary appointments, but in 1565 Fabricius was appointed to the chair of surgery and was enjoined to add instruction in anatomy to his other duties. Between 1565 and 1584 his salary was increased sixfold, from 100 florins to 600. In 1600 Fabricius was appointed Professor Supraordinarius in Anatomy, with an increased stipend of 1,000 scudi, and instruction in surgery was entrusted to Casserius. Fabricius retired in 1613 from active teaching and died in 1619 at the age of 82 or 86, for the year of his birth is given as 1533 or 1537.

Subsequent to Aristotle, Fabricius gave the first analysis of the life history of the egg, based on observation of the successive stages. He described in greater detail the two twisted cords of albumen, the chalazae, which tether the yolk. He recognized that the egg rotates as it descends through the oviduct, and that the albumen first deposited is thicker than subsequent layers. He was most cautious when describing the formation of the shell. He asked the question: "Why does the egg emerge blunt end first?" He described accurately the "air space" at the blunt end of the egg, noted its slight eccentricity, its increase in size on keeping, and its considerable increase during incubation.

Recently Mr. J. R. G. Bradfield, of the Department of Zoology, has studied the problem of the laying of the egg in the domestic hen. The work was carried out in the School of Anatomy with the active assistance of the

radiographer, Mr. J. A. F. Fozzard, who was awarded the Rodman Medal of the Royal Photographic Society for the excellent photography here displayed. Lateral radiographs were taken at stated intervals and have added to our knowledge, but the significance of all the facts still awaits clarification.

It is known that about 26 hours elapse between the laying of successive eggs. This period of 26 hours is subdivided roughly into:

Half an hour between laying one egg and discharging the next ripe ovum with its yolk from the surface of the single left ovary. Half an hour in passing through the abdominal ostium or funnel of the oviduct. Three hours in the magnum of the oviduct, where the albumen is secreted over the rotating yolk. One hour in the isthmus of the uterus, where the thin shell membrane is secreted. Twenty and a half hours in the uterus, where the calcareous shell is secreted.

The earliest trace of calcium deposition is first visible as a very thin hair-like line on the negative (as distinct from the print) about 6½ hours after laying the last egg (Fig. 1). At 9 hours the density is increased (Fig. 2). At 12 hours the outline of the shell is distinct, with the pointed end of the egg in advance (Fig. 3). At 23½ hours after laying the last egg the pointed end of the new egg is still in advance (Fig. 4). Now occurs one of the strangest movements. During the 24th and 25th hours the egg rotates on its vertical short axis in a horizontal plane so that the pointed end is up-stream and the blunt end presents to the cloaca (Fig. 5). It is not yet known whether this late rotation is constant in direction.

How is this rotation accomplished, and why? The egg is not finally laid in the 26th hour by mass peristalsis. It is not extruded by contraction of the uterus in the manner of a bolus moving along the intestine. The terminal part of the uterus with the contained egg can be seen prolapsing through the cloaca. The uterus is then withdrawn, leaving the egg outside, covered by a viscid fluid which hardens or dries immediately on contact with air. As Fabricius says, "This you will easily observe if you keep a hen at home and dexterously catch her egg in your hand as it is laid." And again, as evidence of the age of the art of palpation, Fabricius says: "In a live hen, too, an egg provided with a hard shell may easily be palpated superficially. Housewives daily make this test when they try the hardness of an egg with their fingers from outside the body in order to find out whether or not the hen is soon going to lay."

It is suggested that the egg rotates and the hemispherical blunt end is presented in advance because it has the surface area which conforms most snugly to the mucous membrane of the dilated terminal portion of the uterus. Whereas all raised water tanks in this country are built with flat bottoms, our American cousins learnt long ago to build them with hemispherical bottoms. The area of the plane circular floor of a cylinder is πr^2, but the area of the hemispherical bottom is $2\pi r^2$. In short, the latter tank can stand twice the head of water of the former or, alternatively for the same head, the material can be reduced to one-half the thickness of the former. The presenting blunt end of the egg gives the better arrangement for avoiding both rupture of the egg and rupture of the uterus.

In 1873 the Rev. Samuel Haughton, M.D. of Trinity College, Dublin, applied one of the celebrated problems of Lagrange to the act of parturition. It is the problem of the equilibrium of a flexible membrane subjected to the action of given forces.

$$P = T \times \left(\frac{1}{r_1} + \frac{1}{r_2}\right)$$

where P is pressure, T is tensile strain in the tangential plane, and r_1 and r_2 are the radii of curvature. At the presenting membranes the two radii are almost equal, and so $P = \frac{2T}{r}$.

Haughton calculated that the surface of the gravid uterus is 270 sq. in. (1,765 cm.^{2}), the volume 402 cu. in. (6,588 cm.^{3}), the weight of muscle in the uterus 1.56 lb. (0.7 kg.), and the maximum hydrostatic pressure inside the uterus produced by contraction of the muscle 3.4 lb. per sq. in. (239 g. per cm.^{2}). Matthews Duncan and Tait in 1868 had found experimentally that the mean rupturing pressure of the membranes was 1.2 lb. per sq. in. (84 g. per cm.^{2}). In short, the uterine muscle can always rupture the membranes, and in general has three times the strength necessary.

In the case of the hen the uterus is confronted with the passage of a solid egg, and considerations of hydrostatic pressure of the liquor amnii do not satisfy the circumstances. There have been some measurements of the tensile strength of the vitellin membrane surrounding the yolk, and Moran recently calculated it as 4,500 dynes per sq. cm., or 0.06 lb. per sq. in. There are but few estimates of the tensile strength of the two distinct membranes next to the egg shell, or of the shell itself. Romanov in 1926 stated that the average thickness is 0.311 mm. and the breaking strength 4.46 kilos, or 9.8 lb.—somewhat greater than the average man can apply to the egg when held in the palm and fingers.

Haughton said: "Happy is the man whose mother possessed the hereditary tendency to form no more uterine muscle than was absolutely necessary to push him into the world." In similar Lamarckian vein may we say, Happy the chick whose mother hen possesses the necessary uterine muscle to rotate the egg in the uterus, deliver it blunt end first, and yet avoid both rupture of the egg shell and of the maternal uterus.

It is possible that Haughton's earlier years may have been one long Lent, for his father, James Haughton, philanthropist, friend and supporter of Father Mathew and O'Connell during the great potato famine of 100 years ago in Ireland, was also president of the Vegetarian Society.

The domestic hen, who, like the cow, has become a foster-mother of the human race, still presents problems in anatomy, physiology, and biochemistry. So does the cow as regards the mysteries of lactation. It is well to think of this at a time when Easter eggs are in short supply.

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The National Association for Mental Health has recently published its report for the year 1946–7. It gives an outline of the Association's many activities, which include lectures to medical practitioners, teachers, social workers, and many special organizations; research into the social adaptation of children brought up in institutions, carried out under the direction of Dr. Bodman; and proposals for the International Congress on Mental Health to be held in August. The Association has charge of four homes for mentally defective children at Rhyl, Bognor Regis, Basingstoke, and St. Leonard's-on-Sea. It runs nine hostels for county agricultural committees. The inmates are selected for their suitability for agriculture, and reports on the value of their work are enthusiastic—such comments as "the most reliable form of labour" often being heard. The hostels altogether accommodate 300 men in Gloucestershire, Hampshire, Shropshire, and Yorkshire. The Association's journal *Mental Health* will now appear four times a year and the subscription has been raised to 5s.

ENVIRONMENTAL FACTORS INFLUENCING HEALTH AND EFFICIENCY IN WARSHIPS*

BY

F. P. ELLIS, O.B.E., M.D.
Surgeon Commander, Royal Navy

When the designers plan the allocation of space and the installation of equipment in warships they have to effect a satisfactory compromise between many requirements, including those for providing in one ship an optimum number of useful weapons and detecting devices, high-powered engines for achieving high speeds, armoured protection against bombs or shells, watertight compartments to enable damaged ships to remain afloat, and, lastly, living and working conditions under which men may remain healthy and work efficiently.

It is one of the tasks of the Royal Naval Medical Service to advise the Staff when this balance of conflicting interests may act unfavourably towards the men and impose adverse effects on their health or efficiency. It will be seen that in the past the acceptance of standards which fell short of those required by the highest dictates of environmental hygiene was unavoidable at times; but the circumstances were such that the alternative would have been unacceptable loss of fighting efficiency in other ways, or a reduction of the safety factor.

In recent years the attention of those responsible for the efficiency of the armies, navies, and air forces of the World Powers has been drawn repeatedly to the fact that the power of modern weapons and the efficiency of fighting machines may be reduced because of neglect to consider sufficiently the characteristics of the men concerned with their operation. This has led to a renewed stiffening of opinion concerning the relative importance of human factors in the design of equipment. These factors may be examined broadly in relation to the physical or psychological ability of the men to carry out their various tasks, or in relation to limitations imposed on them by the nature of their environment. In practice these considerations are usually merged together, and to study one it is necessary to have a good working knowledge of the other.

When war was declared in 1939 the Navy had not for 130 years conducted a major campaign which entailed ships remaining continuously at sea in tropical waters, and the constructional features and design of ventilating arrangements were mainly based on experience gained in operating in temperate or subtropical waters. Although the ill effects of nutritional deficiency and infectious disease, which had ravaged the fleets in the past, were rarely seen, warships were still desperately crowded when they carried their full war complements, and the enormous power generated by their machinery produced great quantities of heat below decks which were hard to control by normal ventilating methods.

The efficiency of ships' ventilation systems was determined until recently by measurement of their ability to keep the level of carbon dioxide in the air of occupied compartments below 7 parts in 10,000. Compartments ventilated to accord with this standard were found, however, to be uncomfortably warm in the Tropics, and in 1937 the decision was made that ventilation arrangements would be designed thenceforward with the aim of maintaining an equable thermal environment under the climatic conditions generally imposed on warships, a decision easy to make but difficult to carry out.

The early years of the war saw a tightening up of precautions for increasing the watertightness of ships damaged in action by increasing compartmentation and reducing communications between compartments, such as those afforded by ventilation trunking deemed to be unessential. These developments, combined with the "black-out," further complicated the task of those who had to provide satisfactory living and working conditions.

While the main activity lay in home and northern waters the increasing warmth in ships did not hamper operations, but the early Mediterranean campaigns gave warning that when the Fleet operated in the Tropics conditions incompatible with reasonable efficiency might be encountered in certain situations. Thus in 1944, when the Japanese campaign became imminent, the Royal Naval Personnel Research Committee of the Medical Research Council, which had previously devoted its attentions to problems of operational divers, anti-aircraft defence, cold-weather clothing and body protection, was directed to examine the environment of men in warships in the Tropics and to report on the probable effect on fighting efficiency.

This direction was expanded later to include more general problems, conditions in submarines, and problems of the thermal environment in temperate and northern waters. The specialized problems of the naval airman in the air were dealt with by the Flying Personnel Research Committee of the Air Ministry and will not be discussed here. Much of the work subsequently carried out has been reported or is to be reported elsewhere; other studies are not yet complete. It is therefore possible to refer only to the interim conclusions of these investigations.

Surface Ships

It is convenient to consider the various living and working spaces of warships in separate groups according to the activities of the men who occupy them, and the complexity of the problem is indicated by the varying nature of the average thermal conditions. The observations described below were made during a four-month period in 1944 in eleven ships of the Eastern Fleet, including battleships, aircraft carriers, cruisers, and destroyers.

Thermal Environment

The thermal conditions below decks were measured in accordance with the recommendations of Bedford (1946), and were described in terms of the "normal" effective temperature as well as the more conventional dry- and wet-bulb temperatures. The effective temperature may be derived simply, if the air movement and dry- and wet-bulb temperatures of the air are known, from the charts constructed by Houghten and Yaglou (1923) in the United States. This scale of warmth expresses as a single figure the summated effects on the comfort of lightly clothed human beings of air temperature, humidity, and air movement. At the higher ranges of warmth it does not afford an accurate index of the physiological effects of the possible combinations of these three factors, and the practicability of replacing this scale with a concept based more closely on the physiological and psychological reactions of individuals is being examined. During the war effective temperature was the most suitable common index available, and over the range of conditions generally encountered it was satisfactory for our purpose.

Houghten and Yaglou also constructed a "basic" effective temperature chart which referred to the comfort sensations of men stripped to the waist. Warship crews in action, however, generally wear overalls and anti-flash hoods and gloves to protect them against flash burns. The normal effective temperature chart was therefore used in describing the measurements made on this survey.

*The basis of a paper given to the Society of Medical Officers of Health (Services Hygiene Group) on Nov. 28, 1947.

Allowance was made for the effects of radiant heat where these were important by making globe-thermometer measurements also and computing the mean radiant temperature of the surroundings; or, alternatively, by applying a correction to the effective temperature scale by substituting the globe-thermometer readings for those of the dry-bulb thermometer when reading the chart.

Bedford (1948) has pointed out that recent American studies on the effects of radiant heat on rectal temperature showed that "corrected effective temperature" fitted the experimental findings when the average rectal temperature of the subjects of the experiments was 100° F. (37.8° C.), over-corrected for radiation under more severe thermal conditions and under-corrected for it when the environment was less severe. The concept of corrected effective temperature may be used, therefore, only to give an approximation of the added strain imposed if heat radiation is added to the other thermal factors of a man's environment.

The standards provisionally accepted by the Admiralty since 1944 in planning warship ventilation for the Tropics state that 80° F. (26.7° C.) effective temperature (or corrected effective temperature if radiant heat is a factor) is the upper desirable limit for thermal conditions in spaces where men must live and work, and that 86° F. (30° C.) effective temperature (or corrected effective temperature) is the upper acceptable limit.

It is necessary to interpret these standards with considerable latitude in considering different compartments. The severity of thermal conditions should be assessed in relation to the energy expended by the men exposed, to the complexity of their mental tasks, and to the clothing they must wear. Thus men handling ammunition for the heavy guns would become inefficient in a less severe environment than would engine-room watch-keepers, whose physical tasks might be light in comparison; or a radar operator watching for the faint signals on the display might fail to observe the presence of a ship or aircraft in the vicinity, although an engine-room watch-keeper observing the more plainly displayed dials and indicators in the engine-room under similar thermal conditions would be less liable to make an error; or, again, submarine crews stripped to the waist when submerged in the Tropics could sustain without loss of efficiency severer thermal conditions than the more heavily clothed crews of surface ships in action.

The average dry-bulb temperature on deck was 83° F. (28.3° C.) and the average wet-bulb temperature 77° F. (20° C.) when these measurements were made. The sea temperature varied between 82 and 88° F. (27.8 and 31.1° C.). In the living compartments (mess-decks) the average wet-bulb temperature was 82° F. and the average effective temperature 84° F. (28.9° C.). In the main working spaces of these ships, and in some of the compartments which were especially important in action, the average effective temperature varied from 85 to 90° F. (29.3 to 32.2° C.). In certain spaces, such as machinery compartments, galleys, and workshops, it was found that for nearly 800 measurements made the mean radiant temperature of the surroundings lay between 90 and 120° F. (32.2 and 48.9° C.) for 66%, and between 120 and 150° F. (48.9 and 65.6° C.) for 24%; and "corrected" effective temperatures between 95 and 100° F. (35 and 37.8° C.) were encountered at times.

The thermal conditions in ships in temperate waters gave less cause for concern. In northern waters men below decks were generally able to carry on with their work without loss of efficiency, and remained healthy. The men on deck were reliant on carefully designed clothing for protection against cold, wet, and wind. The thermal environment here was apparently less critical than in the Tropics, but the effects of conditions in the Arctic regions have not been the subject of detailed investigation in recent years.

Accommodation

Sir Sheldon Dudley, in his preface to *Environmental Warmth and its Measurement* (Bedford, 1946), stated: "The problem to be solved by research and experiment can be stated briefly, thus—What is the ratio of the space allocated to the human element, to the space allotted to the mechanical element of the total fighting machine (ship plus ship's company) which will make the most efficient engine of war?"

A review of the space available for a community of nearly 8,000 men who were living on the mess decks of two battleships, four cruisers, an aircraft carrier, and an escort carrier in the Eastern Fleet showed that less than 150 cu. ft. (4.25 m.^{3}) of space per man was provided on the mess decks for 69% of these men and their belongings and less than 200 cu. ft. (5.66 m.^{3}) for 92%. The height of the deckhead is usually about 8 ft. (2.4 m.) in warships. Thus the majority of ratings were entitled to a floor area of less than 19 sq. ft. (1.76 m.^{2}). It is interesting to note that Dudley (1928) reported similar arrangements for the crew in H.M.S. *Dunedin*. Satisfactory air hygiene was obtainable under these congested conditions by high ventilation rates below decks achieved by powerful fans for supplying fresh air to compartments and others for drawing stale air away from them.

TABLE I.—*Average Thermal Conditions in Living and Working Compartments in Surface Ships of the Eastern Fleet (1944)*

	Normal Effective Temperature	Dry-bulb Temperature	Wet-bulb Temperature	Air Movement per Minute	Relative Humidity	No. of Observations
Mess decks	84·0° F. (28·9° C.)	90·0° F. (32·2° C.)	82·0° F. (27·77° C.)	100 ft. (30·48 m.)	71%	947
Machinery spaces	88·7° F. (31·5° C.)	102·7° F. (39·27° C.)	87·7° F. (30·94° C.)	468 ft. (142·65 m.)	58%	359
Gunnery control compartments	86·5° F. (30·28° C.)	95·5° F. (35·28° C.)	84·2° F. (29° C.)	172 ft. (52·42 m.)	61%	364
Gun-turret lower quarters	86·6° F. (30·33° C.)	91·9° F. (33·28° C.)	84·9° F. (29·39° C.)	60 ft. (18·29 m.)	75%	125
Radar offices	86·9° F. (30·5° C.)	97·7° F. (36·5° C.)	83·8° F. (28·77° C.)	160 ft. (48·77 m.)	56%	59
Electrical spaces	89·5° F. (31·95° C.)	104·7° F. (40·4° C.)	82·6° F. (28·11° C.)	147 ft. (44·8 m.)	39%	81
Workshops	87·5° F. (30·83° C.)	100·3° F. (37·33° C.)	83·7° F. (28·66° C.)	193 ft. (53·83 m.)	51%	55
Sick bays	83·0° F. (28·33° C.)	90·9° F. (32·72° C.)	82·1° F. (27·77° C.)	239 ft. (72·85 m.)	68%	82
Communication offices	85·8° F. (29·88° C.)	95·9° F. (35·5° C.)	83·9° F. (28·83° C.)	163 ft. (49·68 m.)	61%	168
Galleys	87·4° F. (30·77° C.)	97·5° F. (36·39° C.)	84·2° F. (29° C.)	192 ft. (58·5 m.)	58%	168

The above figures may be compared with wartime standards in naval barracks ashore, which allowed a minimum of 45 sq. ft. (4.18 m.^{2}) of floor space per man and an "austerity" standard of 30 sq. ft. (2.79 m.^{2}) if double-tiered bunks were used for sleeping (Dudley, 1943). The men slept in hammocks in temperate waters, but in the Tropics many found these too hot, and light camp-beds were issued as well, so that up to 70% of ships' companies slept in the open air on the upper deck.

Chemical Factors

The powerful ventilation systems of modern warships prevent undesirable accumulation of products of respiration such as carbon dioxide. Chemical factors are not therefore generally of importance. Reference has been made elsewhere (Ellis, 1944, 1947b) to circumstances which may result in casualties when, as a result of explosions or faults in machinery, contamination of the air of compartments, by nitrous fumes, carbon monoxide, and certain volatile chemicals used as refrigerants and in fire extinguishers, may occur without the knowledge of the occupants.

There is one exception to the above generalization. The magazines and ammunition-handling spaces of ships in action are hermetically sealed to prevent the flash of explosions blowing up their dangerous contents. In war these compartments may be heavily manned for many hours, or even days, and after a period (10 to 15 hours) without ventilation it becomes necessary to guard against undesirably high accumulations of carbon dioxide. The rate of accumulation varies with the size of the compartments, the number of occupants, and the energy expended by them. At an earlier time complaints may be made of headaches and general malaise due to inhaling the volatile

decomposition products of cordite. These effects have been studied by Thomson and Weiner (1947), who have shown that men handling cordite charges are more severely affected in hot humid atmospheres. The gun-crews were clothed in overalls, fabric hoods, and long gloves to protect them against flash-burns. Ammunition compartments were also critically warm and humid in the Tropics (Table I). It may be concluded that ammunition handlers carried out their arduous tasks in the face of considerable difficulties.

Bacterial Factors

The increasing use of air-conditioning equipment in warships led to proposals for economizing in the weight and and size of ventilation trunking by effecting considerable reductions in the volumes of fresh air to be supplied to air-conditioned compartments; for the former lavish supplies were based on the need for limiting the thermal conditions, which would now be controlled by refrigeration. It was asked, therefore, if decreasing fresh air supplies and increasing air recirculation would cause undesirable additions to the bacterial content of the air of compartments.

Several serious epidemics of upper respiratory tract diseases which had occurred in ships at critical stages of the war, and the annual rate for pulmonary tuberculosis in the Navy, which had been double that in the other Services for many years (Dudley, 1941), were additional reasons for examining these proposals to reduce fresh air supplies with some precision.

A preliminary survey of conditions in a newly built cruiser and a submarine (M.R.C. Special Report Ser., No. 262) provided interesting data which permitted a comparison to be made between the bacterial environment of naval ratings and that of the civil community. About 600 "two-minute" samples of air were taken with a slit sampler (Bourdillon, Lidwell, and Thomas, 1941) in the cruiser during several days at sea under action conditions and while lying in Scapa Flow.

Previous studies by the Medical Research Council had suggested that under ordinary domestic or working conditions bacterial counts made in this way should not exceed 50 bacteria-carrying particles per cubic foot (0.028 m.^{3}) of air, although much lower levels were desirable in hospital wards, dressing-stations, or operating theatres. It was found that when men were engaged in quiet occupations on the mess decks the above level was not usually exceeded, but it was when there was much activity, such as sweeping up after meals, turning out of hammocks in the early morning, and crowding into the bathrooms before breakfast. These findings indicated a need for making improvements, but did not compare unfavourably with similarly crowded situations ashore. In the critical action-compartments, such as the crowded gunnery-control positions beneath the armoured deck, surprisingly high standards of air hygiene were achieved by the ventilation provided.

In the air-conditioned compartments investigated recirculation of the air did not lead to a build-up of bacteria during two-hour periods. This aspect requires further investigation, and it is also desirable to repeat in the Tropics the general study in ships.

Submarines

Although the first submarine is said to have been navigated in the Thames in the time of James II, they were not developed as naval weapons until the twentieth century, when in two wars they nearly proved to be decisive weapons in the hands of our enemies. British submarines were also a most effective naval weapon, and, in view of the small numbers of men employed, an economical one too. In the Mediterranean alone a total force which rarely exceeded 1,000 men—or the ship's company of a single cruiser—sank between one and two million tons of Axis shipping and paved the way for the success of the Eighth Army by disrupting enemy supply lines. The Germans were late in appreciating that the effectiveness of a submarine on long patrols depended on the provision of an optimum environment for the crew. These environmental problems differ in certain important respects from those of surface ships.

Thermal Environment

When a submarine is submerged and propelled by the electric motors the conditions are ideal for securing a high degree of control of the thermal environment by insulating the pressure hull to prevent large heat transfers between the sea water and the internal surface of the pressure hull, and by using refrigerating machinery for cooling and dehumidifying the air in the Tropics and heating elements and radiators for warming it in the Arctic.

A series of observations made just after the end of the war in a submarine carrying out an Arctic and tropical cruise showed that, even when pressure-hull insulation was only partially fitted, satisfactory control of the thermal environment could be achieved during a diving patrol in tropical conditions off the Orinoco, where the upper desirable thermal level of 80° F. (26.7° C.) effective temperature was rarely exceeded.

When a submarine is on the surface the main engines draw large amounts of air down the conning-tower hatch and aft to the engine-room. In northern waters the crew are probably colder than they would be in surface ships in the same area, while in the Tropics the introduction of so much fresh air reduces the effectiveness of the air-conditioning plant. In rough seas and foul weather the added inconveniences of motion sickness and exposure to cold and wet which handicap many of the crew on surface patrols are practically eliminated when the submarine is submerged.

Accommodation

The cubic space allocated for sleeping and living quarters in large submarines varies from just above to just below 100 cu. ft. (2.83 m.^{3}) per man. Thus the average space available for a man and his belongings is rather less than in surface ships; but the separate messes are divided from each other only by curtains or light partitions, and when the ventilation fans are circulating the air it is more reasonable to consider the entire submarine as a single compartment. It is then found that the volume of breathable air available for each man when the submarine is submerged will lie somewhere between 300 and 500 cu. ft. (8.49 and 14.16 m.^{3}) in different classes of submarine, and, provided the sleeping billets are separated by adequate intervals, this will be more important for providing satisfactory air hygiene than the amount of space actually allocated to each man in each mess.

The best use is made of the space available by ingenious designs of fittings and furniture, and the degree of comfort obtainable is surprisingly high under the circumstances.

Chemical Factors

When a submarine is submerged carbon dioxide will accumulate in the air, which will at the same time be depleted of oxygen by the respiratory requirements of the crew. The rate at which these changes occur will vary with the volume of air available in the different types of submarine, the numbers of the crew, and the energy expenditure of the latter in the duties they must perform.

The careful control of both these factors is essential. The features of oxygen lack are said to include deterioration in visual acuity when the percentage at one atmosphere falls below 19% and, at lower concentrations, impairment of judgment and reasoning faculties, possibly associated with confident unawareness of the dangers involved and a feeling of well-being. Narcotic effects may also result from breathing atmospheres with a high content of carbon dioxide (5 to 10%), and varying degrees of headache and malaise occur in some people after breathing lower concentrations for a few hours. In addition, after regaining fresh air, unpleasant "after-effects" of this type may be experienced.

The time factor is of considerable importance. Past standards for achieving satisfactory air purification have been based on the assumption that periods submerged would not usually extend beyond one to two days at the outside and were usually less than 24 hours. In the event of more prolonged exposure these physiological effects will require re-examination. In the control of these factors reliance is laid on devices for absorbing carbon dioxide and generating oxygen, and on indicators

which keep the commanding officer informed of the chemical composition of the air.

Atmospheric hazards, which occasionally may cause casualties in submarines, include poisoning by carbon monoxide evolved from torpedoes which "run hot" in the torpedo-tubes, battery gases such as chlorine, and volatile chemicals used as refrigerants or in fire extinguishers. The breathing apparatus provided to enable men to escape from sunken submarines is an excellent ready-to-hand self-contained breathing apparatus for rescue or repair work in compartments containing these gases. The refrigerant "freon" (dichlorodifluoromethane) which is generally used in submarines is innocuous if inhaled. Such accidents are uncommon nowadays.

Pressure Changes

During long periods submerged, leaking high-pressure air, and ballast adjustments concerned with maintaining the ship on a level keel, may lead to considerable increases in atmospheric pressure. The physiological effects are not important provided that the partial pressures of oxygen and carbon dioxide are known and suitable precautions are taken before opening the conning-tower hatch.

In 1944 and 1945 the Germans fitted to their submarines a device developed by the Netherlands Navy which they called a "Schnorkel." This consisted of a hollow mast which could be raised above the surface to provide air supplies for the interior while the main hull of the submarine remained submerged. The schnorkel supply duct was a relatively narrow tube, and the demands of the engines for air were heavy, so the pressure within these submarines was generally depressed to varying degrees below one atmosphere, and in a choppy sea the intermittent occlusion of the air inlet by a valve fitted to prevent flooding would cause fluctuations of the internal pressure. By the use of this device U-boat commanders remained continually submerged for many weeks while avoiding detection, and it would appear that, provided the machinery was suitably designed and the device was wisely used, ill-effects on the personnel did not result.

Bacterial Factors

During the survey of air-borne bacteria described above 80 two-minute samples of air were collected in a submarine during a day at sea off the Orkneys. It had been suggested previously that the difficulties of ventilating submerged submarines might lead to undesirably high bacterial contamination of the air, although it had often been observed that on long patrols submarine crews were unaffected by serious epidemics of upper respiratory tract infections.

It was found that, under a wide variety of probable operating conditions, the upper desirable level of 50 bacteria-carrying particles per cubic foot of air was exceeded only when there was considerable human activity near to the slit sampler. This excellent state of affairs was attributed to the good ventilation obtainable on the surface and to the recirculation of the submarine air through the engine-room when submerged, where the bacteria-carrying particles adhered to the oily bulkheads and machinery.

The Effect on Health

The health of men serving in home and northern waters did not give rise to undue concern during the earlier years of the war, but when the majority of ships were transferred to the Indian Ocean and the Pacific in 1944, before the Japanese campaign, it was considered desirable to obtain an overall picture of the reaction of the men to their new environment. Reports were requested from the medical officers of the ships in the Eastern Fleet and later in the British Pacific Fleet. Their examination showed remarkable similarity in the state of health of the men in the two Fleets.

In the Eastern Fleet it was found that on the average each month, for every 100 men in ships afloat, 29 attended the sick bay as out-patients and 5 were made unfit for duty because of ill-health. In the British Pacific Fleet the corresponding figures were 28.6 and 4.6. The more common conditions which caused the men to report at the sick bay are shown in Table II.

TABLE II.—*Common Causes of Ill-health in the Tropics: Case Incidence per 100 Man-months*

	British Pacific Fleet (March–May, July–August, 1945)				Eastern Fleet (February–September, 1944)			
	Warships (58)	Depot Ships (19)	All Ships (77)	Shore Estabs. (9)	Warships (23)	Depot Ships (5)	All Ships (29)	Shore Estabs. (7)
Man-months available	83,206	43,570	126,776	37,720	128,194	28,863	157,057	131,700
Heat exhaustion	0·14	0·20	0·16	0·01	0·24	1·23	0·42	0·04
Skin diseases*	**8·43**	**10·16**	**9·02**	**3·62**	**9·39**	**10·96**	**9·68**	**5·75**
Otitis externa	1·80	2·16	1·93	0·47	1·84	3·01	2·05	0·99
Malaria	0·02	0·01	0·02	0·01	0·09	0·04	0·08	0·76
Dysentery	0·37	0·70	0·48	0·45	2·31	4·08	2·63	1·83
Psychoneurosis	0·06	0·07	0·06	0·08	0·05	0·11	0·06	0·11
Dyspepsia	0·19	0·18	0·19	0·17	0·25	0·24	0·25	0·15
Bronchitis	0·17	0·22	0·19	0·12	0·20	0·40	0·24	0·29
Common cold	1·26	1·61	1·38	1·39	1·45	2·02	1·56	1·17
Sore throat	1·00	1·34	1·12	1·03	0·78	0·93	0·81	0·91
Fever (P.U.O.)	0·07	0·07	0·07	0·01	0·13	0·04	0·11	0·12
Pulmonary tuberculosis	0·01	0·02	0·01	0·02	0·02	0·02	0·02	0·02
Minor injuries	**3·27**	**4·15**	**3·57**	**2·11**	**3·79**	**5·99**	**4·20**	**2·09**
Totals	16·79	20·89	18·20	9·49	20·54	29·07	22·11	14·23

*Excluding prickly heat.

The amount of ill-health in ships was very much greater than in naval barracks and establishments ashore, mainly because of the predominance in ships of skin diseases (including boils, fungus infections, septic prickly heat, and tropical pemphigus) and other infections of the epidermis such as otitis externa, and also because of the relatively greater incidence of minor injuries. Uncomplicated prickly heat was almost universal in many ships, and the monthly incidence of heat exhaustion in ships of the Eastern Fleet (0.42) represented a rate of 1 man in every 20 per year.

On the credit side the incidence of infectious diseases and malaria remained at a low level. Respiratory tract infections were the most prevalent infective condition in both Fleets. Dysentery, however, accounted for increased ill-health in the Eastern Fleet. Dyspepsia was not a common complaint, and neuro-psychiatric disorders were relatively infrequent. Cruises out of the Tropics to South Africa or Australia were always associated with a great decrease in minor sickness, and the significant role of hot humid atmospheres in the causation of ill-health in the Tropics was undoubted.

Comparable wartime figures are not available for the Home Fleet. Reports from ships made during the first twelve-month period after the Japanese War ended, which gave the numbers of men on the sick-list or attending as

out-patients at midnight each Wednesday, have been analysed by Dr. J. A. Fraser Roberts. These show that the average sickness for the period under review was approximately twice as great for ships serving in the Tropics as for those in the Home Fleet, and the figure for ships in the Mediterranean lay between these two extremes. Few ships were serving in northern waters at this time. The increase in the Tropics was found again to be due to skin diseases and minor injuries, and again the ships' companies of depot ships and repair ships were the least healthy in the Fleets.

The Effect on Efficiency

The adverse influence on efficiency imposed by this widespread increase of skin disease and heat illness in the Tropics was unquestionable. It was found that air-crew in a fleet aircraft carrier lost more than three times the number of flying days in three months in the Tropics than did a larger number of air-crew in the same ship in a previous quarter when operating off the coast of Norway. In addition to ill-health the warm environment in itself reduced the efficiency of the men. Work took longer to do, and was not so well done as in cooler climates. Heavy operations, such as "bombing-up" a wing of 24 aircraft, took half as long again as in home waters.

Observations on men working in gun turrets (Ellis, 1947a) showed that the ammunition parties were working under conditions which brought them near to the limits of physical endurance. Submarine crews were prevented by heat and humidity from carrying out full-length tropical patrols until air-conditioning plant was fitted.

The view that the prevailing warmth in ships was detrimental to efficiency was given further support by work at the climatic laboratories of the Medical Research Council by Professor F. C. Bartlett and Dr. N. H. Mackworth at Cambridge and by Dr. E. A. Carmichael and Dr. B. McArdle and their colleagues in London. This work confirmed the main conclusions of Eichna *et al.* (1945) and of Robinson *et al.* (1945) in the United States of America that men could carry on with heavy physical tasks for short periods without collapsing when the prevailing level of warmth was greater than that generally encountered in the Eastern Fleet except in gun turrets in action and certain machinery compartments. The efficiency of wireless operators, however, was found to fall off between effective temperatures of 83 and 87.5° F. (28.3 and 30.8° C.) which were commonly experienced in the Eastern Fleet; and the examination of the effects of warmth on other activities of importance in warships confirmed the conclusion that accuracy, judgment, and concentration over short periods (four hours) were reduced in quality before ability to continue to perform simple but strenuous physical tasks.

Many of the principles of man's reaction to excessive warmth have been examined in the United Kingdom, although the effects of heat radiation require further elucidation. It is now desirable to discover whether men acclimatized by living in ships stationed in tropical waters will show similar reactions to the conditions of the above experiments.

This survey of conditions in ships, similar observations by Royal Air Force observers in aircraft in the Eastern Theatre, precise observations on the effects of desert heat on soldiers by Ladell, Waterlow, and Hudson (1944), research in climatic chambers, and parallel studies in the United States have provided much information on the environmental factors which limit the efficiency of military forces in hot climates. In general this supports the standards which are now used in designing ships' ventilation systems for tropical service.

It is generally agreed that to afford men periodic respite from the heat by the selective application of air-conditioning to certain offices, work-places, and recreational and living spaces offers the best chance of improving the thermal environment of men in warships in the Tropics, but much can be done with soundly designed and operated ventilation systems, and by keeping the air moving with ceiling or bracket fans. More generous application of air-conditioning is desirable for those smaller ships which must patrol in the desert-locked waters of the Red Sea and the Persian Gulf, where the severity of the climate far exceeds that normally encountered in the Indian Ocean.

Less is known about the effects of extreme cold on efficiency. There is no sound index for indicating simply the effect of varying low temperatures, humidities, and air velocities on physiological and psychological functions, and information about the optimum levels of warmth to be maintained in ships by artificial heating is incomplete. There is thus a need for further examination of the human factors related to operations under extremely cold conditions, to make available the fundamental facts without which the design of equipment for the Arctic and Antarctic will continue to depend on empirical methods.

Conclusion

Considerable research is being devoted to ways of securing optimum arrangements of working equipment, machinery, and seating, to the designing of instrument controls and displays to enable simple and efficient operation, to anthropometry, and to time-studies for reducing delay or saving man-hours in processes involving several operators or teams of workers. Other investigations are concerned with the definition of optimum lighting intensities and the most favourable siting of sources of illumination for various types of work. The influence of background noise or unexpected sounds on the performance of auditory or non-auditory tasks, and more abstract considerations such as the effects of monotony or repetitive tasks on overall efficiency, are being reviewed.

It is not possible here to consider many other factors which affect working efficiency. Little reference has been made to clothing or the psychological aspects of life in warships, the present knowledge of which was reviewed by Critchley (1945), or to less common environmental problems such as those associated with escape from sunken submarines.

From this brief survey it will be seen that the structural features of warships are closely bound up with the requirements of the men. The acute space limitations, the need for securing watertight subdivisions of ships, the heat generated by machinery, and the limitations in the Tropics of ventilating procedures designed for temperate climates make it necessary to secure a sound compromise between meeting these requirements and building efficient fighting ships. We have reached a stage when satisfactory design can proceed only if precise and accurate data are available on the human requirements and limitations and if these can be translated simply into terms appreciated by engineers and designers.

The rapid strides in aircraft construction, shipbuilding, underground engineering, and under-sea activities, and the economic need for providing optimal conditions for workmen in many spheres, have shown that many of the environmental problems which beset the fighting services in war differ little from those of the civil community at peace.

It would seem appropriate that men with a medical education should play a large part in these studies, and in particular that the medical services of the Army, Navy,

and Air Force should play a leading part in integrating the results of research work in the medical and physiological fields in the plans of those responsible for equipment design or concerned with maintaining operational efficiency.

I am indebted to the Royal Naval Personnel Research Committee for permission to publish this account of some of the committee's activities.

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PERMANENT HOMONYMOUS QUADRANTANOPIA AFTER MIGRAINE

BY

W. M. RICH, D.O.M.S.

Migraine with visual hallucinations is reported often enough in the literature to need no further amplification. That it can have a permanent effect on vision is not. A case is here described of permanent homonymous quadrantanopia following 20 years of migrainous headaches.

Case History

The patient, a married woman aged 32, has had headaches since she first began to menstruate at about the age of 12. There is some relationship to her periods, but it is not absolute. The headaches have been getting worse during the past two or three years. They always develop in the same way: first there are "flashing lights," and as these fade a "haze" appears on the right side and spreads from above downwards and to the left. With the haze, or soon after, the headache ensues, beginning in front and radiating to the back of the head, becoming most intense occipitally. The patient recently noticed that the "haze" was permanently present wherever she looked and whether she had a headache or not. When I first saw her she had had this shadow in each eye, above and to the right, for about two years. She has been married 14 years and has two children (girls, aged 13 and 7); there have been no miscarriages. She was very thin up to the birth of the younger child, but during the next two years her weight rose from 7 st. 6 lb. (47 kg.) to over 10 st. (63.5 kg.), where it has remained for the past four or five years. Her periods are normal and regular. There is no polyuria or polydipsia.

On examination she was seen to be a well-nourished, placid, intelligent, and apparently healthy young woman. Eye examination revealed: R.V. 6/5, J. 1; L.V. 6/5, J. 1; emmetropic; orthophoric; pupils active to light, both direct and consensual, and to accommodation-convergence, equal and well sustained; Wernicke's hemianopic reaction could not be obtained; tension (digitally) normal; media and fundus of each eye normal and healthy. The blood pressure was 128/68. Night and morning specimens of urine were normal. The Wassermann reaction and gonococcus-fixation test were negative. *X*-ray examination of the skull showed that the pituitary fossa was exceedingly small, with ossification of the petro-clinoid ligaments. The only other abnormalities discovered were:

Peripheral Field.—1/330 mm. white was full and normal in each eye, except for a small absolute scotoma, homonymous and quadrantic in shape and less than 30 degrees, which was more satisfactorily plotted with the Bjerrum screen. Those for red, green, and blue were similar. Only the white is illustrated (Figs. 1 and 2).

Bjerrum Screen.—5/2000 mm. white, red, blue, and green were taken, but only that for white is illustrated (Figs. 3 and 4). The points to be noted are: sparing of the macula; the clean-cut edge along the 90 degrees vertical and 180 degrees horizontal meridians, and between these the absolute scotoma from 1 to 18 degrees; the relative scotoma for a further 5 degrees where the colour faded; its quadrantic shape, homonymous in character, and almost complete congruity. The colours followed an almost identical pattern.

Discussion

Migraine is usually considered to result from vascular instability, the headache being due to spasm of the arteries supplying the occipital cortex, or of the scalp and dura mater, or to irritation of the meningeal arteries following an initial dilatation which produces the sense of well-being. In the present case, however, there is just the possibility of friction on the left optic tract due to calcification of the clinoid ligament; but this seems somewhat unlikely, for the patient was re-examined at three-monthly intervals during the ensuing six months and no change was found.

Traquair (1933, 1942) states that the characteristic feature of optic tract lesions is incongruity, that the fixation area is more often affected when the lesion is in the anterior part of the suprachiasmal path, that homonymous quadrantanopia is found in damage to the calcarine fissure or to the radiation, that sparing of the fixation area of usually less than 5 degrees is almost constant in occipital hemianopias, and that isolated hemianopia is so rarely due to optic radiation and so frequently to occipital lesions that the latter position should be assumed as the site of the lesion unless there is other and stronger evidence, such as a wound, to implicate the former. While Peter (1938) states that perimetry definitely locates ophthalmic migraine in the visual cortex and that migraine is probably due to spasm of the small vessels in the cuneus and where the scotomata—quadrantic or hemianopic, always bilateral and homonymous—have become permanent, the repeated attacks of spasm in these vessels during the migrainous attacks have resulted in permanent occlusion of the vessel, with softening of the brain tissue, the functional now becoming organic.

It may therefore be safely assumed that in my case this is what has happened rather than the problematical suggestion of friction from an ossified clinoid ligament damaging the optic tract.

Review of the Literature

That there is a connexion between idiopathic migraine, epilepsy, and subarachnoid haemorrhage has been mentioned before. It is not the purpose here to discuss this, but to draw attention to the much greater frequency of hemianopias associated with migrainous headaches either of established or, most probably, vascular origin, irrespective of the age of the patient, and those associated, as in the case described, with idiopathic migraine in which the possibility of vascular origin other than vasomotor instability is most unlikely. Ormond (1913), quoting from his own and other observers' cases, mentioned nine in all, six of which,

with one doubtful exception, were probably cases of intracranial haemorrhage. In two of the three cases of migraine uncomplicated by a probable vascular lesion there was homonymous hemianopia with sparing of the macula by less than 5 degrees.

At a meeting of the Ophthalmological Society Prof. Uhthoff (1914) said that he had seen five cases of persistent partial hemianopia following recurrent migraine, and was of the opinion that they were localized to the occipital cortex; Hawthorne (1914) described four cases free from vascular or renal cause in young women, and five others in older patients with a greater or lesser degree of cardiovascular degeneration; and Cross (1914) mentioned 18 of his cases of the latter type, and stated that the common cause was embolism of some twig of the calcarine artery.

Johnson (1936) quoted two cases of quadrantanopia which came to necropsy. The first was that recorded by Hun (1887). This patient, a man aged 57, had a left inferior homonymous quadrantanopia, and necropsy showed complete atrophy, strictly limited to the lower half of the cuneus, of the right occipital lobe. The second was recorded by Schiff-Wertheimer (1926). This patient, a man aged 60, had a right superior homonymous quadrantanopia, and necropsy revealed a lesion of the left cuneus, limited to the inferior lip of the calcarine fissure. These two cases, particularly the latter, support the hypothesis that in my case the lesion will be found in the occipital cortex rather than in the optic tract.

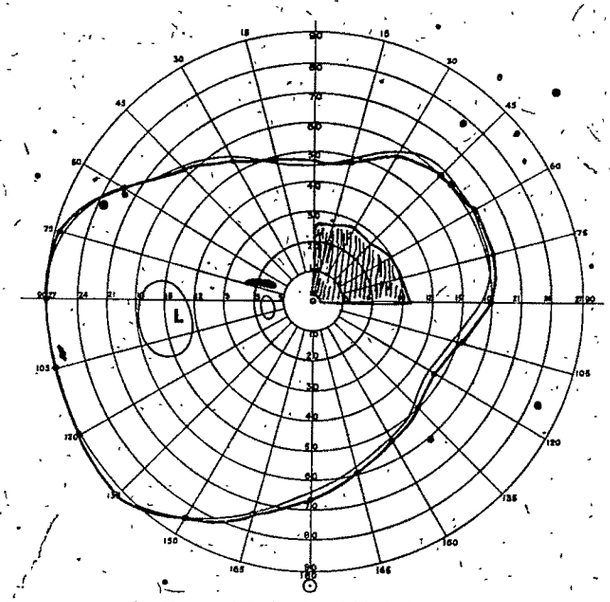

FIG. 1.—Perimeter field, left eye.

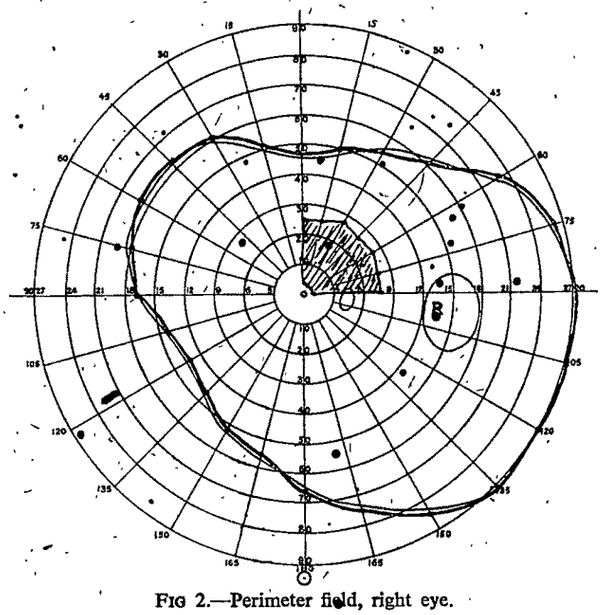

FIG 2.—Perimeter field, right eye.

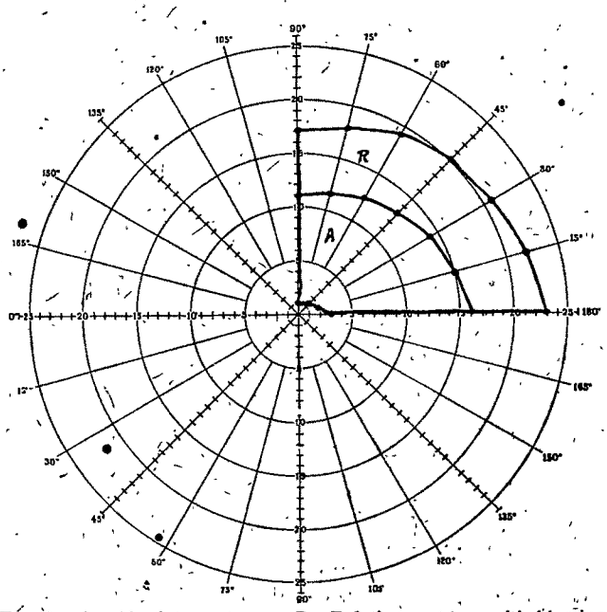

FIG. 3.—A: Absolute scotoma. R: Relative scotoma with blurring and loss of colour. (Left eye.)

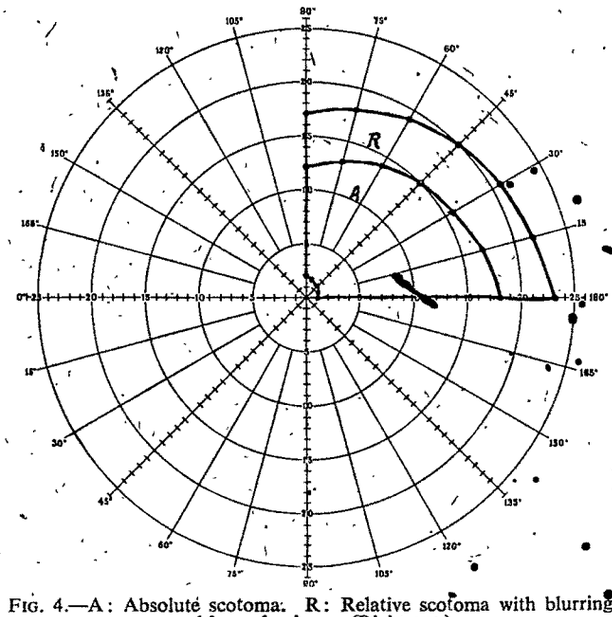

FIG. 4.—A: Absolute scotoma. R: Relative scotoma with blurring and loss of colour. (Right eye.)

The statement by Veil (1930) that transitory hemianopia associated with ophthalmic migraine is of no importance seems to require revision, as does Tidy's (1945) that in rare cases migraine may subsequently result in complete blindness; for Thomas (1907) remarked that "a number of cases are reported [of hemianopia as an aura of migraine] where symptoms appearing during the attack similar to transitory ones in previous attacks have become permanent." He

quoted eight cases, four of which were his own. One of these four proved at necropsy to have had an aneurysm of the right posterior communicating artery which had burst; two others were probably vascular in origin, since in one case there was amnesia and in the other paraesthesiae; and the last of the four—a healthy young woman of 27—was a case of right permanent hemianopia as a result of idiopathic migraine, with sparing of the macula by less than 10 degrees and otherwise a clean-cut vertical edge above and below. She was re-examined six weeks later, but there was no alteration. The ages of these four patients varied from 15 to 67 and all had had proved intracranial vascular catastrophes.

Peter (1938), quoting Charcot and others in their description of cases of persistent quadrantic and hemianopic scotomata following migraine, remarks that other cases have appeared in the literature from time to time; while Adie (1930), drawing attention to permanent hemianopia in migraine, migrainous epilepsy, and spontaneous subarachnoid haemorrhage and their probable interrelationship, describes seven cases in which there was probably a subarachnoid haemorrhage. Dixon (1947), in drawing attention to the frequency of strokes in young adults, mentions four cases of field defect in young people associated with a probable intracranial haemorrhage.

Comment.—In this brief review of the literature 63 cases are mentioned, of which 14 seem to be of true idiopathic migrainous origin, and 49 have been associated with intracranial haemorrhage—a ratio of 2 : 7. It seems likely, therefore, that many more cases of migraine than appear in the literature would show permanent field defects, that sooner or later a number of these would show other signs of intracranial haemorrhage, embolism, or thrombosis, and that the relationship between migraine, epilepsy, and subarachnoid haemorrhage is closer than has been recognized. Attention is also drawn to its greater frequency in women.

Summary

A case of permanent quadrantanopia subsequent to 20 years of repeated attacks of idiopathic migraine is described.

The probable site of the lesion—at first functional, later organic—is discussed.

A review of the literature revealed only 13 other cases.

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The National Corporation for the Care of Old People has appointed a committee to make recommendations on grants for old people's homes and their welfare services in Scotland. Sir Hector Hetherington, Principal and Vice-Chancellor of Glasgow University, is chairman of the committee, and the other members are: Dr. A. Greig Anderson, Dr. A. D. Briggs, Dr. R. W. Craig, Miss Grace Drysdale, Prof. Ferguson, and Mr. H. L. F. Fraser. Offices are to be opened at 2, St. Andrew's Square, Edinburgh.

PHLEBOTHROMBOSIS, DECUBITI AND PREVENTION OF PULMONARY EMBOLISM

BY

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The assumption that pulmonary embolus is an unavoidable accident is no longer tenable.—J. FINE.

In this article no attempt will be made to describe and discuss the prevention of phlebothrombosis by early ambulation, exercises and massage, or the administration of anticoagulants. Moreover, much as I should like to express my views on the relationship of posture to venous thrombosis, I am anxious to avoid becoming involved in controversies concerning the merits and demerits of Fowler's position. This does not imply that I fail to appreciate that the prevention of phlebothrombosis is an ultimate goal of the combined professions of medicine and nursing. On the contrary, it is because this goal cannot be reached without a numerically enhanced nursing service, including specially trained masseurs, far better laboratory facilities, an unlimited supply and unbridled use of expensive drugs, and, above all, more and better hospital facilities, that I propose to concentrate on how to grapple with the problem as it presents itself in average hospital and private practice in Britain to-day.

We are faced with the fact that, except in a few clinics that are accorded facilities not vouchsafed to any but a mere handful of the profession, there is not one iota of evidence that pulmonary embolus is less frequent to-day than it was ten, fifteen, or twenty years ago. It is for this reason, while continuing to preach the gospel of the prevention of phlebothrombosis instead of sitting with folded hands awaiting the medical millennium, that I propose to concentrate on measures to forestall pulmonary embolism which the clinician himself can inaugurate and carry out if he has the energy and determination to do so.

Fatal pulmonary embolus is always disconcerting. Those in attendance rightly cannot smother a conviction that the visitation should not have occurred. Little wonder that generations of conscientious workers have sought to rid the practice of surgery and gynaecology of a scourge. I envisage (*a*) the early detection of phlebothrombosis, and (*b*) the removal of the clot from the femoral vein before it has moved to the heart, as the two limbs of a Colossus astride a subject of fundamental importance to every surgical practitioner.

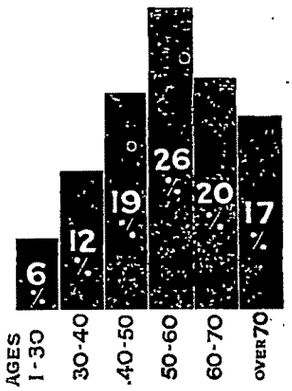

FIG. 1.—The age incidence of fatal pulmonary embolism. (A. W. Allen's and other statistics.)

Early Diagnosis

The temperature chart shows unexplained repeated slight elevations. As the condition is more prone in those past the meridian of life and the highest incidence is between ages 50 and 60 (Fig. 1), if the patient has undergone an operation about a week previously, more particularly if that operation was one of herniotomy, hysterectomy, resection of the rectum, prostatectomy, cholecystectomy, or

for perforated appendicitis, and decidedly if the patient has been nursed with a pillow placed beneath the knees, the well-trained clinician's thoughts should reflexly turn to the veins of the lower extremities. While it is true that the fewer the symptoms caused by phlebothrombosis the greater the danger of pulmonary embolism, it is equally true that the majority of cases of phlebothrombosis decubiti remain undiagnosed until pulmonary embolism has occurred, *because the lower limbs have not been examined.* When all those in attendance are alert to the dangers of clotting in the veins of the legs, when the nurse reports a slight pain in the calf and, in relevant cases (especially between the third and seventh post-operative days), the clinician undertakes routine examinations to exclude phlebothrombosis, then, and then only, is real progress in the prevention of pulmonary embolism likely to occur.

Have the bed-clothes turned up (not down) and display the whole of both lower extremities. Observe the limbs for swelling, which may be slight, fullness of the veins, and a cyanotic tinge.

In suspected early cases proceed as follows:

1. Apply finger-tip pressure over each saphenous opening, and with a stroking motion run the finger down the course of each femoral vein, seeking a segment of unilateral localized tenderness.

2. Let the patient draw up the knees and lie quietly, relaxing the muscles. Begin by palpating the feet for tenderness, especially the medial aspect and behind the internal malleolus (Payr. 1930). Next gently squeeze the calves and then palpate the whole of the thighs systematically, the object being to seek a localized area of muscular rigidity combined with deep tenderness (Frykholm, personal communication).

3. Palpate deeply in the popliteal spaces, noting if there is tenderness here, after which ask the patient to lower the legs on to the bed.

4. Homan's sign. With the knee extended, dorsiflex the foot. Pain in the calf is a positive sign of considerable significance.

5. Compare the femoral pulses. When the femoral vein contains clot the beat of the artery alongside it is usually perceptibly weaker.

If as a result of this thorough examination the diagnosis of femoral thrombosis is reasonably assured, the advisability of exposure of the sapheno-femoral junction should receive every consideration. Removal of clot and interruption of the femoral vein will forestall many pulmonary emboli.

Femoral Thrombectomy

Femoral thrombectomy is not a new procedure. Thirty years ago Sir Carrick Robertson, of Auckland, New Zealand, successfully removed a thrombosis from the femoral vein of Mrs. Bates. In Germany, before the 1939–45 war, Kulenkampff carried out the operation many times. In the U.S.A in recent years femoral thrombectomy has frequently been undertaken; indeed, in a number of American surgical centres the resident and nursing staffs are trained in the early detection of phlebothrombosis decubiti, and the reports on large series of cases of thrombectomy are highly satisfactory.

Anaesthesia.—I have experienced but little difficulty in carrying out the operation under local analgesia. When, as is sometimes the case, there are gelatinous adhesions between the femoral artery and vein, their separation is painful. In these circumstances, and when the patient is very nervous or grossly obese, local analgesia may be supplemented with a small intravenous injection of thiopentone.

The Incision.—A transverse incision* about 4 in. (10 cm.) long 1/2 in. (1.25 cm.) above the saphenous opening has proved adequate.

* Since this was written, A. W. Allen gives good reasons for choosing a vertical incision.

Operation

The inferior lip of the incision being retracted, the saphenous vein as it passes through the saphenous opening is identified and divided between haemostats. After the fascia that constitutes the edges of the saphenous opening has been slit vertically, employing the stump of the saphenous vein as a guide, the femoral vein can be quickly exposed with but little disturbance to it. That this great vein is filled with clot may be apparent at once, but clots cannot be felt unless they are of the most solid character. Employing a Watson Cheyne dissector, the femoral vein is isolated for a distance of about 3 in. (7.5 cm.), exercising gentleness for fear of displacing the clot.

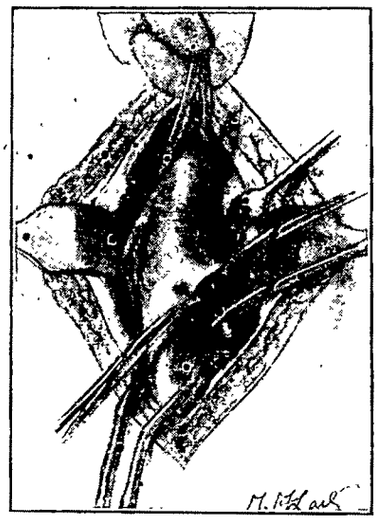

FIG. 2.—Femoral thrombectomy. Bisection of the saphenous vein.

The first aim is to clear the circumference of the upper end of the common femoral vein sufficiently to pass a sling (a narrow strip cut from a sheet of corrugated rubber) around it. Once the sling is in action (see Fig. 2) there is no fear of displacing the clot towards the heart, and the process of freeing the femoral vein and identifying the superficial and deep branches and other radicles can proceed apace. A sling is passed under the superficial femoral vein at the lower end of the wound. Ideally another sling should be passed under the deep femoral vein, but I have omitted this step in most of my cases. Neither the upper sling nor the lower sling is put into action at this stage. The haemostat on the stump of the saphenous vein, which has served well first as a guide and later as a tractor, is removed and the sealed mouth of the vessel is prised open (Fig. 2); scissors are introduced and the common femora vein is slit for about half an inch.

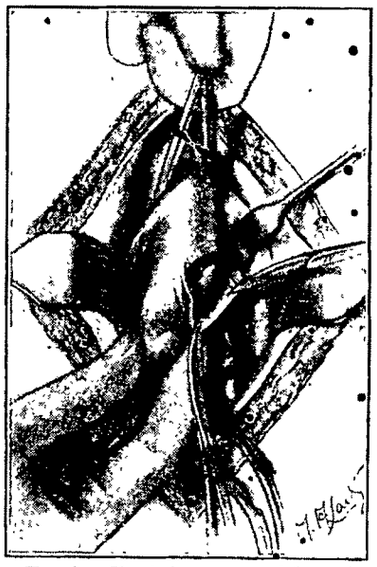

FIG. 3.—Clot being expressed from the femoral vein. Some of it is often extruded spontaneously.

There is no need to become apprehensive regarding a possible haemorrhagic cascade: if the vein contains much clot there will be no bleeding at all; if it contains loose clot the very thing we want is to let the femoral vein bleed and sweep out the clot. Haemorrhage can be brought under absolute control with the slings. Be assured that with the slings in position the surgeon is complete master of the

situation at any moment. When present, clot is expressed from the distal end of the vein (Fig. 3). By the delicate use of Desjardin's gall-stone forceps a long wormlike clot can often be extruded without breaking it, or at any rate not fragmenting it. The same procedure in extracting clot from the proximal end is undertaken. If free bleeding occurs the sling is tightened and the next step omitted. A glass tube or, better still, my pattern clot extractor (Fig. 4) connected to a sucker is passed up the common femoral vein into the iliac vein (Fig. 5). Smaller clots can be expeditiously removed by its agency. Ideally there should be bleeding from both ends of the vein. In my experience, when a considerable amount of clot has been extracted it is seldom realized from the distal end. The vein is clamped above and below the opening that has been made into it. The vein is then divided across the ends and ligated. After sprinkling sulphanilamide powder into the wound the skin is closed with rubber dam drainage. I have not regretted draining the wound, but I have had a little trouble with local sepsis in cases where this step is omitted.

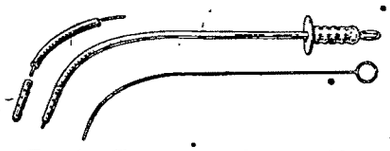

FIG. 4.—Clot extractor for use with a suction apparatus. (Made by Hawkins, Ltd.)

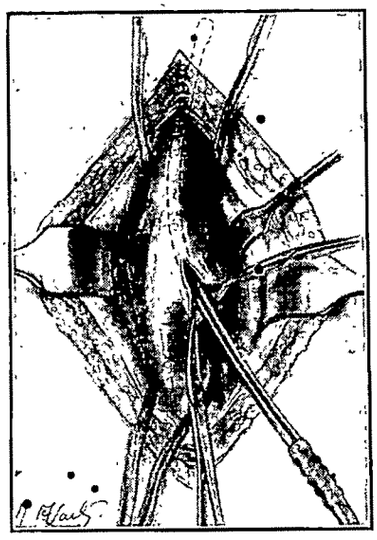

FIG. 5.—Clot extractor in use.

Immediate After-treatment.—Prophylactic penicillin treatment is not out of place. The limb is elevated on pillows, but the patient is encouraged to move it from the beginning. Even should there be a clot above the point of interruption of the vein the motive power that sweeps the clot to the heart is lacking, and consequently the danger of pulmonary embolism, at any rate from the iliac vein on the side operated upon, is greatly reduced. In recent cases, with the object of preventing further intravenous clotting, I have ordered the administration of dicoumarol for a week.

More Remote After-treatment.—On the third day the patient is sat out of bed, unless other considerations negative this. Before he gets up, flexible adhesive plaster, with the sticky side outwards (which permits its easy painless removal), is applied from foot to groin, so as to support the whole limb firmly.

Sequelae are surprisingly few. Astounding to relate, there is less swelling of the limb than is observed in cases of thrombophlebitis followed by spontaneous recovery. In the latter case the accepted practice is to keep the patient strictly at rest with the limb elevated for six weeks. Compare from the patient's point of view this tedium with vein interruption and sitting out of bed on the third day. Certainly there is some swelling of the limb, which continues for weeks or months; consequently it is usually advisable for the patient to wear a crêpe bandage for six months.

Less Straightforward Cases

Occasions will arise where the femoral vein is explored and clot within it is not discovered. In these circumstances it is usually advisable to explore the contralateral side, although this step requires the conviction that one is acting in the best interests of the patient. On other occasions when the patient has had a pulmonary embolism and, as always, another (probably fatal) one is feared, and there is no clear guide as to which femoral vein to explore, a most onerous decision has to be made—whether (*a*) to explore one femoral vein and, if that be fruitless, to explore the other, or (*b*) to tie up the inferior vena cava.

Ligation of the Inferior Vena Cava

The first case of therapeutic ligation of the inferior vena cava was carried out by Trendelenburg in 1911. The patient had pelvic thrombosis due to puerperal sepsis. After the operation there was dramatic improvement.

Reports of successful ligation of the inferior vena cava in cases of thrombophlebitis of the pelvic veins, and when the patient has had one pulmonary embolism and another is feared, are scattered through the surgical literature of the period between the two world wars. Contrary to what might be thought, this procedure is not a desperately formidable undertaking. It is of course essential that the ligature be applied below the level of the renal veins. To divide the inferior vena cava between ligatures appears to be a better practice than simple ligation; this would prevent late cutting through of the ligatures.

These points were brought out in and this was the impression to be gained from a paper by Wakefield and Mayo, who in 1934 were able to collect 19 cases with recovery of 15 In two instances the patient died as a result of the operation: one fatality occurred on the 23rd day, and was due to the ligature cutting through the vein; in the other case the ligature had been tied above the right renal vein.

During the past few years so much confidence has accrued in America in this to many of us still desperate expedient that in 1947 Veal *et al.* of Washington were able to present 30 cases of their own. In 28 of these the operation was undertaken on account of pulmonary embolism. Of the three deaths following the operation, two occurred in patients suffering from cardiac disease and one was due to pneumonia. It should be noted particularly that no further embolism occurred in any of the cases. So it comes about that there is reason to believe that ligation of the inferior vena cava is a practical proposition likely to save life when employed in appropriate cases at the right time. The difficulty is to be sure that the procedure is indicated. When facilities exist, intravenous injections of diodone into an exposed saphenous vein and subsequent radiography will display information regarding thrombosis of the great veins of the pelvis. The technique of the procedure is set out by Stowers and Grossman (1946).

This is not the place to enter into the technique of ligation of the inferior vena cava. It suffices to say that the operation is well within the competence of the average general surgeon, and the best surgical approach appears to be an extraperitoneal one, very similar to that of exposure of the lower end of the ureter.

Ligation of the inferior vena cava does not produce more than slight disability—oedema of the lower limbs—and this usually passes off in time.

Conclusions

At the present time in Britain there are but few surgeons who have carried out femoral thrombectomy; indeed, the operation has received less attention than pulmonary embolectomy. The latter is a heroic measure requiring

special facilities, special instruments, and special skill. Femoral thrombectomy requires none of these things.

The indications for femoral thrombectomy are: (1) when pulmonary embolism has occurred and mercifully the patient is yet in a fit condition to withstand operation, and (2) when phlebothrombosis decubiti has been diagnosed with some precision.

To endeavour to stimulate surgeons, house-surgeons, and practitioners to undertake a careful clinical examination for phlebothrombosis in relevant cases is my main object in writing this paper.

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TREATMENT OF THYROTOXIC HEART DISEASE BY METHYL THIOURACIL

BY

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While thiouracil has been employed in large numbers of cases of thyrotoxicosis, comparatively little attention has been paid to its use in the cardiovascular complications of that condition. It is the purpose here to survey this aspect of thiouracil therapy. Case histories are recounted, and these are reviewed in the light of the literature.

Patients suffering from cardiovascular disease to whom thiouracil may be administered may be grouped broadly into those in whom cardiovascular disease results from thyrotoxicosis and those in whom it originates independently. In the latter group thiouracil therapy has the same rationale as thyroidectomy has had in the past—that is, a lowering of the basal metabolic rate. It has been given with this aim chiefly to patients with angina pectoris and those with congestive heart failure.

Thyrotoxicosis is a common disorder, but few cases nowadays develop cardiovascular disease: timely operations have in so many instances remedied the condition in an early phase. Nevertheless, most of the published series of cases of thyrotoxicosis have contained several examples of such complications as auricular fibrillation. Thus Himsworth (1944) notes two cases of auricular fibrillation in 33 cases of hyperthyroidism. Grainger *et al.* (1945), reporting 29 cases of thyrotoxicosis, mentions two cases of patients with auricular fibrillation who reverted spontaneously to normal rhythm after treatment by thiouracil. Nussey (1944) mentions four cases of auricular fibrillation in a series of 29 cases of thyrotoxicosis. McGarack *et al.* (1945) reported the effect of thiouracil on 18 cases of auricular fibrillation in a series of 78 cases of thyrotoxicosis. Cookson (1945) mentions 10 cases of auricular fibrillation in 66 cases of thyrotoxicosis, and more recently Cookson and Staines (1947) reported eight patients out of 16 with auricular fibrillation who reverted to normal rhythm. Wilson (1946) noted six cases of auricular fibrillation in 66 cases of thyrotoxicosis.

The material in the present series comprises 10 patients with cardiovascular disease associated with thyrotoxicosis—seven women and three men, whose ages ranged from 41 to 81. The longest history of symptoms was eight years, the shortest a few weeks. The increase in basal metabolic rate ranged from +14 to +55%, and the lowest blood cholesterol before treatment was 106 mg. per 100 ml. There were six cases of nodular hyperplasia and four cases of diffuse enlargement; the type of enlargement did not affect the response to treatment. They have been observed over a period of 8 to 18 months.

In four patients with established auricular fibrillation various complications caused failure in each case. There were two patients with paroxysmal auricular fibrillation, in both of whom treatment was successful. Of the two patients with hypertension and cardiac enlargement one showed only slight improvement, the other none. Striking improvement resulted in the patient with angina of effort, who was able to resume work after being completely incapacitated. One patient with premature contractions and gross diminution of cardiac reserve was much improved, and was able to do her housework.

Case Histories

Case 1.—A man aged 41 was diagnosed as suffering from thyrotoxicosis in 1940. In April, 1946, auricular fibrillation began. When seen six weeks later he showed typical thyrotoxic signs and symptoms. The thyroid was diffusely enlarged. There was no cardiac enlargement or any sign of valvular disease. Auricular fibrillation was present; the heart rate was 120 and the blood pressure 130/70. There was no cardiac failure. The basal metabolic rate was + 45% and blood cholesterol 155 mg. per 100 ml. On methyl thiouracil therapy the B.M.R. fell to −10% and the blood cholesterol rose to 283 mg. Cardiac rhythm was restored to normal by 50 gr. (3.2 g.) of quinidine two weeks after starting thiouracil administration. After eight months methyl thiouracil had to be withdrawn because of granulopenia. The patient continued at work, against advice, from February to June, 1947, during which time he took sedatives, and then agreed to thyroidectomy. He has since been quite free from symptoms, the heart remaining in normal rhythm throughout.

Case 2.—A man aged 68 presented with sacral pain following an infected pilonidal sinus. On examination he was thyrotoxic, with slight exophthalmos and a nodular goitre. Auricular fibrillation was present. The heart rate was 124 per minute; the blood pressure 185/90 and there was marked arteriosclerosis. The heart was enlarged and the sounds weak; there was no evidence of valvular disease. He made steady improvement on methyl thiouracil for three months, when obvious chemosis and exophthalmos developed. He was admitted to hospital and treated with Lugol's iodine and 200 mg. of di-iodotyrosine daily; later, deep *x*-ray therapy to the pituitary gland was given. In two months the right eye developed an exposure keratitis and hypopyon, necessitating evisceration. After a very stormy convalescence he recovered, and eventually was discharged, still with fibrillation between 80 and 90 a minute and a blood pressure of 170/90.

Case 3.—A woman aged 46 presented with nervousness, depression, palpitations, and occasional irregularities of the heart. When seen in 1946 she was thyrotoxic and had an adenoma of the right lobe of the thyroid. There was no congestive failure; fibrillation was present at 140 a minute, with a radial pulse deficit of 16 a minute. Blood pressure was 130/80. Screening showed a typical heart of mitral stenosis. The electrocardiogram revealed auricular fibrillation with right ventricular stress. She made a good response to methyl thiouracil therapy, but on her return home various functional symptoms supervened and she decided to undergo operation.

Case 4.—A frail old lady of 81 presented with thyrotoxicosis and general slight thyroid enlargement. There was no cardiac

failure; rhythm was regular and blood pressure 205/100. X-ray examination revealed left ventricular enlargement and a prominent sclerotic aorta, with hilar engorgement. She was put on methyl thiouracil and after 13 days had improved somewhat; but she then developed drug fever to 103° F. (39.4° C.), which disappeared in 24 hours on stopping the methyl thiouracil. One week later fibrillation was noticed; at first it was intermittent, but in two days it had become persistent. Her condition deteriorated rapidly; she developed pneumonia, and died in coma two weeks later.

Case 5.—A woman aged 65, after a shock in December, 1945, noticed lack of energy and dyspnoea on effort, and later some swelling of the ankles. On examination she was thyrotoxic, with slight general thyroid enlargement. There were a few rales at the lung bases, the liver was enlarged by three fingerbreadths, and there was slight peripheral oedema. There was fibrillation on her first visit; but later the heart was regular at 96. It was not enlarged, and there was no valvular disease. Blood pressure was 150/80, with obvious arteriosclerosis. On methyl thiouracil she made excellent progress, which is being maintained on very small doses.

Case 6.—A woman aged 55 gave a history of prominence of the eyes and dyspnoea for 18 months, and palpitations for six months. On examination bilateral proptosis was present. The pulse was regular at 76, the blood pressure 150/95. There was a slight thickening of both lobes of the thyroid, but no thyrotoxicosis. On July 15, 1946, the blood cholesterol was 225 mg. per 100 ml. Radiographs of the pituitary fossa were normal. On Sept. 9 she was given hexoestrol, and two weeks later she presented with exophthalmos, enlargement of the thyroid, and thyrotoxicosis. Fibrillation was present. She responded rapidly to methyl thiouracil therapy, and the heart reverted spontaneously to normal rhythm.

Case 7.—A woman aged 52 gave a long history of nervous symptoms, which were exacerbated by the outbreak of war. In January, 1943, the thyroid was noticed to be enlarged. In July, 1946, she complained of lassitude, dyspnoea on effort, and palpitations. On examination she was thyrotoxic, and an adenoma of the right lobe of the thyroid was found. The heart was slightly enlarged, rate 90 a minute, and the blood pressure was 220/115. The arteries were normal for her age. She improved generally on thiouracil therapy, but her blood pressure fell only to 180/100.

Case 8.—A woman aged 60 gave a three-year history of loss of weight and excitability. On examination she was thyrotoxic and had a general nodular enlargement of the thyroid. The heart was slightly enlarged, with a soft apical systolic murmur. The blood pressure was 165/90, with general arteriosclerosis. The B.M.R. was +55% and the blood cholesterol 129 mg. per 100 ml. After seven days on methyl thiouracil (total dosage 4.6 g.) her temperature rose to 103.6° F. (39.8° C.). The next day fibrillation started, and continued for five days, remitting spontaneously. Thyroidectomy was performed later with excellent results. Her blood pressure, however, remained unchanged.

Case 9.—A man aged 45 had a coronary thrombosis in March, 1945, while in the Army, and was in hospital for three months. This was followed by angina of effort even on slight exertion. In May, 1946, paroxysmal nocturnal asthmatic attacks developed and he had to give up his work. Dyspnoea on effort was increasing, with ankle oedema in the evenings. In November, 1946, typical thyrotoxic symptoms started. On examination then he was obviously thyrotoxic. The thyroid was firm and easily palpable. The heart was not enlarged, and rhythm was regular at 120 a minute; there was no failure. Blood pressure was 145/90; arteriosclerosis was present. The B.M.R. was + 39%, and the blood cholesterol 106 mg. Thiouracil therapy resulted in great improvement. He is now back at work, and has only a very mild chest pain after moderate effort.

Case 10.—A woman aged 45 had had increasing dyspnoea on effort for nine months, and when seen in July, 1946, could walk only a short distance on the level. She was thyrotoxic, with nodular swelling of the right lobe of the thyroid. There was no failure, the heart was not enlarged, and there was no valve affection. Pulse rate 100, with frequent premature contractions. Blood pressure was 145/70; the arteries were normal for her age. She improved on thiouracil, and manages her housework and has no cardiac symptoms. She is still on 50 mg. of methyl thiouracil daily.

Comments on Results

Auricular Fibrillation.—In the present series six patients had established or paroxysmal auricular fibrillation. Three reverted to normal rhythm; two of these were suffering from paroxysmal auricular fibrillation and in one it had been established only a few weeks. The latter patient developed a granulopenia, and treatment had to be abandoned; but normal rhythm was held, and continued after thyroidectomy. In McGarack's (1945) series there were 18 cases of auricular fibrillation; 12 of these reverted to normal rhythm spontaneously on treatment with thiouracil, and three others were successful when digitalis was given. In none of these cases was there any other cardiovascular disease, the fibrillation being due entirely to the thyrotoxicosis. In Cookson's (1945) cases normal rhythm was restored in three out of 10 cases of auricular fibrillation. Of the remaining seven, one was treated only six days before death, and one also had mitral stenosis. In Wilson's (1946) series five out of six cases of auricular fibrillation reverted to normal rhythm spontaneously, and here again no other cardiac lesion was mentioned. Similarly, Grainger's two cases reverted to normal rhythm spontaneously. Of Nussey's four cases two were restored to normal rhythm—one spontaneously and one after the administration of quinidine. In the other two, of one and five years' standing, no attempt was made to restore normal rhythm.

Hypertension.—Grainger *et al.* (1945), noting the effect of thiouracil on hypertension not associated with thyrotoxicosis, found that little or no response occurred. Two of our cases had hypertension as the only cardiovascular abnormality and two more had established auricular fibrillation with hypertension. Of the first two, one responded well so far as her toxic symptoms were concerned, but showed only a slight fall in blood pressure. The other developed a drug fever, and treatment had to be abandoned. Thyroidectomy was performed; her blood pressure, however, remains at its former level. Of the other two, one developed malignant exophthalmos, and his fibrillation and hypertension persisted; the other reverted to normal rhythm, but the blood pressure rose from 150/95 to 170/95

Angina.—One patient with angina pectoris gave an excellent response to thiouracil. The toxic symptoms completely disappeared, and instead of an attack of anginal pain occurring after walking half a mile (0.8 km.), he is now hardly troubled during the whole day. Raab (1945) states that the treatment of angina pectoris unassociated with thyrotoxicosis proved effective in seven out of 10 cases, the clinical improvement coinciding closely with the fall in the basal metabolic rate. Ben-Ascher (1947) found thiouracil beneficial in 25 out of 37 patients with angina pectoris. In a former paper Ben-Ascher (1945) reported on eight cases of angina pectoris with favourable results in all of them. The basal metabolic rate fell from −8% to −20% at the time of the maximum improvement. Di Palma and McGovern (1946), however, reporting eight cases of angina pectoris, found that treatment had to be abandoned in four instances, and two of the others became myxoedematous. One patient had symptoms of coronary occlusion during treatment.

Cause of Failure of Thiouracil Therapy.—Failure in five cases in the present series was due to a variety of reasons. In two cases drug fever prevented further administration; in another, psychological inability to face the long treatment necessary in thiouracil therapy was the cause, and

one was due to development of granulopenia while on a maintenance dose of thiouracil. One patient developed a malignant exophthalmos which necessitated evisceration of an eye.

Thiouracil Therapy *v.* Surgery

Thiouracil interferes with the production of thyroxine by the thyroid gland and, as shown by Himsworth *et al.* (1947), after the first three weeks there is no difference between the condition of patients so treated and those treated by thyroidectomy; and the risk of thyroidectomy is removed. With expert surgeons the mortality rate is 1% or less, and is probably nearer 4–5% when overall figures are taken. *A priori*, in cases with cardiovascular disease complicating thyrotoxicosis the figure is higher. In patients who refuse operation outright thiouracil provides an effective alternative method of treatment.

Thiouracil may also be used to assess the effect of thyroidectomy on the cardiovascular condition generally, and to bring the patient into a better state pre-operatively. This is so especially in cases in congestive heart failure. It is given for at least three weeks; it is then stopped seven to 10 days before operation, and iodine is substituted. This reduces the friability and vascularity of the gland resulting from the use of thiouracil, and substantially facilitates the surgical procedures. In patients who are sensitive to iodine, however, thiouracil may be used alone as a pre-operative measure.

Thiouracil may be used in the younger age groups in whom auricular fibrillation has occurred secondarily to the thyrotoxicosis alone. The heart in most cases will revert to normal rhythm spontaneously, and almost all of those which do not will do so when quinidine is combined with thiouracil therapy. The thyrotoxicosis may remit in time, and after adequate treatment over 12 to 18 months the thiouracil may be stopped with a fair chance of complete recovery.

Whenever thiouracil is used the risk of allergic or toxic complications arising is very real. The drug is stored in the bone-marrow in concentrations up to 16 times that in the blood, and it is this which causes the most lethal of all the ill-effects attendant on its use. Fowler (1946) has shown that of 1,573 cases collected from the literature toxic reactions of one kind or another occurred in 13.7% and serious complications in 4%; the mortality was 0.57%, and was decreasing. With the smaller doses needed when using methyl or propyl thiouracil complications are less likely to occur.

In cases with rheumatic, hypertensive, or arteriosclerotic heart disease neither thiouracil nor thyroidectomy will have any effect on the original heart condition. It will, however, improve prognosis by removing the toxic effect and the added load imposed on the already damaged heart by the thyrotoxic state.

Some cardiologists of repute have entirely abandoned the use of thiouracil as being too toxic and dangerous, and regard thyroidectomy as an equally safe method of treatment, with a more immediate and better cosmetic result.

Thiouracil should never be used when the gland is so enlarged or so placed as to cause tracheal obstruction; nor in cases in which there is the slightest suspicion of malignancy. In elderly people thyroidectomy is to be preferred. There is always a possibility of relapse on ceasing treatment or of complications; and such people will then be in a worse condition for thyroidectomy and their myocardium less well able to withstand either operation or thyrotoxicosis. In those whose temperament or economic condition will not permit them to face the long treatment with thiouracil under adequate supervision thyroidectomy is best performed at once.

Summary

An account is given of the use of methyl thiouracil in 10 patients with thyrotoxic cardiovasoular disease.

The value of this treatment in auricular fibrillation, hypertension, and angina pectoris is discussed and the results are compared with those of other observers.

Treatment failed in five cases, the causes of failure being drug fever (2), malignant exophthalmos (1), granulopenia (1), and neurosis (1).

The considerations governing the choice between surgical treatment and thiouracil therapy in thyrotoxic cardiovascular disease have been reviewed.

I am much indebted to Dr. K. Shirley Smith for his encouragement and help and for permission to refer to his cases; also to Dr. H. A. Dunlop for permission to include two of his patients in this series.

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PENICILLIN AND GONORRHOEA

AN ANALYSIS OF 150 CASES TREATED BY THE SINGLE-INJECTION METHOD

BY

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It is now common knowledge that penicillin injected intramuscularly affords the best means of curing gonorrhoea. Like other treatments it has, however, certain disadvantages, and an analysis of 150 cases seen at the male V.D. clinic of the Cardiff Royal Infirmary may prove of interest. The cases were treated between October, 1946, and June, 1947. All except three showed typical signs and symptoms of acute gonococcal urethritis. In each case the diagnosis was confirmed by a microscopical examination of the discharge.

Details of the Cases

Their nationality was: British, 144; Greek, 3; Maltese, 3. 101 were single, 44 married, 3 married but separated, and 2 were widowers.

Age Incidence

16–20 years	9	36–40 years	8
21–25 ,,	50	41–50 ,,	7
26–30 ,,	44	51–60 ,,	Nil
31–35 ,,	31	61–70 ,,	1

The greatest number of cases occurred during the age group 21–25, and altogether 125 out of the 150 men were from 21 to 35 years old. The youngest patient seen was a boy aged 16 years and 11 months whose case is described below, and the oldest was a widower aged 63, who gave a history of having had gonorrhoea 30 years previously. This man was first seen on Nov. 11, 1946, after infection by a prostitute. He was free from discharge and other signs of gonorrhoea in 10 days after one injection. He then ceased attending. On Jan. 2, 1947, he returned, admitting to further coitus, and was found to have become reinfected. Again a single injection of penicillin cleared

him up. He then absented himself once more, only to reappear with a further infection on April 21. Thirty-five of the men were on demobilization leave. The rest were clerks, dock labourers, farm workers, seamen, and every conceivable type of worker found in a large seaport town. The sources of infection were: by friends, 60; by prostitutes, 56; marital coitus only, 4; risks denied, 2; not stated, 28. These figures show what is already widely known—that the prostitute is not the only source of infection.

Duration of Infection before Treatment

1 week and under	50	Between 1 and 2 months	1
Between 1 and 2 weeks	55	" 2 " 3 "	1
" 2 " 3 "	26	Over 3 months	2
" 3 " 4 "	6	Uncertain	9

The great majority of the men came to the clinic within two weeks of becoming infected. In the "uncertain" group were a number of sailors who had had treatment with ineffectual remedies on board ship. No doctor was on board to give them proper advice.

All the patients showed typical signs and symptoms of acute gonococcal urethritis, with the exception of the following three:

1. A man aged 31, who had had gonorrhoea while on active service in India in 1944. He said he had been cured. No gonococci were found in a specimen of pus which looked typical of a gonococcal infection. He had been married two years and denied extramarital coitus. He made an uneventful recovery after one injection of penicillin.

2. A Chinese cook on board ship aged 34, who had been given an unknown dose of sulphapyridine by the ship's steward. No obvious discharge was present. He was given one injection of penicillin and a "V.15" as he was going to sea again.

3. A man aged 34, who had a primary sore as well as gonorrhoea. He was given 20 g. of sulphathiazole concurrently with arsenic and bismuth injections. After 10 days he was given an injection of penicillin, as his discharge had not gone. It did so in a day or two after the penicillin. He is still under treatment for syphilis.

There were four cases of double infection: two had a typical primary sore as well as an acute gonococcal urethritis, and two proved to be double infections but the onset of the syphilitic infection was delayed by the penicillin. Reports of these two cases follow.

Onset of Syphilis Delayed by Penicillin

Case 1.—A married man aged 24, with no previous history of venereal disease, was first seen on Sept. 30, 1946. He had run risks a week before, and had had a urethral discharge for three days. It was a typical example of gonococcal urethritis, and cleared up completely after one injection of penicillin. He reported at proper intervals of time, and on Nov. 4 his Wassermann reaction was negative. At about 12 noon on Nov. 21 I noticed a small plaque-like swelling on the body of the penis bordering on the coronal sulcus. It had a tiny central pinpoint opening. By Nov. 28 it was a typical indurated hard sore. Dark-ground illumination failed to reveal spirochaetes, but his Wassermann reaction was ++ on Dec. 9. He had typical enlarged inguinal glands on both sides. He was at once given treatment, and is still attending. This would appear to be a delayed chancre. The man first noticed a spot on his penis about Nov. 20, thus the first appearance of a specific lesion was approximately 51 days after the date of infection.

Case 2.—This patient, a married man aged 26, was first seen on Oct. 14, 1946. He had been infected a week previously and discharge had been present for three days. He had a typical gonococcal urethritis. The discharge dried up in a week after one injection of penicillin. On Dec. 2 his Wassermann reaction was negative; on Feb. 3, 1947, it was +±−, and on Feb. 10 it was +++. The only physical signs of syphilis were very typical enlarged inguinal glands on both sides. There was no trace of any primary sore, and the man was not aware that he had seen anything like a pimple on his penis. He is now being treated with concurrent injections of arsenic and bismuth. The first evidence of syphilis appeared approximately 112 days after the date of infection.

Reinfections.—During the period September, 1946, to June, 1947, there were 17 patients who reappeared with a fresh infection of gonorrhoea—12 admitted the fact spontaneously; the other five, when pressed and confronted with a pathological report, left little doubt in my mind concerning the source of their acute urethritis.

Type of Penicillin Used, Dosage, and Technique

Two penicillin oil-wax suspensions (ethyl oleate and arachis oil) were used, and both proved very satisfactory. They were warmed up to blood heat and well shaken before being drawn up into the syringe. The dose given was 375,000 i.u. in each case. It was injected into the upper and outer quadrant of the buttock. None of the patients complained of more than temporary pain or stiffness at the site of injection. No time was lost at work and no patient had any allergic reaction. The discharge disappeared in most cases very quickly: 41 were free of discharge in under 1 week, 66 in 1 week, 5 in 2 weeks, 3 in 3 weeks, and 5 in 4 weeks. In 30 cases no definite time was stated.

Sulphathiazole tablets were prescribed in 5 cases in which the urine showed persistent pus cells but no gonococci after the penicillin injection. Irrigation of the urethra was not resorted to. In cases with balanitis and some phimosis a solution of 1 in 10,000 potassium permanganate was used for subpreputial lavage.

A single injection was given to 134 patients, 14 required two injections, one patient three, and another four. When two injections were needed, the patients failed to attend promptly after the first one. The period varied from one to four weeks, and purulent discharge was always present. In one case the discharge had cleared up completely in a week, only to recur three weeks later. I have a suspicion that it was a case of reinfection, although this was denied. The case requiring three injections is described below (Group 3, Case 1).

Case Requiring Four Injections.—This patient had had gonorrhoea in 1940 during his Army service and had been cured. He was admitted with an acute gonococcal urethritis and penicillin was injected. When he attended the clinic three weeks after the injection the discharge was still profuse. A second injection was given. This time he stayed away for five weeks, and when he reappeared the discharge was as free as ever. A third injection was given. Again he absented himself, this time for 10 weeks. Then on examination the discharge was still plentiful, and a fourth injection was given. Since then he has not attended.

End Results

Group 1.—This group consisted of 62 men who were discharged cured. No patient was under treatment and surveillance for less than three months. The average period of treatment for the whole group was about four months per patient. Every one of them was free from all signs and symptoms of gonorrhoea and, except in one case in which a double infection was present, the Wassermann reaction was negative. Tests of cure adopted conform to those advised by the Ministry of Health.

Group 2.—This group consisted of 56 men who had attended the clinic for less than four weeks and had then ceased attending. Twenty-five came only once, so it is impossible to say whether they were properly cured. It is not unreasonable to assume that at least their discharges were dried up. All the remainder were dry and free from signs and symptoms.

Group 3.—In this group of 30 patients who ceased attending after one to seven months only the following three showed any signs of infection.

Case 1.—The patient, aged 23, was infected two weeks before. He attended the clinic on four occasions between Dec. 23, 1946, and March 3, 1947. On admission he was found to have a typical gonococcal urethritis and penicillin was given. He absented himself for a month, and when he returned he was found to be still discharging freely. A second injection of penicillin was given, and he then disappeared for a further month, only to return again with a right-sided epididymitis and orchitis. A third injection of penicillin was given, followed by a course of sulphathiazole. When he turned up a fortnight later his discharge had gone and his testicle was less swollen though still tender. Since that time he has ceased attending altogether.

Case 2.—A youth aged 16 years 11 months had a typical gonococcal urethritis associated with phimosis and balanitis. He did not attend until two weeks after his first injection, and was then showing much purulent discharge. The second injection of penicillin cleared up the gonococcal inflammation of the urethra, but he still had a mild degree of balanitis. This showed no evidence of being gonococcal. He ceased attending after 11 weeks' treatment.

Case 3.—A man aged 31, who had served in the Army in the East, attended for 10 weeks, and when he ceased attending had been free from discharge for a long time. His urine, however, still showed some pus cells. His general health was poor. He had been a prisoner of war in Japanese hands and had had pellagra, beriberi, and dysentery.

Group 4.—The following two cases are still attending at the clinic.

Case 1.—A man aged 21 had typical gonococcal urethritis. The discharge and all other signs and symptoms cleared up in 24 hours. His gonococcal flocculation reaction, however, was positive.

Case 2.—A man aged 26 had had gonorrhoea in the early part of 1946. He had a typical gonorrhoeal discharge, which cleared up in a week after an injection of penicillin. His urine still shows some pus cells.

Comments

To analyse case records at a V.D. clinic is difficult and unsatisfactory. In the first place I feel that the patients' statements are often open to doubt. In the second place—and this is the main trouble—such a large percentage of patients cease attending before their surveillance is complete. However, from the facts and figures that emerge from this analysis I can say that penicillin given intramuscularly in an oil–wax suspension is the treatment of choice for gonorrhoea to-day. Its advantages are obvious. Easy to give, it causes no appreciable pain or discomfort. The patient is asked to spend the minimum amount of time attending the doctor and loses no time at his work. His discharge is quickly dried up, and if he co-operates he is certain of a quick cure. It is to be specially noted that complications such as orchitis, epididymitis, and vesiculitis are now very rarely met with.

As I said at the start, there are a few disadvantages: (1) It is almost too efficient. The patient gets well so quickly and so easily that some are tempted to run further risks. No longer is the cure worse than the disease. (2) As is already known, penicillin can mask and delay the onset of primary syphilis. (3) Because of this the necessity for repeating the Wassermann test over a period of months is unfortunate. So many patients fail to realize the importance of having more than one blood test.

I would like to express my thanks to my colleagues, Dr. H. Sheasby and Dr. J. Rebeiro, for their help in preparing this paper, and also to acknowledge much assistance given me by Mr. R. D. Vanstone, the clerk to the clinic.

Medical Memoranda

Penicillin, Beeswax, and Allergy

The following two cases of allergy occurring in general practice are described to illustrate the severity of reaction to penicillin and the possibility that some component of the beeswax–oil suspension, other than the penicillin, was the exciting factor.

CASE 1

A man aged 58 complained of persistent boils, and as no previous treatment had allayed the condition it was decided to give a course of penicillin. Injections of 250,000 units in distilled water were given twice daily on June 16 and 17, 1947, and one on the 18th. The patient then defaulted. However, the furunculosis improved considerably.

On June 25, the ninth day after the first injection of penicillin, I was asked to see the patient. He stated that while driving home that day he had felt itching, first of the left foot where his boot-laces pressed, and then of the right foot in the same situation. He felt very drowsy and could hardly keep awake to drive the car home. Within half an hour he began to itch all over. He also complained of severe pain behind the sternum and of severe indigestion. An examination showed the body to be covered with large urticarial weals about the size of the palm of the hand. The feet, hands, and face were swollen. This condition persisted for seven days in spite of treatment with "benadryl," 50 mg. thrice daily, later increased to 100 with adrenaline, 10 min. (0.6 ml.), twice daily. After seven days the condition gradually subsided, but during this time the itching was intense and the patient had only very fitful sleep with the aid of morphine.

CASE 2

The patient, aged 33, was the wife of an ardent bee-keeper, and she helped with the manipulation of the bees from time to time. At first the patient had little reaction to stings until the summer of 1941, when she was stung on the lip. This became very badly swollen. In the summer of 1944 she was stung on the leg. The leg became very swollen, and she stated that the sites of previous stings also became swollen. In February, 1947, she had a small carbuncle on the face, which was treated with penicillin, 150,000 units, in distilled water, given eight-hourly for five days. This cleared up the carbuncle. On Oct. 25 a carbuncle began to develop on the chin, and next day injections of 250,000 units of penicillin in wax–oil suspension were started. These were given twice daily into each buttock alternately at the "site of election." The injections were continued until the morning of Oct. 29, six injections in all being given. On Nov. 2, the eighth day after the first injection of penicillin, the patient began to feel the site of the old bee-sting on the leg itching and a weal developed. Within half an hour the sites of injection of penicillin on both buttocks became itchy and red. For a week the sites of the injections were covered with a ring of urticaria and there was considerable swelling of the underlying tissues. During the same period the site of the old bee-sting on the leg was irritated and became swollen from time to time. The patient also averred that the taking of honey led to an increase in the local symptoms of allergy shortly thereafter. All symptoms were controlled to some extent by benadryl.

COMMENTARY

Case 1 is described to illustrate the severity of the allergic reaction to penicillin. The patient avers that he had never before had penicillin in any form whatsoever.

The second case is the more interesting in that it would seem more likely that the local allergic reactions were due to some component of the beeswax suspension. This is deduced from the facts that the bee-sting on the leg was reactivated. The other interesting factor is that the patient was quite definite that the ingestion of section-honey caused an increased irritation of both the site of the bee-sting and the sites of penicillin injection. It may be argued that the sting of a bee has no relation to beeswax. The firm which produced the beeswax was contacted. They stated that the beeswax used in the suspension is the natural product, but that in their opinion it is impossible for formic acid or other component of a bee-sting to be present in the wax. On the other hand, a well-known naturalist, who is also a bee-keeper, is of the opinion that it is quite possible for formic acid to be present in nectar and that natural beeswax could quite easily be polluted with nectar.

J. WATSON, M.D.

Reviews

MORE LIGHT

Light, Vision and Seeing. A Simplified Presentation of Their Relationships and their Importance in Human Efficiency and Welfare. By Matthew Luckiesh, D.Sc., D.E. Fourth printing. (Pp. 323; illustrated. 25s.) New York: D. van Nostrand Company, Inc. London: Macmillan and Co. 1947.

Matthew Luckiesh, the Director of the Lighting Research Laboratory of the General Electric Company of America, is a prolific writer, and this book, which is represented as "a simplified presentation of the relationships of light, vision, and seeing and their importance in human efficiency and welfare," conforms to the usual pattern of his writings. It is a simple and popular exposition of the importance of adequate lighting in everyday tasks and in industry. The author traces the history of commercial illumination from the candle to the fluorescent tube, discusses the workings of the visual apparatus, points out the meaning of visual acuity and its dependence on illumination and contrast, and shows how lighting is measured and how, when it is adequate, it eases ordinary work and is a potent factor in the attainment of efficiency, safety, and clear seeing.

Luckiesh has always been and still remains an enthusiast, and the book should be read with this in mind. To him the slogan "Better Light—Better Sight" (which, born in America for a nation-wide campaign, "has crossed the seven seas and invaded the five continents" and "has rapidly evolved into a world-wide movement") is a cure for all ills. That adequate artificial lighting is of the greatest importance to a civilization which has gone indoors no one will deny, but some of Luckiesh's statements—particularly those on medical questions—must be accepted with reserve. He is greatly worried, for example, by the "appalling prevalence of eye defects," but to expect engineering accuracy in an organ of the body is to misunderstand the whole economy of living organisms. Nearly all babies, he says, are born with normal vision, while one in four has measurable eye defects (especially myopia) when leaving school, due in part to eye-strain, which is preventable by good lighting. The defectives increase to 50% at middle age and to 80% at 60 years, for presbyopia (he claims) cannot rightly be accepted as inevitable. Moreover, since these defects are hereditary according to the philosophy of Lamarck, which he adopts without reservation, the penalties of the "unforgivable abuse" of our eyes with inadequate illumination are passed on to future generations. Should this abuse not be stopped (by adequate illumination), all mankind is "travelling the road towards blindness." If enthusiasm wins a case, Luckiesh should certainly make converts.

STEWART DUKE-ELDER.

PARATHYROIDS AND KIDNEYS

The Parathyroid Glands and Skeleton in Renal Disease. By J. R. Gilmour, M.R.C.P. Oxford Medical Publications. (Pp. 157; 26 figures. 18s.) London: Geoffrey Cumberlege (Oxford University Press). 1947.

This admirable and painstaking study is based on 90 cases of renal disease, with special reference to the histology and weight of the parathyroid glands and the skeleton. The author's earlier studies have enabled him to make an accurate comparison with a normal series. He divides the histological appearances of the parathyroids into six types, of which Type I is normal, and reaches the conclusion that two (II and IV) of these are due to renal disease. Of the others, III is doubtful and V and VI are not due to renal disease. Bright's disease (which he classifies according to Russell's ideas) is associated with Type IV. The author discusses the converse of his main thesis—the renal changes which may be secondary to parathyroid disease—and concludes that not only metastatic calcification of the kidney but chronic progressive nephritis may be symptomatic of von Recklinghausen's disease.

It should not be regarded as derogatory to observe that this book makes stiff reading. It is a mine of information, but surface working of the mine is impossible. The exposition is so concentrated that any adequate summary would be almost as long as the 157 pages of the original. Perhaps that is why the author's summary seems rather inadequate and at the same time Olympian.

RAYMOND GREENE.

DETOXICATION

Detoxication Mechanisms: The Metabolism of Drugs and Allied Organic Compounds. By R. Tecwyn Williams, Ph.D., D.Sc. (Pp. 288. 25s.) London: Chapman and Hall, Ltd. 1947.

The versatility and resource of the animal mechanism are well shown in the variety of ways in which it disposes of alien substances. This metabolic strategy, popularly known as detoxication, has been recognized for a century, but only recently is becoming specially prominent—in relation to modern chemotherapy. Dr. Williams, known for his contributions to the chemistry of the glucuronides, has now surveyed the wide field of detoxication processes and mechanisms in a closely written yet lucid monograph which, though the index contains some 1,500 entries, is no mere directory but a systematic exposition of a fascinating subject.

Detoxication, or, as it might be termed, *para*-metabolism, is of primary interest to the biochemist in that it presents Nature with chemical posers to solve. The pharmacologist, knowing the chemical tactics of the organism, can construct new drugs or modify old ones so as to prolong their action, enhance their potency, or repress their toxic qualities. The industrialist, faced with the risk of chemical hazards, can learn how to recognize their signs and avoid their consequences if he knows the detoxication capacities of the workers. Perhaps in his next edition Dr. Williams will criticize the work of Ekman (1944) on the effect of ascorbic acid on the metabolism and excretion of cyclic compounds, which should be capable of extension to several types of detoxication processes. Meanwhile we have ample material to occupy our attention in his excellent book, which will interest and enlighten many readers and will provoke discussion and encourage experiment.

W. R. FEARON.

PSYCHOTHERAPY IN PRISONS

Handbook of Correctional Psychology. Edited by Robert M. Lindner, Ph.D., and Robert V. Seliger, M.D. (Pp. 691. $10.00.) New York: Philosophical Library, Inc. 15 East 40th Street, N.Y.16.

The editors of this compendium aimed to provide a source book of techniques and methods for the treatment of the medico-psychological problems encountered in prison inmates, and there is no doubt that they have produced a useful volume. Much practical experience is summarized on such topics as court procedures, problems in the handling of special groups—for example, the female defective, sex offenders, malingerers, and juvenile delinquents—and the use of certain diagnostic and therapeutic methods such as psychological tests, the electro-encephalograph, group treatment, individual psychotherapy, hypno-analysis, narco-analysis, and electric convulsion treatment. Some theoretical considerations such as the concept of the psychopathic personality, the meaning of punishment, and psycho-analytic contributions to the understanding of the criminal are also discussed. The fact that there are 47 chapters of which almost all are by different authors inevitably results in a good deal of repetition of general principles. The reader may be puzzled by the inclusion of chapters on general medicine and on some of the medical specialties—for example, eye, ear, nose, and throat, venereal diseases, the use of sedative measures in mental hospitals, and the understanding and management of gastric neuroses—which have little specific reference to prison practice.

A collection of contributions by a large number of experts has become fashionable in scientific literature. We should like to see this form of collaboration supplemented by volumes written by groups of experts in a wide range of subjects working together through the main problems in order to assess what is really known and what is not. Bergler makes this point forcibly in his lively and stimulating chapter when he states that with the insignificant scientific status of present clinical knowledge

only one conclusion on basic principles in criminological problems is possible—that is, "your guess is as good as mine—until experience proves otherwise." Some signs of haste should be removed—for example, the authors of the chapters are not given in the contents list; and we hope that any later edition will include an index, which should not be omitted from a practical handbook.

J. D. SUTHERLAND.

PRACTICAL ALLERGY

Office Immunology, including Allergy. A Guide for the Practitioner. Edited by Marion B. Sulzberger and R. L. Baer. (Pp. 420; illustrated. $6.50 or 36s.) Chicago: The Year Book Publishers, Inc. London: H. K. Lewis and Co. 1947.

The qualification of this book's title is an understatement: discussion of allergy is not merely included but forms by far the greater part of the book. The authors begin with a full description of how to do tests for sensitivity, illustrating the text by photographs showing the technique of scratch- and patch-testing and of intradermal injection. The next section is about the immunology of infections, but, since the authors confine their account to what the practitioner can do in his own office, they ignore bacteriological and serological methods in diagnosis and mention only skin tests with antigens prepared from the micro-organism concerned. They even suggest their being used in diagnosing actinomycosis and filariasis, without any mention of examining the pus and blood respectively. The book would be more helpful if it included instructions for collecting specimens for the more usual laboratory investigations which give an unequivocal result.

The subjects of the remaining sections are Rh grouping, respiratory allergies, skin diseases (again largely allergic but oddly including actinomycosis and anthrax), spider, insect, and snake bites, and miscellaneous allergies. The authors fully describe methods of immunization and include lists of firms supplying the necessary materials. There is a prodigious list, running to 19 pages, of substances with which patch tests can be done, stating the vehicle and concentration to be used. Regarded as a practical textbook of allergy, this book presents to the reader a large and new if somewhat unreal world, and it may be found of much interest. When the authors discuss conditions not primarily allergic they give so incomplete an account as to be positively misleading to all but the well-informed.

L. P. GARROD.

GROWING OLD

The Years after Fifty. By Wingate M. Johnson, M.D. With a foreword by Morris Fishbein, M.D. (Pp. 153. $2.00.) New York: McGraw-Hill Book Company, Inc.

This book is not to be regarded as an addition to geriatric knowledge. Although the author adequately surveys for the layman some elementary facts about disease, yet in a book on senescence it is a little disconcerting to find references to rheumatoid arthritis, prolapsed disk, and puerperal thrombophlebitis. The concluding chapters contain unexceptionable advice on the problems of ageing, but the author makes plain that the quality of our advice to those growing old has not improved upon that of Cicero, from whose *de Senectute* he quotes freely. It is also inevitable that

> "Grow old along with me!
> The best is yet to be,"

should be quoted, if only to convince the cynical that life would be difficult, and senescence intolerable, without self-deception. It is perhaps in the same vein that the author, who is Professor of Clinical Medicine in the Bowman Gray School of Medicine, of Wake Forest College, records the "apparently well-authenticated case of a North Carolina Confederate veteran who became the father of two children at ninety-four and ninety-six years of age." However, robust American common sense cannot be altogether excluded, and we read with affection of Chauncey Depew, who lived to the age of 93, remarking that "the only exercise he took was acting as pallbearer for his friends who took exercise."

D. V. HUBBLE.

BOOKS RECEIVED

[*Review is not precluded by notice here of books recently received*]

La Tubercolosi in Italia. By G. L'Eltore. (Pp. 284. No price.) Rome: Federazione Italiana per la Lotta Contro la Tubercolosi. 1947.

A general account with statistical tables of tuberculosis in Italy.

Modern Trends in Dermatology. Edited by R. M. B. MacKenna, M.A., M.D., F.R.C.P. (Pp. 432. 42s.) London: Butterworth. 1948.

Articles on various aspects of dermatology by different authorities.

Modern Methods of Amputation. By E. Vasconcelos. (Pp. 253. 61s. 6d.) Bognor Regis, Sussex: John Crowther. 1945.

Narcosis and Drug Addiction. By E. Hesse, M.D. (Pp. 219. 22s. 6d.) Bognor Regis, Sussex: John Crowther. 1946.

Discusses the ordinary drugs of addiction as well as tobacco, alcohol, tea, and coffee.

Introduction to Physiology. By W. H. Newton, D.Sc., M.D. (Pp. 284. 7s. 6d.) London: Edward Arnold. 1948.

Intended for the general reader as well as the medical student.

A Handbook on Hanging. By C. Duff. 3rd ed. (Pp. 79. 2s.) London: Freedom Press. 1948.

A light though informative account of the art of hanging.

Psychotherapy, its Uses and Limitations. By D. R. Allison, M.D., M.R.C.P., and R. G. Gordon, M.D., D.Sc., F.R.C.P. (Pp. 160. 8s. 6d.) London: Geoffrey Cumberlege. 1948.

A practical introduction for general practitioner and student.

Diabetes and the Diabetic in the Community. By M. E. Tangney, R.N. (Pp. 259. 14s.) Philadelphia and London: W. B. Saunders. 1947.

The management of diabetics described for the medical practitioner.

A Baby is Born. By G. M. Kerr, M.B., B.S. (Pp. 120. 3s. 6d.) London: Lantern Publishing Co. 1947.

A short book of advice for expectant mothers

On Hospitals. By S. S. Goldwater, M.D. (Pp. 395. $9 or 45s.) New York: The Macmillan Company. 1947.

A general account of modern hospitals.

Microbial Antagonisms and Antibiotic Substances. By S. A. Waksman. 2nd ed. (Pp. 415. $4 or 22s.) London: Geoffrey Cumberlege. 1947.

The discoverer of streptomycin discusses the interrelationships of micro-organisms.

The Background of Therapeutics. By J. H. Burn, M.D., F.R.S. (Pp. 367. 22s. 6d.) London: Geoffrey Cumberlege. 1948.

A short account of the principles and practice of therapeutics.

Psychological Atlas. By D. Katz. (Pp. 142. $5.) New York: Philosophical Library. 1948.

A varied gallery of illustrations to lectures on psychology, including composite photographs of faces, children's drawings, and paintings by the insane.

Bodies and Souls. By M. van der Meersch. (Pp. 463. 15s.) London: The Pilot Press. 1948.

A novel of medical practice in France; translated from the French.

Endotracheal Anaesthesia. By N. A. Gillespie, D.M., B.Ch., M.A., M.D., D.A. 2nd ed. (Pp. 237. $4.) U.S.A.: The University of Wisconsin Press. 1948.

A general account, including practical details and references.

Paravertebral Block. By F. Mandl, M.D., F.I.C.S. (Pp. 330. 32s.) London: William Heinemann. 1947.

A monograph on the relief of pain associated with the autonomic nervous system.

Dermatologic Therapy in General Practice. By M. B. Sulzberger, M.D., and J. Wolf, M.D. 3rd ed. (Pp. 663. $7.75 or 42s. 6d.) London: H. K. Lewis. 1948.

A manual of modern methods in dermatology.

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THE REPRESENTATIVE MEETING

The Special Representative Meeting last week passed as a resolution the recommendation put before it by the Council of the B.M.A. This resolution urged that changes should be made in the National Health Service Acts of 1946 and 1947, and expressed the hope that by making such changes the Government would make it possible for the profession to co-operate. If the Government rejects this proposal and refuses to make changes in an Act which is unacceptable as it stands to 80% of the medical profession, then doctors will exercise the right given to them not to enter the Service. To make collective opinion effective the Representative Body (the R.B.) resolved that an Independence Fund should be established. This fund will be administered by trustees appointed for the purpose who will act independently of the B.M.A. The R.B. was in a decisive mood and inclined even to think that the Council's recommendation was not worded in strong enough terms. It would, indeed, have been easy for the Council to put before the R.B. a provocative recommendation which would have made impossible any new approach to the present difficult situation, already made more difficult and more unpleasant by the activities of trade unions and local Labour Party organizations referred to in the next leading article.

The two outstanding contributions to the day's proceedings were made by Lord Horder and Dr. H. Guy Dain, Chairman of Council. Lord Horder said that the B.M.A. now had the confidence of the profession in a fuller measure than ever before. This was not due to its mere numerical strength but to the realization that the B.M.A.'s policy "has crystallized in respect of those principles to give way on which would be to sell the profession's birthright." "We believe," Lord Horder continued, "that the Association regards the points still at issue as we regard them, not bargaining points but signs of the doctor being a free man, free to practise his science and art in his patient's best interest." By sticking together we should win, but we could lose by squabbling about which of our principles is the most important. "We must not yield," Lord Horder said, "on any of the points which, collectively and individually, spell the doctor's freedom."

Dr. Dain, in a forthright speech, said it must be apparent to the whole country that there was something seriously wrong with an Act which provoked so strong a feeling against it as the plebiscite figures revealed. He discussed the situation as it had unfolded since January of last year, and observed that it was unfortunate that a problem of great national importance should have been approached either with emotion or in a spirit of party politics. "We want," Dr. Dain said, "to have regard only to the efficiency of the proposed service and to exclude it entirely from political ideologies." The overall objection to the Act was against the powers of the Minister. "The Minister's power in this Act is absolute." If we entered this service without proper safeguards we should become servants of the Ministry of Health, whether whole-time salaried or not, and if this Act was not amended before it came into force we should have lost our independence and freedom. Dr. Dain emphasized once more that the people had been promised a free-for-all service available to everybody, and were going to be greatly disappointed. A wise Government, he considered, would have thought it proper to start such a service by stages. Among his concluding remarks Dr. Dain said:

> Our position to-day is that we are willing to explore the problems afresh, provided that the outcome is a service in which the medical profession remains an independent profession, secure from domination by the State. We doctors want a health service. We want our services to be available to all who need them. We are ready to enter into any discussions directed to making it possible for the medical profession to co-operate with the Government. If the Government can show us other ways, new ways, of preserving our independence we are willing to listen. But if this cannot be done we owe it to the public to make our stand.

These last words of the Chairman of Council must be carefully considered by the medical profession and will, we hope, receive equal consideration by the Minister of Health. Speaking at a moment when the plebiscite has given the B.M.A. 40,000 votes of confidence in its policy, the Chairman of Council has opened the door to new discussions. It is now for the Government to respond to this gesture and to underwrite Mr. Bevan's assertion that he seeks the harmonious and enthusiastic co-operation of the medical profession. Like Lord Horder, Dr. Dain avoided discussing any particular point on which a settlement might be reached, and when the Cardiff Division moved that ownership of goodwill by practitioners, the abolition of basic salary and the powers of direction, and the right of appeal to the Courts be regarded as essentials in any settlement with the Minister, the R.B., after some discussion on this, accepted Dr. Dain's suggestion that they should pass to the next business. The R.B. gave no support to the Lothians Division in its plea for compromise, or for the view of its spokesman, Dr. G. W. Ireland, that "if you offer concessions and the Government remains adamant, public opinion will swing right round in your favour." In a subsequent discussion on the question of a new approach Dr. Dain repeated his observation that "we are reasonable people, ready to consider any possibility for securing a service consonant with the independence of Medicine." The R.B. rejected a motion in favour of an approach to the Prime Minister with a view to reopening negotiations, and supported the motion by the City of Edinburgh "that inasmuch as the medical profession believe that a complete health service cannot be made available to everyone in July, 1948, because of lack of staff and other facilities, this meeting is of opinion that particular consideration should be given in future negotiations to the possibility of introducing the Service by stages, as this becomes feasible."

Perhaps one of the most significant motions accepted by the R.B. was that put forward by Plymouth, "that in the

opinion of this Meeting the Act must be amended to guarantee freedom of expression to doctors in all matters relating to the clinical and administrative aspects of the National Health Service in which they are engaged." In whatever kind of a service the medical profession enters there will be no freedom or independence if the right to express opinion on all medical and professional matters is in any way restricted. In an article in *The Times* of March 15 this was one of the points which a special correspondent considered should be included in an amending Bill. The writer observed that an amending Bill was needed to remove from the Health Act the legal ambiguity affecting partnerships, and suggested that the same Bill might incorporate the four pledges recently given by Mr. Bevan and his colleagues: "They have assured doctors," *The Times* correspondent states, "that the new service will respect their freedom of speech and writing; that it will not impose a 'closed shop' on them or other health workers; that the executive councils (responsible for the general practitioner service) will choose their own chairmen when the initial Minister-appointed chairmen retire in 1949; and that local authorities will be pressed to co-opt local doctors and other experts on to their health committees." *The Times* correspondent suggests that these are "not 'concessions' except to common sense."

One representative observed towards the end of the afternoon that little had been said about the consultants' position in relation to the Act. The representatives had, on the whole, been more concerned with matters affecting general practitioners. It has been said that the consultants voted in the plebiscite in the way they did because of the desire to support the general practitioner. This was obviously one motive. But during the last three months it seems that the consultants have become more aware than before of the effect of the present Act upon themselves and their work, and upon the profession of medicine. The Royal College of Physicians and the Royal College of Surgeons have so far expressed no views. But the Royal College of Physicians of Edinburgh has passed a number of resolutions which it has submitted to the Prime Minister and made public on March 26. In the view of this College the result of the plebiscite can be explained only by the fear that the freedom of the profession is gravely endangered, and that this fear centres round the power of the Minister to alter by Order or Regulation the fundamental terms of service of the medical profession. The College goes on to urge that in the national interest negotiations should be resumed and that the matters in dispute should be re-examined and adjusted so that the medical profession may co-operate with confidence in the development of the comprehensive service desired by all. This is the first statement to be made by a corporation representing consultants, by the teachers of Medicine. It underlines Dr. Dain's observation about the powers of the Minister, and re-emphasizes the readiness of the profession to consider reasonable proposals.

This is not the time for face-saving devices or for the exhibition of pride that brooks no opposition. The Government, we suggest, should call a halt to the manœuvres, described in the next article, designed to browbeat the medical profession, and in the interests of the public as well as of the medical profession should respond to the moves made by the Chairman of Council and the Royal College of Physicians of Edinburgh.

PROPAGANDA

The Government, continuing to ignore the overwhelming opposition to the National Health Service Act on the part of those who will work under it, are proceeding to waste the country's money in an attempt to secure co-operation by compulsion. By the use of films, posters, and pamphlets they are preparing a huge publicity campaign to induce the public to bring pressure upon the medical profession. The trade unions, the Government's masters, are aiding and abetting this campaign. Some, at least, are using the strength of the organized workers as a means of influencing the decision of men and women who prefer to organize themselves on a voluntary basis.

During the Representative Meeting last Wednesday Dr. J. A. Brown, of Birmingham, moved as a matter of urgency the following resolution:

> That this Meeting condemns as grossly improper the bringing to bear of pressure for political purposes upon individual doctors to induce them to inform outside bodies of their intentions in relation to the new service.

He then read three letters sent to individual doctors by two trade unions and a branch of the Labour Party. The Secretary of the Letchworth Trades Council wrote to a practitioner in that area saying that "the representatives of the twenty-two trade unions who attended would be grateful if you would very kindly let us know your intentions." The Letchworth Trades Council was acting on its decision to try to discover the number of medical practitioners who intended entering the Service on July 5. The day before this doctors in Rogerstone, Monmouthshire, received a more abruptly worded letter from the local branch of the National Union of Railwaymen. The secretary of this branch said he had been instructed "to inquire as to your views regarding the National Health Service Act to be operated from July 5," and went on to say that the members of his branch "wish to know if you are prepared to operate it on and from July 5." We may note that the Letchworth and Rogerstone letters were sent out within a day of each other, and it is perhaps not being too deeply suspicious if we see in this the guidance of a central hand. Within three days of the issue of the letters referred to, a doctor in Cambridgeshire received one from the Histon and Impington Labour Party signed by the chairman and secretary of this organization, and also by the chairman and secretary of the Transport and General Workers' Union. He was asked whether he proposed to participate in the new service, and the letter ended thus: "Should your decision be a negative one we think it only fair that we should know this in order that we should be in a position to take such steps as may be open to us for the protection of our members." Dr. J. A. Brown pointed

out that no official invitation had been issued to any doctor to join the Service and that at the present moment the regulations of the Service had not been published; nor had the legal committee been set up to report upon the ambiguities of Section 35 of the Act. The branches of the three trade unions and Labour Party are doing Mr. Aneurin Bevan's work for him on the plea that they are anxious that their members will receive medical advice and assistance. They know full well that medical men will not use the trade union's weapon of the strike; and so far as we know no medical organization, not even the Socialist Medical Association, has circularized coal-miners and dockers with letters expressing anxiety about the effect on patients of a shortage of coal or foodstuffs in the event of a workers' strike. Whatever alarm we may feel about the effect upon health of a hold-up of essential goods and services, we like to believe that other groups of workers in the State are the best judges of their own conditions of work. There is only one answer which any medical man can give to these scarcely veiled threats, and that is that he will continue as always to give medical advice and care to those who seek it, but that he will not inform trade unions or local political parties of his intention to serve or not to serve under the National Health Service Act. Any doctor receiving such letters should forward them to the Secretary of the B.M.A., who will advise him what to do. These organizations are not instruments set up under the Act, and have no right to attempt to usurp the functions of the Local Executive Councils.

The dates of the letters referred to were March 10, 12, and 13. On March 15 the Ministry of Health issued a circular to local authorities on "Publicity Regarding the Services Available to the Public." "The most important aim of central publicity," the circular states, "will be to stimulate general interest in the new service." It is urged that local health authorities should take the initiative in publicizing details of the Service under the Act and in making arrangements to deal with personal inquiries. It is suggested that in some areas joint inquiry bureaux should be set up and that another method of dissemination of information should be through local voluntary societies.

There are already in the post offices of the country copies of a leaflet prepared by the Central Office of Information for the Ministry of Health, and it is believed that this and other publicity material will be released by the Ministry of Health about the middle of April. The burden of this leaflet is conveyed in the slogan, "Choose your doctor now." "If one doctor cannot accept you," the leaflet states, "ask another, or ask to be put in touch with one by the new 'Executive Council' which has been set up in your area." Of interest to insurance practitioners is the following statement: "If you are already on a doctor's list under the old National Health Insurance Scheme, and if you do not want to change your doctor, *do nothing*. Your name will stay on his list under the new Scheme." The leaflet urges the public to "act at once," to fill in application forms for each member of the family and to hand them to the doctor. The medical man has the right to time to make up his mind whether to join the new service, especially as the legal ambiguity about partnership agreements is still unresolved. No one has the right to press him to a decision before July 5 and until he is in full possession of the facts.

This is the Minister's reply to the plebiscite. Does he really consider that the way to secure the co-operation of the medical profession is to couple the financial threat of loss of compensation with a propaganda attempt to persuade the community to coerce 40,000 doctors to enter the Service against their better judgment? The situation is getting beyond the bounds of common sense and human decency. We do not believe that the public wish to be treated by doctors bullied and threatened into a service they do not like, and we do not believe that medical men and women will allow themselves to be so coerced.

HEALTH IN WARSHIPS

The need for fresh air below decks in men-o'-war was recognized at least two hundred years ago, and at that time various attempts were made to improve the living conditions of the sailors who manned them. In 1734 Dr. Desaguliers exhibited to the Royal Society a model of a ventilating machine which could extract air from a room or impel fresh air into it, and a little later he used this appliance, which he called a centrifugal wheel, to ventilate the House of Commons. Not long afterwards troops were embarked at Spithead to proceed on an expedition against Spain, and the ill-health of these troops forced upon the Government the need to adopt some means of airing ships. Dr. Desaguliers was invited by the Lords of the Admiralty to exhibit his model; some of their Lordships saw the ventilator in the House of Commons at work, and the inventor was ordered to make a similar appliance to be tried in a warship at Woolwich. The trials were successful, but none of their Lordships witnessed them, and the Surveyor to the Navy, a prejudiced man conservative in his ideas, made an adverse report. Other schemes met with a rather better reception. After a long tussle a Mr. Sutton managed to get permission to ventilate a man-o'-war by drawing the air supply for the galley fire through the various compartments, and Dr. Stephen Hales secured a trial for his bellows-like ventilator. Yet the centrifugal fans on which the Royal Navy now relies for the ventilation of its ships are the direct descendants of the rejected Desaguliers machine.

One hundred years after these events, in 1844, D. B. Reid[1] wrote that the ventilation of ships had not at that time been placed on the systematic footing which was necessary to ensure comfort and success, but that of late it had been much improved in the Navy, with good effect on the health of the sailors. Reid referred to the great congestion which was common in ships of war and to the value of space, and he advocated the use of plenum ventilation in ships sailing to "localities dangerous from the state of the atmosphere."

[1] *Illustrations of the Theory and Practice of Ventilation*, 1844. London.
[2] "The Habitability of Naval Ships under Wartime Conditions." *Trans. Instn. Nav. Archit.*, 1945, 87, 50.
[3] Thorndike, E. L., McCall, W. A., and Chapman, J. C., *Ventilation in Relation to Mental Work*, 1916. New York.

Since those days the picture has changed. The Admiralty has endeavoured to ensure that ships are effectively ventilated and that a reasonable standard of accommodation is maintained. Neither of these results is easy to achieve. Space, as Reid noted, is very precious, and lavish allowances are impracticable. Yet if the initial space allowance is only just satisfactory any encroachment on it, or any increase in the ship's complement, will reduce the space per man to below the acceptable minimum. During the recent war such reductions in space occurred. Additional fighting equipment was introduced at the expense of living accommodation, and more men were needed to operate that equipment. In modern times efficient fans driven by electric power can supply large volumes of fresh air, but the ventilation problem is greatly complicated, especially in tropical waters, by the presence within the ship of much heat-producing machinery and equipment. Sims[2] has described some of the difficult problems which arose during the war in naval vessels.

In the years between the wars many investigations were made by the Industrial Health Research Board in this country, and by others overseas, of the effects of heat and of moderate cold on the efficiency and general well-being of the industrial worker. When the temperature was uncomfortably high or low sickness increased, and so did the accident rate. At high temperatures working efficiency declined, and in cold surroundings work which demanded a considerable degree of manual dexterity was done less efficiently. It is common experience that high temperatures are not conducive to efficient mental effort, but whether the reduction in efficiency is due to a diminished ability to work or merely to an increased disinclination for it has remained an open question. Psychologists in the U.S.A. studied the problem 30 years ago,[3] but with inconclusive results. Probably their experimental conditions did not include sufficiently high temperatures.

Before the outbreak of war in 1939 much evidence showed the deleterious effects of high temperatures, and when during the war it became evident that there would be large naval concentrations in the Tropics the Medical Research Council's Royal Naval Personnel Research Committee was asked to study the environmental conditions in warships in the Tropics and to report on their probable effects on fighting efficiency. Attention was later invited to more general problems. Several investigations were undertaken in response to these requests. A comprehensive survey of the thermal environment and general living conditions in surface ships of the Eastern Fleet was made, and similar observations were recorded in submarines during Arctic and tropical cruises. Sickness reports were obtained from the Eastern Fleet and later from the British Pacific Fleet, and the data thus obtained were submitted to statistical analysis. Laboratory experiments on the effects of heat on efficiency in both physical and mental tasks were undertaken, and a study was made of the efficiency with which work was done in ships. These investigations, and the results obtained, are described in this issue by Surgeon Commander F. P. Ellis, the Naval Secretary of the Royal Naval Personnel Research Committee, who himself carried out some of the work.

The Admiralty provisionally accepts an effective temperature of 80° F. (26.7° C.) as the upper desirable limit of warmth in living and working spaces in ships, and 86° F. (30° C.) as the upper acceptable limit. Ellis points out that in the ships of the Eastern Fleet the average effective temperature observed in each of the types of compartments listed was above the upper desirable limit, and in many of the main working spaces the upper acceptable limit was exceeded. In some of these spaces there was much radiant heat, and in these the effective temperatures corrected for radiation were substantially above 86° F. Living conditions were congested. Of the 8,000 men living in a number of ships of the Eastern Fleet the majority had less than 19 sq. ft. (1.76 m.^{2}) of floor space on the mess decks, and in the Tropics many of the men found their hammocks too hot and slept in the open air on the upper deck.

Observations in submarines showed the importance of adequate hull insulation, both in the Arctic and in the Tropics. With good insulation satisfactory temperatures can be maintained when the submarine is submerged, but on the surface the effects of climate are felt to a greater extent. Discussing accommodation in submarines Ellis remarks that the best use is made of the space available, with the result that a surprising degree of comfort is obtained. An investigation of the bacterial content of the air in a submarine showed that even when the vessel was submerged the concentration of bacteria-carrying particles rarely exceeded 50 per cu. ft.—a result attributed to the adherence of the particles to oily bulkheads and machinery.

The sickness returns covered an exposure of about 450,000 man-months. Sickness was much more prevalent in ships than in shore establishments, mainly because of the greater incidence of skin diseases and minor accidents. Prickly heat was almost universal in many ships. The great diminution in cases of minor sickness during cruises out of the Tropics to South Africa and Australia left no doubt about the importance of hot, humid atmospheres in causing ill-health. During the first twelve months after the defeat of Japan the average amount of sickness was about twice as much in ships stationed in the Tropics as in those of the Home Fleet, while for ships in the Mediterranean the figure was between the two.

Physiological studies confirmed the American finding that men could perform heavy physical tasks for short periods without collapsing when the degree of warmth was greater than that generally encountered in the Eastern Fleet. In another study the efficiency of wireless operators was found to fall off between effective temperatures of 83° and 87.5° F. (28.3° and 30.8° C.)—temperatures which were commonly met with in the Eastern Fleet. This result is noteworthy, for it gives experimental proof that efficiency in mental tasks is adversely affected by excessive temperatures.

In a concluding note Ellis remarks that we have reached a stage where satisfactory design can proceed only if precise and accurate data on human requirements and limitations are available, and he mentions the ways in which the required particulars are now being obtained. Nowadays there is much talk about humanizing industry, and from Ellis's account it is clear that the Admiralty is not only very much alive to the importance of the human factor in maintaining the traditional efficiency of the Royal Navy but that it is actively promoting research into human problems.

THE INDEPENDENCE FUND

The Special Representative Meeting last week approved the recommendation of the Council that an Independence Fund should be established, and the first Meeting of the Trustees of the Fund was held on Thursday, March 18. The Fund is an independent entity and is not part of the organization of the B.M.A. The Trustees have issued an appeal for money and have decided not to invite a renewal of the guarantees made to the previous Guarantee Fund. The two main objects of the Independence Fund are to provide financial aid to practitioners who may suffer hardship in the event of a continuation beyond July 5 of the present conflict between the medical profession and the Government; and to provide through Local Independence Committees throughout the country an organization for maintaining the unity of the profession in its expressed determination not to accept service under the National Health Service Acts of 1946 and 1947 until such amendments have been made as will preserve the freedom of the profession. The National Insurance Defence Trust has deposited with the Fund an initial contribution of £400,000. The Trustees are appealing to individual doctors to give what they can to make this Fund effective for the purpose. They suggest that there are few practitioners in established practice who cannot afford to give £100 as a first contribution. In a statement just issued the Trustees state: "The danger to the independence of our profession is a measure of the need for generous giving. . . . We appeal to you to give all you can afford in order to conserve the freedom which neither we nor the public can afford to lose." The Trustees are twenty-three in number, and have appointed Dr. H. Guy Dain as Chairman, Lord Horder as Deputy Chairman, and Dr. G. F. Buchan as Treasurer. The other Trustees are: Mr. A. Lawrence Abel, Dr. J. C. Arthur, Dr. J. A. Brown, Dr. R. W. Cockshut, Dr. W. E. Dornan, Dr. A. Staveley Gough, Dr. I. D. Grant, Dr. F. Gray, Dr. E. A. Gregg, Dr. Charles Hill, Dr. W. M. Knox, Dr. J. B. Miller, Dr. J. C. Pearce, Dr. J. A. Pridham, Dr. W. D. Steel, Prof. G. I. Strachan, Dr. S. Wand, Sir Reginald Watson-Jones, Dr. D. J. B. Wilson, and Dr. W. Woolley.

POLIOMYELITIS

In July last year we drew attention to the unusual prevalence of poliomyelitis.[1] A few weeks later it was clear that something like an "American experience" of the disease was to be expected, and we published in successive issues papers by Dr. W. H. Kelleher[2] and by Prof. H. J. Seddon[3] and discussed the general problem of its management.[4] There followed at a later stage some discussion of the terminology of poliomyelitis and polio-encephalitis.[5] The Kenny method[6] was reassessed and interest revived in the still unsolved problems of distribution and spread. Towards the end of the epidemic McAlpine and his co-workers[7] revived some of the clinical lessons that had been learnt, and Ritchie Russell[8] made an important contribution relating physical activity in the pre-paralytic stage to the severity of paralysis.

These clinical studies preceded the epidemiological surveys which were set in train in October.[9] One of these surveys has now been completed, and its results are reviewed by Bradley and Gale[10] in a paper which was published this week. From the point of view of the Registrar-General there were 53 weeks in 1947 and 9,262 "original" notifications of poliomyelitis and polio-encephalitis in England and Wales. Corrected notifications will probably total 7,600 or less, giving an attack rate of 3.8 per 100,000 population for the largest epidemic known in this country. Bradley and Gale analyse the replies to a questionary addressed by the Ministry of Health to hospitals throughout England and Wales. The 270 replies received cover the period from Jan. 1 to Oct. 11, 1947, and relate to 6,762 patients admitted with a tentative diagnosis of poliomyelitis or polio-encephalitis. The diagnosis was confirmed for 4,717 patients, of whom 2,687, or 57%, were males. The inquiry includes therefore about three-quarters of all the cases occurring in England and Wales.

There was no difference in the age distribution for males and females, and for both sexes combined 30% of the patients were under 5 years of age, 35.1% were aged 5–15 years, and 34.9% were aged 15 and over. The case mortality increased with age from a minimum of 3.2% at ages 1–4 to 34.7% in those aged 45 and over. The case mortality for males was slightly higher than that for females; for all ages the rates were 8.2 and 6.9%, respectively.

Of the 4,717 confirmed cases 2,976, or 63%, had paralysis chiefly affecting the limbs and trunk, and in 485, or 10.3%, the paralysis affected chiefly the cranial nerves. There were 333 deaths among these 3,461 paralysed patients, and of the 3,128 who recovered 1,285 (41.1%) were classed as "mild," 1,205 (38.5%) as of "moderate" severity, and 638 (20.4%) as "severe." Altogether 188 males and 122 females had to be treated in respirators; 217 were so treated temporarily and 93 are likely to need such treatment permanently. Related to the whole epidemic these figures suggest that lengthy hospital treatment will have to be provided for about 3,000 patients, one-third of them under 5 years of age, one-third at ages 5–15, and one-third of 15 or over. The preponderance of males over females in this group will be about 5 to 4, and it is probable that about 1,000 of these patients will be severely crippled.

There was no paralysis in 1,256 of the 4,717 confirmed cases. Changes in the cerebrospinal fluid made diagnosis possible in 769 of these patients; 328 were diagnosed on clinical grounds; and in 159 of the patients the symptoms and signs were indefinite, but the diagnosis was made because of close contact with a proved case. The diagnosis was confirmed in 760 women of child-bearing age, and of these patients 71 (9.3%) were pregnant. The proportion of pregnant women among the general population of women of child-bearing age during 1947 was 9.4%. In this epidemic, therefore, there was not an unduly high incidence of the disease in pregnant women. The trend of this epidemic generally was in accord with those already reported for other countries of Western civilization.

1 *British Medical Journal*, 1947, 2, 135. 2 Ibid., 1947, 2, 291. 3 Ibid., 1947, 2, 319. 4 Ibid., 1947, 2, 338. 5 Murray, L. H., ibid., 1947, 2, 1028. 6 Ibid., 1947, 2, 182. 7 Ibid., 1947, 2, 1019. 8 Ibid., 1947, 2, 1023. 9 Ibid., 1947, 2, 698. 10 *Mon. Bull. Min. Hlth*, Vol. 7, March, 1948.

MEDICAL MEN ELECTED F.R.S.

The following members of the medical profession were elected Fellows of the Royal Society on March 18: Robert Alexander McCance, Ph.D., M.D., F.R.C.P., Professor of Experimental Medicine in the University of Cambridge, for his contributions to metabolic studies of human beings: Sir Leonard Gregory Parsons, M.D., F.R.C.P., F.R.C.O.G., Emeritus Professor of Diseases of Children in the University of Birmingham, for his studies on child health and the wasting disorders of children; and William Albert Hugh Rushton, Ph.D., M.R.C.S., L.R.C.P., Lecturer in Physiology in the University of Cambridge, for his researches on the effect of electrical stimuli on muscles and nerves.

On Monday, March 22, Lord Moran was once again elected President of the Royal College of Physicians.

SIR FRANCIS CHAMPNEYS

CENTENARY OF BIRTH

The centenary of the birth of Sir Francis Henry Champneys, Bt., M.A., D.M., F.R.C.P., was celebrated on March 25 at St. Bartholomew's the Great, London. We print below an abridgment of a memoir prepared by his son, Sir Weldon Dalrymple-Champneys, Bt.

On March 25, 1848, there was born, in London, Francis Henry Champneys, who devoted his life to the sacred cause of motherhood and after many years of bitter fighting in the face of great opposition gave the country a fully trained and regulated midwifery profession, thus saving the lives of millions of British mothers and their children.

Francis was the fourth son of the Very Rev. William Weldon Champneys, D.D., afterwards Vicar of St. Pancras, Canon of St. Paul's Cathedral, and Dean of Lichfield (1868–75). Dean Champneys' grandfather had also been Vicar of St. Pancras and Sub-Dean of St. Paul's Cathedral. Dean Champneys was a profoundly religious man and a leading figure in the Evangelical revival. He was also a pioneer in several social movements for the care and education of the poor, starting one of the first "ragged schools" in England while in his second curacy at St. Ebbe's, Oxford, and continuing this work when he went to London. He also secured the passing of an Act in 1842 which gave the "coal - whippers" for the first time the right to establish offices of their own instead of having to tout their coal round the public houses.

Sir Francis Henry Champneys, Bt.

Francis was thus brought up in a strongly religious atmosphere, but it was by no means a stifling one, for the deepest affection and understanding existed between the Dean, his wife, and their five sons and two daughters. Francis' love of music stands out as one of the first and most marked of his characteristics. In 1860 he won a scholarship at Winchester College, and there he continued his organ lessons under Samuel Sebastian Wesley, who was organist to both the college and the cathedral.

In 1866 he won an exhibition at Brasenose College, Oxford, where his father had been a scholar and fellow (1831–7). He read natural science at Oxford, studying under Prof. Rolleston, and took a first-class in that school in the Michaelmas term of 1870. During one of his long vacations he stayed up at Oxford to dissect a chimpanzee, this work being the subject of his first medical publication, entitled, "On the Muscles and Nerves of the Chimpanzee and Anubis," which appeared in the *Journal of Anatomy and Physiology* for 1872. In 1871 he entered the medical school of St. Bartholomew's Hospital, and the following year he was elected a Radcliffe Travelling Fellow. During the half of his three years' tenure of this Fellowship, which had to be spent abroad, he worked at Vienna, Leipzig, and Dresden; at Dresden he held an appointment at the Royal Lying-in Hospital. On his return to England in 1875 he took the qualifications of M.R.C.S. and B.M.(Oxon), and was immediately appointed medical registrar at St. Bartholomew's, and in 1876 he was admitted a Member of the Royal College of Physicians of London. In the same year he married Virginia Julian, only daughter of Sir John Warrender Dalrymple, 7th Baronet of Luchie, North Berwick, a descendant of the first Lord Stair and a first cousin of the Earl of Haddington.

The year after his marriage he was appointed casualty physician at St. Bartholomew's in addition to his other work, his brother casualty physician being his friend Robert Bridges, later Poet Laureate, with whom he maintained contact all his life, both of them dying in 1930. Robert Bridges once reckoned that he saw about 30,000 patients in the casualty department during the year, and was thus able to devote on the average one and a quarter minutes to each patient! In spite of this killing pace Champneys was able to keep very interesting notes of these casualty patients, some of which were contributed to the *St. Bartholomew's Hospital Journal* in 1943* by his son, Sir Weldon Dalrymple-Champneys.

Champneys had already been attracted towards obstetrics by the teaching of Matthews Duncan, then physician accoucheur to the hospital (1877–90), a rugged Scot of outstanding personality and very decided views. All his life Champneys spoke of his teacher with the warmest admiration and affection, and the teacher must have had great belief in his pupil, for he did his best to advance his career and showed him many kindnesses. In those days and indeed much later the budding

*St. Bart's Hosp. J., 1943, 47, 223.

sultant was faced with a grim struggle whatever his ability, so Duncan's encouragement must have meant a great deal to him in his early years. It was characteristic of Champneys' innate modesty that even after his appointment in 1880 as assistant obstetric physician to St. George's Hospital he regularly attended Matthews Duncan's 9 a.m. lectures at St. Bartholomew's. At St. George's he was assistant to Robert Barnes, and when Barnes resigned in 1885 at the age of 68 Champneys succeeded him, but had to carry the whole weight of the department, as no assistant obstetric physician was appointed to the vacant post. In the same year as Champneys had been appointed to the assistant post at St. George's he had also been appointed, with Sir John Williams, who became one of his greatest friends, as obstetric physician to the General Lying-in Hospital, York Road, and his connexion with this hospital, of which he became president in succession to Lord Lister, lasted all his life. It was here, where devastating outbreaks of puerperal fever had recently been sweeping the wards, that Champneys and Williams made history by applying Lister's antiseptic principles for the first time in any English maternity wards and with the dramatic success which seems so natural to us now but was then so sensational. He was elected a Fellow of the Royal College of Physicians in 1882, a Councillor from 1902 to 1904, and served as an Examiner for the Conjoint Board from 1887 to 1891 and again from 1903 to 1907. He was offered, but declined, the honour of nomination as Harveian Orator.

From his student days he had been appalled by the way in which unskilled midwives and "handywomen" spread infection, illness, and death among the mothers and babies of the country, and he was determined to fight this evil with all the skill and energy at his disposal. This fight, which was not crowned with success until 1902, was the greatest work of his life. In 1876 he had become a Fellow of the Obstetrical Society of London, which in 1872 had set up a Board for the Examination of Midwives to conduct a voluntary examination of women proposing to practise as midwives and to grant where appropriate a certificate that the woman in question was "a skilled midwife, competent to attend natural labour." Up to this time there had been no control of women practising as midwives, the majority of whom were ignorant handywomen with dangerous and unhygienic methods. In 1890 Champneys was elected chairman of this Board. Though the setting up of the Board was a step in the right direction and the diploma was for many years the hall-mark of a well-trained midwife, this did not satisfy Champneys, and he fought hard for the next twelve years to achieve his ambition of making motherhood as safe as possible by establishing a compulsory training and qualification for all midwives, thus finally abolishing the unskilled "handywoman," the cause of so many maternal and infant deaths.

This proposal met with the bitterest opposition from inside and outside the medical profession, but Champneys drove fearlessly onward in his crusade that was to save the lives of millions of British mothers and their babies. Stirred up by agitators in the profession, the General Medical Council threatened the Obstetrical Society with anathema for infringing the Medical Act and deceiving the public, and even hinted at the word "infamous" being applied to the officials of the Society who signed the midwives' diplomas. The agitators claimed that they were "creating a new order of medical practitioners," to which Champneys replied (in his presidential address to the Society in 1895): "This is as correct as the classical definition of the crab which was criticized by Cuvier; it is perfectly accurate, except that (1) we have not 'created' any persons at all; (2) midwives are not 'medical practitioners' (in the technical sense); and (3) if either doctors or midwives are 'new,' I fear that history tells us with no uncertain voice that midwives antedated doctors by an enormous length of time. It is hardly too much to say that midwives must have begun nine months after there were two women and one man on the earth." He was attacked by many of the general practitioners for taking the bread out of their mouths and received threatening letters, but nothing was able to deter him from the great task he had set himself. He showed conclusively that "any person is at liberty by the law of the land to render aid to any other in time of sickness if desired; any person is at liberty by the law of the land to receive such aid from any other; unskilled aid leads to lamentable consequences to poor mothers and children; midwives are a necessity." "The question," as he pointed out, "is not whether midwives shall exist, but whether they shall be as good or as bad as possible." The registration of midwives was, in fact, the best protection of medical men against the usurpation of their medical functions.

By close reasoning, fearless fighting, and scrupulous fairness Champneys gradually won the admiration and support of the profession and of the general public, till in 1901 he persuaded the Government to promote the Midwives Bill, which was passed the next year, following which he was entrusted with the extremely delicate and difficult task of conducting the affairs of the new Central Midwives Board, a task which he fulfilled with outstanding success for the next twenty-eight years, never missing a meeting until his last illness.

On Sept. 1, 1890, Matthews Duncan had died, and in the following January Champneys was invited by the Governors of St. Bartholomew's Hospital to succeed his old teacher as physician accoucheur to the hospital. The title of this post was a relic of the time when caesarean section represented practically the only cutting operation in obstetrics, and this tradition had survived the expansion of surgery resulting from the two great discoveries of anaesthesia and asepsis, so that abdominal surgery for gynaecological conditions was still carried out by a surgeon on the staff, in this case Harrison Cripps, and not by the physician accoucheur, though he was a skilful surgeon and operated frequently on his private patients. On Champneys' retirement both the scope and the name of the post were changed, but the former physician accoucheur was wont to comment with regret that the younger members of his specialty had become too surgically minded.

Champneys and Cripps were thus very closely associated for many years. His tenure of this post from 1891 to 1913 was a period of ever-increasing and more varied activity, during which he rose to undisputed pre-eminence in his branch of the profession and acquired a world-wide reputation.

The traditions of his profession were to him a precious heritage to be guarded at all costs, and this is well brought out by a passage in his presidential address to the Obstetrical Society, from which I have already quoted: "A patient is a person who requires a doctor; a doctor is not, in the same sense, a person who requires patients. A patient is not, primarily, an organism for extorting so many guineas or shillings per annum, as an aphis exudes syrup at the titillation of an ant, or a cow secretes milk under the blandishments of a dairymaid. This is a fact often forgotten."

In spite of his numerous preoccupations, music was never entirely neglected, as is shown by his composing during this time several tunes for his friend Stainer's "Hymns Ancient and Modern," writing a number of articles for the "Dictionary of Musical Terms" produced by Stainer and A. W. Barrett in 1876, and forming a private choir about 1878. He also employed his musical gifts to the benefit of his hospital, and Sir Norman Moore wrote of him, in his *History of St. Bartholomew's Hospital*, that "as a learned and admirable musician he benefited the school of St. Bartholomew's by encouraging the practice of music there." When on July 25, 1893, Winchester College celebrated the quincentenary of its opening a performance was given of the "Carmen Saeculare Wiccamicum," with words by G. H. Cremer and music for four voices with organ and pianoforte obbligatos composed by Champneys. He was a frequent visitor to the organ loft at St. Paul's Cathedral during the times that his friends Sir John Stainer and Sir George Martin presided there.

Reference has already been made to the events which led up to the passing of the Midwives Act of 1902, in some ways the crowning achievement of Champneys' life, but by no means the last important contribution which he made to the advance of his specialty and the welfare of the whole profession and nation. Of his work as chairman of the Central Midwives Board his successor, Dr. J. S. Fairbairn, wrote: "For 27 years he was annually re-elected by its members as chairman of the Board and, more than any other of its members, was responsible for moulding its procedure and policy. Its early problem was the difficult one of a new and untried body gaining the

confidence of the divergent interests represented by the practising midwives it controlled, the general practitioners that came to their aid, the medical officers of health who supervised their practice, and the teachers who had to follow the Board's instructions on training. That the new body succeeded in working smoothly and avoiding serious controversy, even so far as to secure general approval, was a remarkable tribute to the sagacity and tact of the man at the wheel. His was no nominal chairmanship, for he was always in touch with the business of the Board and word perfect in his part before each meeting; he was ready to sum up each item on its agenda and had a resolution in draft prepared for discussion."

In 1910, in the first honours list of his reign, King George V conferred upon him the honour of a baronetcy. In the same year that the Central Midwives Board came into being Sir William Japp Sinclair, of Manchester, with the support of Champneys, John Williams, and C. J. Cullingworth, founded the *Journal of Obstetrics and Gynaecology of the British Empire.* Champneys was a director of the journal company from the first, and in 1907 succeeded Sir John Williams as its chairman: and when, after its suspension in 1915 because of the war, it was revived as a monthly publication in 1921 he was again elected chairman and persuaded to retain that post in spite of his advancing years, because, in Dr. Russell Andrews's words, "we could not possibly find a more efficient or more trusted chairman." Sir Comyns Berkeley, who was editor of the revived journal, has recorded that, fearing he could not devote sufficient time to ensure its success, he wrote to Champneys, who at the end of a characteristic letter of encouragement remarked, "Medical men who are too busy to do anything, according to their own report (and still more of their wives), have generally little to do."

His long and distinguished connexion with the Royal Society of Medicine started with his membership of at least two of the Societies whose amalgamation in 1907 brought the R.S.M. into being. As has been already mentioned, he had been since 1876 a Fellow of the Obstetrical Society of London, but he had also been a prominent Fellow of the Royal Medical and Chirurgical Society of London and a frequent contributor to its *Transactions.* He was therefore eminently fitted to play an important part in the task of amalgamating thirteen separate societies representing the different branches of medicine and surgery. His international standing in his subject was shown by his election as president of the Section of Obstetrics and Gynaecology at the 17th International Congress of Medicine held in London in August, 1913. Another activity which was to take up a great deal of his time and energy was the General Medical Council, to which he was appointed as a Crown nominee in 1911, and of which he remained a member until 1925. When in 1911 the National Insurance Bill was under heated discussion Champneys was the chairman of a subcommittee of the Council which formulated their comments on the proposals in regard to maternity benefit. Sir Norman Walker has written of his activities on the Council that "he was a very valuable committee man, and his opinions were much valued and respected."

A good description of him at "Bart's" in his prime was given by the late J. D. Barris, who was one of his favourite interns and later succeeded Champneys on the honorary staff. "Those of us," he writes, "at St. Bartholomew's Hospital who trained and served under him have vivid recollection of his striking presence. We felt in him the man of character and of high ethical and moral standards, so that later he became our example and guide in all that concerned the management of our patients and our professional conduct. He spoke to us with the voice of authority, and we listened to him with admiration and respect. He was so clear, incisive, prompt, and businesslike. His punctuality was proverbial; we knew when two o'clock would strike (for that was the appointed hour of his afternoon round in Martha Ward), that at this hour precisely he would sweep across the square in his open landau, for this was before the days when motors had ousted the more graceful carriage and pair. Arrived at the foot of the seventh block, a short, virile handsome man would alight and as often as not would scorn the lift in order to go to the third floor by the stairs, taken at the run all the way, his intern and students panting after him, unless we had had the foresight and time to forgather in Martha Ward beforehand. Later still it was the privilege of some of us to know him as the adviser and friend to whom we could always turn. He was without doubt a great public servant who advanced the interests of his subject and shed lustre on his hospital."

During the 1914–18 war he not only continued to conduct the affairs of the Central Midwives Board but in addition he travelled about 20,000 miles lecturing to the troops on venereal disease on behalf of the National Society for Combating Venereal Disease, now the British Social Hygiene Council. After the war, at the request of his old friend Sir Clifford Allbutt, he undertook the chairmanship of the Examiners of Midwifery at Cambridge, though he was then over 70 years of age. He greatly enjoyed the companionship of Allbutt, with whom he always stayed on these occasions. In 1922 his wife died, and at the end of the funeral service at St. Alban's, Holborn, he walked across to the organ and played some of her favourite music, saying it was the last little bit he could do for her except prayer.

One of the last contributions which he made to the advancement of his specialty was to use all his influence, experience, and tact in helping the foundation of the British (now the Royal) College of Obstetricians and Gynaecologists, and in recognition of these services the College paid him the highest compliment in their power by electing him a Vice-Patron. Dr. Russell Andrews has recorded that in a conversation with him only six days before his death he showed a lively interest in the College and in the proceedings of the latest Council Meeting, which he had been unable to attend on account of illness. So on July 30, 1930, Sir Francis Champneys, then in the 83rd year of his age, passed away peacefully at the Sussex home he had loved so well, having given the mothers of his country a fully qualified midwifery profession in place of a body of ignorant and dangerous handywomen and having raised the status of obstetricians and gynaecologists by a lifetime of devoted and unremitting labour, always giving God the praise.

Grateful acknowledgment is made to the Editor and Proprietors of the *Journal of Obstetrics and Gynaecology of the British Empire* for permission to quote freely from their "In Memoriam," published in 1930, Vol. 37, No. 3.

MR. BEVAN ADDRESSES ALMONERS

The Minister of Health, Mr. Aneurin Bevan, addressed the annual meeting of the Institute of Almoners on March 12, Prof. Alan Moncrieff presiding. Mr. Bevan said that the duties of the first hospital almoner, appointed to the Royal Free Hospital in 1895, were to prevent abuse of the hospital by persons able to pay for medical treatment, to refer persons already in receipt of private relief to Poor Law authorities, and to recommend suitable persons to join provident dispensaries—a rather meagre programme which went only a very short way indeed to revive the generous profession of almoner in the mediaeval monastery. The first hospital almoners were little more than means-test agents, concerned much more with the financial help of the hospital than with the mental and physical help of the patient. Much progress had been made since then; the concept of "social medicine"—an awkward phrase—had arisen, and it was now understood that the work of the doctor failed of its full effect unless reinforced by such work as the almoner could carry out in connexion with the social background of the patient.

Under the new Health Service, Mr. Bevan continued, it would no longer be necessary for the almoner to concern herself with the financial position of the hospital; her concern would be solely with the patient. The anxiety of large sections of the population—and those not the poorest—concerning doctors' bills and hospital payments would disappear. This was one of the most important revolutions which had ever taken place in the treatment of the sick. The almoner would represent the patient to the hospital management committee; she would see that proper facilities for his accommodation were provided—waiting-rooms, canteens, all that sort of thing—and she would link up hospital services with general-practitioner and local-authority services on the one hand and with resettlement and rehabilitation services on the other. Her duties would be

further enlarged later on when health centres were developed. It was one of the most regrettable features of our present materials shortage that it had not been possible to develop health centres as quickly as had been hoped. It was never expected that health centres would spring up by July 5. The more ambitious programme would have to wait until more resources were available, but wherever it was possible to adapt an old building or to use a new building a start on health centres would be made.

The Health Service not a Bureaucracy

After speaking of the value of the almoner's work in cases of incipient mental illness, Mr. Bevan went on to say that consultation among those working the new Health Service would take place to a greater extent than if had ever done before.

"We do not want the Health Service of the future to be a bureaucracy. That is the very last thing we want. We want health workers in every field to be organized and represented on the various bodies, so that policy from time to time may be shaped and directed by the workers themselves in the various health fields. For the first time this will be possible, and of course for me or any Minister of Health this is essential. The National Health Service Act is not like some other pieces of legislation. The Minister of Health is responsible to Parliament for the whole health system. The responsibility of the Minister of the Crown to Parliament is the medium by which all health services will be brought to public accountability. . . . After July 5 the Minister of Health will be the whipping-boy for the Health Service in Parliament. Every time a maid kicks over a bucket of slops in a ward an agonized wail will go through Whitehall. After the new Service is introduced there will be a cacophony of complaints. The newspapers will be full of them. I am sure some doctors will make irate speeches. The order paper of the House of Commons will be filled with questions, and for a while it will appear that everything is going wrong.

"As a matter of fact everything will be going right, because people will be able effectively to complain. They complain now, but nobody heeds them. What the Health Act will do after July 5 is to put a public megaphone in the mouth of every complainant so that he will be heard all over the country. As the months go on and the limelight of publicity is brought to bear upon every aspect of the Health Service, for a while it will be almost intolerable. But this public scrutiny will have a medicinal effect. Everybody will be on his toes. Everybody will know that his actions are liable to be matter for public debate. The Minister in the House will be a shock-absorber between Parliament on one side and the vast body of health workers on the other. This period of interrogation is an essential prerequisite for the organization of the Service. You almoners will be able on many occasions to provide an emollient, and to the extent you do your work properly and intelligently my own work will be eased.

"The Health Service," said Mr. Bevan in conclusion, "is being launched in stormy waters, but then the launching of any big ship causes considerable water displacement. It was hopeless to expect such a service to be started without controversy. But it will be a very great revolution. It is being watched by every country in the world. There will come over here a stream of visitors to find out how it works and how its difficulties are being resolved. We shall of course find from time to time that alterations and adjustments have to be made. We are not ridden by doctrine: we are a nation very largely of visionary empiricists, able to adjust things where necessary, and between us we shall have a standard of health service that will be the envy and admiration of the world."

In reply to a vote of thanks Mr. Bevan further said that the polemics surrounding the Service would soon disappear and be settled. Whatever might be their quarrels or their policies, these were relatively quite unimportant when the work they had to do was considered.

Sir Ernest Rock Carling, a member of the Executive Committee, who introduced the annual report, said that 790 candidates had been interviewed during the year for the post-war emergency courses of the Institute. The first hundred to qualify in these shortened courses had had little difficulty in securing posts of all types. During the year 203 certificates altogether had been granted, about half to candidates who had qualified after the shortened course and half after the normal course. The number of members on the register was just over 1,000. The wastage rate due to matrimony was very high. Sir Ernest pleaded that the training of the almoner, at present supported on the fees of students alone, should be subsidized by the Government.

THE COMMONWEALTH FUND

One of the examples of selective philanthropy for which the United States is noted is the Commonwealth Fund, which last year appropriated 1,614,000 dollars for programmes and special grants in the field of medical education and research and public health and mental health services. The Commonwealth Fund was founded twenty-nine years ago, at first as a service for delinquent and problem children. One of its first achievements was an institute for child guidance in New York, where teachers for child-guidance clinics might be trained. Its second project was a child health service which was set up in a number of States. From this it moved to the betterment of American health by means of the rural hospital, assisting communities where hospital facilities were difficult of access. The Fund then widened its activities to support research and teaching in medical schools. In a retrospect of its work it observes:

Medical education is basic to nearly everything that the Fund is trying to accomplish. It is the only sure road to comprehensive medicine. It underlies public health work. It is a daily objective of the well-conducted hospital. It is inseparable from medical research. . . . But medical education is in ferment; ideas long in germinating are beginning to bud furiously like yeast. The Fund shares with medical educators everywhere a deep concern that physicians shall be taught, and shall have opportunity to teach themselves, how to practise the best contemporary medicine.

Finally, thanks to the warm friendliness of its founder, the late Edward S. Harkness, towards the British people, the Fund established a number of fellowships for British students. From 1925 until their suspension during the war these fellowships had entitled over 400 students, technicians, and Civil Servants in Great Britain and other parts of the British Commonwealth to spend some time—usually two years—in the United States with ample opportunity for the studies they wished to follow and for extensive travel. The fellowships have now been resumed, and in 1947 the normal quota of twenty were awarded by the British committee, under the chairmanship of Sir Walter Moberly, to students at British universities, not all of them for medical studies, but some for studies in political science, economics, international law, and such subjects. The six fellowships for medical studies were at Harvard, Columbia, and St. Louis, and the subjects endocrinology, forensic medicine, cardiovascular surgery, psychiatry, and haematology.

In the twenty-ninth annual report of the Fund an account is given of its stewardship during the past year. It has continued to assist medical education in many of the American universities, has made grants for the development of public health services in six States, and has subsidized various mental health projects, including two in Great Britain. Thirty-four investigations on medical subjects at twenty American universities or other scientific institutions have received some support from the Fund during the year, and as a result of these subsidized projects twelve works and about 135 medical and scientific papers have been published.

"The analysis of the genetic basis of emotional behaviour thus remains a field for the future. On its investigation may well depend the acquisition of knowledge of fundamental importance to human education and behaviour. We have neglected such study because of a quixotic and erroneous belief that studying the emotional behaviour or misbehaviour of even young human beings was tabu. The blind and impractical worship of euphonious but sterile dicta of unscientific leaders, who have mistaken 'declarations' of human equality for truth, have too long held us spellbound. All around us are tragic evidences of the evil that uncontrolled or prostituted emotion can create. Our own place in the family of nations has been perilously risked and is still insecure because of this factor which is still abroad in the world. Even the basis of our own emotional control and integrity within the bounds of our national and personal problems is still largely a jungle of ignorance. Expensive social, economic, and educational systems present impressive exteriors but are unsound at the core, because the human beings of which they are made remain largely well-dressed, housebroken savages whose behaviour remains creditable only so long as the strain on it is not too great. There is no reason why emotions cannot be studied and trained as well as intellects, so that the risk of their exploitation and disintegration can be decreased, to the greater security and happiness of all."—"Parental Influence," by C. C. Little, in *Genetics, Medicine, and Man* (Cornell University Press, 1947).

Correspondence

Signs-manual of Freedom

SIR,—I am sorry that my article in *The Sunday Times* (not my letter to *The Times*) horrified Dr. John V. Mainprise (March 13, p. 519). My reason for picking out remuneration by capitation fee and right of appeal against dismissal was that I was dealing with the acceptance of those two principles by the Northern Ireland Act. Though it is true that, as a consultant, the retention of goodwill does not affect me directly, I have tried to make it clear that *all* the signs-manual of a doctor's freedom—and this is one of them—are of vital interest to every one of us.—I am, etc.,

London, W.1. HORDER.

Ownership of Goodwill

SIR,—At a recent B.M.A. meeting many doctors expressed a desire to yield to the Minister of Health on any points not absolutely essential to the preservation of our freedom. In this connexion the question of the purchase and sale of practices was discussed. I think that the distinction, in this case, is not merely between the abolition of the purchase and sale of practices on the one hand and the preservation of this custom on the other, but rather between a centrally administered and monopolistic control of the appointment of doctors to all spheres of medical practice on the one hand and some more democratic arrangement on the other.

It has been argued that a doctor selling his practice is actuated in his choice of his successor by considerations other than the suitability of the purchasing doctor to conduct the practice. This may be true, but we have Willesden to remind us that considerations other than medical proficiency may influence public bodies responsible for making medical appointments. In this connexion it would be well for members of all political parties to remember that, whatever they may think of the present Minister of Health, the Minister of the future may belong to the extreme "left" or the extreme "right" politically, and there is no doubt that the administrative structure of the new Act would offer a magnificent opportunity to a Communist, should such a one, by that name or any other, one day assume the office of Minister. A man loses his freedom when he loses his right to change his employer should he object to the terms of his service, the character of the service he is instructed to give, or to any other conditions, political or otherwise, imposed upon him.

It has been said that a doctor selling his practice does not necessarily concern himself with the professional ability of the incoming doctor, but against this I would argue that the purchasing doctor has to assume responsibility for his own ability. He has to decide whether he considers himself competent to conduct a general practice or not, and he knows that the patients will pass judgment upon this important matter in the near future. He will not lightly make a wrong decision knowing that if he does so the goodwill of his practice, for which he has paid, will dwindle away. It is a matter between the doctor himself and his patients, whose servant he is, and I believe that he and they are the people best able to judge his competence.

The problem of to-day is the failure of faith in man the responsible individual and the deification of the State "as the universal provider and the authority determining all thinking and willing" (see quotation from C. G. Jung's *Essays on Contemporary Events* in Dr. Ahrenfeldt's interesting letter—March 13, p. 516). The question men have to decide is whether they will maintain their faith in the man on the spot, aware of conditions and of the results of his decisions and actions, or the man remote in the fastness of Whitehall. Where faith rests, there responsibility and power should rest also. It is for the patients themselves to decide whether they would prefer to have their doctor appointed for them by the State or whether they would prefer to exercise some responsibility in this matter through the democratic power of valuable goodwill, a power vested ultimately in their own hands.

The goodwill of practices is worth a very large sum of money. Money is power. When one speaks of the power of money people are apt to think of a few rich people exercising undue power over others. They forget that as the wealth of a country becomes more evenly distributed among its members so the power of money becomes increasingly a democratic one. So it is with the power derived from the value of goodwill. This power is vested ultimately in the hands of the patients themselves. Is it wise to take this power away from the many and centralize it? Is it wise to do this at any time, and particularly now, when the threat to our freedom and to the whole structure of democracy is like the hot breath of some devouring animal upon us?—I am etc.,

Reading. BETTY F. HILL.

SIR,—I am in entire agreement with the views of Drs. Ida M. Will, J. H. Francis, and R. A. Furniss (March 13, p. 519). Provided they are satisfied that the Northern Ireland Act does not conflict with our "principles," the B.M.A. Council should state clearly, emphatically, and with every method of publicity available: "The Northern Ireland Parliament has passed a Health Act similar to the one in this country but without its objectionable features. If such an Act were adopted in this country, with only one modification, we should be prepared to advise our members to accept service under it immediately." Such a statement would be well within the understanding of even the meanest intelligence among the general public.

Modification: ownership of goodwill. The Minister is taking away from us something that has stood the test of time without replacing it by a satisfactory alternative. Few of us like squatting, few of us obtained our present goodwill by squatting, and fewer still of us who have spent long years in insalubrious areas care for the thought that, in order to obtain a change of scene in later life, we shall have to go through the process of squatting (always an undignified posture even on physiological occasions) without even the capital from our previous goodwill on which to live during the lean years. Convertible Government bonds in lieu of the present never-never system of compensation would help to alleviate this. For the young man embarking on practice for the first time the only alternative would be a real encouragement to enter partnership with an existing practitioner; how this could be made to function equitably without some element of purchase of goodwill in the partnership either by cash or by extra work I cannot fathom.

May I suggest, Sir, a reprint of your leading article of Sept. 20, 1947? We do not all, I regret to admit, file away our old *B.M.J.s.*—I am, etc.,

Edlington, Nr. Doncaster. R. S. GILCHRIST.

Dr. Taylor and the Health Service

SIR,—In your leading article (March 6, p. 454) you criticize some of the points in Dr. Stephen Taylor's letter published in the same issue (p. 463). You will no doubt receive many letters from other readers about that same letter, which, however, raises so many controversial issues that I feel that an extra letter may not be superfluous.

Dr. Taylor in his opening sentence says he is "a Labour Member of Parliament who happens also to be a doctor" and thus sets the standard of his whole letter. "The Labour Party has accepted the Act," "our Labour Party," and many other such pointers are sprinkled through it. Here, surely, naked, unashamed, and nauseating is the epitome of partisan approach which has done so much to make this Act anathema to so many doctors. Here speaks the arrogance of a political party at present in the majority, with the lack of respect for the opinions of others, however fitted the latter may be to advise on a highly specialized subject, which has already been made notorious by Mr. Shinwell and the "tinker's cuss." Dr. Taylor makes great play with the fact that the other political parties support the Government over many points in the Act, and Mr. Bevan in the House of Commons tried to make capital of the fact that the B.M.A. had not seen eye to eye with previous Ministers of Health any more than with him. What better proof is there that the B.M.A. is not a party political organization? Surely through the fog of political squabbling emerges the fact, clear to all but those who do not wish to see, that the medical profession opposes this Act for the same reason that it has opposed the others—because it is a bad Act. When a Government of this country introduces a good Bill (and such a Bill could easily be produced by consultation between experts in the Government

and experts in the profession) then I am sure that Government, whatever its political colour, will have the fullest support of the medical profession and the B.M.A.

Dr. Taylor says he is concerned primarily with the needs of his constituents for more doctors. Why then is he so wholeheartedly in favour of an Act which will spend millions of pounds (many of which will come from his constituents) and give them neither hospital beds, health centres, nor more doctors for many years? Since he "happens also to be a doctor," the implication is plain!

Dr. Taylor also points out that any Government in the future can alter decisions arrived at now, a point frequently stressed by the B.M.A. But he does not seem to draw the moral that seems obvious—namely, that we should therefore keep our heads out of the noose. He says we all want to avoid bureaucracy. So we do, so why support an Act which is going to saddle us with yet another army of bureaucrats at a time when our man-power is said to be short? Surely we have enough already.

Dr. Taylor asks every doctor to think over carefully the issues at stake. To my mind, and I believe to the minds of many other younger members of the profession, the fundamental issue is quite clear. It is freedom which is at stake, and that is always worth defending. The points at issue are the outward and visible signs, but their significance goes much deeper. If the B.M.A. were to yield in these points, even though plausible people would have us believe they are unimportant, then the freedom of the medical profession in this country might well be lost for good; and as we have seen in the last ten years, medicine is a flower that does not flourish in captivity.

Dr. Taylor finishes his letter with some words of advice to the profession. It seems to me that because some people have voted for him and returned him to Parliament that does not qualify Dr. Taylor to proffer advice to a highly educated and trained body of men who, perhaps more than any other body of men in the country, are able to think for themselves. However good the intention, I am sure many will agree with me when I say that I consider it impertinence and conceit of a really amazing degree.—I am, etc.,

London, S.W.3. H. E. LOCKHART-MUMMERY.

Profession's Independence

SIR,—The foundations of the new Health Service (the health centres, the hospital extensions, and the increased facilities for training medical students) are not in sight, let alone under construction. The attempt to bring in the full Service on July 5 next is to risk everything without bringing benefit to anyone. The effect on the schools of the Education Act, in spite of the emergency training courses for teachers, is a lesson to us, and on these grounds alone the operation of the Act should be postponed.

But Dr. F. M. R. Walshe's letter (Feb. 28, p. 407) is timely. It becomes increasingly clear that the real issues before us are moral and ethical, and we must not be distracted by practical details which are by comparison of little importance. Attention should be fixed on the persistently inadequate presentation, and frequently misrepresentation, of the doctors' case in Parliament and certain sections of the Press, notably *The Times*. The views of the minority who approve of the Act in its present form are less important than the belief that all who oppose them are activated solely by a "determination to sabotage the Labour Government" or motives of monetary gain. Clinical or ethical issues requiring a sober and reasoned analysis are clouded by political prejudice or a materialist philosophy of life that precludes the holders from conceiving, let alone understanding, any other viewpoint.

Dr. Stephen Taylor (March 6, p. 463) is probably right when he contends that any safeguards for the doctors' freedom secured by amendments to the Act would be of little or no value, as Parliament could modify such provisions at any time. It is therefore essential that no steps should be taken that could in any way weaken the profession's independence. With the lights once again going out in Europe this is no time for the doctor to give up the control of his means of production, together with his freedom of speech, thought, and action. If we as doctors fail to give a moral lead at this point we shall lose the trust and respect of our patients, and deserve to do so. —I am, etc.,

London, W.1. ALAN MABERLY

Deprivation of Initiative.

SIR,—Dr. G. C. Pether (Feb. 28, p. 411) calls attention to the psychological effects of the Minister of Health's proposed medical service and invites opinions. I would agree with him that there would be likely to be unhappy psychological repercussions were doctors to try to work under the conditions proposed in the new Act as it stands at present. Dr. Pether states that there would be "cramping and thwarting of the personality inherent in the massive schemes of the planners."

Regimentation, interference, and exploitation would be rife—all factors that conduce to a neurosis in the Serviceman in wartime. Nietzsche divides men into slaves (or the masses) and the higher man. By this latter he implies one who is happy in his capability to indulge in original thinking and to this extent to take risks, as opposed to the majority who, putting safety first, need security and are willing to entrust their welfare to some authority that will work to this end. Such are unhappy if they even think individually. Doctors should not be encouraged to put themselves into this group. Where authority denies to any minority group of men permission and opportunity to develop freely and expand (in their own time and way) —should they wish to do so—the end result can only be to build up inwardly protests and hate towards such a frustrating authority. This is bound to slow up activity and so prejudice efficiency.

Negative affects can only be dealt with in one of two ways. (1) Either they lead to the adoption of an unhealthy subservience (or slave reaction), brought about by the enforced blinding of the critical faculties—good for neither masters nor slaves —or (2) they lead to an apparently peaceful acceptance by the group with a liability to periodic violent outbursts, most harmful to the satisfactory evolution of a planned and progressive service such as we would all wish to see. Dr. F. M. R. Walshe in his excellent letter (p. 407) entitled "The Commonplace Mind" reinforces this point of view. He quotes from *The Revolt of the Masses*, by Ortega y Gasset, who asserts that "the mass crushes beneath it everything that is different, everything that is excellent, qualified, and select." It will be a sad day for the world when democracy becomes identified with the mass that crushes out original thinking and with it all that psychological treatment aims at encouraging. It is only a comparatively small number of men that can think objectively without emotional bias creeping in and distorting perspective. They should be encouraged, not discouraged.

In your annotation (p. 399) you refer to the importance that educated men attach to the freedom to criticize the administration of the service in which they serve. Were this not to be permitted it would be a bad thing for the service itself—as occurs in the R.N. and R.A.M.C. The medical profession, because of its training, which is essentially concerned with basic and physiological facts of life, is best qualified to think objectively. To do efficient work doctors must not be regimented as a profession. As Dr. Pether puts it, they should be left free to develop as fully adult individuals. In other words the job of the medical man, whether a psychologist or not, is to help his patients to become adult so that they may think ahead and do their own planning. This will be the more difficult for doctors to do if they are to be themselves forced into a service in which they are deprived of all initiative and all powers of criticism of the administration.—I am, etc.,

London, W.1. CYRIL WILSON.

Doctors who Might

SIR,—Most of your correspondents appear to agree that the retention of the ownership of goodwill is of paramount importance, and there can be no doubt that if we lose it we shall be in a very poor position to negotiate with the Government if it should choose to introduce new and unwelcome measures at some future date.

Lieut.-Col. James T. Harold (March 13, p. 518) refers to ex-Service doctors, etc., who might be induced to undertake service under the Health Act owing to economic pressure, but such people should consider matters very carefully before taking such a step, however difficult their present financial circumstances. It is obvious that a salary of £300 p.a. implemented by a few transfers from established practitioners at 15s. 2d. per head will not be sufficient for them to subsist on, whereas,

with the retention of goodwill, purchase price could be borrowed on life insurance at a gross cost of 12% p.a. spread over 10 years (about 9% after income tax rebates have been deducted), and at the end of that time the capital (greatly increased if we have inflation) would be realizable if the doctor should wish to move elsewhere.

Let the would-be entrant to general practice realize that we, the established practitioners, are fighting *his* battle as well as our own for freedom in our professional life. If we stand out, as I for one intend to do, against the financial pressure which is being brought to bear against us, the opportunist will have the option of entering the Service and gaining a practice at the expense of those of us who are adhering to our principles. To put it briefly, if we, the established practitioners, were to accept the Act, the new entrant would have to "put up his plate" at £300 a year, but if we refuse he would be in a position to reap a rich harvest. Let anyone considering the latter course examine his conscience and decide whether it will allow him to gain a living at the expense of those who are striving to maintain the rights and freedom of the profession for generations to come.—I am, etc.,

Kirkby-in-Ashfield, Notts. J. D. DURANCE.

The Independence Fund

SIR,—Is it of any use to reiterate our reasons for refusing to accept service unless we also counter the economic threat which the Act presents? It surely is this which makes the Minister feel that he only has to sit back and say nothing. He is well aware that a large number of doctors have such liabilities that, when they know that certain neighbours already have decided to join and that others are in the same dilemma as themselves, they may be overwhelmed by the fear of bankruptcy. The obvious remedy is to raise such a sum of money by subscription and guarantee that these members may feel completely independent. If we have sufficient conviction we certainly can do this.

The sum I would suggest is of the order of £20,000,000, or an average of £500—the price of a car—from each of the 40,000 doctors who voted "No" in the plebiscite. Many, of course, can guarantee very much more than this, just as many cannot afford nearly so much; but for all it will be a question of the price at which they value their liberty. Twenty million pounds will allow £3,000 to each of 5,000 doctors, with £5,000,000 to give temporary assistance to specialists and consultants.

The first effect of the scheme will be to show the Council how many are prepared to stand firm. The second, if this is really "our finest hour," will be to show how strongly and sincere our convictions really are; and because of this I believe that Mr. Bevan, who, after all, is staking his political future, would meet us in a very different spirit, and that we might hope to have such amendments that all who wished could join happily and cheerfully.—I am, etc.,

Beckenham, Kent. W. MAXWELL PENNY.

The Doctor's Oath

SIR,—In some of your leading articles and in many of the letters which have recently appeared in the *Journal* there has been a recurring and an increasingly insistent stress laid on the question of the doctor's conscience in relation to taking service under the Act. Most of the writers rightly draw attention to the fact that the doctor's primary duty is to his patient and not to the State, and that this centuries-old tradition of primary service to the patient will be greatly endangered or completely nullified by the intervention of a State paymaster. In the terrifying spread of State power which we are witnessing in the world to-day it was never more true to say of all men, and particularly of doctors, that no man can serve two masters.

Many doctors, if not most, feel themselves vaguely bound by the ethical precepts outlined in the Hippocratic Oath. Unfortunately, however, neither the original oath nor its later Christian modification is now taken by doctors, either before or after graduation. In a recent letter to a lay journal Dr. Tudor Jones has expressed the opinion that if the oath, particularly its Christian form, had been taken and kept by every doctor the introduction of the present Act would have been impossible. In outlining how the original meaning of the Oath has, of set purpose, been steadily whittled away, he goes on to state: "It is a truism of politics that power does not vanish; it can only be transferred. The history of the Medical Oath is the history of the transference of power from the individual to the 'State.' It is a long history. The effect of the transference is the reign of the immoral law in place of the Moral Law."

While vigorously opposing the introduction of this Act by all practical means, many doctors are realizing that we have been betrayed into a false position by this continued undermining of the moral basis of our profession. Most of us have been rather late in recognizing this process, so the movement to reverse it should begin now. Might I suggest that the administration of the Christian form of the Medical Oath be revived, that doctors already qualified should be given the opportunity of taking it, and that we press on the medical faculties and the Royal Colleges the desirability of reintroducing the Oath as an integral part of the graduation ceremony?

I can well understand the mind of those who would consider my suggestion to be a long-term solution for a short-term problem, but I would point out that the fifth of July is not the Last Day. Neither, unfortunately, is it the First Day. The profession has lost one defensive position after another through the habit of dealing with the symptoms of a social and moral disease as they happened to appear. It is now time to deal with the disease itself, its cause, and the only sound method of cure.

I would be grateful if any doctors interested in the practical realization of the above project would write to me at the address below.—I am, etc.,

17, Monkhams Avenue,
Woodford Green, Essex. L. P. GRAY.

Petition against the Act

SIR,—Continually we are told that Parliament represents the "will of the people." Is this so? I worked during 1946 in a very large panel practice in an industrial area in the Midlands, where I spoke with many patients about the Health Act, and not a single one wanted their doctor to be a State-controlled doctor but a free man. Since then, working in this very rural practice I have found only two patients who appeared (rather half-heartedly, though) to approve of the Act, or, rather, to side with the Government against the doctors.

The Government will be convinced that this Act is against the wishes of the people only if it is shown definite proof that this is so. In order to obtain this proof I suggest that the B.M.A. organizes immediately a petition to be sent to the Prime Minister. If the public are circularized with a clear statement of the doctors' objections there will be at least a 75% majority of the population who will vote against the Act. If paper shortage renders circularization impossible then I suggest that in each district public meetings are arranged by doctors (all the doctors of that district appearing together on the platforms); and the public made aware of our point of view and an opportunity be given to sign the petition. The petition could also be signed in our waiting-rooms.—I am, etc.,

Wool, Dorset. THOMAS B. L. BRYAN.

Building without Bricks

SIR,—July 5 is not far distant, and I think it is now necessary to drop, once and for all, discussion concerning "doctor-patient relationship," freedom, moral issues, and a hundred other etceteras. What I want to know is, How can we give a better health service if we have no more hospital beds, no more staff for the hospital, no new clinics, and no new equipment, etc.? Will the patients be better served after July 5? I do not think so unless we have at our disposal the means to give them better service. We require better tools and we will finish the job, but the mere introduction of a scheme does not make matters one bit better for a patient who cannot get treatment. It is perfectly clear that the introduction of the scheme is premature, as we have not at our disposal the means to carry it out.

Once again, turning to the practitioner who is going to earn his living by working a satisfactory scheme, I want to warn him that payment by capitation fee—i.e., 15s. 2d. to 18s.—

is going to spell financial failure, more especially if he is a rural practitioner with a small panel who derives the major part of his income from private patients. You may have private patients after July 5, but not for very long. I will close by asking one more question: Is a practitioner's experience in years of practice of no financial value?—I am, etc.,

Callander. F. C. M. MCILWRICK.

A Compromise

SIR,—May I suggest a compromise which might retain our essential freedoms while allowing the Government to meet our demands? (1) Basic salary to be paid to doctors in under-doctored areas only; all doctors to be free to enter public practice anywhere on capitation fees only. (2) The General Medical Council and the new Tribunal to be merged into a new body, an improved G.M.C., which will keep the *Register* as at present. (3) Compensation for goodwill to be paid at the earliest possible date, and sale of house or surgery to be unrestricted; a doctor should be free to sell his own property for what he can get for it, and when health centres are provided there will be no need for an incomer to buy a surgery. (4) When a doctor retires from the area all his patients should be asked to choose again.

Point 1 above removes the need for direction, helps those who want help, and allows a doctor who so wishes to semi-retire to a quiet area. Point 2 avoids the appeal to the Courts issue. If a doctor is unfit for the public service he is unfit to be on the *Register*, and vice versa. Point 3 would satisfy some of the critics of buying and selling and would encourage doctors to enter existing practices as partners or assistants, chosen by those they are to work with, of course, rather than squat and hope for the best. Point 4 would remove the illusion that patients are bought and sold. I hope that these suggestions will not be dismissed as weak, for I think that we have here the desired freedoms so far as is possible in a 100% service. Our present unyielding attitude can only wreck the whole scheme if persisted in. May I say that I propose to stick to the majority if it remains large enough, but I do feel we could make the next move towards a settlement.—I am, etc.,

Paignton. J. F. BURDON.

Postpone Until Workable

SIR,—After attending the meeting of the Scottish Representatives on March 10 I left with a feeling of complete insecurity. Practitioners of my age who have been working on their own for about thirty years are asked to accept conditions under an Act of which they disapprove and also to be in complete dependence upon an income fixed by the computation of their share of a certain sum derived from taxation of the population. I cannot understand why the medical profession should be subject to a bond which no business man or body of men would accept for a moment. In these times of fluctuation of the value of money it would be perfectly ridiculous if there were no clause in the Act whereby our emoluments were not adjustable to the variation of the cost of living and increased taxation.

I consider that the Act is, under present conditions, absolutely unworkable and also dishonest. The public is asked (rather *made*) to contribute to a national fund administered by the Socialist Government without being told that the present situation of medical arrangements is becoming gradually more desperate, and that to improve it many years of hard spade work will be necessary. In order to live decently doctors are having gradually to increase their private fees—at least, I am doing it gradually, because no one likes very sudden things. Nursing associations and hospitals are crying for more nurses. Plenty of plans for this and that are being made, but from whence comes the all-important trained specialist staff?

We find all our industry crippled by the exportation of vital transport and other necessities which we badly need ourselves for recovery. Taxation has gone so far as to be increasingly imposed upon necessary medicine. This reduces the chemist and dispensing doctor to the position of unpaid tax-collectors and falsifies their books, while at the same time increasing the cost of treatment. While we all realize the benefit of inoculation, maternity subsidies, and special allowances for the sick, it must be remembered that all these public services demand filling up of *forms* and making out of *claims*. The unfortunate person who requires a "certificate" cannot help it, but it must be remembered that we doctors have no option either in the matter, have never been asked whether we will or will not do all this extra work, and do not receive any pay for doing it. Yes, we are sick and tired of forms and certificates, and now we are in danger of being all our lives under the necessity of reporting everything we do, and depending for our living upon every person "choosing" us bringing another "form."

Sir, I hope that the British Medical Association will advise the Government to postpone the foundation of a National Health Service *until it can be worked*, and until every member of the public can realize that he or she will derive increased benefits from the proposed taxation involved. In the meantime, I am sure, we shall all work to improve conditions, and expect help from the Government in so doing.—I am, etc.,

Coldingham, Berwickshire. F. O. TAYLOR.

Parliament Defying the Public?

SIR,—The Minister's suggestion that we are defying Parliament has greatly damaged our cause with the public. Could it not be made clear to them that the boot is really on the other leg? (1) Parliament, realizing that a service manned by reluctant, resentful, and recalcitrant doctors must be inefficient, has decreed that each individual doctor shall choose freely whether he will or will not enter the Service. (2) Four months before the appointed day the Minister was informed that a great majority of the profession, in exercise of this legal right, would choose to stay out. (3) The Government can now ask Parliament to amend the Act so as to make participation (*a*) compulsory or (*b*) acceptable. (4) If they do neither it would seem that they hope to stultify the freedom of choice, conferred by Parliament, by fear of financial consequences.

It seems odd that trade unionists should wish to coerce a profession by means which they would be the first to denounce if applied to an industry. Perhaps they do not realize that, since we cannot use the "strike weapon," any doctor entering the Service under the present Act will be absolutely committed to docile acceptance of whatever conditions of service the present or future Ministers may choose to impose. The choice before Mr. Bevan now is between providing an efficient service for the public and trying to score a personal victory for himself at the public expense.—I am, etc.,

Paignton. ATHELSTANE HILL.

Contracting Out for Patients

SIR,—As one of many "lay" people who have long been fighting the imposition of a centralized health service, I am glad to see that doctors are realizing that, far from having given a "mandate" for it, the public has never been consulted or told the facts. This comes out in a good many letters recently published in your columns, and Dr. W. H. Spoor (Feb. 28, p. 412) renews the question, "Has the patient's right to contract out from the Service been dropped, and, if so, why?" while Mr. Reginald T. Payne (March 13, p. 514) faces the fact that "the interests of the public and the interests of the profession both call for the repeal or abandonment of this Act."

The question of "opting out" for patients has been raised many times in the B.M.A., and, with all due respect to a profession which is doing more than any other to defend the freedom of everyone, it cannot be "dropped" without a betrayal of the patients' interests. It is the essential corollary of the doctor's right to retain the ownership and goodwill of his practice; the one without the other is, in the long run, untenable. Freedom of choice in a matter so closely affecting the private life is a fundamental human right, to deny which is to declare for despotism.

As for the nonsense about doctors "buying and selling patients" when a practice changes hands, it is a good example of the notorious political trick of accusing one's opponents of one's own intentions. Any doctor who accepts "compensation" in connexion with the surrender of patients against their will to the control of the politicians, is "selling" them, and the Government is "buying" them, because they will have had no choice in the matter. When a practice is sold normally, the patients have a perfectly free choice, of course, and can contract out of the new arrangement. Freedom of choice is of the

essence of the whole business, and if the doctors will not concede it to patients, as to themselves, they are isolated and lost.

In conclusion I would add that I write not for myself alone, but for over seven thousand people who have signed a demand for the right to contract out, and a declaration that they will work for the repeal of any legislation which infringes it.—I am, etc.,

Bangor, N. Wales. C. G. DOBBS.

"What do the Doctors Want?"

SIR,—When Hitler was building up for his aggressive war upon the liberties of the world, a part of his technique was to declare himself an essentially reasonable man whose generous intentions were consistently misrepresented by gangs of ruffians, Jews, capitalists, reactionary "old men," and other miscreants. His "patience had been exhausted" in the struggle to instil his reasonableness into an irrational world. "What," he would then demand rhetorically, "do the English—or the Democracies—really want?"

Mr. Bevan has borrowed extensively from this technique, and he and many of his supporters in the House repeatedly ask the same kind of question in the same kind of rhetorical way. What they are trying to do, of course, is to shirk the obvious duty of the plaintiff to prove his case and to throw upon the defendant the onus of proving his innocence. If you want to change the world, it is up to you to show reason why it should be changed; there is no reciprocal obligation upon the world to prove that it does not need changing.

But this significant point is apt to be missed, and Mr. Bevan's rhetoric has had a considerable measure of success both with the Press and the public. At public meetings recently one hears the question asked again and again, What does the B.M.A. want? or What do the doctors want? These questions have a sufficient flavour of reasonableness to be echoed by a large part of the audience. They are posed, not only by the political agitators who haunt such meetings, but by the ordinary thoughtful citizen, whose papers have led him to believe that the doctors are being reactionary and obstinately obstructive to a fine forward movement.

Such questions are difficult to answer from the platform of a public meeting. The Act as it stands is so monstrous that it can easily be torn to pieces; but when that is accomplished the citizen, looking half-consciously to the doctors for a constructive lead, asks not unreasonably what we can put in its stead. I think the real answer is that the doctors, with their immense tradition of public service, know that sweeping revolutionary reforms are usually bad, and that it is best for the world that the art and practice of medicine should be suffered to evolve gradually, stage by stage, under the guidance of those who have given their lives to it and with the minimum of interference from the political State.

Hamstrung as we are by every kind of shortage, there is only one major reform that can usefully be introduced at the present time—the reform repeatedly pressed by the B.M.A. upon successive Governments—that the benefits of National Health Insurance be extended to the dependants of panel patients. That is a crying need. No other revolutionary change should be contemplated until the national finances have been put in order and until the shortages of doctors, nurses, hospital domestics, hospital beds and equipment, houses and health centres, food, and the general amenities of living have been remedied.—I am, etc.,

Orpington, Kent. A. C. E. BREACH.

Decentralize Power

SIR,—In the letter "Criticism from Holland" (March 6, p. 465) we have in my opinion the most important argument against total State control of doctors. We have the history of Germany, with its total State control of medicine, sterilization of political opponents, etc. Certain services (a few only) could be carried out by the Government—e.g., irrigation schemes, electric power schemes—although even these could be carried out by co-operative effort in natural areas.

State control is clumsy and prevents refinement. Freedom is a necessity for a high standard. Countless laws, regulations, rules, forms, certificates, confuse the mind and spirit. The "panel yoke" is a true description of panel service and I agree with the writer of the letter of March 6 (p. 469). Let us have more freedom for all. An alternative health service, an extended insurance service, a comprehensive scheme, etc., may be as total as the present one which we have rejected. We need to get away from totalitarianism by decentralization of power.—I am, etc.,

Liverpool. S. PUGMIRE.

Plato on Free Doctors

SIR,—Plato is generally recognized as one of the greatest thinkers and writers of the world, and it is interesting to recall his comments on the National Health Service although they were written 2,300 years ago. The following passage is taken from *The Laws*: "Did you ever observe that there are two classes of patients in states, slaves and freemen; and the slave-doctors run about and cure the slaves, or wait for them in the dispensaries—practitioners of this sort never talk to their patients individually, or let them talk about their own individual complaints? The slave-doctor prescribes what mere experience suggests, as if he had exact knowledge; and when he has given his orders, like a despot, he rushes off with equal assurance to some other servant who is ill; and so he relieves the master of the house of the care of his invalid slaves. But the other doctor, who is a freeman, attends and practises upon freemen; and he carries his inquiries far back, and goes into the nature of the disorder; he talks with the patient and with his friends, and is at once getting information from the sick man and also instructing him as far as he is able, and he will not prescribe for him until he has first convinced him; at last, when he has brought the patient more and more under persuasive influences and set him on the road to health, he attempts to effect a cure."—I am, etc.,

London, W.8. H. STEPHEN PASMORE.

Direction under N.H.S.

SIR,—I was glad to see Dr. R. L. Osmaston's letter (Feb. 14, p. 312). The misstatement that he refers to (it is in the leading article "Money and Freedom," Jan. 24, p. 153) is present also in "The Minister's Reply Examined" (Jan. 17, p. 109)—"a few cases of 'under-doctoring'"—and unfortunately this commentary was, I believe, circulated to all practitioners whether readers of the *Journal* or not. It would be good to see a public correction and to hear of an apology to Mr. Bevan. This would help maintain the honour of the B.M.A. and would also help to clear the air.—I am, etc.,

Kendal, Westmorland. R. B. WILSON.

Mental Health of Students

SIR,—It is interesting that the only special investigation that Dr. John Pemberton (March 13, p. 490) undertook himself was to "assess the mental health" of the students. Presumably he subjected each student to a psychiatric investigation.

He purported to show that 20% of the students were suffering from "minor anxiety states or depression." Depression is a mood disorder which can occur in normal and many abnormal people and is not in itself a diagnosis. If "minor anxiety state" means anything it means psychoneurosis—mild anxiety state. Yet it is quite clear that Dr. Pemberton did not include his group of minor anxiety states under psychoneurosis, which he considered separately. Similarly he set up a separate category, hysteria, which he did not group under psychoneurosis. He did not indicate what he included under psychoneurosis when he had abstracted anxiety states and hysteria from the group. Two conditions he named—"marked introversion" and "nervous breakdown"—are not accepted psychiatric syndromes.

From all this one is forced to the conclusion that Dr. Pemberton is either using the current psychiatric diagnostic terminology incorrectly or is setting up a new jargon of his own. If the latter is true then he should state clearly and in detail what he means by the terms he uses. If, for instance, "marked introversion" means shy, normal personality and "minor anxiety state" means worried, normal personality, Dr. Pemberton should state so in plain English.

Finally, Sir, it would be interesting to know exactly what investigations Dr. Pemberton did undertake. Did he subject

his students to psychometric tests, personality tests, such as the Rorschach, and questionaries designed to show abnormal traits, or did he just rely on his psychiatric intuition?—I am, etc.,

Sheffield. F. J. KELLEHER.

The Problem of Chilblains

SIR,—I am grateful to Dr. William P. McKeever (March 6, p. 475) for drawing attention to a terminological error in my paper (Feb. 21, p. 336). As a result of experiments on the effect of cold on cellular metabolism it was found that cyanosis did not develop in a hand that was immersed in cold water for as long as six minutes when the venous return was stopped by a tourniquet, but rapidly developed on transferring the hand to hot water. The failure to develop cyanosis in the first place was no doubt due to impaired cellular activity, and the development of cyanosis in the second place was due, most probably, to the accumulation of the waste products of cellular metabolism and the consequent increase of reduced haemoglobin.

When the hand was returned to the cold water, with the tourniquet still in position, the cyanosis slowly disappeared and at the end of six minutes had been replaced by a bright red colour. I suggested that the reason for this must have been a dissociation of the carbon-dioxide–haemoglobin relationship (I used the term carboxyhaemoglobin in error).

I am aware that it is stated that cyanosis only appears when 40% of a normal haemoglobin content exists as reduced haemoglobin (*Price's Textbook of the Practice of Medicine*, 1942 p. 339), but on this basis I found it difficult to explain the disappearance of the cyanosis on exposure to cold. It is hard to imagine why cold should decrease the percentage of reduced haemoglobin present, assuming the venous circulation to be stagnant in the area under consideration. That cyanosis may develop from other causes is evident from the fact that sulphonamide medication may cause it; in this case the cyanosis may be due to either methaemoglobin or sulphaemoglobin (ibid., p. 16).

In my paper I tried to avoid being dogmatic regarding the nature of the products of cellular metabolism which cause the inflammatory reaction found in chilblains. I prefer to leave the elucidation of this point to colleagues who have a greater knowledge of biochemistry than I possess.—I am, etc.,

Ilkley, Yorks. R. JOHN GOURLAY.

The Design of Bed-pans

SIR,—Although the practice of getting patients out of bed soon after operation will to some extent solve the problem of that nerve-shattering act the use of the bed-pan, nevertheless there will still be many patients who are condemned to use it. The writer did at one time design a bedstead in which the bed-pan was placed below the bed and moved into position by a lever rather like the breech-block of a gun. This, however, required a special mattress and draw sheet and was considered by the nursing profession to be too elaborate. It is essential therefore to redesign the bed-pan itself, which should be deeper and more stable. This is an unpleasant subject to discuss in print, but the comfort of our patients must always be our first thought and justifies calling attention to the matter.—I am etc.,

London, W.1. MALCOLM DONALDSON.

Medical Photography

SIR,—In the concluding section of "Where are we Going?" Dr. Ffrangcon Roberts (March 13, p. 485) says that economics is a dismal science. But surely he is being a little too dismal. He is particularly unfortunate in his choice of clinical [*sic*] photography as a scapegoat. The present growth of medical photographic departments (the term "clinical" is too restricted to cover their work) has been brought about mainly by a widening realization of the value of visual methods in education.

We in this country, with a few noted exceptions, had been lagging behind the United States in our use of visual methods of instruction, but during the late war we were compelled to increase the efficiency of our technique for the simple reason that the need for more rapid training was paramount. It was shown time and again that the great majority learn better and faster by using their eyes than by using their ears. There is now a widespread desire among teachers to apply this wealth of experience to medical teaching in general, and I feel sure that Dr. Roberts would be the first to support anything which can lighten the almost intolerable burden of the present curriculum. Agreed that the facilities must be intelligently employed, but it is quite certain that the demands of teachers for the products of the department are wellnigh overwhelming, in spite of expansion.

Dr. Roberts does not give the sources of his quotations, but I can recognize them with the exception of the reference to radiology. The first article was widely felt at the time to be "castles in the air" and likely to frighten people away, and several writers said so. I can safely assure him that it does not represent the opinion of the majority of those connected with departments of medical photography. The statement that the staff will need a long and complete training needs no support. If the new qualification set up by the Institute of British Photographers, the examining board for which includes qualified medical men, is to mean anything, its standards must be high. And I have yet to find evidence that an expert in any branch of photography, or for that matter in anything else, can be made overnight. The quotation concerning cramped quarters is torn from its context, and does not suffice to convey the author's meaning. Would Pasteur, Thomson, and Hopkins have been any the worse for good accommodation? Surely this is merely a passion for what the Services used to call "doing it the hard way"?

Finally, I would suggest that the present increase in medical photographic departments in our teaching hospitals does not indicate an urge for expansion; the teaching staff are not all suffering from delusions of grandeur. It indicates only a very reasonable desire for high quality in recorded and instructional material, and a determination that those who provide it shall work under reasonable conditions. There is also every chance that it will lead incidentally to a much-needed improvement in the standard of pictorial and line work submitted to the journals for publication.—I am, etc.,

Manchester, 13. ROBERT G. W. OLLERENSHAW.

Bone Conduction in Otosclerosis

SIR,—What is most urgently needed to-day in regard to the over-publicized fenestration operation for otosclerosis is a careful, sober, and dispassionate estimation of end-results. After Simson Hall had performed 200 operations he reviewed 118 of them only as suitable for analysis (*Journal*, 1946, 2, 647): as long ago as January, 1945, Lempert, of New York, published a series of 1,000 fenestration cases, and Shambaugh, of Chicago, recorded 930 cases in 1946. And here is Mr. Magauran reporting a case in the *Journal* (March 20, p. 569) six weeks after he had left hospital and only 12 weeks after his first (of two) fenestration operations, and apparently the patient's hearing was never examined with an audiometer before or after operation.

Otologists in general agree that two years (some optimists one year) is the period after which the hearing result from fenestration may be regarded as permanent. Suggit found in 1938 that there was an average fluctuation of 10 decibels in a group of stationary cases of otosclerosis when examined methodically with the audiometer. Psychological deafness is well recognized nowadays, though not many otologists have found as many cases as Canfield (1947) did in his war veteran patients, and there is undoubtedly a marked psychological element in many otosclerotics. As for bone conduction in otosclerosis, most otologists would, I think, agree with Tumarkin (1947) that the myth of increased bone conduction has long been exploded.—I am, etc.,

London, W.1. R. SCOTT STEVENSON.

Brodie's Abscess

SIR,—In the interests of accuracy it seems desirable to add to the article by Messrs. Stanley Scott and Frank S. Preston (Feb. 14, p. 296) and to Mr. St. J. D. Buxton's letter on this subject (March 6, p. 472). The latter rightly points out that although Brodie saw the first of his cases for the first time in 1824 he did not actually publish anything on the subject in

WELL-LEG TRACTION

Using Gypsona P.O.P. Bandages

Fig. 1

Fig. 2

MARCH 6TH. — Patient aged 66, sustained transtrochanteric fracture of the left femur. (Fig. 1.)

MARCH 6TH. — Fracture reduced and fixed in modification of the well-leg traction technique. Using Gypsona, a snug-fitting plaster casing was applied and anchored to the uninjured leg (Fig. 3). X-ray showed good reduction, which was maintained satisfactorily without need for any change of plaster during the two months in which it was retained.

APRIL 30TH. — X-ray examination showed good position and good callus formation proceeding (Fig. 2).

COMMENT. This method obviates the necessity for pins transfixing the heel or tibia, it enables the patient to sit up in bed, and thus materially reduces the risk of hypostatic pneumonia and pressure sores. It is essential that during fixation of the cross struts the injured leg is pulled, and the well-leg pushed, so that the top of the plaster is firm against the tuber ischii.

These details and illustrations are of an actual case. T. J. Smith & Nephew, Ltd., of Hull, manufacturers of Gypsona P.O.P. and Elastoplast bandages, publish this instance — typical of many — in which their products have been used with success.

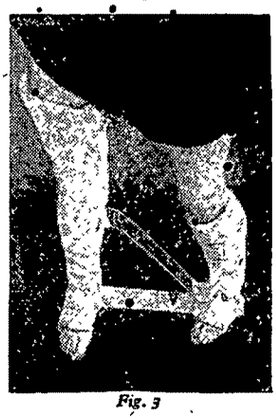

Fig. 3

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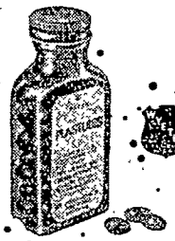

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that year. However, he continues, "I find no record of him reporting this case prior to 1832." In fact, Brodie published this case and one other in a paper, "On Trephining the Tibia," in 1828 (*Lond. med. Gaz.*, 2, 70). These were described more fully, with a third case, in his paper of 1832; all three were repeated, with a further three, in the famous lecture of Nov. 19, 1845, together with a few miscellaneous cases not of this type of abscess.

As for the question of what is and what is not a Brodie's abscess, it seems reasonable to define it as a "chronic circumscribed pyogenic intramedullary abscess of bone." In fact Brodie's cases were all of the tibia, but it seems not unreasonable to use the term for a similar lesion occurring infrequently in other bones. Incidentally, although, of course, he gave no suggestion as to the aetiology, it is almost certain from his descriptions that these were pyogenic abscesses and not tuberculous disease of the bone as is sometimes stated.

It is a pity that Messrs. Scott and Preston give no references whatever to the authorities they quote, not even Brodie himself, whose papers they do not appear to have consulted. (The second and third of these are reprinted in full in *Medical Classics*, 1937–8, 2, 900 and 907). As Mr. Buxton states, it is important to know exactly what an eponymous authority actually said, and this not only to avoid the confusion to which uncertainty leads but also for the intrinsic merit of classical writings, in this case considerable.

I would add that this is not to detract from the clinical part of their paper, which I have no wish to criticize.—I am, etc.,

The London Hospital, E.1. A. P. WATERSON.

Relief of Pain in Midwifery

SIR,—Dr. Anne M. Toms (March 6, p. 475) maintains that stretching of the perineum in the second stage of labour cannot be painless, her argument being that stretching of the skin of any other part of the body is painful and that the perineum is no less sensitive. She does not take into account the softening of the perineum that occurs during pregnancy and labour.

Stretching of the perineum in the non-pregnant woman is certainly very painful. The perineum is painful and tender for days following the stretching necessary, for example, before a dilatation and curettage is performed. I have had a dilatation and curettage.

I have also, however, had a normal, relaxed labour, after antenatal preparation as advocated by Dr. Grantly Dick Read. I had no drugs, but during the second stage I had absolutely no pain; and at no time then or in the puerperium was the perineum at all tender or painful.—I am, etc.,

Prestbury, Cheshire. FLORENCE H. AUCKLAND.

National Hearing-aid

SIR,—The Government hearing-aid scheme seems to have been engendered in an emotional fervour on behalf of the deaf and to have swept on to its present state without adequate thought as to the objectives and the most efficacious way of achieving them. It has got entirely out of control and must fail to achieve its objective unless correctives are applied.

It presupposes that there are 400,000 deaf people in this country waiting anxiously for hearing-aids. Three-quarters of them have never seen a hearing-aid and would shrink from using one. Most of those who have inquired will refuse to use the Government aid when they see how bulky and complicated it is. The education of a deaf person to the point where he will use a valve hearing-aid takes a long time, and when knowledgeable he will demand and need only the best, with the right kind of personal attention.

The aid itself will give good results, though not as good as laboratory tests, due to the difficulties of maintaining high standards in mass production. It suffers from the handicap of its conception—a standard aid for all deaf people. There is no standard aid that is satisfactory for all. Success depends on a number of factors of very real importance to individual patients. The Report admits the unreliability of the crystal receiver which will be used with most patients. The alternative disk earphone with headband is ugly and inconvenient. No provision whatsoever is made for bone-conduction. This is a striking omission.

The proposed method of supply through hospitals is unsuitable. A deaf person should be freed from the feeling that he is a hospital case. No hospital scheme can give the efficient service and thoughtful attention required to ensure success. The United States Veterans Administration, with long experience of hearing-aid supply, regards the after-fitting attention as more important than the instrument itself.

The New Zealand Government has given our own a lead in the provision they should make. As an alternative to a standard aid a grant of £15 is made towards the purchase of a commercial instrument. Our own Government should do no less. In order to avoid what they call "commercial exploitation" they have evolved a scheme which is costly and valueless. Surely the objective is that the deaf shall be helped to the utmost; as it is, they will be fobbed off with a utility instrument and a totally inadequate service. They will have freedom from payment, but they will lose freedom of choice and freedom of criticism, and they will not get good hearing.—I am, etc.,

London, W.1. A. EDWIN STEVENS, Governing Director, Amplivox Ltd.

SIR,—According to the Medical Research Acoustic Committee's Report No. 261, "Hearing Aids and Audiometers," prototypes of the national hearing-aid now being manufactured were tested by 27 deafened persons, and Lord Walkden tells us in the House of Lords that these tests were each of three hours' duration. The following facts should be taken into account when considering the results of the Medical Research Council's tests.

(1) Post-war models of British commercial hearing-aids were not included in the Medical Research Council Acoustic Committee tests.

(2) Reputable British hearing-aid manufacturers are prepared to allow any of the deafened public a full week's unrestricted trial of their products under ordinary conditions of use before purchase need be considered, and during the trial the instrument can be compared with any other British or American aid available. The results of these tests will be different from those of three hours.

(3) Production models of British commercial post-war hearing-aids will without doubt compare favourably in efficiency, compactness, and appearance with production models of the national aid when available.

(4) The deafened public are not likely to remain satisfied for long with the Government free aid which has been made obsolete by British commercial hearing-aid manufacturers' latest models.

—I am, etc., H. C. GEE, Secretary, the H.A.M.A. and Society of Aural Technicians.

London, W.C.2.

Calories and Appetite

SIR,—The many controversial statements which have recently been made both in the medical press and Parliament have, to my surprise, considered the nutritional value of food solely in terms of calories (and occasionally vitamins). No mention is ever made of the quality of the food eaten.

Statistics completely ignore this aspect and naturally pay no attention whatever to whether the food is appetizing or not—it usually is not! Consequently much of the food statistically consumed is never eaten at all. It is ludicrous to make no distinction between good fresh food, well cooked, and stale unappetizing meals badly cooked. They may weigh the same (and calories are based entirely on weight), but they are not of the same use to us.

There is plenty of food in Britain, but mostly of inferior quality and far from tempting. That we survive is a tribute to our digestion.—I am, etc.,

London, W.2. A. M. GREEN.

Westmoreland Lodge

SIR,—Your readers will remember that in the *Journal* of Jan. 18, 1947 (p. 101), you kindly gave an account of a new venture of the Royal Medical Benevolent Fund—namely, the provision of a house for a number of our old ladies. I shall be grateful if you will now allow me to report the opening of Westmoreland Lodge.

In spite of the usual difficulties with licences, supply of builders' materials, and labour this charming house standing in its own grounds near Wimbledon Common has been completely renovated and adapted to the needs of twelve of our beneficiaries. Each lady has her own bed-sitting room equipped

with either gas or electric fires and a small set-up for minor cooking, while on each floor there is generous provision of all necessary facilities. In addition there is a lovely room on the ground floor in part dining-room and in part sitting-room, with a sun-lounge overlooking the garden.

Fifteen years ago the late Dr. A. Holdsworth Davies bequeathed to the Fund his house at Bournemouth and the whole of the estate. He expressed the wish that his house should be used as a home for elderly people, but wisely left the Fund free to use its own judgment and free of restraint. The late Sir d'Arcy Power and I visited the house and realized it was quite unsuitable for this purpose. Accordingly the house was sold and the Holdsworth Davies estate has been administered as a separate entity in our accounts and the income used as nearly as possible to help those whom Dr. Davies had had specially in mind in the hope that one day his wish might be fulfilled.

To-day something perhaps even better than he visualized is a vital concern, and I have delayed writing until a few weeks have elapsed and we knew that our ladies were happily settled in. Two other friends have helped materially in furnishing and equipping Westmoreland Lodge. Under the will of Miss L. H. Wiltshire the Fund received a most valuable gift of furniture in addition to a substantial sum of money. Mrs. Parry has also helped us with a most generous donation in memory of her late husband. These gifts have enabled us to furnish the communal dining- and sitting-room and to provide other attractions which would have been difficult without them.

I think I may claim that this venture, the merits of which are so self-evident, required considerable courage on the part of the committee of management in embarking upon so ambitious a project in such difficult days. We are amply repaid by the sense of security and comfort and happiness of our residents. Their feelings are summed up in the words of one of them thus: "I do like opening the front door of this house because I know I am coming in to such a happy atmosphere." We are also repaid by the approval and encouragement given to us by so many members of the profession.

This letter is a progress report, but the success of Westmoreland Lodge leads us on to other thoughts. Might we not think of a similar house for men, and should we also provide for the sick and bedridden? To a certain extent the answers to these questions depend upon the reaction of the profession to our work. This is not a begging letter, but in the past twenty years the Fund has made enormous strides and Westmoreland Lodge is a new and important venture. The committee would like to know that the profession whole-heartedly approves the work we are doing as trustees of their benevolence.—I am, etc.,

R. M. HANDFIELD-JONES,
Chairman,
Committee of Management,
Royal Medical Benevolent Fund.

1, Balliol House,
Manor Fields,
Putney, London, S.W.15.

POINTS FROM LETTERS

Resign on April 1

Dr. G. H. URQUHART (St. Annes-on-the-Sea, Lancs.) writes: The medical profession's idea of a sound national health service is that the health of the nation should be the main consideration. This could quite readily be accomplished through "grants in aid" by the Treasury to all hospitals and universities. The medical profession in other respects can best manage its own complex affairs without political interference. In order to achieve our aims we shall have to fight, and in order to fight, funds are necessary. We have some, but not enough; so in order to conserve and reinforce these the general practitioners should resign *en masse* from the N.H.I. on April 1 instead of being pushed out on July 5. Let them then transact treatment for patients on a cash basis only (no accounts) that will keep the practitioners in funds meanwhile. On and after April 1 let there be no issue of any kind of certificates other than birth, infectious diseases, and death. The B.M.A. fighting fund could thus be utilized wholly for the purpose of supporting those who have not the above advantages at their disposal but yet must live. . . .

Prescribe Quickly

Dr. W. H. TATTERSALL (Reading) writes: The 1946 National Health Act—not yet eighteen months old—seems to be threatened with what might be called "infantile paralysis." At any rate 75% of our profession agree about it—a degree of unanimity rare among doctors. It hardly matters now whether this condition is the result of a birth injury following a long labour or whether the midwife should have summoned medical aid to the confinement. No, the problem now is to prescribe, and *prescribe quickly*, such treatment as is necessary to enable this Act to recover from its palsies and find a respected place on the statute book. . . .

Design of N.H.S. Cards

Dr. G. B. BOWATER (Birmingham) writes: If under the N.H.S. patients are still to possess medical cards, I would suggest that they be modified to include a space in which the surgery hours and half-day of the doctor could be entered.

Doctors' Wives

Mrs. W. GORDON (Poole) writes: In view of the recent comments in the *Journal* regarding the unpaid work of doctors' wives after July 5, would any useful purpose be served if we (the wives) called meetings either privately or through the auspices of the local Branches of the B.M.A. throughout the country? We could then air our views, grievances, and suggestions, and present our case to the Minister, and so ensure that he realizes that if we down tools (the telephone) he must either provide our husbands with competent telephonists or secretaries or pay us for doing the job.

Petrol Rationing

Dr. H. S. GRIFFITH (Wolverhampton) writes: For thirty years I have been giving certificates which have always been accepted without hesitation, but when it is a matter of my own petrol requirements, what a fall is there, my countrymen! No longer am I the omniscient sage whose word can be trusted, as it is regarding your wife's visceroptosis, your invalid aunt's fuel requirements, or as to whether your grandpa is a genuine tobacco addict. No, I think my application must be included in the "obvious twisters" batch and given to a clerk with the instruction to "dock 'em 50%." Anyway, that is the result when I apply (and reapply) for three-quarters of the amount allowed to my predecessor in this practice.

Fugue after Mepacrine Administration

A physician writes from Pakistan: The account by Dr. D. R. Macdonald (Dec. 13, 1947, p. 959) of two cases of fugue after mepacrine prompts me to cite my personal experience with the drug. Towards the end of May last I had a 4-day course of mepacrine, 4 tablets a day. This finished on May 30. On the afternoon of the following day, as I was writing a couple of letters, I suddenly felt that I could not easily write a full sentence; I had to think out each word separately. A few minutes later restlessness with mental and physical overactivity followed. For instance a chair slightly out of line with others, a book placed not in a straight line on the table, and such other very minor things began to irritate me. I perceived that something was going to happen. I called in my son, a medical student, to warn him of the possibility of mepacrine psychosis. In the course of a few minutes the condition became distinctly worse. I was agitated and apprehensive. I lost reserve. The speech was at first hurried, but soon I could not find suitable words. However, I continued to talk in a non-stop manner. Old memories came up to the forefront, and ideas ran across the mind with great speed. However, none of the higher faculties was affected. The acuteness lasted about three hours. By then I felt exhausted and literally sank upon my feet. Shortly thereafter, suddenly, I felt that the worst was over. I took rather heavy doses of sedatives and hypnotics. Next morning I woke up exhausted, but otherwise practically normal. For a week thereafter I was mentally below my own normal, though I carried on my usual medical practice. For instance, while driving my car on a familiar road with turns I would not realize which turn would be the next until I actually reached it, when I would take the correct turning.

My age is about 56. Otherwise I have a very good personal and family history. I had never taken mepacrine before, though I had prescribed it thousands of times with no mishap, except once when a short psychosis occurred in a rather unstable lady.

Sweet Urine Containers

Dr. W. E. MCCULLOCH (Kingston, Jamaica) writes: This case illustrates the necessity of being careful about the bottles that are used to send samples of urine to the laboratory. The early morning urine of a patient of mine was ++++ for glucose on two successive days, and this was totally unexpected. My laboratory technician then noticed that the stoppers of the bottles were labelled "honey." A third morning sample sent in a soda-water bottle was negative and the urine has continued to be free from sugar.

The husband assured me that all bottles had been boiled before use, and he is a careful man. A third honey bottle was obtained. It had also been boiled and was dry. Washings in distilled water were negative for glucose. The cardboard lining to the stopper was strongly positive for glucose. The astonishing thing is that these honey bottles can be dated. They were received from England as samples over ten years ago, and were washed and put away as used. The honey absorbed in the cardboard washers has been there for over ten years; no crystallized sugar was visible, yet the glucose reaction was very strong.

Obituary

E. WAYMOUTH REID, Sc.D., M.B., F.R.S.

Prof. E. Waymouth Reid, who occupied the chair of physiology at University College, Dundee, for forty-six years, died on March 10 at his home in Edinburgh, where he had been living since his retirement. He was 85, and although he had been confined to bed for several years he had been in his usual state of mental alertness until three days before his death.

Edward Waymouth Reid was born in Canterbury, where his father was in practice as a surgeon. He went from Sutton Valence Grammar School to Cambridge with an open classical scholarship in 1879. He took a first-class in human anatomy and physiology in the natural sciences tripos in 1883, and after a period at St. Bartholomew's Hospital he graduated M.B. He was assistant electrician at St. Bartholomew's Hospital in 1885, and subsequently demonstrator of physiology in St. Mary's Hospital Medical School. He became assistant lecturer on physiology at St. Mary's two years later and was appointed professor of physiology at University College, Dundee, in 1889. He was then only 27, and he taught generation after generation of medical students at Dundee until his retirement in 1935. At the relatively early age of 36 Waymouth Reid was elected a Fellow of the Royal Society in recognition of the contributions he had already made to physiology, and six years later he was made an honorary Sc.D. by the University of Cambridge.

Prof. Reid was one of the first workers in Great Britain to suffer from *x*-ray burns. Only a few months after Roentgen's discovery he constructed an *x*-ray apparatus and in the course of his experiments received a superficial skin injury which he thought might be due to exposure to the rays. To settle this point he deliberately exposed himself for a longer period and received a burn of which he carried the scar for the rest of his life. During his tenure of the chair some 60 papers were published from the Physiology Laboratory of University College, Dundee. His work on serum absorption was important, and so was his preparation of crystalline haemoglobin. He was the first Dean of the Faculty of Medicine in the University of St. Andrews and did much valuable work in connexion with the early organization of a laboratory service for the use of general practitioners in the Counties of Fife, Forfar, and Perth, a service which was later taken over by the University Court. The work he had done for University College and St. Andrews University was recognized soon after his retirement by the conferment of the degree of LL.D.

Prof. Reid had been a member of the British Medical Association for just under sixty years. He was vice-president of the Section of Physiology at the Annual Meeting in 1898, and he was president of the Dundee Branch in 1903–4. He was for a time one of the editors of the *Journal of Physiology*, and he had acted as examiner in physiology for the Royal College of Surgeons of England, the University of Cambridge, and the Royal College of Veterinary Surgeons. Waymouth Reid was popular with his students and was an enlightened and enlightening teacher. His recreations included photography and horticulture, and he had a keen sense of humour. His wife died many years ago, and he is survived by a son and three daughters.

H. W. GARDNER, M.B.E., M.D., F.R.C.P.

Dr. Henry Willoughby Gardner died peacefully at his home in Church Stretton on Feb. 27, at the age of 86. He was educated at Charterhouse and St. Bartholomew's Hospital, qualified in 1885, graduated M.B. in the following year, and proceeded M.D. in 1888. He was elected F.R.C.P. in 1917. He was a house-physician and resident obstetrical assistant at St. Bartholomew's Hospital before taking up an appointment as a Government medical officer in New South Wales.

Returning to England, he joined Dr. Withers in general practice in Shrewsbury. After some years, however, he decided to do consulting work only and found his real vocation as honorary physician to the Royal Shropshire Infirmary, the Shropshire Orthopaedic Hospital, and the County Sanatorium. Interested in all branches of medicine, he was always receptive to new ideas and recent advances. Dr. Gardner had been a member of the British Medical Association since 1892, and was a president of the Shropshire and Mid-Wales Branch in 1913 and 1919, and a member of the Branch Council in 1901, and from 1906 to 1917. When the Association met at Birmingham in 1911 he was vice-president of the Section of Therapeutics, and he had previously represented his constituency at the Annual Representative Meetings at Leicester in 1905 and at London in 1906. His other interests were many, and included gardening, golf, and fly-fishing, at which latter he was quite an adept. He had the misfortune to lose his wife and only son some years ago. As evidence of his great and abiding interest in the Royal Shropshire Infirmary he has left his house at Church Stretton to that institution to be used as a rest home for the nurses. He was much interested in the present phase of medical politics, and, it might be added, was considerably perturbed at the outlook. In recognition of his work during the 1914–18 war he was made a member of the Order of the British Empire, but he will remain long in our minds as a man of charming personality who did his life's work well and whose main characteristics were honesty of purpose and a well-balanced mind.—J. A. I.

R. F. YOUNG, *M.C.*, M.B., B.Chir., F.R.F.P.S.

Mr. Roy Frew Young, one of the best-known surgeons in Glasgow, died on March 12. Mr. Young was educated at Glasgow Academy and Sedbergh School, and at the Universities of Cambridge and Glasgow. After graduating B.A. at Cambridge and M.B., Ch.B. at Glasgow in 1909 he was appointed extra dispensary surgeon at Glasgow Western Infirmary, becoming in turn dispensary surgeon, assistant surgeon, and visiting surgeon. On his retirement in 1944 he was appointed honorary consulting surgeon. He was also a lecturer in clinical surgery at the University of Glasgow; consulting surgeon to the Vale of Leven Hospital; and he was associated with the Bellahouston Hospital and with the Royal Alexandra Infirmary at Paisley. In the 1914–18 war he served with the R.A.M.C. as a surgical specialist with No. 14 General Hospital in France. He was awarded the M.C. and twice mentioned in dispatches. As well as being the convener of the medical committee of the Glasgow Western Infirmary, he sat on the board of managers as representative of the Royal Faculty of Physicians and Surgeons of Glasgow, of which he became president in 1940. Last year the University of Glasgow conferred on him the honorary degree of LL.D., and it was barely a month ago that he retired from the board of managers of the Infirmary on the grounds of ill-health.

Roy Young was a good athlete in his younger days. He was president of the rugby football club at Glasgow University, and subsequently did much to encourage student athletics. He was a good teacher and a good surgeon, always telling his students that the operation was only a part, and perhaps not the most important part, of the surgeon's work. He insisted on the most careful pre-operative investigation and always devoted a great deal of attention to after-care. His counsel was widely sought, and he was ever ready to give advice on personal problems or on more general matters. A man of strong convictions, any cause he espoused was advocated with singleness of purpose and enthusiasm tempered by sound judgment. His personal charm and his lively sense of humour were potent factors in gaining acceptance for his views.

C. C. HEYWOOD, M.A., M.B., M.R.C.P.

Dr. Charles Christopher Heywood, who died at his home in Alderley Edge on March 10 at the age of 82, had been associated for 43 years with the Manchester Children's Hospital, Pendlebury, and he was also for many years consultant physician to the Salford Royal Hospital.

Charles Christopher Heywood, a son of the Rev. H. R. Heywood, vicar of Swinton, was educated at Harrow and Trinity College, Cambridge. He graduated M.B., B.Ch. in 1890 and took the conjoint diploma in the same year, and the M.R.C.P. in 1904. He was house-surgeon at the Salford Royal Hospital and later clinical assistant at St. Thomas's Hospital. Dr. Heywood then returned to Manchester as medical officer to the Manchester Children's Hospital, and at the same time acted as lecturer in physiology for the Salford Technical Institute. Later he became the senior physician at the Manchester Children's Hospital, and, apart from his work there and on the staff of the Salford Royal Hospital, he was

consulting physician to the Manchester Warehousemen and Clerks School, Cheadle Hulme, and examiner in physiology and hygiene to the Union of Lancashire and Cheshire Institutes. He was also consulting physician to Chetham's Hospital and to the Alderley Edge Cottage Hospital. He was for nine years an officer of the 2nd V.B. Manchester Regiment and the 6th Batt. Manchester Regiment.

Dr. Heywood's skill as a paediatrician, his sense of humour, and his kindness soon made him well known and well liked. He contributed a number of papers to the medical journals on the diagnosis of early rickets; on serous pleural effusions in children; on Calmette's tuberculin reaction; and on similar subjects.

Dr. WADHAM BRUCE WINCKWORTH died on Feb. 20 at the age of 79. At the time of his retirement ten years ago Dr. Winckworth was the senior practitioner in Taunton, where he had practised for more than forty years. He was born in London, and educated at Westminster School and at the Westminster Hospital. He qualified M.R.C.S., L.R.C.P. in 1893, and was a house-physician at the Westminster Hospital before settling in Taunton in 1895. He began practice with the late Dr. Samuel Farrant, and after some years set up his own practice, in which he remained until he was joined by his son, Dr. R. F. Winckworth, in 1935. His son is now in orthopaedic practice, and Dr. Fleming and Dr. Knowles have for many years been continuing the practice which the elder Dr. Winckworth founded. From 1923–33 Dr. Winckworth was on the honorary staff of the Taunton and Somerset Hospital, and after his retirement he continued to serve as chairman of its nursing committee. He was chairman of the West Somerset Division of the British Medical Association in 1932–3, and he was also an active member of the St. John Ambulance Association, for many years coaching the Taunton G.W.R. teams. He leaves a widow, two sons, and three daughters.

Dr. JOSEPH JOHN CLARKE, a justice of the peace for Essex and formerly medical officer of health for Walthamstow, died at his home in Hove on Feb. 24 at the age of 86. Dr. Clarke was previously in private practice in Walthamstow in partnership with his brother. He was educated at Queen's College, Cork, and the Middlesex Hospital, qualifying in 1894 and obtaining the diploma in public health in 1898. He was appointed part-time medical officer of health to the Walthamstow urban district council in 1898, and whole-time medical officer of health in 1906, retiring on pension in 1930. During this period Dr. Clarke built up a public health service in Walthamstow which compared more than favourably with that in any comparable area. In particular he was largely responsible for the erection of a fine infectious disease hospital, and this included the first cubicle block ever built in this country. The idea followed a visit to Paris, and the plan of this cubicle block was for many years a feature in the public health textbooks. This block is still actively functioning and has been in every way satisfactory for more than forty years. Dr. Clarke also sponsored an up-to-date welfare centre in Markhouse Road and the provision of specialist facilities in connexion with school health services. He will be remembered by his colleagues and friends for his charming Irish personality and his readiness to help in all cases of misfortune. Recently his period of retirement had unfortunately been marred by ill-health.—A. T. W. P.

Dr. PERCY LUND POLLARD died on Feb. 25 at the age of 66 after a short illness. Dr. Pollard was educated at Manchester, and graduated M.B., Ch.B. in 1906. He went to the Royal Halifax Infirmary as a house-surgeon and remained there until 1910, when he went into general practice. It was during the years as a house-surgeon that he became interested in surgery, and the opportunity to practise came with the 1914–18 war, when he joined the R.A.M.C. and did excellent work on the surgical side, for which he was mentioned in dispatches. In 1919 he was appointed assistant honorary surgeon at the Royal Halifax Infirmary. His chief interests lay in general surgery and in gynaecology. Though running a busy general practice he found time to spend hours a day at the Infirmary. He was twice chairman of the Halifax Division of the British Medical Association, and was president of the Yorkshire Branch in 1928–9. He was senior surgeon at the Infirmary by 1939, and he became medical superintendent in charge of air-raid precautions and of E.M.S. cases, and did much valuable work. In 1943 he had to undergo a major operation, and but for his indomitable spirit would never have returned to duty. Early in 1947 he retired from the active surgical staff and became a consultant surgeon. On the occasion of his retirement the Board of Governors and the medical staff presented him with a silver salver to mark many years of good, faithful service. Unfortunately P.L.P., as he was known to his friends, was not to enjoy a long retirement, for after a short illness he died. His many friends and colleagues extend their sympathies to his widow and two sons.

Medical Notes in Parliament

National Health Service

On March 16 Mr. BEVAN gave an assurance that names on existing panel lists would be automatically transferred to the list of their present doctor if he entered the National Health Service unless either the doctor or the patient objected.

On the same day Mr. BEVAN assured Mr. PARKIN that doctors joining the National Health Service in July who had not reached their 56th birthday would be eligible to complete ten years' service and qualify for superannuation and retirement allowance.

Mr. BEVAN stated on March 18 that provision was made in the estimates for the current financial year, 1947–8, for 350 extra staff to deal with additional work resulting from the National Health Service Act. For the next financial year, 1948–9, it had been found necessary to provide for a further 320. Nearly half of these additional 670 were required as a result of the provisions in the Act for superannuation benefits for those taking part in the different branches of the new Health Service. Of the remainder, most are required for other financial work in connexion with the Act. He added that the total staff to be employed at the headquarters of the fourteen Regional Hospital Boards at the date when the Act came into force would be about 600. Of these a large proportion would not be extra staff but would have been transferred to the service of the Boards from local authorities and other bodies.

Sir WAVELL WAKEFIELD asked on March 18 if Mr. Bevan proposed under the National Health Scheme that medical practitioners should be entitled to a five-day week, with extra pay for overtime, Sunday work, and night work, together with danger money when attending cases of infectious disease.

Mr. BEVAN replied that the terms of service for general practitioners under the National Health Service were set out in the National Health Service (General Medical and Pharmaceutical Services) Regulations, 1948, which were now before Parliament.

Nutritional Surveys in Germany

Mr. MAYHEW, for the Foreign Office, stated on March 15 that late last autumn members of the Combined Nutritional Committee reported that the nutrition of the urban population in the Western Zones of Germany had improved during the previous six months. Famine oedema was very rare, and adult body weights had not declined. These findings had been confirmed by a survey carried out by representatives of the Medical Research Council in November.

Food Facts

Dr. SUMMERSKILL circulated on March 15 the following statistics of the daily intake of foods in the United Kingdom per head during the first half of 1947:

Protein—	
animal	45.2 g.
vegetable	43.0 g.
total	88.2 g.
Fat (from all sources)	108.3 g.
Visible fat (butter, margarine, lard, etc., fat content)	42.1 g.
Total energy value	2,870 calories

Purchase Tax

Sir STAFFORD CRIPPS estimated on March 10 that receipts of purchase tax for medicines, drugs, disinfectants, toothbrushes, and toothpaste were in the region of £15,000,000 a year. He promised to reconsider, before the National Health Service Act was brought into force, the taxation of such goods.

Theft of Dangerous Drugs.—The records of the Metropolitan Police show that 4 losses and 60 thefts of dangerous drugs from doctors were reported in 1947.

Streptomycin.—Production of streptomycin in the United Kingdom on a small scale will start shortly, but imports are still necessary. Stocks on Sept. 1, 1947, were 25 kg. and on March 1, 36 kg.

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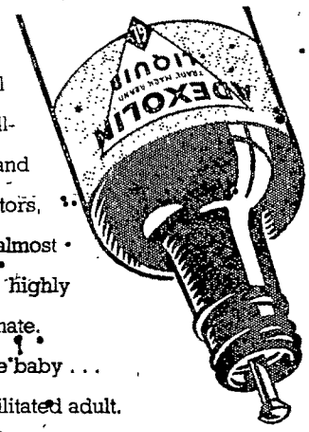

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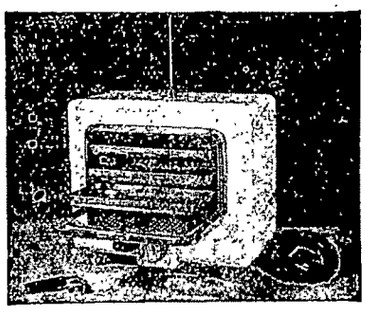

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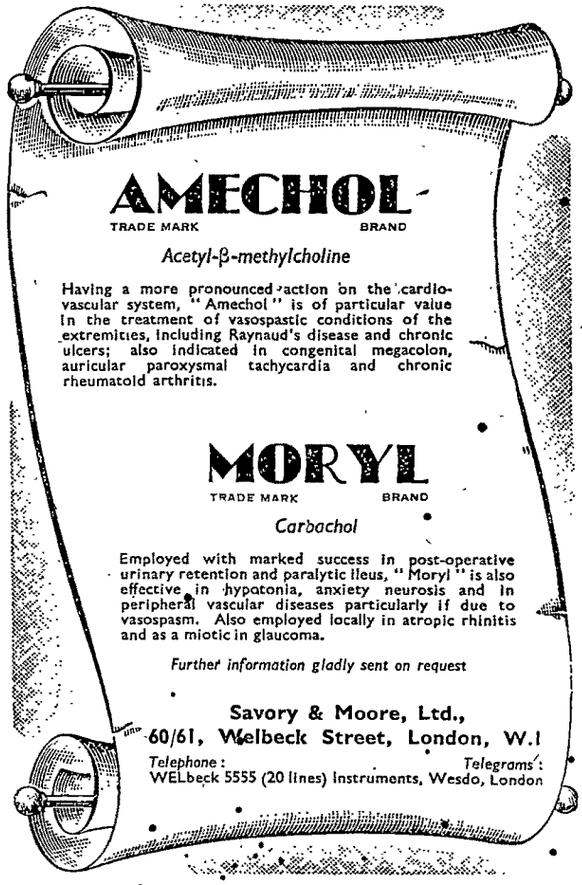

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No. 10

INFECTIOUS DISEASES AND VITAL STATISTICS

We print below a summary of Infectious Diseases and Vital Statistics in the British Isles during the week ended March 6.

Figures of Principal Notifiable Diseases for the week and those for the corresponding week last year, for: (a) England and Wales (London included). (b) London (administrative county). (c) Scotland. (d) Eire. (e) Northern Ireland.

Figures of Births and Deaths, and of Deaths recorded under each infectious disease, are or: (a) The 126 great towns in England and Wales (including London). (b) London (administrative county). (c) The 16 principal towns in Scotland. (d) The 13 principal towns in Eire. (e) The 10 principal towns in Northern Ireland.

A dash — denotes no cases; a blank space denotes disease not notifiable or no return available.

Disease	1948					1947 (Corresponding Week)				
	(a)	(b)	(c)	(d)	(e)	(a)	(b)	(c)	(d)	(e)
Cerebrospinal fever	42	4	37	—	6	86	7	33	5	8
Deaths		2	2				2	3		
Diphtheria	200	21	60	8	2	182	20	34	18	12
Deaths	5	1	—	—	—	1	1	—	—	—
Dysentery	184	22	37	—	—	69	11	38	—	—
Deaths				—	—				—	—
Encephalitis lethargica, acute	—	—	1	—	—	—	—	1	—	—
Deaths		—					—			
Erysipelas			55	13	5			46	13	4
Deaths		1					—			
Infective enteritis or diarrhoea under 2 years				20					29	
Deaths	49	3	7	1	—	89	9	21	16	2
Measles*	8,788	1303	775	78	34	12,137	574	246	21	168
Deaths†			4	—	—	37	6	1	2	2
Ophthalmia neonatorum	67	6	6	1	1	81	1	15	1	1
Deaths										
Paratyphoid fever	2	1	6 (B)	—	1 (B)	4	—	1 (B)	—	—
Deaths	—	—	—	—	—	—	—	—	—	—
Pneumonia, influenzal	794	45	10	8	3	958	81	18	28	8
Deaths (from influenza)‡	27	2	1	1	—	92	17	4	10	2
Pneumonia, primary			277	22				303	55	
Deaths	316	60		15	9		102			17
Polio-encephalitis, acute	1	—				—	—			
Deaths							1			
Poliomyelitis, acute	22	2	2	2	—	10	1	2	2	—
Deaths§	6	—					—			
Puerperal fever		2	12		—		1	10		—
Deaths										
Puerperal pyrexia‖	94	6	13	—	—	128	5	11	—	2
Deaths		—					—			
Relapsing fever	—	—			—	—	—			—
Deaths										
Scarlet fever	2,069	136	347	48	60	1,217	79	199	21	37
Deaths†			—	—	—	1	—	1	—	—
Smallpox	—	—	—	—	—	7	—	—	—	—
Deaths				—	—				—	—
Typhoid fever	5	2	—	—	—	4	—	1	1	—
Deaths	1	—	—	—	—	—	—	—	—	—
Typhus fever	—	—	—	—	—	—	—	—	—	—
Deaths				—	—				—	—
Whooping-cough*	3,067	217	44	63	8	2,461	262	369	109	29
Deaths	10	1	—	1	—	15	1	9	3	2
Deaths (0–1 year)	430	49	45	27	8	636	79	78	64	17
Infant mortality rate (per 1,000 live births)										
Deaths (excluding still-births)	5,914	956	668	221	139	7,755	1258	931		195
Annual death rate (per 1,000 persons living)			13·5	13·8				19·4	26·2	
Live births	8,369	1317	944	404	266	9,650	1452	1231		274
Annual rate per 1,000 persons living			19·1	25·3				24·8	31·1	
Stillbirths	231	37	28			290	33	49		
Rate per 1,000 total births (including stillborn)			29					38		

* Measles and whooping-cough are not notifiable in Scotland, and the returns are therefore an approximation only.

† Deaths from measles and scarlet fever for England and Wales, London (administrative county), will no longer be published.

‡ Includes primary form for England and Wales, London (administrative county), and Northern Ireland.

§ The number of deaths from poliomyelitis and polio-encephalitis for England and Wales, London (administrative county), are combined.

‖ Includes puerperal fever for England and Wales and Eire.

Discussion of Table

In *England and Wales* infectious diseases were more prevalent during the week, and increases in incidence were recorded for measles 1,476, whooping-cough 436, scarlet fever 359, acute pneumonia 62, dysentery 39, and cerebrospinal fever 11.

The largest increases in the notifications of measles were: London 371, Middlesex 259, Lincolnshire 181, Lancashire 161, Warwickshire 141, Surrey 130, and Northamptonshire 128. An increase in the incidence of whooping-cough occurred throughout the country; the largest rises were Essex 63 and London 59.

Notifications of scarlet fever increased in every region except the south-western and eastern counties; the chief increases were: London 55, Glamorganshire 44, Middlesex 22, and Warwickshire 32. A small rise in the incidence of acute pneumonia was recorded in most areas, but there were no large variations in the local trends. The chief features of the returns for diphtheria were increases in Lancashire 10 and London 8.

The largest centres of dysentery were Yorkshire West Riding 55 (Sheffield C.B. 25), Lancashire 47 (Preston R.D. 11), and London 22. One-quarter of all the cases of cerebrospinal fever were notified in two cities—Liverpool C.B. 7 and Birmingham C.B. 5. The only counties with more than one notification of acute poliomyelitis were Warwickshire 4 (all from Birmingham C.B.), Middlesex 4, Lancashire 3, London 2, and Surrey 2.

In *Scotland* there were increases in the incidence of measles 43, diphtheria 22, and cerebrospinal fever 22, and decreases in the notifications of dysentery 28 and scarlet fever 10. In Glasgow the notifications of cerebrospinal fever rose from 10 to 27. The rise in the incidence of diphtheria occurred in the western area. Only 6 cases of dysentery were notified in Edinburgh compared with 23 in the preceding week.

In *Eire* the chief features of the returns were increases in scarlet fever 22 and whooping-cough 26 and a decrease of 58 in the notifications of measles. A small increase in the returns for scarlet fever and for whooping-cough occurred in most areas.

In *Northern Ireland* there was an increase of 14 in the notifications of scarlet fever. This disease is at the highest level since the beginning of November.

Week Ending March 13

The notifications of infectious diseases for England and Wales during the week included: scarlet fever 2,027, whooping-cough 3,418, diphtheria 173, measles 8,449, acute pneumonia 933, cerebrospinal fever 55, acute poliomyelitis 20, dysentery 213, paratyphoid 3, and typhoid 4.

Medical News

London Consultants Liaison Committee

The first formal meeting of the London Consultants Liaison Committee was held on March 16 at B.M.A. House. Representatives were present from the London teaching hospitals, the Association of Non-teaching Hospitals, the Association of Municipal Specialists, the B.M.A. Consultants and Specialists Standing Committee, and the Marylebone Division of the B.M.A. It was proposed, seconded, and unanimously agreed that such a committee should be formed, and that the terms of reference laid down by the B.M.A. Council's letter of Feb. 20 be adopted.

To establish and maintain liaison between the consultants and specialists staffs of the London hospitals and the B.M.A. in order to unify and consolidate consultant and specialist opinion on the National Health Service Act, 1946, within the policy of the profession as a whole.

The following officers were elected: Chairman, Lord Horder; Vice-Chairman, Sir Reginald Watson-Jones; Hon. Secretary, Mr. Eric Steeler.

The following resolution was proposed and passed unanimously:

That the Committee considers it desirable to investigate the present Act with respect to the privileges and restrictions of the consultant and specialist section of the profession, and that the best possible legal opinion be obtained to that end.

U.C.H. Scholarships

University College Hospital Medical School is offering two Goldsmid Entrance Scholarships entitling the holder to the final course of medical study, one Goldsmid Entrance Exhibition entitling the holder to a reduction in fees of £126 for the final course of medical study, and the Filliter Entrance Scholarship in Pathology entitling the holder to a reduction in fees of £123 for the final course of medical study. Further scholarships, medals, and prizes to the value of £1,000 are awarded annually. Full particulars may be obtained from the Vice-Dean.

Cost of N.H.S.

The estimated cost in the first nine months of the National Health Service is £149,675,000, according to the Civil Estimates published on March 20. The hospital, specialist, and ancillary services in England, Scotland, and Wales will cost £120,606,500; services provided by the local authorities, £4,050,000; general medical and dental services, pharmaceutical and supplementary ophthalmic services, £56,072,500. Compensation for loss of right to sell practices is estimated to be £4,800,000, and central purchase of equipment to be £7,505,000.

Exhibition of Medical Photography

The Medical Group of the Royal Photographic Society of Great Britain has arranged an exhibition of medical photography to be held at the Royal Society of Medicine (1, Wimpole Street, London, W.) from May 24 to 29. Entries must be submitted by April 24. Further particulars may be obtained from the honorary secretary of the group at 16, Prince's Gate, London, S.W.7.

Whitley Council Machinery

It is proposed to set up nine functional councils and a general council, as well as a Scottish council for special conditions in Scotland. The proposed functional councils are as follows: medical, dental, pharmaceutical, optical, two for professional and technical staffs, one each for nurses and midwives, administrative and clerical, and ancillary staffs. They would deal with questions of remuneration and the conditions of employment of people within the functional group concerned. The general council would deal with problems affecting more than one functional group.

Medical Certification

A preliminary draft of medical certification arrangements under the National Insurance Act has been issued and submitted to the National Insurance Advisory Committee. The regulations provide for five incapacity certificates: (1) A first certificate, to be issued when the patient falls ill. (2) An intermediate certificate, to be issued within seven days of the first certificate. (3) A special intermediate certificate, to be issued after 28 days, if the incapacity is likely to continue for a long period. (4) An intermediate convalescent certificate, to be issued after 28 days when the patient will remain incapable of work until after a period of absence from home during convalescence. (5) A final certificate, to be issued when the patient is again fit for work. Two certificates to be given by a doctor or midwife are also described, noting details of when the woman may expect to be confined and when she was delivered.

Scottish Hospitals Excepted from the N.H.S.

The Department of Health for Scotland has notified Roman Catholic hospitals and institutions that they will not be required in the N.H.S. Contractual arrangements will be made between Regional Hospital Boards and institutions.

Public Opinion on the N.H.S.

In a "Gallup Poll" conducted by the *News Chronicle* to test public opinion, 61% considered that the new Health Service "is a good thing." Sixty-four per cent of those questioned said they had some idea what the dispute is about between Mr. Bevan and the B.M.A., and in reply to the question, "In the main would you say that your sympathy is with the doctors or against the doctors?" 30 of these said "with," 28 said "against," and 6 said "don't know."

Czech Medical Trade Union

Since the Communist coup in Czechoslovakia, the Czechoslovak Medical Association has been declared a trade union, according to *The Times* of March 8.

COMING EVENTS

Chesterfield Medal Examination

The Chesterfield Medal examination in dermatology will be held at St. John's Hospital for Diseases of the Skin, 5, Lisle Street, London, W.C., on Wednesday and Thursday, April 7 and 8, and Friday, April 16. The fee for candidates is £3 3s.

Medical Exhibition

The Southern Counties Medical Exhibition will be held at the Polygon Hotel, Southampton, on April 20 to 22. A number of well-known drug manufacturers are exhibiting, and some medical films will be shown each day in the afternoon.

Aslib

A study group on special librarianship will be held at the Library Association, Chaucer House, Malet Place, London, W.C.1, on April 13–17. Applications should be sent as soon as possible to Aslib, 52, Bloomsbury Street, London, W.C.1.

SOCIETIES AND LECTURES

Wednesday

INSTITUTE OF LARYNGOLOGY AND OTOLOGY, 330, Gray's Inn Road, London, W.C.—March 31, 11.30 a.m. "*Plastic Surgery,*" by Prof. T. Pomfret Kilner.

ROYAL INSTITUTE OF PUBLIC HEALTH AND HYGIENE, 28, Portland Place, London, W.—March 31, 3.30 p.m. "*The Home Nursing of Children,*" by Miss Dorothy A. Lane, R.S.C.N.

Thursday

ROYAL PHOTOGRAPHIC SOCIETY.—At 16, Prince's Gate, London, S.W., April 1, 7 p.m. Medical Film Evening.

ROYAL SANITARY INSTITUTE.—At Guildhall, Northampton, April 1, 10 a.m. "*Control of Infection in Day Schools,*" paper by Dr. C. M. Smith. "*The Water Supply of Northampton,*" paper by Dr. C. G. Payton.

Friday

KENT AND CANTERBURY HOSPITAL, Canterbury.—April 2, 5 p.m. Monthly clinical meeting.

LEEDS AND WEST RIDING MEDICO-CHIRURGICAL SOCIETY.—At Leeds General Infirmary, April 2, 8.30 p.m. Annual meeting. "*Some Diseases of People,*" by Dr. T. Main.

WHIPPS CROSS HOSPITAL MEDICAL SOCIETY, Whipps Cross Hospital, London, E.—April 2, 8.30 p.m. "*The Modern Treatment of Venereal Diseases,*" by Dr. F. G. Macdonald.

APPOINTMENTS

Sir Alexander Fleming, F.R.S., and Sir John Boyd Orr, F.R.S., have been appointed members of the Scottish Council for Health Education.

HOLDERNESS, G. P., M.B., Ch.B., D.P.H., Full-time Medical Officer for New County Health Division of Airebrough, Horsforth, and Pudsey, Yorkshire.

LONDON COUNTY COUNCIL.—The following appointments in the Council's mental health services are announced at the hospitals indicated in parentheses. *Assistant Physicians:* H. R. Rollin, M.D., D.P.M. (Horton); A. S. Thorley, M.D., D.P.M. (Sutton).

MCNEIL, CHARLES, M.D., F.R.C.P., Emeritus Professor in Child Life and Health in the University of Edinburgh, has been elected to the Board of Managers of Edinburgh Royal Infirmary, in place of Dr. John Orr who has resigned.

PARKER, W. S., M.B., Ch.B., D.P.H., D.I.H., Medical Officer of Health, Cromer U.D.C., North Walsham U.D.C., Sheringham U.D.C., and Erpingham R.D.C., and Medical Officer, East Norfolk Joint Isolation Hospital.

THOMPSON, J. D., M.B., B.Ch., Director of Department of Physical Medicine, Redhill County Hospital, Edgware.

BIRTHS, MARRIAGES, AND DEATHS

BIRTHS

Ferguson.—On March 10, 1948, to Joan M. Ferguson (*née* Thornton), M.R.C.S., L.R.C.P., wife of Matthew Ferguson, of 17, Townsend Crescent, Kirkcaldy, Fife, a daughter.

Howkins.—On March 14, 1948, at 9, Lansdowne Road, Wimbledon, to Lena, wife of John Howkins, M.S., F.R.C.S., a daughter—Jane.

Raymond.—On March 7, 1948, at University College Hospital, to Dr. Joan Raymond, wife of Dr. Michael Raymond, a daughter.

Tate.—On March 13, 1948, at St. Mary's Nursing Home, Nottingham, to Betty (*née* Wilks), wife of Dr Hugh Tate, M.B.E., a brother for Richard—Simon George.

MARRIAGES

Adam—Ross.—On March 12, 1948, at St. John's Episcopal Church, Forres, by the Rev. Canon Cecil Lake, T.D., J. C. Adam, T.D., M.B., Ch.B., Duncrune, Forres, to Elizabeth Ross, S.R.N., S.C.M., Ivy Cottage, Forres.

Arnott—Burt.—On Feb. 21, 1948, in London, David Charles Arnott, M.B., B.S., D.C.H., to Ruth Margaret Burt, M.R.C.S., L.R.C.P.

Pezeshgi—Jones.—On March 20, 1948, S. H. K. Pezeshgi, M.R.C.S., of Persian Embassy, to Audrey Elizabeth Jones, S.R.N., of Slindon, Sussex.

DEATHS

Hay.—On March 12, 1948, at University College Hospital, London, Malcolm Bell Hay, M.R.C.S., L.R.C.P., D.P.H., aged 71, late West African Medical Service.

Heywood.—On March 10, 1948, at Earnscliffe, Alderley Edge, near Manchester, Charles Christopher Heywood, M.B., B.Ch., M.R.C.P., aged 82.

Laird.—Recently, at 5, Neville Road, Rathgar, Dublin, Harry Seymour Laird, L.R.C.P &S.I., and L.M., aged 77.

MacMillan.—On March 11, 1948, at Perth Royal Infirmary, Evan MacMillan, M.B., Ch.B.Ed.

Newbigging.—On March 8, 1948, at Holmfield, Lanark, Thomas Duncan Newbigging, M.B., C.M.

Oliver.—On March 6, 1948, at Malvern House, Marshfield, Richard Harris Oliver, F.R.C.S.I.

Pearse.—On March 5, 1948, at Rest Harrow, Uplyme, Lyme Regis, Athol Stewart Joseph Pearse, M.B., B.Ch.

Prentice.—On Feb. 29, 1948, at Lusaka, Northern Rhodesia, George Prentice, L.R.C.P.&S.Ed., L.R.F.P.S.Glas.

Reid.—On March 10, 1948, at 53, Alnwickhill Road, Edinburgh, Edward Waymouth Reid, Sc.D LL.D., M.B., F.R.S., late Professor of Physiology, University College, Dundee, St. Andrews University, aged 85.

Robertson.—On March 6, 1948, at Bridgefoot House, Thornton-le-Dale, Pickering, Yorks, Douglas Robertson, M.B., Ch.B., aged 49.

Stolterfoth.—On March 6, 1948, at Heather Cottage, Burghclere, Newbury, Berks, Charles Sigismund Stolterfoth, M.R.C.S., L.R.C.P.

Turle.—On March 6, 1948, at Duffield House, Bexhill, James Evan Turle, M.R.C.S., L.R.C.P., aged 70.

Young.—On March 12, 1948, at Glasgow, Roy Frew Young, M.C., LL.D., M.B., B.Ch., F.R.F.P.S.Glas., of 2, Park Quadrant, Glasgow.

Any Questions?

Correspondents should give their names and addresses (not for publication) and include all relevant details in their questions, which should be typed. We publish here a selection of those questions and answers which seem to be of general interest.

Iron in Anaemia

Q.—*Are the various proprietary tablets of ferrous sulphate, manganese, etc., as effective as a mixture containing large doses of iron and ammonium citrate for the simple anaemia of women? Is the action of the iron reinforced by giving dilute hydrochloric acid before meals and a maintenance dose of vitamin C daily?*

A.—The only drug required in hypochromic anaemia is iron. There is no clinical justification for adding manganese or other substances, although some experimental work has suggested that the effect of iron may be enhanced in this manner. These experiments refer to animals, and there is no evidence that their results are applicable to man. Pills of ferrous sulphate are quite as effective as mixtures of iron ammonium citrate—9 gr. (0.585 g.) daily of the former is therapeutically equivalent to 90 gr. (5.85 g.) daily of the latter. Only ferrous iron is absorbed from the alimentary tract, and in the patient with achlorhydria conversion to the therapeutically inactive ferric ion takes place rapidly. It is possible that dilute hydrochloric acid may have some effect in preventing this, and thus in facilitating absorption; nevertheless there is little clinical evidence in support of this suggestion. Ascorbic acid may be valuable in this respect, by virtue of its reducing action: it has been shown that large doses of ascorbic acid (300–500 mg.) given at the same time as iron will lead to repair of anaemia in some instances where iron alone was ineffective. This seems to be due to maintenance of the ferrous state by the vitamin's reducing action, and can be duplicated with other reducing agents.

Quinine in Early Pregnancy

Q.—*Is there any evidence that quinine taken for the purpose of inducing abortion at about two months of pregnancy has a deleterious effect on the subsequent mental development of the child?*

A.—Quinine traverses the placenta in small amounts in late pregnancy, so early chorion may also be pervious to it. Although it is believed that large doses sometimes cause death of the foetus in late pregnancy or damage its auditory nerve, such possibilities have never been fully proved. There are reports of experimental work on birds and fish which go to show that quinine poisoning affects unfertilized ova and delays the development of fertilized ova, but it has not been demonstrated that the early human foetus is influenced when quinine is administered to the mother, at least not when therapeutic doses are used. Perhaps the best evidence is to be obtained from countries in which malaria is common and in which women in the early months of pregnancy often take even large doses of quinine to prevent or cure the disease. Most observers are agreed that this treatment has no significant ill effect on the children of such women. Even when abortion has occurred it would appear to be more often due to the malaria than to its treatment.

Sterilization of Eye Instruments

Q.—*Is the electric hot-air sterilizer suitable for the sterilization of eye instruments? If so, what temperatures and times are recommended? Does this method impair the delicate points and cutting edges of knives, needles, and the like?*

A.—The electric hot-air sterilizer is extensively used in French, German, and Scandinavian eye clinics, and can be recommended for the sterilization of eye instruments provided that: (*a*) they are conventionally cleaned before insertion; (*b*) they have no component liable to damage by heat—this debars cataract knives with ivory handles, irrigators with rubber tubing, diathermy electrodes insulated by rubber or varnish, and "Record" syringes in which the cement between metal and glass may be affected; (*c*) the sharp instruments are "racked" in a container which protects them from damage and contamination during stowage, removal, and storage; and (*d*) the temperature is adequately controlled by a thermostat and a thermometer or chemical temperature indicator close to or among the instruments during sterilization.

The temperature and time required for sterilization are interdependent, and various views have been expressed. Marchesani (Hamburg) claims that five minutes at 180° C. is adequate to kill all spores without corroding cataract knife blades. His special sterilizer with a built-in fan can pass from 15° to 180° C. and back in six minutes, making a total sterilizing time of eleven minutes. Moritz, on the other hand, aiming at a similar temperature in a sterilizer of older design, found a yellow tarnish on knife blades after five minutes. This suggests that the temperature (which varied by 30° C. in different parts of the oven) must in one portion have exceeded 200° C.—the critical temperature for steel. The converse has been recorded by Hanne, who found many hot-air sterilizers in Berlin ineffective, as portions of them remained below the sterilizing temperature. Holth advises 30 minutes at 160° C., which he claims does not affect the strength of silk sutures. His sterilizer takes several hours to reach a steady temperature before insertion of the instruments.

With the majority of ovens at present in use in Great Britain the standards recommended are those of the M.R.C. War Memo. (1945, No. 15) on the sterilization of hypodermic needles and all-glass syringes by hot air, which advises one hour at 160° C. This may take more than two hours in all, so that three cataract operations on the same morning will (unless the blunt instruments used are sterilized by boiling) require the previous sterilization of three complete sets of instruments. On the other hand, even repeated sterilization by this method leaves the edges and points of the finest instruments clinically and photomicrographically unimpaired—a great advantage in ophthalmic surgery.

Prolapsed Cervical Disk

Q.—*What are the symptoms, signs, and diagnostic criteria of a prolapsed cervical disk? How should it be treated? Is the prognosis good?*

A.—The clinical picture in cases of prolapsed cervical intervertebral disk is variable and depends not only upon the level of the disk affected but also upon the situation of the prolapse in relation to the midline. Thus where the prolapse occurs in or near the midline the spinal cord itself may be compressed, with symptoms of an upper motor neurone lesion below the level of the compression. On the other hand, when the prolapse is laterally placed, pressure may be exerted on a cervical nerve root, with symptoms related mainly to the distribution of the affected nerve. The nerve root compressed is always numerically the one immediately below the affected disk—e.g., prolapse of the fifth disk will compress the sixth nerve root, and prolapse of the sixth disk will compress the seventh nerve root. In practice it is found that a large proportion of the cases fall into two reasonably well-defined clinical groups, corresponding to lesions of the fifth and sixth cervical disks. Often, however, the clinical picture is ill defined and even vague.

Symptoms.—In a typical case the symptoms are related partly to the neck and partly to the arm. There may be a history of trauma—for instance, an awkward twisting movement of the neck. Pain is felt locally to one or other side of the spinous processes, and neck movements are painful and restricted. After an interval of hours or days the pain is felt to radiate downwards to the shoulder and arm. If the sixth nerve root is the one affected the radiation is down the outer border of the arm and forearm towards the dorsum of the thumb. In the case of the seventh nerve root the radiation is over the outer aspect of the shoulder and the posterior axillary fold, down the postero-lateral aspect of the arm and forearm to the wrist, sometimes extending to the index and middle fingers. The pain is not necessarily severe and may be more in the nature of uncomfortable paraesthesiae.

Signs.—In the cervical spine there is some degree of limitation of movement by pain, usually most pronounced on lateral flexion towards the affected side and on backward extension. Downward pressure on the head may cause pain radiating down

the arm. Head suspension, on the other hand, tends to relieve the pain. In the arm the signs depend upon the root affected. In the case of the sixth cervical root there may be weakness of the biceps muscle and diminution of the biceps-jerk. In the case of the seventh cervical root there may be weakness of the triceps and wrist extensors, with diminution of the triceps-jerk. There may be some blunting of sensation, but not complete anaesthesia, in the distribution of the affected root.

Diagnosis.—This is based on a careful consideration of the history and findings, and may be supported by radiological changes in the form of narrowing of one or other of the cervical disk spaces. Radiological examination also helps to exclude other causes of root symptoms. In occasional cases it may be desirable to seek more accurate information by means of contrast myelography. Somewhat similar symptoms may be produced by pressure on the cervical nerves after their exit from the bony column—e.g., by a cervical rib. Differential diagnosis is not always easy.

Treatment.—Initially, conservative measures should be tried. Minor degrees are often helped by physiotherapy. Occasionally a judicious manipulation of the cervical spine is useful and there is little risk of increasing the amount of prolapse if flexion movement is avoided. None the less, the risk should always be borne in mind when considering the advisability of manipulation, particularly under anaesthesia. Severer cases can be relieved by rest in bed, with traction of 5–10 lb. (2.27–4.54 kg.) applied via a halter. Within 10 to 14 days relief is sufficient to allow the patient to get up, but it is wise to apply a collar of moulded leather or plaster-of-Paris for the next six to eight weeks. It is rarely necessary to include the arm in the plaster. Only when the symptoms are severe and persistent or when disabling attacks occur should operative treatment be considered.

Prognosis is on the whole good. The great majority of cases clear up spontaneously within six to 12 weeks. Persistent or recurrent cases have been satisfactorily treated by operation.

(See also an annotation on this subject in the *Journal* of March 13 at p. 505 and the report of a discussion in our issue of March 20 at p. 557.)

Estimation of Bile Acids

Q.—*Is there any reliable test for estimating bile acids in the plasma or serum?*

A.—Several methods have been described, but the variation in their "normal range" suggests that they do not measure true bile-acid concentration. The most satisfactory appears to be that of Josephson (*Biochem. J.*, 1935, **29**, 1519), which was recently used by Sherlock and Walshe (*Clin. Sci.*, 1948, **6**, 223) in a thorough survey. The normal range is 0.2–3 mg. per 100 ml., and rises in obstructive jaundice to as high as 6.6 mg. per 100 ml. (as cholic acid), but the overlap between normal persons, patients with infective hepatitis, and patients with obstructive jaundice is so great that the results of the test are of no clinical value in the differential diagnosis of liver disease.

Penicillin Blood Levels

Q.—*In a moderately severe infection, with or without pyrexia, such as tonsillitis, furunculosis, or septic wounds, from which an organism as penicillin-sensitive as the Oxford staphylococcus has been cultured in the laboratory, what level of penicillin in the blood should be maintained, and for how long? The blood level is of course high immediately after parenteral administration, depending on the dose given. Does it necessarily follow that the raising of the blood level will shorten the duration of the infection, or must one be guided by the patient's condition before stopping penicillin?*

A.—The minimum concentration inhibiting the growth of such an organism is about 0.02 unit per ml. If this is continuously maintained or exceeded in the blood, it will also be maintained in the infected area of tissue. If adequate doses are given at reasonably short intervals, even though the blood level falls below this minimum before another dose is due, diffusion into the tissues while the level is high will ensure that local effect is maintained. How efficient this mechanism is must depend on the rate of exudation into the inflamed area and other factors. There is *in-vitro* evidence that somewhat higher concentrations are more rapidly bactericidal, but the range to which this statement applies is small, and above this no increase in concentration has any enhanced effect. There can be no arbitrary rules about the duration of treatment; the indications for stopping it are clinical signs or laboratory evidence that the infection has been overcome.

NOTES AND COMMENTS

Archives of Disease in Childhood.—The Editor of the *Medical Journal of Australia*, Dr. Mervyn Archdall, wishes to obtain copies of the March and June, 1944, issues of the *Archives of Disease in Childhood*, which are now out of print. Dr. Archdall's address is Seamer Street, Glebe, New South Wales, Australia.

Treatment of Chilblains.—Dr. W. H. McKINSTRY (Rottingdean, Sussex) writes: Dr. R. John Gourlay (Feb. 21, p. 336) has discovered that nicotinic acid will cure chilblains. When I was in practice about 1896 I cured chilblains by giving cod-liver oil. This remedy was given by me as I found my patients taking cod-liver oil for other diseases, as phthisis, did not suffer from chilblains. Nicotinic acid at that time was unknown.

Vitamin B and Growth of Hair.—Dr. AGNES SAVILL (London, W.) writes: The subject of the effect of *p*-aminobenzoic acid on hair, especially on greying hair, was investigated by Benjamin Sieve and several other American writers many years ago. Sieve published the results on 460 patients in 1941. The drug became unobtainable during the war, as it was required for other purposes. Doubtless this explains why this research has been forgotten. In the third edition of *The Hair and Scalp* I have given references to all that I could trace on the subject. The reprint has taken over two years to appear, owing to the acute paper shortage from which all medical publishers have suffered.

Piercing the Ears.—Dr. H. MAITLAND MOIR (Currie, Midlothian) writes: The ring presented by the patient has a locking device. It is impossible to lead the one half of the ring through a straight piercing. After piercing the ear with a straight skin-needle, the two ends of the ring are placed in the "pierce," i.e., one behind and the other in front; then they are forced together and lock in the tissues. Before learning this trick I used to use a silk suture, which was effective if unsightly.

Cataract.—"Partial Eclipse" writes: Perhaps your inquirer on cataract ("Any Questions?" March 13, p. 531) may be interested in my own case. My left eye was operated on four years ago for cataract. Vision, when corrected with a strong lens, is 6/5 in that eye. Vision in right eye is P.L. only, owing to a mature cataract in that eye. I can read for hours without strain. The main drawbacks are: (1) The peripheral field is severely restricted. (2) Inability to judge distance. An object 9 feet distant appears to be only 6 feet away. (3) Objects are considerably magnified.

Some of the consequences of these drawbacks are more commonly felt out of doors. Movement on a pavement is generally punctuated by bumps on the right side from pedestrians who approach from my blind side. To cross a road carrying only light traffic I must wait at a crossing and then cross with the crowd. I can and do ride a push-cycle on quiet roads. When making a turn to the right I can sometimes manage to look over my left shoulder far enough to see traffic approaching from the rear, but I find it generally safer to dismount. I was desirous of taking up motor-cycling again, but decided that the risk was too great. It would be impossible for me now to drive a motor-car with safety anywhere outside the Sahara Desert, though before the onset of my cataract I had driven for many years.

A one-eyed man with a lens in his eye has many advantages over the individual who has to carry his lens on his nose.

Correction.—In the annotation under the heading of "Thirty-million Volt *X* Rays," published in the *Journal* of March 20 we referred to developments in the nuclear physics laboratories of the General Electric Company at Stafford. This was an error, and the reference should have been to the English Electric Company.

All communications with regard to editorial business should be addressed to THE EDITOR, BRITISH MEDICAL JOURNAL, B.M.A. HOUSE, TAVISTOCK SQUARE, LONDON, W.C.1. TELEPHONE: EUSTON 2111. TELEGRAMS: *Aitiology, Westcent, London.* ORIGINAL ARTICLES AND LETTERS forwarded for publication are understood to be offered to the *British Medical Journal* alone.
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B.M.A. SCOTTISH OFFICE, 7, Drumsheugh Gardens, Edinburgh.

SUPPLEMENT TO THE

BRITISH MEDICAL JOURNAL

LONDON SATURDAY MARCH 27 1948

British Medical Association

SPECIAL REPRESENTATIVE MEETING

DEMAND FOR CHANGES IN THE ACT

UNANIMOUS DECISIONS

The Special Representative Meeting summoned to consider the result of the plebiscite and certain recommendations of Council concerning the National Health Service Act and acceptance of service was held in the Great Hall of B.M.A. House, London, on Wednesday, March 17. About 350 representatives were in attendance from all Branches and Divisions of Great Britain. Dr. J. B. Miller, of Bishopbriggs, presided. He was supported by Dr. H. Guy Dain, the Chairman of Council, Sir Hugh Lett, Bt., President, Dr. J. W. Bone, Treasurer, and other officers of the Association. The agenda contained 170 motions and amendments, but the whole of it was covered in a meeting which lasted, with two short intervals, for 8½ hours. Except for a short private session, the meeting was open to the Press and to strangers.

Tribute to Council and Headquarters Staff

Mr. Douglas S. Pracy (Nuneaton and Tamworth), before the meeting proceeded to its main business, moved to place on record the gratitude of the profession to Dr. Dain and the other members of the Council for their untiring efforts, especially during the last three months, in addressing meetings of Divisions and otherwise making known the important matters at stake; also to Dr. Hill and the Headquarters staff for the efficient manner in which they had carried out the duties falling to them and especially in the difficult task of keeping in touch with members in all branches of the profession.

The motion was carried with prolonged acclamation, which was renewed when Dr. Dain rose to acknowledge the tribute. He said that on behalf of the Council he wished to thank the meeting for the way in which this motion had been received. "We have as your servants endeavoured to put forward the policy you have laid down, and I take it from the terms of this resolution and from the way you have received it that you are satisfied with the manner in which we have advanced the policy for which the Representative Meeting is responsible. I hope that we shall be able to retain that confidence."

A further motion by Salisbury was carried expressing appreciation of the work of the Editor and staff of the *Journal* both in keeping the profession informed of the progress of events and in moulding opinion by means of a valuable series of leading articles.

Dr. O. C. Carter (Chairman of the Journal Committee) said that the Association expected so superlatively high a standard of work from its officers that it was inclined to take too much for granted. They had in their Editor and staff a first-class team, and he knew that their work during the last few months had been welcomed throughout the country. The quality of argument advanced in the *Journal* had played a large part in enabling the members of the profession to come to a decision on how they should vote in the plebiscite.

Representative Character of the Association

Lord Horder (Marylebone) moved:

"That in view of the continued misleading statements made by the Minister of Health and supported by some sections of the Press this Meeting wishes to place on record its opinion that the British Medical Association is thoroughly representative of the medical profession and that the Council and the B.M.A. representatives on the Negotiating Committee could not be elected more fairly or freely."

Lord Horder said that this was in effect a vote of confidence in the Association as being thoroughly representative of the profession. In such a meeting as the present the motion might be redundant, but outside that hall, largely as a result of mendacious statements in the House of Commons and in a section of the Press, doubt had been thrown on the position of the Association as a constitutional democratic body and on whether in fact it represented the profession. It was an example of the unscrupulousness of the Minister that he arranged for a period of some 12 months that his chief secretary, his principal medical officer, and his chief adviser should meet a body appointed in the main by the Association, with an addition from other bodies in the profession, and should then, as a result of two short sessions following that prolonged period, having failed to get what he wanted, say that this body was a small body of spokesmen who had consistently misled the great profession which they were supposed to represent. He had also accused the B.M.A. of being engaged in a "squalid political conspiracy." The same unscrupulousness had been followed by certain of the Minister's colleagues. A gentleman with a "song in his heart," which turned out to be his swan song, copied the line taken by a certain newspaper and spoke of the Negotiating Committee as a handful of elderly doctors dictating to the profession. In the public interest it seemed desirable to nail these lies to the counter. (Applause.)

Perhaps a slight significance, Lord Horder continued, attached to the fact that it was Marylebone which proposed this resolution, because Marylebone had not in the past been averse from offering criticism, he hoped of a constructive kind, and Marylebone was thoroughly appreciative of the fact that the Council had accepted these criticisms in good spirit.

"We believe that the Association has got the confidence of the public in a fuller measure to-day than ever before. This is reflected in the fact that, of 68,350 doctors registered in the British Isles in January of this year, 58,000 are members of the Association. But I would not put the profession's confidence to-day at the height at which I believe it to exist merely on numerical strength. I believe it to be due to the realization that the Association's policy, as crystallized in the well-known principles, to give way on which would be to sell the pass, commands the adherence of the whole profession. The

Association regards the points at issue not as bargaining points but as indicating the desire of the doctor to be a free man—free to practise his science and art in the patient's interests. It is because we feel that the same spirit animates the Council that we are satisfied that the Council adequately represents us.

"I am sometimes accused of being too much a 'B.M.A. man,' but I do not lose my equanimity over that. I am more and more a 'B.M.A. man' because I realize that if we stick together we shall win. In order to stick together we must have a focus point for our power, and that focus point is the B.M.A. There are certain other distinguished bodies within the ambit of medicine, but, whether from their constitution or some other reason, the immediate fight lies not with them.

"Can we possibly lose? Yes, I think we can possibly lose. We can lose by squabbling as to which of these principles is the most important. We can lose by arguing as to which of these principles we should yield to the Minister first or last. That way madness lies. We must not yield on any of the points which collectively or individually sell the doctor's freedom. I have watched the Negotiating Committee cut the joint to the bone. There is nothing left to go, except our freedom, and that we dare not give. Once this position is made abundantly clear to the Government, legislation against the nationalization of medicine is quite certain. We in Marylebone believe that the Association shares this view, and we confidently bring this motion before you." (Loud applause.)

Dr. J. A. Pridham (Chairman of the Organization Committee), reported that the membership of the Association had reached the record height of 58,195, or 75% of the total profession in the United Kingdom. If retired practitioners were eliminated the percentage was 77.5. Between 1935 and 1940 the Association increased by 5,000 members, but from 1940, when the profession became aware of the events impending, to the present date the membership had risen by 19,000.

The motion was carried unanimously.

The Plebiscite

The Chairman of Council (Dr. Dain), in moving that the statement of the results of the plebiscite be received, emphasized the more striking features. It must be apparent to the whole country that there was something seriously wrong with a National Health Service Act which had provoked so strong a demonstration against it as the overall figures of the plebiscite revealed. The Minister had made a definite effort to split the profession into two by offering certain concessions to consultants and specialists; the results must have been disappointing to him, because the consultants and specialists headed the list with the largest percentages of those who regarded the Service with disfavour. They had to thank the consultants for realizing the extent to which these proposals were likely to impair their freedom. It appeared that the whole profession was seriously disturbed. Members who were not concerned in any way with service under the Act, such as whole-time research people, medical personnel in Government service, and in the public health services, all saw that if the Service in its present form came into operation their essential freedoms would be endangered.

Dr. Noy Scott (Plymouth) asked the meeting to express the opinion that the profession should stand by the position as revealed by the plebiscite results. "The fight is now on and the time for action is now."

Dr. Dain said that Plymouth was rather short-circuiting the whole business of the meeting by saying, "Stand by the plebiscite and that is all there is to do." Of course they stood by the results of the plebiscite, but that was not to say how they should implement them.

The Chairman of Council's Statement

Dr. Dain at this point reviewed the situation. He said:

"We had better start with the history which leads to the plebiscite, because we want to have a clear understanding of our position and of the action which should flow from it. In the early part of last year we agreed to go into discussions at the Ministry on the understanding that amendment of the Act was not excluded. But in fact amendment of the Act was excluded, as we found when we came to meet the Minister. We were satisfied, by the attitude that he adopted, that he had never intended to amend. He knew that, following the discussions, we should take a plebiscite. We did our utmost to place things fairly before the profession as a whole. We gave our report of the discussions and the Minister's reply equal publicity, sending them to every member of the profession. That, however, has not protected us from manœuvres of various kinds. When the plebiscite was arranged the first thing that happened was a suggestion that this was a form of intimidation to be put across to the profession in order to force them against their will presumably, to stay out of the Service. The Minister made that accusation without the slightest grounds for doing so. When a body like ours gives an undertaking that the secrecy of a document will not be broken it must be assumed that we are honest in such an undertaking. We should take such steps as are necessary to protect ourselves against any imputations to the contrary. (Applause.)

"Then, although the Minister had told us that we were free to come or not to come into the Service, we have been accused of sabotaging an Act of Parliament. The Minister had himself given us the authority to decide whether we should come in or should not come in. Then a charge was made that the plebiscite was not being correctly counted and that secrecy was being given away. Indeed, so far from intimidation on our part, I may say that when we invited the Minister to come and see for himself how it was done we had letters expressing the hope that the Minister would not be allowed to come too close to the papers in order that he might see how any particular practitioner had voted! (Laughter.)

"During the taking of the plebiscite the extraordinary thing happened that a debate was arranged in the House of Commons on an Act which had already become law, the debate taking place on a resolution by the Minister who had been in charge of the Bill. We can take credit for having set up a new precedent in the House of Commons. If you ask me why the House of Commons should have undertaken such an extraordinary proceeding, it is hard to find any other answer than that it was an attempt by the Minister to intimidate us during the course of our voting. In the debate we were accused of being politically inspired, and at the same time we were told that we were awkward people who had not agreed with Ministers of Health to whatever party they might have belonged. What sort of party politics inspires us when we are so awkward with all parties it is not easy to say. But those are the manœuvres which the Minister has improperly used to influence us in our important decision with regard to service under the Act.

"The results of the plebiscite showed that he has completely failed to divide the profession or to influence it in forming its opinion. It is very unfortunate that a problem which is of great national importance should have been approached either with emotion or in a spirit of party politics. We are perfectly competent to devise a service in which it is entirely unnecessary for anybody to become emotional. We want to have regard only to the efficiency of the proposed Service and to exclude it from entirely unnecessary political ideologies.

The Power of the Minister

"What are our objections to the Act? How comes it about that 90% of doctors think it unsatisfactory? The overall considerations are the Minister's powers. It has been said that power corrupts, and absolute power corrupts absolutely. The Minister's power in this Act is absolute. All sections of the profession are opposed to it and we speak for all of them. The Minister claims that we are 'raucous-voiced people' speaking without authority. That claim has been completely disproved by the plebiscite and our solidity has remained more evident than ever. We have not been shaken by threats or abuse. The power of the Minister will lead to the enslavement of the medical profession. We believe that ultimately it will lead to a service in which we shall be completely controlled, in effect, by the officers of the Ministry. We, of course, deal with Ministers, but, assuming that a service of some kind is running, it will be run by the principal officers of the Ministry and it is for them to see that their controls are so good that they will not get into trouble with the Minister himself or have unpleasant questions asked

in the House of Commons. If we enter this service without proper safeguards we shall be landed as servants of the Ministry of Health, whether whole-time salaried or not.

"We set out, as we thought, to establish a health service, and we found to our great disappointment that we were engaged in a life-and-death struggle for our freedom and independence. We never anticipated that that would be the ultimate outcome of the attempt to set up a National Health Service, but we must not disguise it that that is the position. If we do not have this Act amended in appropriate ways before it comes into force we shall have lost our independence and our freedom. It is for us to see, in the interests of the progress of medicine in this country and in other countries, that we do not fail. If you say that the Act does not put us in jeopardy my answer is that 40,000 doctors have said in the plebiscite that they believe that it does so.

"We are not concerned at this moment with financial considerations. There has been no proper opportunity of discussing remuneration for consultants or general practitioners or any other branch of the profession. The monetary question is not one which has influenced us in our decision. Unscrupulous propaganda has been put out that this is a stunt of the doctors to make more money. We can completely refute the statement that in the action we have taken we are influenced by financial or monetary considerations in any way.

"This Act is a paper service and nothing more. (Applause.) The people who have been promised a free-for-all service available to everybody are going to be very greatly disappointed. The Service will not and cannot be there on July 5 or on any reasonably approximate date. A wise Government would have thought it the proper way to start such a service by stages. I hope we shall not lend ourselves to any idea that the Service can properly be implemented by the given date. The failure of the Service must recoil on the people who produced it well knowing that it was impossible to implement it. (Applause.) The temptation to try to get the medical profession into the grip of a Government Department has been too much for them. The Government is starting an insurance service on July 5 and it wants certifying doctors firmly in its grip before certificates are required to be issued.

"All our points of objection are based only on one thing, our determination that when we take part in a service we shall not risk our freedom and independence and shall act always in the interests of the patients who have placed their confidence in us." (Loud applause.)

Ready to Enter into Discussions

In conclusion Dr. Dain said:

"We are accused of intransigence. Yet our position to-day is that we are willing to explore the problems afresh provided that the outcome is a service in which the medical profession remains an independent profession secure from domination by the State. Can I say more?

"We doctors want a health service. We want our services to be available to all who need them. We are ready to enter into any discussions directed to making it possible for the medical profession to co-operate with the Government. If the Government can show us other ways, new ways, of preserving our independence, we are willing to listen. But if this cannot be done, we owe it to the public to make our stand.

"We ourselves approach the prospect of a fight in anything but a light-hearted mood. Whatever may be said on the other side—and it has been often rumoured that some political circles are not unwilling, as they put it, to 'smash the doctors' as the first step to reducing all independent workers to subservience—we ourselves can have no place for any such irresponsible levity. We know there is too much at stake in this fight—for ourselves, for medicine, and for the public as a whole. But prepared as we are for discussions aimed at conserving our essential freedom, willing as we are to examine new proposals, I should be failing in my duty to the profession and to the public if I did not make absolutely clear that in the absence of such necessary changes we shall stand as a united profession outside this Service, continuing with our daily work, but unwilling to enter a service which in its present form is inconsistent with the freedom of medicine and of the public." (Loud continued applause.)

The Council's Recommendation

The Chairman of Council then moved, on behalf of the Council, the following recommendation:

That the Representative Body, reaffirming the whole-hearted desire of the medical profession for a comprehensive health service available to everyone, urges that in the public interest such changes should be made in the National Health Service Acts of 1946 and 1947 as are necessary to maintain the integrity of Medicine and to prevent doctors being turned into State servants, with harmful consequences to patient and doctor alike. The Representative Body therefore expresses the hope that the Government will make it possible for the profession to co-operate by making such changes, and states its view that it is not in the best interests of the public or of Medicine for members of the profession to enter the Service until such changes are made.

Dr. Dain said that this resolution had been framed carefully and it expressed exactly what they needed to say. There were many resolutions on the agenda seeking to modify it in one way or another. There were resolutions which suggested that it was too mild. His reply to that was that one did not show one's courage or determination by the force of one's words. They were a reasonable body of people determined if possible to get a service established in which they could co-operate. He hoped the meeting would not spend a great deal of its useful time that day in altering the words of the motion.

Dr. H. A. Summers (Nottingham) moved a substituted wording for the Council's recommendation. He said that the sense was the same, but the Nottingham phraseology, he thought, was more clear and simple.

Dr. W. Gunn (Greenwich and Deptford) also thought that the wording was not direct enough.

Dr. E. A. Gregg said that the Panel Conference on the previous day had spent some time considering similar amendments and had come to the conclusion that the original resolution was quite good enough to express their views.

The Nottingham substitution found no support and was lost.

Dr. D. L. Little (Dudley) moved that the following be substituted:

The Representative Body, confirmed in its judgment by a plebiscite of doctors most carefully and honestly carried out, declares the National Health Act, unamended, to be contrary to the public weal and the traditions of the profession. The Representative Body therefore calls on the medical profession to reject the Act and to continue to serve the public by independent practice, making suitable provision for everyone in this Island.

He said that in Dudley they felt strongly that the Minister had no intention now, nor had a year ago, of amending the Act, and if they went on hoping that the Government would change its attitude in the matter they were really playing into the Government's hands.

Dr. Dain said that he hoped the meeting would not accept this amendment. It was an attempt to mix policy with action. The Council's resolution was concerned with policy; they would have to consider action later in the day.

Dr. G. O. Barber (Mid-Essex) commended to the movers of this and other amendments that they should implement the vote of confidence they had already passed in the Council by withdrawing their amendments.

It was agreed to pass to the next business, and the original recommendation of Council as moved by Dr. Dain was then put to the meeting and carried unanimously.

Conditions of Any Future Settlement

The first of 40 motions on this subject was by Mr. Tudor Thomas (Cardiff), who moved:

That ownership of goodwill by the practitioner, abolition of basic salary and of powers of direction, and the right of appeal to the courts be regarded as essentials in any settlement with the Minister.

Each of these individually was important, but there was a close relation between them. It was desirable that they should be emphasized collectively rather than separately. It was not an exclusive list, but contained the essentials to guarantee their freedom.

Dr. E. W. Goodwin (Leicester and Rutland) said that if the results of the plebiscite meant anything at all they meant that every section of the profession was voicing its deep protest

against the attempt of the Minister to deprive the individual practitioner of a large measure of his independence and freedom. The safeguards of freedom were these four well-known principles. Dr. D. V. M. Adams (Lanarkshire) declared that the continued right to buy and sell practices and to be paid only by capitation were vital to the freedom and security of the profession.

Dr. Dain said that on many occasions the Representative Body had expressed with great forcefulness its determination that certain principles should be maintained. The time of the present meeting was not being spent profitably in saying the same thing over again. More than that, they might be driven into the undesirable position of establishing a list of priorities in their demands. If the Government came along with new proposals they were prepared to examine them, on one basis, that they provided for the freedom for which the present Act did not provide. He hoped they would not go on reiterating their opinions on the importance of these things, because in doing so they lost sight of the one thing that was essential—namely, their objection to the vast powers which the Act placed in the hands of the Minister. He begged them not to enter into a Dutch auction or a bargain sale, but to keep in mind the maintenance of freedom and independence. (Applause.)

The Chairman said that that was a statesmanlike appeal, but as chairman he must maintain the rights of Divisions and allow motions which appeared on the agenda to be moved, or, if they were covered by other motions, give the representative an opportunity to speak.

Dr. A. H. Forman (Fife) said that his Division felt that the Council should adopt a more vigorous, constructive, and fighting policy. Dr. A. G. Manley (Richmond) said that he wanted to take the opportunity, in view of the public speeches of a former representative of Richmond (Dr. Stark Murray), of saying that in that Division, save for a very small minority, they were whole-heartedly behind Headquarters policy. Dr. D. C. Barron (Sheffield) said that his Division wanted the meeting to reaffirm its opinion that the continued ownership of practices was an essential factor in maintaining the freedom of the doctor, upon which depended the rights and privileges of the patient. If the profession accepted compensation for the abolition of goodwill it would be "buying" control.

Dr. C. K. Cullen (City of London) moved an amendment instructing the Council to seek the abolition of the Minister's power to convert the profession to a full-time salaried service, the amendment adding:

> This meeting does not consider the buying and selling of practices, negative direction of doctors, and appeal to the courts as essential factors in the solution of the deadlock.

Their basic fear was of a whole-time salaried service. If they could get a guarantee from the Government that such whole-time salaried service was not in the offing, these other questions were not really essential. The main point was that the Minister had power by regulation to alter certain features of the Act, and the Council should take that as their main ground of opposition in any further negotiation.

Dr. J. A. Gorsky (Westminster and Holborn) said that a serious misrepresentation in the Press which had troubled many doctors was a statement that the B.M.A. was in favour of the abolition of the right to buy and sell practices. Those who made this statement quoted the draft interim report of the Medical Planning Commission published in 1942. That, however, was a guarded statement, and was governed by certain words in italics:

> The suggestions contained in the present report should not, therefore, be regarded as expressing the Commission's conclusions but as recommendations made to it which the Commission as a whole has not yet considered and will not consider until the profession has made known its views through the usual channels.

The question relating to buying and selling of practices was merely put down as a question for decision.

Dr. Dain took up the City of London amendment. He hoped the meeting would not attempt to set up priorities either in what it was ready to discard or in what must be retained. He asked that the City amendment be turned down.

The City amendment was put to the meeting and decisively rejected, and the debate continued, with the Cardiff motion as the peg.

Mr. H. H. Langston (Winchester) said that the primary issue was the possible conversion of members of the profession into full-time salaried servants of the State. Dr. D. T. McDonald (North Northumberland), from a Division consisting almost entirely of general practitioners in rural and semi-rural practice, said that his constituents also held that view.

The Question of Goodwill

Dr. R. W. Cockshut (Council) protested against the picking out of the question of buying and selling practices and making it stand alone. If the Minister were left with his present powers, the retention of buying and selling might not be of any particular use. What would be the value of the right to sell a practice in a closed area or in an area where, owing to shortage of doctors, anyone could get a practice? Theirs was the last body in the world which should deal with symptoms rather than with causes. So far the B.M.A. had played its part with great finesse, and had not made a single mistake. Things that could have gone wrong for them had gone right. He hoped that they would continue to be guided by Dr. Dain in his insistence that the power of the Minister was the primary objection, and the primary requisite was that the profession should be free. In any profession administered by the Minister they could never have any certain guarantee of total freedom.

Dr. J. C. Arthur (Gateshead) said that if at this stage they endeavoured to assess one principle as of more importance than another they would affect the morale of their people. On the practical side it would be foolish to tell their opponents which position they intended to hold strongly and which not to hold at all.

Dr. Dain said that the debate had been confused. He suggested that they got rid of the whole matter by passing to the next business.

It was agreed accordingly to proceed to the next business, which meant that no vote was taken on the Cardiff motion.

Dr. Arthur then moved to reaffirm adherence to the principle that no penalty should attach to doctor or patient who elected to remain outside the Service. Incidentally he referred to a letter by Sir Henry Morris Jones, M.P., in *The Times* of that morning which supported the suggestion made by a correspondent of that paper that many of the powers now conferred on the Minister could with advantage be transferred to a Central Medical Practices Committee; in particular the method of payment could be handed over to that committee, and payment by attendance, which had worked well in France, should not be excluded.

Mr. C. E. Beare (Reigate) said that the principle of no penalty for remaining outside the Service had been endorsed over and over again. It was on the understanding that that principle would be safeguarded that they gave up their point on the 100% issue. Dr. J. A. Ireland (Council) said that "no victimization" was a principle of organized labour and he thought it should be the principle of the profession also.

Dr. O. C. Carter (Council) said that they were wasting time in trying to safeguard interests in one respect or another. The importance of that day's meeting did not lie in the motions so much as in the statement made by the Chairman of Council. It was the freedom of the profession that concerned them. Once in history the great contest was over the divine right of kings. The situation had now changed and "we are faced with the divine right of a Cabinet Minister to play hell with the medical profession and the health of the country."

The Gateshead motion reaffirming adherence to the principle that no penalty should attach to either doctor or patient who elected to remain outside the Service was carried, as was also a motion by South-West Essex urging that, in the event of negotiations being resumed, neither consultants nor general practitioners should agree to terms until both sections of the profession were mutually satisfied with them. The mover, Dr. E. R. Tivy, said that the Minister had made an attempt to divide consultants from general practitioners, but the consultants had rallied gallantly to the support of their general practitioner colleagues, and no division of the profession must be allowed to occur again.

Question of Reopening Negotiations

Dr. G. W. Ireland (Lothians) moved a resolution expressing willingness to reopen negotiations with the Government, and that if there was such reopening, concessions might be made provided that an amending Act was passed to ensure that a whole-time salaried service would not be introduced. This motion was not inspired by fear or indecision. His Division was as loyal to the B.M.A. as any in the country. Both sides were strong enough to stand firm against each other. The present situation, if unrelieved, would only lead to bandying of words, exchange of threats, and abuse. Moderate people wanted to see a satisfactory solution of their outstanding difficulties. The only hope lay in one side or the other taking the first step. Was there not some case for a compromise, and

was it not in keeping with the ideals of the profession that they should take the first step? "We have had fine leadership up to now; let us now have statesmanship. As Smuts has said, quarrels are dangerous tactics. This is not peace at any price. If you offer concessions and the Government remains adamant, public opinion will swing right round in your favour. It is rare in these days to see the spirit of magnanimity, but it is most rewarding."

Dr. Helme (Guildford) considered this to be "one of the most frightful expositions of appeasement" he had ever heard.

Dr. D. S. Robertson (Edinburgh), while agreeing with a part of the motion, thought the word "reopen" an unfortunate one. It was very important that a clear expression of opinion should go out from that meeting that they were prepared to take part in further negotiations if and when these were opened. He said this because of the repercussions on public opinion. He did not advocate defeatism, but he thought they should indicate their willingness to take part in fresh negotiations and so rally public opinion to their side.

Dr. Dain hoped the meeting would not have anything to do with the resolution. He repeated what he had said in his speech in opening the debate concerning their readiness to enter into discussions. Could it be said more clearly, definitely, or firmly? He hoped it would be left at that.

The Lothians motion was lost, hardly a hand being lifted in its favour, and the same fate befell other motions by North Northumberland and Winchester suggesting certain provisions which should be made in an amending Act. A motion by the Isle of Wight (Dr. Howie Wood) was accepted, advising the profession against participating in the new Service unless guaranteed that no material changes in the terms of service (when finally agreed with the profession) would be made without prior consultation and agreement with the profession.

The Independence Fund

At this point the Representative Meeting went into committee, under the chairmanship of Dr. E. A. Gregg, and afterwards it was announced that it had passed unanimously a resolution moved by Dr. Dain establishing an Independence Fund to help to finance the profession's activities during the present dispute with the Government. The following had been invited to serve as trustees of the new Fund:

Mr. Lawrence Abel, Dr. J. C. Arthur, Dr. J. A. Brown, Dr. G. F. Buchan, Dr. R. W. Cockshut, Dr. H. Guy Dain, Dr. W. E. Dornan, Mr. A. Staveley Gough, Dr. F. Gray, Dr. Charles Hill, Lord Horder, Dr. J. A. Pridham, Prof. G. I. Strachan, Dr. S. Wand, Sir Reginald Watson-Jones, Dr. J. B. Miller, Dr. E. A. Gregg, Dr. W. M. Knox, Dr. J. C. Pearce, Dr. W. D. Steel, Dr. D. J. B. Wilson, and Dr. W. Woolley.

The Compensation Issue

Dr. A. C. E. Breach (Bromley), taking up the point that an attempt is being made to coerce practitioners into joining the Service by the threat of forfeiture of right to compensation unless they join by July 5 next, moved that as a condition prior to any further negotiation the period during which a practitioner might join the Service with full right to compensation should be extended to July 5, 1949. He mentioned the difficulties of the younger men not firmly established in their practices.

Mr. C. E. Beare (Reigate) said that to talk about compensation at all might be implied as signifying willingness to give up goodwill.

Dr. J. A. Gorsky (Westminster and Holborn) said that many of the young members of the profession were under the impression that they were fully entitled to compensation if they went into the Service. That illusion would be dispelled by a study of Sect. 36 of the Act, where it was laid down that the practitioner must show loss by reason of his inability to sell the goodwill of his practice "by virtue of the last foregoing section"—and this was Sect. 35, prohibition of sale of practices, containing the penal clause which they opposed entirely. It was difficult to understand how a practitioner was expected to prove loss when in fact that loss had not yet occurred and might not occur until such time as the compensation was computed. The Minister might refute any suggestion that a loss had been suffered. He commended a study of Sect. 36 (3) (*a*) as illustrating the Minister's abnormal and inordinate power under regulations. Those younger practitioners who thought they were going to get compensation and were fully entitled to it were labouring under an illusion.

Dr. Laurie Smith (Blackpool) said that to accept the Bromley motion would imply consent to abolition of goodwill.

Dr. Breach said that he was sorry if the wording conveyed that idea. His point had been that the Ministry was here using a big stick with which to coerce the profession, and it was for them to insist that it be laid aside before they entered on any further discussion.

The Bromley motion was lost.

Political Pressure upon Doctors

Dr. J. A. Brown (Birmingham) moved as a matter of urgency the following resolution:

That this meeting condemns as grossly improper the bringing to bear of pressure for political purposes upon individual doctors to induce them to inform outside bodies of their intentions in relation to the new Service.

In support of this motion he read two letters received by doctors in different parts of the country—Cambridgeshire and South Wales. The Cambridgeshire letter, dated March 10, was signed by the chairman and secretary of the local Labour Party and the chairman and secretary of the local branch of the Transport and General Workers Union, and read as follows:

"The attitude of the medical profession towards the new Act which comes into operation in July next is causing considerable anxiety to our combined membership. It will be appreciated that with the advent of the new health service our members are anxious to ensure that they and their families receive the medical advice and assistance to which they will then be entitled. We have therefore been requested to ask you whether or not you propose to participate in the new Service. Should your decision be a negative one, we think it only fair that we should know this in order that we should be in a position to take such steps as may be open to us for the protection of our members."

The other letter, dated March 12, was signed by an official of a local branch of the National Union of Railwaymen in South Wales:

"I have been instructed by our members residing in . . . area, at our branch meeting on March 7, 1948, to inquire as to your views regarding the National Health Act to be operated from July 5. They wish to know if you are prepared to operate it on and from July 5. Thanking you for an early reply," etc.

Dr. Brown pointed out that up to the present moment the regulations of the Service had not been published. No official invitation had been issued to any doctor to join the Service. The legal committee to examine the partnership question had not even been appointed. These two districts, Cambridgeshire and South Wales, were so far apart that there could be only one conclusion—namely, that there was some central thought behind these communications. What looked like organized political and trade-union pressure was beginning to be brought to bear on individual doctors.

Dr. Brown said the Association was accused of attempting to intimidate doctors in connexion with the plebiscite, but here was an attempt—and a scandalous attempt—to intimidate doctors by local political and trade-union pressure. No doubt the Association would advise individual practitioners how to respond to such pressure, but it was the duty of the Representative Meeting here and now to condemn this disgraceful attempt at intimidation. (Applause.)

Dr. Brown was handed another communication, this time from the Letchworth Trades Council, which stated:

"At a recent meeting it was unanimously agreed that we should endeavour to ascertain the number of practitioners locally who intend practising under the new Act."—

and it was added that concern was expressed regarding the medical service of 3,000 families of trade unionists after July 5. The communication concluded:

"Let us know your intentions so that a general idea of what the situation is going to be like here may be obtained."

No doubt other examples could be brought forward.

The motion was carried.

The Question of a New Approach

Dr. R. H. Bailey (West Middlesex) moved to instruct the Council to take no steps to reopen negotiations with the Minister or his department before July 5. He strongly urged that after the experience of last year they should not be induced

to enter discussions again until their just claims were guaranteed by someone who could speak with authority for the Government.

Dr. S. F. L. Dahne (Reading) said that all that the motion intended was that the profession should not make the first move. If the Minister saw fit to approach them, yes, by all means start negotiations. It would be a despicable sign of weakness to start approaching the Minister now.

Mr. C. E. Beare (Reigate) spoke in the same vein. The Council's resolution had not slammed the door, but it was not for them to make the first move.

Dr. Dain said that he had already stated that they were reasonable people ready to consider any possibility for securing a service consonant with the independence of Medicine. If the motion meant that they should approach the Minister to learn whether he would agree to further discussions, he would be entirely opposed to any such step, but did not want to go out of his way to be rude about it, and he saw no reason why the meeting, having expressed itself as it had done that morning, should pass this resolution, which really did not strengthen the position at all and might only aggravate the situation.

It was moved and agreed to pass to the next business.

Dr. F. E. Gould (Birmingham) moved:

That the Negotiating Committee should approach the Prime Minister forthwith with a view to reopening negotiations.

Everything they had been told confirmed their determination to have nothing to do with this Act until it had been amended. The Association had the support of the profession, but what was it going to do with that support? A good general did not allow his forces to sit down in front of a fortress and waste their time. He believed the action should be a direct approach to the Prime Minister.

Dr. Howie Wood (Isle of Wight), in supporting the motion, said that it was not part of his business to make a personal attack on the Minister of Health, but the events of recent months had shown that he was not a man with whom they could successfully conduct negotiations. The onus of providing a solution should be placed upon the Government. The Prime Minister should be approached directly and asked to make such arrangements as were necessary to allow amicable and successful conversations to be started.

Dr. D. G. Morgan (Kingston-on-Thames) said that it was evident that the profession had lost confidence in the present Minister, and in its anxiety to provide a service for the nation it should certainly approach the Prime Minister and ask him to intervene personally or through some other responsible person with a view to the reopening of negotiations.

Dr. Dain asked that this be turned down. Although it came from Birmingham he dissociated himself from the motion. He reminded the meeting that the Prime Minister and the Chancellor of the Exchequer backed with their signature the resolution which Mr. Bevan brought forward in the recent Commons debate. It was not for them to go either to the Minister of Health or the Prime Minister.

Dr. J. A. Gorsky (Westminster and Holborn) suggested that it would be unconstitutional to go to the Prime Minister.

Dr. Gould, in reply, said that doctors who were not representatives felt that this was not the time to sit still and glare at Mr. Bevan. If the procedure suggested was unconstitutional he was very sorry, but it should not stop them from doing it.

The motion was lost by a majority.

Postponement of Service

Dr. Leslie Hartley (Guildford) moved:

That in view of the recent plebiscite result . . . the Representative Body, whilst agreeing with a comprehensive health service available to everyone, requests that it should be postponed until the necessary hospitals and other facilities have been built and equipped, and the personnel for a complete service have been trained.

The Service at present was "an empty egg-shell." He could not believe that 41,000 doctors had voted against the Act in its present form only on grounds of objection to State service; they must have had grave disappointment and misgiving in their hearts as well concerning the possibility of such service having in view the shortage of nurses, the overburdening of general practice, and other considerations. Doctors were skilled in prognosis, and they had given this Act a bad prognosis. They feared that the child would be stillborn. Nevertheless, Mr. Bevan intended to hand them the baby, dead or alive.

Dr. Helme (Guildford) referred to the lack of personnel. They had been told by the Government that this country was in an extremely serious economic position, largely owing to lack of manpower. If this Act came in, in view of the lack of facilities and manpower, they would be doing a great disservice if they tried to work it. It would call for the employment of vast numbers of Civil Servants, and it seemed really a patriotic duty on the part of the profession to let the people understand that the nurses, ward maids, and the like were just not available for running a service like this. The production of food was far more important to the nation than the production of a vast bureaucratic scheme of this kind.

Dr. D. A. Robertson (Reigate) said that if the Government wished to provide a service it should build health centres and hospitals. This thing which was being rushed upon us had only a political background.

The motion was carried, but a further motion by the Hartlepools calling for the postponement *sine die* of the implementation of the Act, and for the Association to draw up in outline a scheme of medical service which could be carried out, was lost.

Dr. W. N. Leak (Mid-Cheshire) said that the Government was in trouble because it had been trying to do too much and to go too far. That was the situation with regard to this Act. It attempted something for which neither the personnel nor the equipment was available.

A motion by Reading calling for the suspension for two years of the suggested arrangement for the correction of maldistribution of doctors (except that of financial inducement to underdoctored areas), and its review at the end of that time, was lost. The following was carried on a motion by the City of Edinburgh:

That inasmuch as the medical profession believe that a complete health service cannot be made available to everyone in July, 1948, because of lack of staff and other facilities, this meeting is of opinion that particular consideration should be given in future negotiations to the possibility of introducing the Service by stages, as this becomes feasible.

Alternative Schemes

Dr. A. C. de B. Helme (Guildford) moved that in the event of a complete deadlock the Council should be instructed to draw up and submit to the profession an interim scheme based on the Marylebone resolution passed by the Representative Body in December, 1944.

(The Marylebone resolution read: "That health legislation should proceed by evolution, and the Representative Body is of opinion that the objects aimed at will be achieved by completion of the N.H.I. service to embrace institutional, specialist, and all auxiliary services; and, when this is accomplished, the expansion and extension of N.H.I. to dependants of those insured and to others of similar economic status." It was carried by 113 to 106.)

On July 5 they would be presented with alternatives, either with postponement or with something in the nature of a fraud on the public. In 1929 and 1931 the Association requested that the National Health Insurance Act should be amended to include dependants of insured persons and others of like economic status. The Marylebone resolution offered an opportunity for acting in conformity with the Association's views and also with what might reasonably be carried out. As for hospital services, if the hospitals were given something like £15 million a year as a grant they could do a great deal to improve their facilities and eliminate their shortages. Possibly for every pound subscribed by the public the Government might offer an equal amount. With regard to general practitioner services, dependants of insured persons and certain other dependants might be included. As for specialists, the increase of the money to the hospitals would undoubtedly help the specialist situation. Some such scheme would at all events be practical and would be likely to lead in the future to something really good. It would safeguard the voluntary hospitals, and it would afford time for the proper consideration of a health service which would commend itself to the whole nation.

Dr. Murray-Browne (Gloucestershire) said that the profession had been faced with a good many negatives. They would like a positive statement of what could be achieved.

Dr. Woodhouse (Harrow) said that her Division, at a meeting with an attendance of 80, with only three dissentients, had recommended that the Council be instructed to prepare an interim scheme comprising an extension of the present panel system to cover all persons in need of such service, on the lines of the scheme published by the Association under the title "Proposals for a General Medical

Service for the Nation." Mr. Bevan was in a tight corner. Would it not be a great kindness on the part of the medical profession to get him out? If they co-operated to make an alternative service a magnificent success and put it forward as an interim scheme perhaps it would not be unacceptable to the Government. It might end this unhappy impasse while at the same time making for the independence of the profession.

Dr. David Haler (Guildford) and one or two other representatives asked that consideration be given to the Marylebone scheme as a practical method of alternative service should the deadlock persist.

Dr. E. A. Gregg said that in so far as this resolution meant the organization of a nation-wide scheme for the provision of medical service for the people, the Association had already published its views. Everyone was familiar with the Association's proposals to give a medical service for dependants of insured persons and others of similar economic status. For a long time those proposals fell on deaf ears so far as the Government was concerned; it was only in recent times that they had shown this great interest in the subject. But if the resolution was directed to what the doctors should do in the interval before their present problem was solved, an Association committee under the chairmanship of Dr. F. Gray had sat for a long time endeavouring to frame schemes. The material this committee had gathered together had been circulated, but it was found that there was no general desire for a standard form of medical service all over the country; various parts of the country preferred to have schemes of their own. Some favoured an extension of existing public medical services.

The Guildford motion was carried.

Midwifery Services

Dr. R. W. Rae (North Staffordshire) moved that the Council advise all practitioners that it is not in accordance with the policy of the Association to accept election to the proposed Local Obstetric Committees; to which Dr. N. J. P. Hewlings (Oxford) moved to add the words: "Until further negotiations have taken place between the Royal College of Obstetricians and Gynaecologists and the Association." Dr. Hewlings felt that means should be found for preventing the standard of general midwifery practice falling to danger level.

Dr. Dain said that advice had been issued on this point, but they had not taken the step of telling members that they must not accept appointment.

Dr. Isabella Little (Oxford) said that no one with knowledge of the varying standards of midwifery in this country would deny that there were very large problems involved in this matter, and instead of shutting the door completely to the appointment of such committees she hoped that further discussion with the Royal College would take place.

Dr. J. A. Gorsky supported the North Staffordshire motion. The instruction had been sent out by the Ministry of Health to Local Executive Councils that they appoint an *ad hoc* committee, to include two general practitioners, which would review the experience of doctors desiring to do midwifery work, and if they considered any doctors were not sufficiently experienced they might call upon them to undertake further training. It was therefore a matter of importance that doctors should not take office on these *ad hoc* committees. If he himself, although actually he did not practise midwifery, were instructed by local practitioners to undertake another course of training he might be inclined to institute proceedings for libel.

The Oxford amendment was lost and the North Staffordshire motion carried. A further motion by Wakefield protesting strongly against the "closed panel" for midwifery under the new Health Service was also agreed to. Dr. D. L. S. Johnston (Halifax) asked why, if doctors by virtue of their qualification from their university were entitled to practise midwifery in Scotland and Northern Ireland, they should not be allowed to do so in England. This might become a precedent for some other limitation on general practice. It might be declared in time that a general practitioner was not to be allowed to open an abscess, and ultimately his work might be limited to signing forms.

A series of motions bearing on the presentation of the profession's case to the public was referred to the Council.

Proposed Withdrawal of Certification

Dr. H. W. Donovan (Birmingham Central) had a motion on the paper "That as this is a fight for freedom which cannot be conducted by appeasement or kid-glove methods, the Representative Body should press for withdrawal of certification prior to July 5." He said that this was a weapon which would put them on equal terms with the Minister.

Dr. Dain asked the meeting to remember that they were a body of responsible people under contract to give service to the insured, and part of such service was the issue of certificates. If this was to cease, it could only be done after notice, and the notice would more or less take them to July 5. Therefore it was not a means of forcing the issue earlier. This was a course not open to them to take unless they individually risked a summons for breach of contract.

Dr. H. H. Goodman (Newcastle-upon-Tyne) said that doctors did not want to offend anyone, least of all their patients. But the refusal of all forms of certification, other than death certificates, would be a sort of token resistance. It would produce some chaos in administrative ranks and expedite the solution of the whole matter. The onus would be on the Government to find some alternative method.

Dr. Donovan said that it was true, as Dr. Dain had stated, that they could not break their contract, but they could resign straight away. He did not believe patients would suffer anything like so much as they would suffer if the Act could not properly be worked.

The Birmingham motion was lost by an overwhelming majority.

Dr. W. V. Howells (Swansea) brought forward a somewhat different motion:

That this meeting considers it essential, if the profession is advised not to accept service after July 5, that no certificates other than infectious diseases notifications, certification under the Lunacy Act, and death certificates be signed by any member of the profession.

They wanted to make it clear that after July 5 they would not withdraw their services for sick people, but they could not carry on their practices exactly as they were before.

Dr. J. L. McKenzie Brown (South-West Essex) said that his Division considered that if they were instructed to refuse service after July 5 no certificates of incapacity should be issued.

Dr. R. W. Cockshut (Hendon) said that if after July 5 they were to carry on the medical services of the nation exactly as in the past Mr. Bevan might well say, "We will see who is going to get tired first." He agreed that they could not stop certifying now, but they must warn the public that if they allowed this thing to come to a conflict a lot of people would have to get hurt.

Dr. E. A. Gregg (Deputy Chairman) entirely disagreed with what had just been said. There could be no more unwise action from the standpoint of policy than to withhold from patients a statement regarding their illness if they asked for it. He was not saying that they should fill in official forms, but the withholding of a private form certifying unfitness for work would only embarrass the patient, and might indeed cause difficulty in providing the ordinary necessaries of life for a sick person. That would be a grave reproach to a great profession. ("Hear, hear.") This "paltry act" of withholding a necessary certificate which would have enabled a patient to make such claim as he could make would do the profession no good with the public, and it would be contrary to all the instincts they had inherited in their professional traditions (Applause.)

Dr. Dain said that it was impossible for a body of gentle people to contemplate making progress in a dispute at the expense of their patients. He had never heard such an atrocious proposal put up as that they should refuse to order the food which a sick person required. Dr. Cockshut had said that somebody was going to be hurt—yes, but not their patients. Their patients would always come first. They were going to fight this battle fairly with proper regard to their responsibilities to their patients. He was amazed that such a suggestion as that they should refuse certificates should have been produced at that meeting. (Applause.)

Dr. J. A. Pridham spoke of the great practical difficulty of refusing certificates.

Dr. Helme (Guildford) thought that, nevertheless, there was a good deal behind these resolutions. There was no intention to hurt people—no one had used the word "hurt" except Dr. Cockshut—and this weapon could be used reasonably. He thought it better not to turn the resolution down but to refer it to some other body which could give it consideration "without sentimentality."

Dr. Howells replied that in bringing forward this motion his Division had not intended to cause hardship, but it felt that, apart from the exceptions mentioned in the resolution, certificates should not be issued.

The Swansea motion was rejected.

Democracy and Freedom

Dr. Geoffrey Evans (Marylebone) submitted a motion approving the statement of the National Executive Committee of the Labour Party, published on March 3, namely:

". . . Democracy cannot live without freedom of speech, press and organization; without the right to protection against arbitrary arrest, the right of appeal to a non-political judiciary."

The motion went on to propose that the National Executive Committee be asked if the profession might rely on them to support the B.M.A. in obtaining these freedoms for the medical profession under the National Health Service. Dr. Evans said that this motion was no manœuvre for appeasement. The fact was that they were a strong and united profession on the principles for which they stood. Nevertheless, in order to achieve their ideals they required public support, and approach to public opinion as a whole was difficult to make. The first section of the community with which to make contact was obviously the Labour Party because it claimed to be representative of the working class, and doctors themselves were working men and women. He knew that they had strong support in some quarters of the Labour Party, and the motion drew attention to the fact that the profession and the Labour Party subscribed to the same principles.

The motion was carried.

A motion by North-East Essex calling for a nation-wide scale of minimum fees for ex-insurance patients, to be recommended by the Association in the event of refusal of service, was referred to Council. Two motions by Plymouth were carried, one that the appointment of medical representatives to bodies set up for administration of the Act should be made only after agreement with the elected representatives of the profession, and the other that the Act must be amended to guarantee freedom of expression to doctors in all matters relating to the clinical and administrative aspects of the Service. South Essex desired the remuneration and conditions of service for junior staffs in hospitals to be considered by the Spens Committee at the earliest possible moment. Dr. Dain said that he was prepared to agree that this should be considered, though he thought the reference to the Spens Committee should be left out because that was not the best method of determining the remuneration of hospital residents.

Consultants Liaison

Mr. G. Whyte Watson (Bradford) asked that there should be adequate provincial representation on the proposed London Liaison Committee, and that the new committee should represent all consultants. Provincial consultants, he said, felt that something should be done to safeguard their interests.

Dr. Dain said that Bradford was under a misapprehension. The London Consultants Committee was set up to consider conditions in London, and he hoped Bradford would set up a committee for its own area. It was expected to see similar committees in different areas, and they would report to the Association's central committee. They were in the process of establishing permanent machinery for the discovery of consultant and specialist opinion in all areas.

Lord Horder (Chairman of the London Consultants Committee) said that the London Liaison Committee was only established formally on the previous day. The committee arose as the result of a desire to carry on the positive effort of standing by their general practitioner colleagues in the present fight. It came about partly in response to an invitation from the Association Council to the Marylebone Division, but he hoped it was obvious that Marylebone did not consider it had a corner in consultant and specialist work and opinion. They valued their provincial colleagues too much to stand in the way of their doing in various centres what Marylebone was doing in London.

The Bradford motion was withdrawn.

Miscellaneous Motions

At this late stage in the meeting a number of motions were put from the chair without discussion, and the following were carried:

South-East Essex: Deprecating the abusive comments made by the Minister of Health upon their democratically elected representatives.

Greenwich and Deptford: Instructing the Council, the profession having expressed its emphatic view through the plebiscite, not to be influenced by any "quislings" however exalted they might be.

South Bedfordshire: Reaffirming that the opposition of the profession to the National Health Service Act in its present form is not connected with parliamentary party politics.

Derby: Pledging support to the Council in all measures considered necessary to safeguard the essential freedom of the profession.

Derby: Warning the Government and the public that medical facilities and personnel are at present entirely inadequate for a full service, the immediate implementation of which will result in a less efficient service than now obtains, and may well lead to a state of chaos.

Doncaster: Supporting the action of the Council of the Association in any action it may take.

And finally, a bouquet to the Representative Body itself.

Oxford: Reaffirming confidence in the deliberations of the Representative Body, and expressing its belief that any recommendations it might make would be based on fair and reasonable discussion.

Regional Hospital Boards and Local Executive Councils

The Chairman of Council moved the following recommendation:

That medical members of Regional Hospital Boards and Local Executive Councils be requested to continue their membership of these bodies for the present.

Dr. Dain said that the question had been considered whether the medical members of these bodies should be asked to retire, and it had been decided to recommend that they remained. They were bodies of which the Association had approved in its policy, and they were looking at the administrative details of the new Service. It was thought that medical members should be present to take part in such administrative construction.

Dr. J. M. Christie (Finchley) had an amendment which made the continuance of membership contingent upon the Government reopening negotiations with the representatives of the profession. He considered that the Council's recommendation would be open to misrepresentation. Medical members of Regional Boards and Executive Councils had been appointed to administer the Act as it stood, and the plebiscite had condemned the Act. An anomalous position might arise if medical members were asked to continue to serve. A hostile Press might well point out an apparent inconsistency, and interpret it in the sense that the profession no longer wanted to stand by the plebiscite.

Dr. Dain hoped the meeting would not agree to this amendment. At any moment it would be possible to change the policy if circumstances suggested that it was the proper thing to do. He deprecated laying down the conditions under which these medical members might be allowed to remain or asked to withdraw.

The Finchley amendment was lost, and the Council's recommendation accepted. Dr. Dain agreed on the amendment of the Isle of Wight to extend the recommendation to cover Health Committees of local authorities.

This completed the business, and the meeting ended after according votes of thanks to the Chairman and Deputy Chairman.

SPECIAL PANEL CONFERENCE

DEMAND FOR CHANGES IN THE ACT

UNANIMOUS DECISIONS

A Special Conference of Representatives of Local Medical and Panel Committees was held at B.M.A. House, London, on March 16, the day before the Special Representative Meeting. The chair was taken by Dr. J. A. Brown (Birmingham), and almost all the insurance areas of Great Britain were represented. The President of the British Medical Association, Sir Hugh Lett, Bt., was on the platform. A visitor was Dr. P. J. Delaney, newly appointed secretary of the Irish Medical Association, who, in reply to a welcome, said that in the Irish Free State the fight of British doctors was viewed with the greatest possible sympathy. "We can do little for you, but at least we wish you well."

The Governing Resolution

A resolution identical with the one to be moved on the following day at the Representative Meeting was proposed on behalf of the Insurance Acts Committee by Dr. E. A. Gregg:

That this Special Conference of Local Medical and Panel Committees, reaffirming the whole-hearted desire of the medical profession for a comprehensive health service available to everyone, urges that in the public interest such changes should be made in the

National Health Service Acts of 1946 and 1947 as are necessary to maintain the integrity of Medicine and to prevent doctors being turned into State servants, with harmful consequences to patient and doctor alike. The Conference therefore expresses the hope that the Government will make it possible for the profession to co-operate by making such changes, and states its view that it is not in the best interests of the public or of Medicine for members of the profession to enter the Service until such changes are made.

Dr. Gregg: "We have reached a further stage in our journey. The various steps we outlined in our programme have been taken one by one. We have had the process of discussion among ourselves and a long series of talks with the Ministry. We have furnished to the profession an account of them and the Minister's reply. We have taken a plebiscite, which was conducted in such a way that no one can ever know how an individual practitioner voted, and by an overwhelming majority in every branch of the profession the vote was against approval of the Act as it now stands. The Government proposes to start this service on July 5, and we as a profession—not the negotiators only, not the leaders of the B.M.A.—have said that we do not approve and do not propose to take service under it. I assure you that there are in preparation ample arrangements to enable every practitioner to look forward with confidence to the difficult period between now and July. If the Minister does not get the doctors by the appointed day he has only himself to blame. Our negotiators have tried patiently to help him, but on all essential points he has consistently refused to consider any modification. It is stated that he has made concession after concession. As a negotiator myself I cannot recall a single concession he has made beyond his proposal to allow consultants to have private beds in hospitals, a proportion with a ceiling and a proportion with no ceiling, 'provided that the hospital needs of the community are met.'

"We are prepared as a profession to stand our ground and resist coercion and all attempts to place us by economic pressure in service under this Act in its present form. The Insurance Acts Committee thought it right that this Conference, which for a long period of years has endeavoured by constructive criticism and suggestion to guide insurance practice, should be called to offer its opinion on the resolution which will be placed before the representatives of the whole profession tomorrow. The resolution has been so worded as to be non-provocative. If the Government want to think again we are ready to listen to what they have to say.

"At the present moment one thing is of the greatest importance to us—to stand in proper relationship to the public—and this resolution is so framed as to enable the public to realize that we as doctors are perfectly reasonable people. There is no truth in the suggestion that doctors are sabotaging the Act. We want a comprehensive health service—we have been agitating for it for years. Only the Government itself is in the way of that ideal by having introduced into this Act certain elements which make it impossible for us as a profession to accept it as satisfactory. Throughout the Act and the speeches supporting it there runs the implication that it is but a step to a goal, and that the goal is a whole-time salaried State service. Some of you will say this resolution is not strong enough, but I hope you will allow it to stand in its unprovocative form, expressing as it does to the public at large the desire of the profession for the setting up of a national health service in which it can take a satisfactory part." (Loud applause.)

An amendment stood in the name of Edinburgh to insert after the words "available to everyone" the following:

> declares its willingness to co-operate with the Government and to reopen negotiations through its representatives towards the establishment of such a service, but urges that in the public interest such changes should be made in the Acts of 1946 and 1947 as are necessary to maintain the independent status of Medicine and to prevent doctors being turned into State servants with harmful consequences to the patient and doctor alike

and then continuing with the last sentence of the I.A.C. resolution.

Dr. N. B. Stewart said that Edinburgh was as steadfastly opposed to the Acts in their present form as the rest of the profession, but it felt that the recommendation was just an expression of opinion and hope; it was not positive enough. Some more clear indication of the profession's attitude should be given for the benefit of the public at large. With the unity demonstrated in the result of the plebiscite they were in a strong position to make the declaration of willingness to co-operate in the terms of the Edinburgh amendment. This was no sign of weakness—far from it.

Dr. Gregg said that he did not think the Edinburgh amendment was any improvement on the resolution.

Only two hands were held up in favour of Edinburgh's amendment, which was heavily lost, and a similar fate befell a Nottinghamshire amendment which proposed a rearrangement of the resolution.

The resolution as moved by Dr. Gregg was then put. No dissentient hand was raised, and assent appeared to be unanimous.

The Next Step

Dr. F. E. Gould (Birmingham) moved that the Negotiating Committee should approach the Prime Minister forthwith with a view to reopening negotiations. The whole country, he said, was waiting for the profession to give a lead, and, armed with the plebiscite result, it could do so without fear of an accusation of weakness. The Prime Minister had said that he was willing to meet anyone. Let our leaders go to Mr. Attlee. "Negotiate," according to the *O.E.D.*, was "to confer with another with a view to compromise or agreement."

Dr. Howie Wood (Isle of Wight) pointed out the danger of arriving at a conclusion on such a matter different from that which the Representative Body might reach on the following day. Dr. A. V. Russell (Wolverhampton) hoped that this suggestion would be turned down. Dr. A. Beauchamp (Birmingham) said that it was of no use both sides uttering the Molotoffian "No." The Prime Minister had said in the House, in reply to Mr. Wilson Harris, "I am prepared to consider any suggestion put before me." Dr. J. A. Ireland (Shropshire) considered that to approach the Prime Minister would be futile.

The Chairman of Council (Dr. Dain), who was received with acclamation, said that although this motion came from Birmingham it did not have his approval and he dissociated himself from it entirely.

The motion was lost by a very large majority. Only about six voted in favour.

Transactions in Goodwill

Dr. D. L. S. Johnston (Halifax) moved a resolution reaffirming that the continuation of the buying and selling of practices was fundamental to the freedom of medicine, and that on this issue above all else the Association should stand firm. This was met by an amendment from Kincardineshire that the profession should consider agreeing to abolition of goodwill provided that all doctors on committees under the Act be directly elected by the profession, and that the committees elect their own chairmen.

Dr. G. H. Sedgwick (Rotherham) was in favour of the Halifax resolution. Surrender on this point meant loss of freedom, and having given up their freedom it would matter very little whether they were paid by salary or capitation fee. "If we are not prepared to stand for this principle the plebiscite is worth nothing at all." Dr. G. M. Goodwille (Norfolk) said that on the various principles, to which the profession had declared its adherence nearly all, he thought, might have been conceded by the Russian Government to Russian doctors, except the ownership of practices. They had been told that this was a weak wicket on which to bat. On the contrary, as Public Relations Secretary in his Division, he had found it a strong one. Labour men in his area had seen the point in a manner which had surprised him.

Dr. Gregg described the Halifax motion as unwise because it was starting the setting up of priorities, "and we have not got that length." He hoped the decision would be left open.

The Kincardineshire amendment was rejected by an overwhelming majority, and the Halifax motion was disposed of by proceeding to the next business. A resolution by Cumberland asked the Conference to express the opinion that the Minister should not have the power to alter or add to the terms of service without consultation with the profession.

Dr. Gregg said that he thought this resolution, too, might be left to the future. On one occasion when a Minister broke faith with the I.A.C. an apology was received and a firm

assurance was given that such a thing would not happen again. If present difficulties were resolved and the Service was in operation there would be a body comparable with the I.A.C. which would discuss with the Minister matters pertaining to the Service and they would insist on the same position as had obtained under National Health Insurance.

It was agreed to refer the Cumberland motion to the I.A.C.

Public Relations

A motion by Newport asked that "immediate steps be taken to inform the public of the exact conditions on which the profession was prepared to enter the Service." Dr. A. C. E. Breach (Kent) suggested that this resolution be withdrawn. "Exact conditions," even if definable at all, were exceedingly complicated and technical. The public, of course, had a right to some sort of statement as to the profession's aims, but in its present form the resolution was thoroughly objectionable. Dr. W. Woolley (Bristol) also spoke against the proposal. It was for the Divisions, through their public relations committees, to do this work. Dr. J. T. McCutcheon (Glasgow) said that people wanted to know the policy of the Association, but it was very wrong to use the phrase "exact conditions." Dr. Gregg said that this was a question of public relations, on which a great deal of work had already been done, and a mass of material would be available and in the hands of the profession up and down the country.

The Newport motion was withdrawn.

Medical Cards

Dr. I. G. Innes (Hull) moved that practitioners be advised not to accept any medical cards under the Act until so advised by the Association. He understood that medical cards would shortly be issued.

Dr. Gregg said that this matter bristled with difficulties. The phrase "accept medical cards" was open to various constructions. It was a matter which would require consideration in connexion with the conduct of the campaign. Dr. F. M. Rose said that his Preston Committee was anxious to have some ruling as to what was to be done with these cards. If they were accepted and put aside did it not imply some acceptance of contract? Dr. Jope (I.A.C.) said that there was no present intention to issue medical cards and he suggested that it be referred to the I.A.C. Dr. Howie Wood hoped that if the motion was referred to the I.A.C. it would not be with the implied approval of the Conference.

It was agreed to refer the matter to the Committee.

The Independence Fund

Dr. Gregg, as chairman of the National Insurance Defence Trust, moved:

That this Conference endorses the action of the Trustees in voting the sum of £400,000 as an initial contribution from the Trust to the Independence Fund.

A great deal would be heard soon about the Independence Fund, which would provide the sinews of war for the conduct of the campaign. The Trustees of the Defence Fund felt that as insurance practitioners were to such a tremendous extent involved it was appropriate that they should support the Independence Fund to the utmost. It might not be necessary to use this money. Such money as was not required in carrying out the campaign and in providing assistance for hardship cases among loyal practitioners would be returned to those contributing in the proportion of their contributions.

The motion was carried unanimously.

Terms and Conditions of Service

Dr. W. Parker (Swansea) moved that in view of the promise given that practitioners should have six months to study the terms and conditions of service, the fullest details of the Service should be published, as affecting the whole profession, before any one section was asked to join. The appointed day was now little more than three months ahead.

The Swansea motion was carried unanimously.

Alternative Service

Dr. P. Y. Lyle (Southport) moved that the Conference would welcome a definite assurance that there was in existence an alternative plan for the medical services of the nation should the profession be advised not to accept service under the Act.

Dr. Gregg said that if in spite of the resolutions of the Conference and those of the Representative Meeting on the morrow no reopening of relations between the profession and the Government took place, and they were faced with a struggle, the question of how practices were to be conducted would undoubtedly arise. A committee was set up which had gone into the whole question of the conduct of practice in the event of a dispute of this kind with the Government, and the report of that committee had been circulated to all Panel Committees. It appeared that Panel Committees did not wish to have a stereotyped standard method applied all over the country, and that this was a matter which should be determined in each locality.

Dr. Lyle found the reply disappointing, and pressed his motion to a division, on which it was carried by 99 to 56.

Dr. D. G. Buchanan (Rutherglen) moved that the B.M.A. Council be asked to frame and publish to the profession at the earliest possible moment its alternative to the National Health Service scheme.

Dr. Gregg: Our alternative is the National Health Service scheme with the changes in it for which we have asked and of which you are all aware.

It was agreed to pass to the next business, which was a motion by Cheshire asking that fresh consideration be given by the Council to the possibility of a National Health Service divorced from direct political control.

Dr. Gregg reminded the conference that the question of a "corporate body" had been argued, but the decision had been in favour of a scheme administered by a Government department. There did not seem to be much good in going over the old ground.

Here again it was agreed to pass to the next business.

Service on Local Executive Councils

Dr. A. C. E. Breach (Kent) moved as a recommendation to Local Medical Committees:

That they inform those medical practitioners whom they have appointed to serve on Local Executive Councils that they regard such appointments as provisional, and that they will expect these members to place their resignations from the Local Executive Councils at the disposal of the Insurance Acts Committee.

He said that this was an attempt to express the unity of the profession and their loyalty to their leaders. The Local Executive Councils were one of the principal bones in the skeleton of the Act and of first-class importance to its whole structure. The recommendation would help to dispel the illusion that acceptance of membership on the Executive Councils was equivalent to acceptance of service under the Act.

The motion was carried.

The Spens Committee

A motion by Birmingham, and similar motions by Warwickshire and Dudley, read:

That the Minister of Health having agreed to accept the Spens Report on remuneration for general practitioners, the proposals for payment to doctors in his statement to the profession should be referred to that Committee for their consideration.

Dr. A. Beauchamp, in moving, said that this would not cut across any decision of the Representative Meeting. He was aware that the Spens Committee was no longer in existence, but it could be reconstituted. He had hoped that it would be a permanent body for the reference of matters connected with remuneration.

Dr. Gregg said that he could see no value in this motion. They had had the Spens Committee report, had considered it, and understood the yardstick, and could apply it quite easily.

Dr. Dain also disagreed with this suggestion. The Spens Committee was set up for a particular purpose, to discover the range of income which a general practitioner should be able

to attain. Its report had been accepted by themselves and by the Minister. When the Service was established the question of terms would be debated between the Government and themselves by means of the Whitley machinery so as to ensure that there was a proper relation between the remuneration of the different branches of the profession. That was a business they ought to keep in their own hands.

The Birmingham motion was lost by a large majority.

A further motion on remuneration was by Swansea, that the capitation fee should be determined independently of the demands of the basic salary on the global sum. The mover, Dr. W. Parker, said that, while it was hoped that if the new Service was satisfactorily established the number of doctors coming into it would increase as the years went on, this ought not to mean any diminution in the capitation fee. "Let us have a fixed capitation fee, and we shall know where we stand."

Dr. Gregg reminded the Conference that the remuneration as set out by the Ministry had not by any means been accepted. Moreover, he did not like the reference to basic salary.

It was agreed to pass to the next business. A resolution was moved by East Sussex declaring that should negotiations be resumed the I.A.C. should insist that, on the coming in of the new Service, provision should be made for the prompt registration of every person with a doctor. Dr. C. M. Stevenson (Cambridge) asked what, under this proposal, would happen to the principle of free choice. Dr. Gregg also criticized the resolution and said that such matters would have to be dealt with at a later time. Undoubtedly the problem would arise in connexion with the Health Service in a way in which it had not arisen under National Health Insurance.

The resolution was withdrawn.

Dr. F. M. Rose (Preston) had a motion calling upon the Conference to reaffirm its confidence in the Negotiating Committee. The mover was met with cries of "Agreed" before he could begin his speech, and the motion was unanimously carried.

CONFERENCE OF REPRESENTATIVES OF SCOTTISH DIVISIONS AND LOCAL MEDICAL AND PANEL COMMITTEES IN SCOTLAND

A fully representative meeting of Scottish Divisions of the British Medical Association was held in Edinburgh on March 10. The Conference, which was held in the Scottish House of the Association, was attended by representatives of the Scottish Constituencies in the Representative Body, representatives of the Local Medical and Panel Committees, members of the Scottish Committee of the B.M.A., and members of the Insurance Acts Subcommittee (Scotland). It was agreed that the Council's recommendations be adhered to, emphasis being laid on the fact that these recommendations were in themselves sufficient indication that the Association was prepared to negotiate, but that the first steps should be taken by the Government.

Dr. J. B. Miller, Bishopbriggs, presided, with Dr. W. D. Frew, Kilmarnock, as deputy chairman. Dr. Miller's first action was to extend a warm welcome to Dr. H. Guy Dain, chairman of Council. In his reply Dr. Dain said that it was important that they should all have every opportunity of understanding the situation, knowing what was going on, and looking to the prospect in front as well as at what had happened in the past. They had the 1946 Act for England and the 1947 Act for Scotland and on the points with which they were most intimately concerned there was very little difference between the two. They hoped that whatever alterations could be made in one Act would be made in the other.

Statements on the discussions on the Scottish Act between the Scottish Negotiating Committee and the Department of Health for Scotland were introduced by Dr. A. F. Wilkie Millar, chairman of the Scottish Negotiating Committee. "The Scottish Negotiating Committee had no specific remit," he said, "but it has always been understood that we would not discuss, with a view to arriving at any agreement, matters which were properly of U.K. concern. These are being left to the Central Committee. Our talks were on matters arising out of the Scottish Act, particularly with regard to administrative arrangements and regulations made under that Act."

General Practice

Giving the report of the General Practice Subcommittee of the Negotiating Committee, Dr. I. D. Grant, its chairman, referred to the fact that succeeding chairmen of the Executive Councils would be nominated by the Councils themselves, the first chairman, appointed by the Secretary of State, holding office for three years.

Discussing partnerships in relation to the suggestion that there would be a maximum number of 4,000 patients on any one list, the Department had agreed that a partnership of two might have 8,000 people on their general list but one partner could have 5,000 and the other 3,000. The Department of Health had concluded that, on the basis of 95% being the appropriate proportion of the United Kingdom population likely to avail themselves of the Service, the appropriate figure for Scotland could be regarded as 96%.

Dr. Dain and Dr. Jope explained the method of distributing the Central Pool and pointed out that there were already 20,000,000 insured persons, so there was no question of a ridiculously small proportion of the people being on the lists at first.

Several speakers questioned the wisdom of considering amendments at that stage and it was agreed to proceed to the next business. There followed some discussion on the Maternity and Consultant Services and on the special problems of the Highlands and Islands.

The meeting then passed to the consideration of the motion, formally moved by the chairman, that the following recommendations of the Council of the Association to the Special Representative Meeting, March, 1948, be received:

"(*a*) That the Representative Body, reaffirming the whole-hearted desire of the medical profession for a comprehensive health service available to everyone, urges that in the public interest such changes should be made in the Acts of 1946 and 1947 as are necessary to maintain the integrity of Medicine and to prevent doctors being turned into State servants, with harmful consequences to patient and doctor alike. The Representative Body therefore expresses the hope that the Government will make it possible for the profession to co-operate by making such changes, and states its view that it is not in the best interests of the public or of Medicine for members of the profession to enter the Service until such changes are made.

"(*b*) That an Independence Fund be established to help to finance the profession's activities during the present dispute with the Government.

"(*c*) That medical members of Regional Hospital Boards and Local Executive Councils be requested to continue their membership of those bodies for the present."

Dr. Dain said it might be appropriate that he should say something about the present position.

The plebiscite figures were interesting in that every type of practitioner regarded the present Act as unsatisfactory. People like medical officers of health and medical research workers had all, by a large majority, decided that the Act was unsatisfactory.

"Our aim," he declared, "is the establishment of a service in which we retain our professional independence. It is better said like that—as a whole—rather than by speaking of individual things like losing goodwill, or direction, or basic salary."

Explaining what he meant by professional independence, Dr. Dain said he had in mind such things as the power of the Minister to do anything he liked, change anything he liked, just by putting a paper on the table of the House of Commons to say he had done it, so that unless someone got up and raised a row in the House nothing could be done about it. This situation could be modified without destroying the Act or the Service if they proceeded about it in the proper way.

These and other matters could be dealt with in the Act without destroying the framework of the Service, and Dr. Dain hoped that the Representative Meeting would express views along these lines. He hoped that they would be able to agree some day with the Government, or with some Government, on a form of service in which their freedoms as well as the patients' and the Minister's were properly provided for.

Suggested Amendments

Dr. D. S. Robertson, Edinburgh, put to the meeting an amendment asking that a clause be inserted in the Council's recommendation to the S.R.M. to the effect that they were

willing to co-operate with the Government and reopen negotiations, this amendment being later altered to replace the word "reopen" with the words "take part in." Similar amendments from the City of Aberdeen and Lothian Divisions were merged with the Edinburgh one. Dr. Robertson emphasized that the amendment left intact the main part of the Council's motion, but it emphasized in a positive rather than a negative way their desire to participate in a health service which would be fair to the profession and good for the nation.

Dr. J. Inglis Cameron, Glasgow, led several speakers in disapproving of the Edinburgh proposal. Dr. Cameron said that offering to take part in negotiations would be taken to mean that they were giving way.

Prof. R. S. Aitken, Aberdeen City, said the Aberdeen Executive felt that from the position of strength in which the plebiscite placed them they ought to approach the Government and offer to reopen negotiations.

Dr. Dain said the Council's resolution had been received by the public as a very statesmanlike resolution. He again deprecated suggestions for more fierce and warlike action and said that the Representative Body hoped the Government would make it possible for the profession to co-operate. He had heard nothing in the discussion that would improve the words of the motion.

The Edinburgh amendment was lost when put to the vote. The meeting also rejected two subsidiary amendments—one suggesting that the phrase "integrity of medicine" be replaced by "independent status of medicine," and another suggesting the addition of the words "and Parliament" after the word "Government" in the first clause of the Council's motion.

Proposing a motion by the City of Aberdeen that service under the National Health Service Acts should be accepted by the profession only when terms of the whole service, including those of the consultants and specialists, were known, Dr. H. G. McPherson, Stonehaven, said specialists had sided with the general practitioners in holding out against the Act and they wanted the assurance that the general practitioners would not accept service under the Act, or the amended Act, until the specialists had a chance of knowing their terms of service. Mention was made of the length of time it might take to have the report on the specialists' terms, but Dr. Dain gave an undertaking that everything would be done to see that the specialists and general practitioners' terms were properly related to one another.

Scottish Negotiating Committee

The meeting adopted a motion from Caithness and Sutherland asking that all future negotiations concerning administration under the Scottish Act should be dealt with by a Scottish Negotiating Committee in Scotland.

OPHTHALMOLOGICAL SOCIETY OF AUSTRALIA

The Ophthalmological Society of Australia will hold its eighth Annual General and Scientific Meeting at Perth, Western Australia, on Aug. 15–21, in conjunction with the sixth Session of the Australasian Medical Congress (British Medical Association). The Society would cordially welcome members of the British Medical Association Section of Ophthalmology. Intending visitors are asked to get further information from the Congress Office, 230, St. George's Terrace, Perth, Western Australia.

TRADE UNION MEMBERSHIP

The following is a list of local authorities which are understood to require employees to be members of a trade union or other organization :

Metropolitan Borough Councils.—Fulham, Hackney, Poplar.

Non-County Borough Councils.—Dartford, Radcliffe (limited to future appointments), Tottenham, Wallsend.

Urban District Councils.—Denton, Droylsden, Houghton-le-Spring, Huyton-with-Roby, Portslade, Redditch (restricted to new appointments), Tyldesley.

Scottish Burghs.—Motherwell and Wishaw.

Association Notices

Diary of Central Meetings

APRIL

8 Thurs. Publishing Subcommittee, 11 a.m.

Meetings of Branches and Divisions

KENYA BRANCH

The Annual General Meeting was held in the Medical Research Laboratory on Feb. 5, with Dr. Paterson in the chair and 41 members present.

The Hon. Treasurer gave a report on the position of *E.A.M.J.*, and proposed that the Branch give a grant of £20 to the Journal. This was approved. Officers for the ensuing year were then elected as follows: President: Dr. R. Guy Johnson (*vice* Dr. A. R. Paterson); President-Elect: Dr. E. A. Trim; Vice-President: Dr. Mary Harris; Hon. Treasurer: Dr. J. A. Carman; Hon. Secretary: Dr. A. Mck. Fleming; Council: Dr. G. V. Anderson, Dr. A. R. N. Dhanji, Dr. R. S. McElroy, Dr. G. E. Nevill, Dr. A. R. Paterson (*ex officio*), Dr. P. G. Preston, Dr. A. T. G. Thomas.

Mr. Gay French moved that "this Branch of the B.M.A. deprecates strongly the action of the Colonial Secretary in granting indiscriminate priorities, especially to the groundnut scheme and the Army, which reacts to the detriment of the civilian population of Kenya, with particular reference to the recent grave shortage of nitrous oxide gas." This motion was unanimously approved. The meeting further instructed the Council to take such action as may be possible to rectify this, and further to take notice of the serious shortage of medical supplies in general in the Colony.

Dr. Johnson's presidential address took the form of a programme of two cinema films: (*a*) D.D.T. against Malaria, prepared by the Medical Department of Kenya; (*b*) Surgery of the Chest. Dr. Trim moved a very hearty vote of thanks to the President for the trouble he had taken to obtain and show these films.

LINCOLN DIVISION

A General Meeting of the Division to which all practitioners in the area were invited was held on March 5, with Dr. A. M. Maiden in the chair. Thirty-two members and non-members were present.

The meeting considered Council's recommendations to the S.R.M., and the chairman read the resolution that was to be put forward. Dr. Wray thought the motion very mild and acceptable to everybody. Dr. Cheshire thought that of Council's four points the two important ones were ownership of goodwill and the question of basic salary. He proposed that the Division should instruct its representative that he should stand firm against any basic salary and against abolition of the buying and selling of practices. This was seconded by Dr. Semple. Dr. Wray thought that to stand by the buying and selling of practices was wrong, particularly as all parties had supported the abolition and there had been a majority in favour of this at the previous plebiscite. Mr. Briggs said that most of us at that time had not studied the question sufficiently nor realized its implications, and the previous vote was therefore not of much value. Dr. Robertson thought that if Dr. Wray held such views he was not suitable to represent the Division. Dr. Wray said that as the Division's representative he would of course vote according to their wishes, but feeling as he did he could not get up and speak with conviction on the subject. He then offered to resign.

After discussion it was proposed and seconded that "this meeting has full confidence in Dr. Wray and that he should continue to represent us." This was carried by 19 votes to 7. Dr. Cheshire's proposition was then put before the meeting and was carried without dissent. Dr. Robertson proposed that Dr. Cheshire's resolution be sent up as a motion for the S.R.M. agenda and this was seconded by Dr. Wray. On a show of hands, the resolution was lost by 19 to 3. Next, the meeting approved the establishment of the Independence Fund. Finally, the meeting agreed that in other matters their representative should follow the lead of Council.

NORTH-EAST ESSEX DIVISION

Dr. Douglas Guthrie gave a B.M.A. lecture on "The Patient as a Factor in the History of Medicine" before a combined meeting of the Colchester Medical Society and the North-east Essex Division on March 4. The meeting was preceded by the regular monthly dinner of the Medical Society, to which members of the B.M.A. were invited.

Dr. Guthrie reminded his audience that while the stories of great advances in the history of medicine and surgery generally recorded the names of the doctors concerned, the names of the patients on whom their theories were tested were seldom mentioned. A few indeed were known and deserved honour, such as Mrs. Crawford, who heroically permitted Ephraim McDowell to perform on her the first successful ovariotomy. There must be many such whose names are unknown. He then reviewed some instances, from an Egyptian mummy to Queen Victoria, where the names of the patients were known. Some, such as Joseph Meister, who had been successfully inoculated against rabies by Pasteur, though honoured in their day, came to a tragic end. He also mentioned some of the medical men who had recorded their own experiences as patients—for instance, Dr. Mark, who suffered from acromegaly, and John Hunter, who inadvertently inoculated himself with syphilis.

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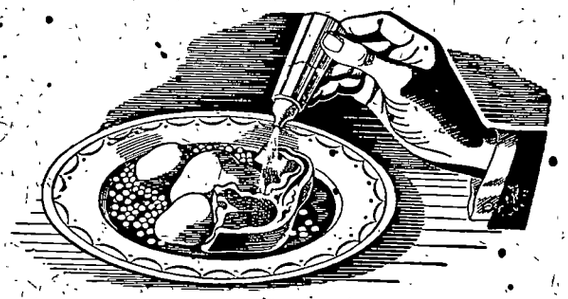

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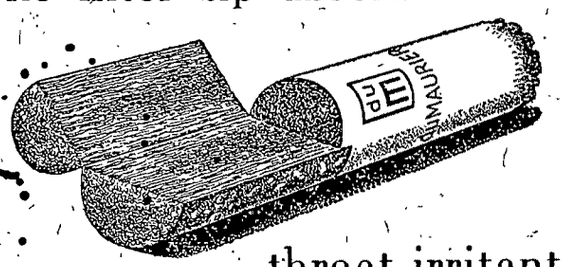

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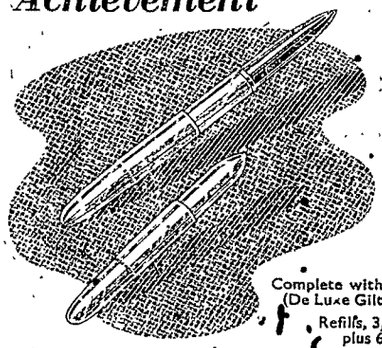

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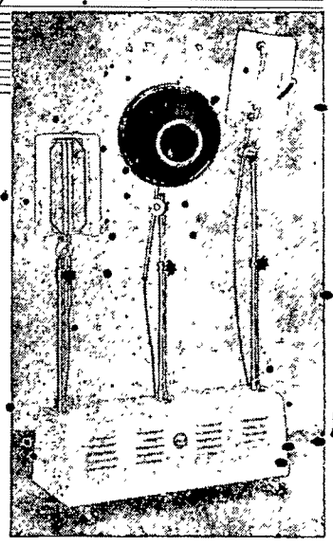

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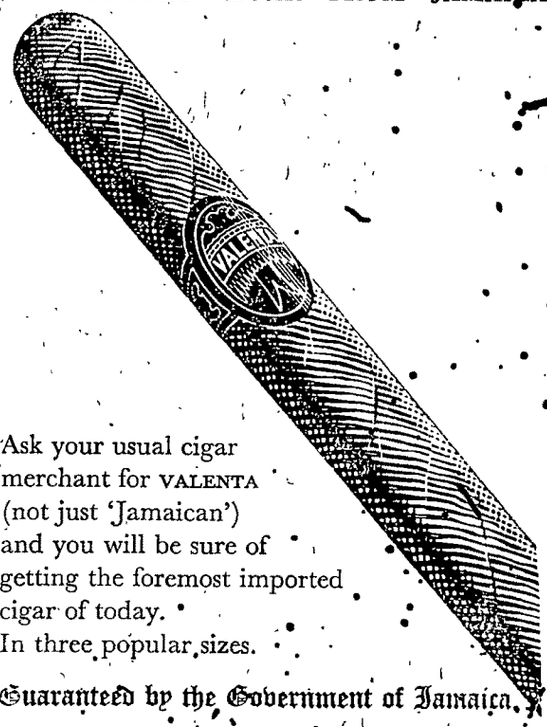

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★ *SERVICE MEMBERS may have difficulty in supplying recent testimonials, but this should not deter them from applying*

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R—Male, liable to military service under the National Service Acts.
W—Women practitioners.

APPOINTMENTS

HIS MAJESTY'S COLONIAL SERVICE
COLONIAL MEDICAL SERVICE

The Colonial Medical Service offers an interesting career and provides unique opportunities for applying medical science in territories which are undergoing rapid development. There are immediate openings in many parts of the Colonial Empire and applications are invited from both men and women doctors who are British subjects and possess qualifications registrable in the United Kingdom. Medical Officers are usually appointed in the first instance for general duties. This implies all-round ability, with a balanced outlook upon both preventive and curative medicine. Officers are also required for public health duties, in which case the D.P.H. or some experience of health work is necessary. Ample opportunities exist for field investigation, while officers with special aptitude are encouraged to obtain such higher qualifications as will enhance their value to the Service. Officers are from time to time seconded or appointed to medical laboratories in the larger territories. In the West African territories improved salary scales and conditions of service have recently been introduced. In most of the other territories the terms of service are being actively reviewed, and meanwhile temporary cost-of-living allowances are being paid over and above the existing salaries. At present initial *basic* salaries, i.e. irrespecuve of any cost-of-living allowance and of any credit that may be allowable for war service or professional experience, vary between £600 and £800 according to locality. There are, in addition, numbers of super-scale posts in the administrative and specialist grades which are normally filled by promotion within the Service. Free passages for an officer and wife are generally provided both on first appointment and when travelling on leave of absence. Where Government quarters are provided a small rent is usually payable. Good leave conditions and an adequate pension scheme are in force. The Colonial Medical Service is a unified service and members are eligible for transfer from one territory to another, either with or without promotion. Selected candidates may be required to take a course in tropical medicine either before proceeding overseas (in which case they would receive an allowance) or on first leave. Candidates for permanent service must have been born on or after January 1, 1908. Contract appointments are also available in certain territories for doctors born before this date. Further particulars may be obtained from, and applications should be addressed to, the Director of Recruitment (Colonial Service), Colonial Office, 15, Victoria Street, London, S.W.1

NATAL PROVINCIAL ADMINISTRATION
GREY'S HOSPITAL, Pietermaritzburg, Natal
FULL-TIME OPHTHALMOLOGIST

Applications are invited from suitably qualified medical practitioners for appointment to a post of full time Ophthalmologist to Grey's Hospital, Pietermaritzburg, Natal. The post is on three years contract with salary at the rate of £1,600 per annum plus cost-of-living allowance, the present rate being £84 per annum for a married man or £28 per annum for a single man. Return passage by sea will be paid together with half salary during the voyage to South Africa. Applications should be sent by Air Mail to the Director of Provincial Medical and Health Services, Box 20, Pietermaritzburg, from whom further particulars may be obtained, to reach him by April 30, 1948.

DEPARTMENT OF HEALTH FOR SCOTLAND
STRACATHRO HOSPITAL, Brechin, Angus
MEDICAL OFFICER

The Department of Health for Scotland invite applications for the post of Medical Officer in charge of laboratory services at Stracathro Hospital, Brechin, Angus. Applicants should have had substantial experience of general hospital laboratory work including biochemistry, histology and blood work. Salary scale £750 to £1 000 non-resident; placing according to qualifications and experience. A charge of £100 per annum is made for board and lodging if the appointee lives in the hospital. Application forms, which must be lodged by April 9, 1948, may be had from the Department of Health for Scotland, Room 130, St. Andrew's House, Edinburgh, 1.

UNIVERSITY OF BRISTOL
AND BRISTOL EYE HOSPITAL
HONORARY OPHTHALMIC SURGEON

The University of Bristol, in conjunction with the Bristol Eye Hospital, invites applications for the post of Honorary Ophthalmic Surgeon at the hospital. Applications stating age, nationality, qualifications and experience, together with the names of three referees and copies of not more than three recent testimonials, should reach the undersigned not later than May 3, 1948.—Winifred Shapland, Secretary and Registrar, The University, Bristol, 8.

MANCHESTER REGIONAL HOSPITAL BOARD
Mental Health Services
REGIONAL ADVISER IN PSYCHIATRY

The Board invites psychiatrists of senior consultant status, desirous of being considered for the part-time salaried post of Regional Adviser in Psychiatry, to submit particulars of their qualifications and experience not later than April 16, 1948, to the Senior Administrative Medical Officer, Third Floor, Sunlight House, Quay Street, Manchester, 3, from whom further information may be obtained. In the case of an officer not holding a whole-time post, the salary will be at the appropriate proportion of £2,000 per annum. Whole-time officers may be seconded by arrangement with their present employers.

ASSISTANT SENIOR MEDICAL OFFICER

Applications are invited for the whole-time post of Assistant Senior Medical Officer at a salary of £1,450 by £50 to £1,650 per annum, subject to 6% deduction for superannuation purposes. Applicants should have had clinical and administrative experience of mental diseases and mental deficiency. The successful candidate will be required primarily to devote as much time as may be necessary to the administrative aspects of the Mental Health Services under the general direction of the Senior Administrative Medical Officer, and he may be required to undertake other administrative duties in connexion with the hospital and specialist services. Applications, with particulars of qualifications and experience, together with the names of three referees, should be submitted to the undersigned not later than April 16, 1948. Further particulars on request.—J. Gibbon, Secretary of the Board, Third Floor, Sunlight House, Quay Street, Manchester, 3

AUCKLAND UNIVERSITY COLLEGE
Auckland, New Zealand
CHAIR OF OBSTETRICS AND GYNAECOLOGY

Applications are invited for the Chair of Obstetrics and Gynaecology. The Chair has recently been established and the appointment to be made will be the first appointment to the Chair. The Chair is a Postgraduate Chair, and has been endowed by the raising of public subscriptions of a sum of approximately £100,000. The Professor will act as Medical Director of the Obstetrical and Gynaecological Hospital recently established by the Auckland Hospital Board. Salary £2,250 per annum (N.Z. currency). Allowance for travelling expenses up to £150 for a single man and £300 for a married man. Appointment is for five years with renewal thereafter indefinitely until applicant reaches the age of 65 years. Further particulars may be obtained from the Secretary, Universities Bureau of the British Empire, 8, Park Street, London, W.1. Closing date for the receipt of applications is June 30, 1948.

AYR COUNTY COUNCIL
COUNTY LABORATORY, CENTRAL HOSPITAL
Irvine
JUNIOR ASSISTANT BACTERIOLOGIST (B1)

Applications are invited for the post of Junior Assistant Bacteriologist (B1) at the County Laboratory, Central Hospital, Irvine, at a salary scale of £415 by annual increments of £25 to £540 with a special advance on completion of six months' qualifying service. The post is superannuable. Applicants should be registered medical practitioners desiring to specialize in laboratory work. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should state qualifications and medical experience since graduation with dates and should be accompanied by copies of three recent testimonials. They should reach the County Clerk, County Buildings, Ayr, not later than April 12, 1948.

BOROUGH OF LLANELLY
MEDICAL OFFICER OF HEALTH

Applications are invited from registered medical practitioners for the above-mentioned permanent appointment. Salary is at the rate of £1,040 per annum plus £59 16s. per annum cost-of-living bonus. The Local Government Superannuation Act, 1937, will apply, and the successful candidate will be required to pass a satisfactory medical examination. Applicants must hold a Diploma in Public Health, Sanitary Science or State Medicine. The appointment will be subject to the Sanitary Inspectors (Outside London) Regulations, 1935, and Section 110 of the Local Government Act, 1933. The person appointed will be required to undertake the performance of the duties prescribed in Regulation 17 of the above-mentioned Regulations and will not be permitted to engage in private or consultant practice. He will be required to give at least one month's notice before resigning his office. Applications should be forwarded to reach the undersigned not later than April 7, 1948. Envelopes should be marked "Medical Officer of Health."—David J. Phillips, Town Clerk, Town Hall, Llanelly.

CITY AND COUNTY OF NEWCASTLE-UPON-TYNE
SENIOR CHILD WELFARE MEDICAL OFFICER

Applications are invited for the appointment of Senior Child Welfare Medical Officer to the City at a salary ranging from £1,200 to £1,500 per annum by annual increments of £50, commencing salary according to experience. The officer appointed will not be concerned with the administration of the City's Maternity Scheme, but will be required to devote his or her attention entirely to the supervision of the Child Welfare Services. Applicants for the appointment:—(a) must have been qualified at least three years; (b) must have experience in child welfare work; (c) must have held a resident appointment in a recognized teaching children's hospital. The Child Welfare Scheme of the City is organized in such a way as to provide special opportunities for research work in sociological and clinical problems. A very close relationship exists between the City's Child Welfare Service, the City General Hospital and other associated Hospitals working with the Professor of Child Health of the University. The successful candidate will be appointed to a part-time clinical post at the Newcastle General Hospital by arrangement with the appropriate authorities. For the purposes of the Local Government Superannuation Act, 1937, the successful candidate is required to pass a medical examination. Canvassing either directly or indirectly will be considered a disqualification. Applications endorsed "Senior Child Welfare Medical Officer" stating age, qualifications, together with full details of the officer's training and experience and particulars of present and past appointments, should be accompanied by three recent testimonials and the names of three persons to whom reference can be made, and must be addressed to the Medical Officer of Health, Health Department, Town Hall, Newcastle-upon Tyne, 1, to reach him not later than April 10, 1948.—John Atkinson, Town Clerk, Town Hall, Newcastle-upon-Tyne, 1.

AMENDED ADVERTISEMENT

CITY OF COVENTRY
Health Department
SENIOR ASSISTANT MEDICAL OFFICER
for Maternity and Child Welfare

Applications are invited from registered women medical practitioners for the vacant post of Senior Assistant Medical Officer for Maternity and Child Welfare. Candidates should hold the D.P.H. or equivalent, and have had considerable administrative experience in all branches of Maternity and Child Welfare work. The possession of either the D.R.C.O.G. or the D.C.H. would be considered an advantage. The officer appointed will be responsible to the Medical Officer of Health for the administration of the Maternity and Child Welfare Service of the Department, but may be required to carry out such other duties of the Department as the Medical Officer of Health may direct. The salary for the post will be £1,025 per annum rising by three annual increments of £50 and one of £37 10s. to £1,212 10s., which includes consolidated war bonus. A car allowance is also paid in accordance with the Council's scale. The appointment is subject to the Local Government Superannuation Act, 1937, and the successful applicant will be required to pass a medical examination and to contribute to the superannuation fund. Applications, supported by copies of two recent testimonials, should be sent to the undersigned not later than April 15, 1948.—T. Morrison Clayton, Medical Officer of Health, The Council House, Coventry.

CITY OF NORWICH
ISOLATION HOSPITAL
ASSISTANT MEDICAL OFFICER OF HEALTH
ASSISTANT SCHOOL MEDICAL OFFICER, AND RESIDENT MEDICAL OFFICER

Applications are invited for the post of Assistant Medical Officer of Health, Assistant School Medical Officer, and Resident Medical Officer at the Isolation Hospital. Salary £675 per annum (including emoluments valued at £150 per annum) rising to £875 per annum, plus bonus. For particulars apply to the Medical Officer of Health, 68, St Giles' Street, Norwich, by whom applications for the post must be received not later than April 10, 1948.

CITY OF BRADFORD
MUNICIPAL GENERAL HOSPITAL, St. Luke's
RESIDENT OBSTETRIC OFFICER

Applications are invited from registered medical practitioners for the following appointment, Resident Obstetric Officer. Salary £350 per annum, plus full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also holding B1 and ineligible for H.M. Forces may apply. This appointment is limited to one year.—W. H. Leathem, Town Clerk, Town Hall, Bradford.

COUNTY BOROUGH OF BIRKENHEAD
BIRKENHEAD MUNICIPAL (GENERAL) HOSPITAL (522 beds)
DEPUTY MEDICAL SUPERINTENDENT (B1)

Applications are invited from registered medical practitioners for the above appointment. The remuneration attached to the appointment is £607 10s. per annum, rising by annual increments of £25 to a maximum of £707 10s. per annum plus bonus, together with board, residence and laundry. The post offers exceptional opportunities for acquiring experience in surgery and general hospital administration, and candidates should be capable of performing major surgical operations and possess a higher qualification in surgery. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is subject to the Local Government Superannuation Act, 1937. Forms of application and further particulars relating to this appointment may be obtained from the Medical Officer of Health, 9, Hamilton Square, Birkenhead. Canvassing directly or indirectly will disqualify an applicant. Applications endorsed "Deputy Medical Superintendent" should reach the undersigned not later than April 10, 1948.—E. W. Tame, Town Clerk, Town Hall, Birkenhead.

COUNTY BOROUGH OF STOCKPORT
STEPPING HILL HOSPITAL
Resident ASSISTANT OBSTETRIC OFFICER (B1)

Applications are invited for the appointment of Resident Assistant Obstetric Officer (B1) at Stepping Hill Hospital. The salary will be £455 per annum, rising by annual increments of £25 to £555 per annum, plus emoluments valued at £120 per annum. The modification of the Interim Revision of the Askwith Memorandum is under consideration. The hospital is recognized for the purpose of the D.Obst. R.C.O.G. Applications from R practitioners now holding B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and the candidate appointed will be required to pass a medical examination. Applications should be sent in forthwith to the Medical Officer of Health, Town Hall, Stockport.

COUNTY BOROUGH OF WALSALL
MANOR HOSPITAL (333 beds)
SENIOR HOUSE PHYSICIAN (B1)

Applications are invited from registered medical practitioners (male and female) for the appointment of Senior House Physician (B1). Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C., but R practitioners now holding B2 appointments are invited to apply. Salary £472 10s. per annum, rising by £25 per annum to £572 10s. per annum, plus emoluments valued at £125 per annum, together with the current cost-of-living bonus. The appointment is subject to the provisions of the Local Government Superannuation Act 1937, and the successful candidate will be required to pass a medical examination. The officer appointed will act under the direction of the Medical Superintendent and perform such other duties as may be required. Applications should be sent as soon as possible to the Medical Superintendent, Manor Hospital, Walsall.

COUNTY BOROUGH OF WALSALL
MANOR HOSPITAL (333 beds)
JUNIOR HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners who now hold A posts, for the position of Junior House Physician (B2). If held by an R practitioner the appointment will be limited to six months. Salary the rate of £350 per annum, with full residential emoluments. Applications should be sent as soon as possible to the Medical Superintendent.

COUNTY BOROUGH OF CROYDON
WARLINGHAM PARK HOSPITAL
(for Nervous and Mental Disorders)
Warlingham, Surrey
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners (ladies and gentlemen), including R practitioners holding A posts, for the appointment of House Physician (B2) for a period of six months. Opportunity for experience in all branches of psychiatry, including out-patient work with psychoses, psychoneuroses, industrial psychiatry, delinquency and child guidance. Salary at the rate of £300 per annum with full residential emoluments, plus war bonus Apply to the Medical Superintendent.

COUNTY BOROUGH OF DERBY
ASSISTANT TUBERCULOSIS OFFICER

Applications are invited from registered medical practitioners for the appointment of a full-time Assistant Tuberculosis Officer. Applicants, who should have held resident general hospital and sanatorium posts, will be required to work under the direction of the Clinical Tuberculosis Officer at the Borough Chest Centre. Experience in the diagnosis of pulmonary tuberculosis, and the various forms of treatment, is essential. Salary is at the rate of £675 per annum, rising by annual increments of £25 to £875 per annum, plus bonus. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to a satisfactory medical examination. Applications should be sent immediately to Acting Medical Officer of Health, The Council House, Derby.—C. Ashton, Town Clerk.

COUNTY BOROUGH OF DERBY
ASSISTANT MEDICAL OFFICER (male)

Applications are invited for the post of Assistant Medical Officer in the Public Health and School Medical Department. Salary £735 per annum, rising by annual increments of £25 to £935 per annum. Applicants must be duly qualified registered medical practitioners, and the possession of the D.P.H., or D.C.H. is desirable though not essential. The duties of the post are the medical inspection of school children, the carrying out of work under the maternity and child welfare scheme, and such other duties as may be required by the Council. The officer appointed will be required to devote his whole time to the duties of the post, to act under the instructions of the Medical Officer of Health, and to reside within the Borough. The appointment is subject to the Local Government Superannuation Act, 1937, and the selected candidate will be required to pass a medical examination. Age of applicant must not exceed 40 years. The appointment will be held during the pleasure of the Council, and is terminable by two months' notice on either side. Applications (no form issued) endorsed "Assistant Medical Officer" should be forwarded at once to the Director of Education, Council House, Corporation Street, Derby.—C. Ashton, Town Clerk.

COUNTY BOROUGH
OF BARROW-IN-FURNESS
Assistant MEDICAL OFFICER OF HEALTH
(Child Guidance Centre)

Applications are invited for the above appointment at an inclusive salary at the rate of £675 per annum rising subject to satisfactory service by annual increments of £25 to £875 per annum plus cost-of-living bonus. Commencing salary will be determined in the light of individual qualifications and experience. Candidates must be fully qualified registered medical practitioners (male or female) and preference will be given to those possessing the D.P.M. and/or experience enabling him/her to act as part-time Child Psychiatrist at the Child Guidance Centre. The other duties will be in connexion with the School Health and Maternity and Child Welfare Services and any other duties required by the Medical Officer of Health. The appointment is subject to the Corporation's general service conditions and the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination. Forms of application and particulars of duties may be obtained from the Medical Officer of Health, Town Hall, Barrow-in-Furness. Completed applications endorsed "Assistant Medical Officer of Health" accompanied by copies of not more than three recent testimonials must be returned to my office within fourteen days of the appearance of this advertisement. Canvassing is strictly prohibited and will disqualify and no candidate summoned for interview, who is not prepared to accept the position without qualification whether it be offered to him or not will be paid his expenses.—W. Lawrence Allen, Town Clerk.

COUNTY BOROUGH OF IPSWICH
DEPUTY MEDICAL OFFICER OF HEALTH AND SCHOOL MEDICAL OFFICER

Applications are invited for the appointment of Deputy Medical Officer of Health and School Medical Officer in the Public Health Department. Applicants must be registered medical practitioners holding the Diploma of Public Health. The person appointed will be required to devote the whole of his time to the duties of the office under the direction of the Medical Officer of Health. The appointment is subject to the provisions of the Local Government Superannuation Act, 1937, and to the passing of a medical examination. Salary scale will be £960 per annum rising by annual increments of £50 to £1,160. A car allowance will be paid. Application forms and conditions of service, which can be obtained upon application to me, must be returned to me not later than April 9, 1948. Canvassing will disqualify.—J. G. Barr, Town Clerk, Town Hall, Ipswich.

COUNTY BOROUGH OF IPSWICH
BOROUGH GENERAL HOSPITAL (312 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male or female), including R practitioners within three months of qualification, for the post of House Surgeon (A). Salary £250 per annum plus full residential emoluments. Appointment for six months to R practitioners, otherwise may be extended. Applications to the Acting M.O.H., P.H. Dept., Elm Street, Ipswich.

COUNTY OF LINCOLN—PARTS OF LINDSEY
WHOLE-TIME PSYCHIATRIST (MALE)

Applications are invited from registered medical practitioners possessing the Diploma in Psychological Medicine for the post of whole-time Psychiatrist (male) in connexion with the Child Guidance Service in the County Boroughs of Grimsby and Lincoln and the administrative County of Lindsey. Salary in accordance with the Interim Askwith Award, i.e., £975 per annum, rising by biennial increments of £50 to £1,162 10s., plus bonus at present £59 16s. per annum. The person appointed will be required to provide a car for the use of which a travelling allowance on the County Council's scale will be paid. Forms of application can be obtained from the undersigned to whom applications, with copies of two recent testimonials, should be submitted as soon as possible.—W. S. H. Campbell, County Medical Officer of Health, County Offices, Lincoln.

COUNTY BOROUGH OF MIDDLESBROUGH
Public Health Department
MUNICIPAL MATERNITY HOSPITAL (59 beds)
RESIDENT MEDICAL OFFICER (B1) (Female)

Applications are invited from registered medical practitioners (female) for the appointment of Resident Medical Officer (B1) at the above Maternity Hospital. The hospital is a Part I Midwifery Training School. The work is supervised by a Consultant Obstetrician and good experience is afforded in obstetrical work. Salary is £455 per annum, rising by £25 to £555 per annum, plus cost-of-living bonus together with full residential emoluments valued at £150 per annum. Ministry of Health Circular 12/48 is at present under consideration. The appointment, which is subject to the Local Government Superannuation Act, 1937, will be for a period of twelve months in the first instance and will be renewable. It is subject to three months' notice on either side and the successful candidate will be required to pass a medical examination. Applications should be sent to the Medical Officer of Health, Municipal Buildings, Middlesbrough, not later than Wednesday, April 7, 1948.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough.

COUNTY BOROUGH OF MIDDLESBROUGH
Public Health Department
MUNICIPAL MATERNITY HOSPITAL (59 beds)
SECOND RESIDENT MEDICAL OFFICER (B2) (Female)

Applications are invited from registered medical practitioners (female) for the appointment of Second Resident Medical Officer (B2) at the Maternity Hospital. The hospital is a Part I Midwifery Training School. The work is supervised by a Consultant Obstetrician, and good experience is afforded in obstetrical work. Salary is £350 per annum, plus cost-of-living bonus, together with full residential emoluments valued at £150 per annum. The appointment, which is subject to the Local Government Superannuation Act, 1937, will be for a period of 12 months in the first instance and the successful candidate will be required to pass a medical examination. Applications should be sent to the Medical Officer of Health, Municipal Buildings, Middlesbrough, not later than Wednesday, April 7, 1948.—E. C. Parr, Town Clerk, Municipal Buildings, Middlesbrough.

COUNTY OF NORTHUMBERLAND
ST. GEORGE'S MENTAL HOSPITAL, Morpeth
Resident ASSISTANT MEDICAL OFFICER (B1)

The Visiting Committee of the Northumberland Mental Hospital invite applications from registered medical practitioners (male or female) for the appointment of Resident Assistant Medical Officer at the above hospital. The salary will be £472 10s. a year, rising by annual increments of £25 to £572 10s. a year, plus a variable cost-of-living bonus (at present £30 1s. 4d a year) and full residential emoluments valued for superannuation purposes at £150 a year. Previous psychiatric experience is not essential as all facilities for training are available at the hospital, but the above salary will be increased by £50 a year should the successful candidate possess a Diploma in Psychological Medicine, and if the practitioner appointed does not already possess the Diploma he or she will be expected to obtain it within three years. Full particulars of the terms of appointment and forms of application may be obtained from the undersigned, to whom all applications must be sent immediately.—E. P. Harvey, Clerk of the Visiting Committee, County Hall, Newcastle-upon-Tyne, 1.

COUNTY BOROUGH OF ROTHERHAM
MUNICIPAL GENERAL HOSPITAL
Resident ASSISTANT MEDICAL OFFICER (A)

Applications are invited from fully registered medical practitioners (including practitioners within three months of qualification and who are liable for service under the National Service Acts), for the above appointment. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, together with full residential emoluments and a temporary cost-of-living bonus in accordance with the Council's scale. Forms of application may be obtained from the Medical Superintendent, Municipal General Hospital, Moorgate, Rotherham, and must be returned to the undersigned, endorsed "Resident Assistant Medical Officer," as soon as possible.—John S. Wall, Town Clerk, Municipal Offices, Rotherham.

COUNTY BOROUGH OF HUDDERSFIELD
ASSISTANT MEDICAL OFFICER OF HEALTH (female) for Maternity and Child Welfare purposes

Applications are invited for the above appointment from candidates who have had special experience in ante-natal work and in the care of infants. Salary in accordance with the revised Askwith Scale. Position subject to the provisions of the Local Government Superannuation Act, 1937, and the successful candidate will be required to pass a medical examination before being appointed. Applications should be sent to the Medical Officer of Health, Public Health Department, Huddersfield, not later than March 31, 1948 Application forms are not provided.—Harry Bean, Town Clerk, Town Hall, Huddersfield.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

COUNTY BOROUGH OF WOLVERHAMPTON
NEW CROSS HOSPITAL
ASSISTANT MEDICAL OFFICER (B2)

Applications are invited from male registered practitioners for the above appointment, including R practitioners who now hold A posts. Duties are mainly medical. Salary (inclusive of cost-of-living bonus) is at the rate of £355 per annum with full residential emoluments. If held by R practitioners the post will be for a period of six months, otherwise it will be for twelve months. Applications should be addressed to the Medical Superintendent of the hospital.—J. Brock Allon, Town Clerk, Town Hall, Wolverhampton.

COUNTY BOROUGH OF PRESTON
Sharoe Green Hospital (260 beds)
Junior RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (female) for the appointment of Junior Resident Medical Officer (A). The appointment will be for six months but may be renewed for a further period of six months. Salary will be fixed at a rate between £200 and £300 per annum with full residential emoluments, according to qualifications and experience. Applications should be sent as soon as possible to the Medical Superintendent, Sharoe Green Hospital, Fulwood, Preston.—W. E. E. Lockley, Town Clerk, Municipal Building, Preston.

CHESHIRE COUNTY COUNCIL
ASSISTANT MEDICAL OFFICERS

Applications are invited for four posts of Assistant Medical Officer within the County of Cheshire. The duties will be concerned with school medical inspection and Child Welfare Centres, and will be in the following Districts of the County:—Altrincham, Macclesfield, South Cheshire and Wirral. Applications, on forms which can be obtained from the undersigned, should be completed, accompanied by the names of three referees, and returned not later than April 10, 1948. The salary attached to the posts is £675 rising by annual increments of £25 to £875 per annum plus bonus, at present £60 per annum.—Arnold Brown, County Medical Officer, Public Health Department, 24, Nicholas Street, Chester.

DIVISIONAL ADMINISTRATION OF PREVENTIVE MEDICAL SERVICES IN THE ADMINISTRATIVE COUNTY OF THE WEST RIDING OF YORKSHIRE
JOINT APPOINTMENT OF DEPUTY MEDICAL OFFICERS OF HEALTH AND DEPUTY DIVISIONAL MEDICAL OFFICERS
To the Kirkburton, Meltham, Denby Dale, Holmfirth and Colne Valley Urban District Councils and the West Riding County Council
To the Maltby Urban, Kiveton Park Rural and Rotherham Rural District Councils and the West Riding County Council

The Deputy Medical Officer of Health will work under the direction of the Divisional Medical Officer, who is responsible for the day to day administration and execution of all, or practically all, public health matters in the Division, and the post is suitable for medical officers who hold the Diploma in Public Health and who wish to get some administrative experience in the public health services. The salary attached to the post is at present £650 to £850 plus cost-of-living bonus according to the County Council Scale, in respect of the duties to be carried out as Assistant County Medical Officer, and with an additional £100 per annum in respect of the duties of Deputy Medical Officer. The modification of the Interim Revision of the Askwith Memorandum is under consideration. Travelling and subsistence allowances are in accordance with the County Council Scales. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the successful candidate passing a medical examination as to his physical fitness. Forms of application may be obtained from the undersigned and should be forwarded to the County Medical Officer, Public Health Department, County Hall, Wakefield, not later than March 31, 1948.—Fraser Brockington, County Medical Officer.

ESSEX COUNTY COUNCIL
Public Health Department
SENIOR MEDICAL OFFICER

Applications are invited from registered medical practitioners for the above whole-time appointment on the central staff of the Council's Public Health Department. The duties of the person appointed will be chiefly those relative to the administration of school medical and child health services and previous experience in the central administration of such services is essential. Remuneration will be at the rate of £1,000 a year rising, subject to satisfactory service, by annual increments of £50 to £1,250 a year, plus such bonus (if any) as may be determined from time to time by the Council. Applications (on the prescribed form obtainable from the undersigned) accompanied by non-returnable copies of three recent testimonials should be addressed to me and delivered at the County Hall, Chelmsford, not later than April 8, 1948. Full information should also be given as to the applicant's position in relation to military service. Canvassing, whether directly or indirectly, will disqualify a candidate.—John E. Lightburn, Clerk of the County Council, County Hall, Chelmsford.

EAST SUFFOLK COUNTY COUNCIL
ASSISTANT COUNTY MEDICAL OFFICER AND MEDICAL OFFICER OF HEALTH
for Stowmarket Urban District and Gipping and Samford Rural Districts

Applications are invited for the joint permanent appointment of Assistant County Medical Officer and Medical Officer of Health for Stowmarket Urban District and Gipping and Samford Rural Districts. The salary is £1,100 per annum, together with car allowance according to the County Council scale. Duties will include school medical inspection, maternity and child welfare work, tuberculosis, and general public health. The possession of the Diploma in Public Health is essential, and former experience with a Local Authority would be an added qualification. The appointment is subject to the provisions of the Sanitary Officers (Outside London) Regulations, 1935, and the Local Government Superannuation Act, 1937. The successful candidate will be required to pass a medical examination. Forms of application and any further information can be obtained on application to the County Medical Officer of Health, County Hall, Ipswich, to whom all applications should be returned as soon as possible.—G. C. Lightfoot, Clerk of the County Council, County Hall, Ipswich.

GLOUCESTERSHIRE COUNTY COUNCIL
SENIOR ASSISTANT COUNTY MEDICAL OFFICER OF HEALTH

The Gloucestershire County Council invite applications for the appointment of Senior Assistant County Medical Officer of Health (female), age not to exceed 45 years, at a salary of £850 per annum rising by four annual increments of £25 to £950 per annum, plus bonus £48, together with travelling and subsistence allowances in accordance with the County scale. Applicants must be registered medical practitioners. The possession of a Diploma in Public Health would be an advantage. The appointment will be subject to the Local Government Superannuation Act, 1937, and to a satisfactory medical report by the Council's Medical Adviser. Forms of application, with particulars of duties and conditions of appointment, may be obtained from the County Medical Officer of Health, 18, Berkeley Street, Gloucester, to whom completed applications, with copies of three recent testimonials, should be sent not later than April 17, 1948. Canvassing directly or indirectly will disqualify.—Guy H. Davis, Clerk of the County Council, Shire Hall, Gloucester.

GLOUCESTERSHIRE COUNTY COUNCIL
SUNNYSIDE MATERNITY HOSPITAL
Cheltenham
JUNIOR OBSTETRIC OFFICER (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the appointment of Junior Obstetric Officer (B2). This hospital of 63 beds deals with the majority of abnormal midwifery cases in North Gloucestershire and is recognized for the purposes of training for the D.R.C.O.G. Salary at the rate of £250 per annum with full residential emoluments. The appointment is for a period of six months in the first instance (limited to six months in the case of R practitioners) and will not exceed one year. The appointment is subject to the conditions of the Local Government Superannuation Act, 1937, and to a satisfactory medical examination by the Council's medical adviser. Applications should be sent to the County Medical Officer of Health, 18, Berkeley Street, Gloucester, as soon as possible.—Guy H. Davis, Clerk of the County Council, Shire Hall, Gloucester.

KINGSTON UPON HULL CORPORATION
Health Department
BEVERLEY ROAD HOSPITAL (432 beds)
JUNIOR HOUSE OFFICER (A), (Surgical)

Applications are invited from registered medical practitioners of either sex, including those now serving in H.M. Forces, for the appointment of Junior House Officer (A), (Surgical), tenable for one year. Salary £250 per annum, plus cost-of-living bonus and plus full residential emoluments. The Askwith Second Interim Revision at present under review. If non-resident, the salary is plus £150 per annum, in lieu of residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Forms of application, conditions of appointment, etc., may be obtained from, and the form should be returned duly completed to the Medical Officer of Health, Guildhall, Kingston upon Hull, as soon as possible.

KINGSTON UPON HULL CORPORATION
Health Department
ANLABY ROAD HOSPITAL (581 beds)
JUNIOR HOUSE OFFICER (A)

Applications are invited from registered medical practitioners of either sex, including those now serving in H.M. Forces, for the non-resident appointment of Junior House Officer (A), tenable for one year. Salary £250 per annum, plus cost-of-living bonus and plus £150 per annum in lieu of residential emoluments. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If such a practitioner is appointed the appointment will be limited to six months. Forms of application, conditions of appointment, etc., should be obtained from, and the form should be returned duly completed to the Medical Officer of Health, Guildhall, Kingston upon Hull, as early as possible.

KINGSTON UPON HULL CORPORATION
Health Department
ASSISTANT MEDICAL OFFICER OF HEALTH

Applications are invited from duly qualified men or women. The duties will be mainly in the School Health Service. The possession of a qualification in Public Health or of the Diploma in Child Health will be considered an advantage, but applications will also be accepted from candidates who do not possess these qualifications, but are either approved by the Ministry of Education for purposes of ascertainment of educationally subnormal pupils or possess such experience as will qualify them for approval by the Ministry. The salary scale is £750 to £850 by annual increments of £25 plus a cost-of-living bonus. The Askwith Second Interim Revision is at present under review. The commencing salary may be fixed at a rate higher than £750 plus bonus in the case of candidates who have had previous experience as an Assistant Medical Officer of Health or an Assistant School Medical Officer. Application forms may be obtained from the Medical Officer of Health, Guildhall, Kingston upon Hull, and should be returned not later than 10 a.m. on Wednesday, April 7, 1948.

GLAMORGAN COUNTY COUNCIL

Applications are invited from registered medical practitioners for the undermentioned appointments which are vacant at the County Council Hospitals:
(a) **EAST GLAMORGAN COUNTY HOSPITAL**
Church Village, near Pontypridd
TEMPORARY HOUSE SURGEON (A)
(b) **MID-GLAMORGAN COUNTY HOSPITAL**
Bridgend
TEMPORARY RESIDENT ASSISTANT MEDICAL OFFICER (B2)
TWO TEMPORARY HOUSE SURGEONS (A)
(duties mainly surgical)

R practitioners within three months of qualification may apply for the A posts, and R practitioners at present holding A appointments may apply for the B2 post, in which cases the appointments will be limited to six months. Salary is as follows plus prevailing cost-of-living bonus and full residential emoluments. (a) Temporary Resident Assistant Medical Officer (B2), £292 10s. rising by annual increments of £25 to £392 10s.; (b) Temporary House Surgeon (A), £260 per annum. All fees whatsoever received by the successful candidates must be handed over to the County Council. The appointments will be terminable by one month's notice on either side. Applications should be submitted to the County Medical Officer, Glamorgan County Hall, Cardiff, within 14 days of the publication of this advertisement.—A. Clifford Walter, Deputy Clerk of the County Council, Glamorgan County Hall, Cardiff.

HERTFORDSHIRE COUNTY COUNCIL
COUNTY SANATORIUM, Ware Park
JUNIOR RESIDENT MEDICAL OFFICER (B2)

Applications, including those from R practitioners holding A posts, are invited for the post of Junior Resident Medical Officer (B2) at the above Institution. The appointment will in the first instance be for six months only, and will be limited to six months if an R practitioner is appointed, and previous experience in the treatment of tuberculosis is not essential. Salary at the rate of £350 per annum plus emoluments. Applications should be sent to the Clerk of the County Council, County Hall, Hertford.

LIVERPOOL JOINT BOARD FOR CLINICAL PATHOLOGY
(University of Liverpool and Liverpool Associated Voluntary Hospitals Board)

Applications are invited for the following posts:

CLINICAL PATHOLOGIST at the Royal Liverpool Children's Hospital.

CLINICAL PATHOLOGIST at the Women's Hospital, Liverpool, jointly with duties in the University Department of Pathology as reference morbid histologist to the group of undergraduate teaching hospitals.

CLINICAL PATHOLOGIST at the Liverpool Maternity Hospital, jointly with duties in the University Department of Bacteriology as reference bacteriologist to the group of undergraduate teaching hospitals. The persons appointed will be members, together with others already appointed, of one team under the joint direction of the University Professors of Pathology and of Bacteriology and will have a recognized status as members of the University teaching staff. Some exchange of duties may from time to time be necessary. Salaries will be at the rate of £1,400 per annum, with membership of the Federated Superannuation Scheme for Nurses and Hospital Officers or the Federated Superannuation Scheme for Universities, as the case may be. Applications, giving the names of three persons to whom reference may be made, should reach the undersigned not later than April 17, 1948.—A. V. J. Hinds, Secretary, Joint Board for Clinical Pathology, 80, Rodney Street, Liverpool, 1.

BECKETT HOSPITAL AND DISPENSARY
Barnsley
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for this appointment, vacant now. Salary is at the rate of £225 per annum with full residential emoluments. Practitioners within three months of qualification may also apply when the appointment will be for six months. Applications should be sent immediately to Arthur L. Bodrne, Secretary-Superintendent.

LANCASHIRE COUNTY COUNCIL
Public Health Committee
COUNTY HOSPITAL
Whiston, Prescot, near Liverpool
HOUSE SURGEON (B2) (E.N.T.)

Applications are invited for the above appointment from registered medical practitioners (male and female) including R practitioners who now hold A posts. The hospital is approved for the D.L.O. If held by an R practitioner the appointment will be limited to a period of six months, otherwise the successful applicant will be eligible for re-appointment for a further period of six months. Salary is at the rate of £250 per annum, plus a cost-of-living bonus and full residential emoluments. Forms of application may be obtained from the County Medical Officer of Health, Hospital and Medical Department, County Offices, Preston, to whom they must be returned not later than Monday, April 5, 1948.—R. H. Adcock, Clerk of the County Council, County Offices, Preston.

MIDDLESEX COUNTY COUNCIL
NORTH MIDDLESEX COUNTY HOSPITAL
Edmonton, N.18
BACTERIOLOGIST

Bacteriologist required. Good general knowledge of pathology and considerable experience in bacteriology and immunology, also higher degree or diploma in medicine. General scope of duties arranged by Medical Director, may include teaching. Required to act as Deputy Medical Director if called upon. Inclusive salary £1,100 plus any temporary bonus (now £60 per annum) by £100 to £1,700 per annum; on proof of outstanding achievement, increments of £50 to £2,000 per annum may be granted. Exceptional circumstances may justify appointing above minimum. Any fees received to be paid to the County Council. Whole-time, established, pensionable, subject to medical examination. Non-resident but required to live near hospital. Further details from Medical Director. Applications with copies of up to two recent testimonials and referees to the undersigned by April 3, 1948 (quoting D.828, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
REDHILL COUNTY HOSPITAL
Edgware, Middlesex

(a) **CASUALTY OFFICER (B1) (male, resident)**, required May 1. Considerable all-round experience. R practitioners holding B2 posts eligible, those holding B1 posts ineligible unless rejected for H.M. Forces. Salary £350 per annum, plus any temporary bonus (now £30 per annum cash).

(b) **SENIOR HOUSE SURGEON (B2) (Resident, male)**, required May 1.

(c) **PAEDIATRIC HOUSE PHYSICIAN (B2) (Resident)**, required May 8.

(b) (c) R practitioners holding A posts eligible. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash). Board, lodging, laundry. All six months' appointments. Applications (no forms) to Medical Director of Hospital by April 3, 1948 (quoting D.830, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex, Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
WEST MIDDLESEX COUNTY HOSPITAL
Isleworth, Middlesex
SENIOR HOUSE OFFICER (B2)

Required immediately at West Middlesex County Hospital, Isleworth, Middlesex, for duty in Psychiatry Department. R practitioners holding A posts eligible. Mental experience desirable but not essential. Salary £250 per annum, plus any temporary bonus (now £30 per annum cash). Board, lodging, laundry. Six to twelve months' appointment (six months only for an R practitioner). Application to Medical Director of Hospital by March 30, 1948 (quoting D.829, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

MIDDLESEX COUNTY COUNCIL
CHASE FARM HOSPITAL, Enfield, Middlesex
VISITING EAR, NOSE AND THROAT SURGEON
(Two sessions per week)
VISITING DERMATOLOGIST

to attend as and when required. Wide experience in their specialty. Remuneration 4 guineas per session of from 1½ to 2½ hours, Unestablished. No pension rights. General scope of duties arranged by Medical Director, may include teaching. Applications (no forms) to undersigned, with copies of up to two recent testimonials and referees by April 7 (quoting D.802, B.M.J.).—C. W. Radcliffe, Clerk of the County Council, Middlesex Guildhall, S.W.1.

ROYAL EDINBURGH HOSPITAL FOR SICK CHILDREN
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Senior Resident Medical Officer (B1). Previous experience in paediatrics essential. Applications from R practitioners, who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment to be for one year from July 1, 1948, in the first place, the holder being eligible for re-appointment. Salary £450 per annum, with residential emoluments. Applications to reach the Secretary, 9, Scotnes Road, Edinburgh, 9, not later than April 30, 1948.

MANCHESTER CORPORATION
CRUMPSALL HOSPITAL (1,400 beds) and PARK HOUSE (1,644 beds)
DEPUTY MEDICAL SUPERINTENDENT (B1)

The Health Committee invites applications from registered medical men, including those in H.M. Forces, for the post of Deputy Medical Superintendent and Resident Medical Officer, which is vacant now, at Crumpsall Hospital (adult, general) and the adjoining Park House (Poor Law Institution including mental wards). No married quarters are available at the hospital. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Candidates should possess a higher medical qualification whilst preference will be given to those who have had some administrative experience. Salary £640 per annum rising to a maximum of £880 with board, residence and laundry in addition valued at £180 per annum, subject to the Manchester Corporation conditions of service. Any fees received must be refunded to the Corporation. Full information and forms of application may be obtained from the Town Clerk, Town Hall, Manchester 2, and applications for the post must be received by him not later than April 3, 1948. Applications or copies thereof must not be sent to any members of the Council. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester 2.

MANCHESTER CORPORATION
Health Department
WHOLE-TIME CONSULTANT RADIOLOGIST

Applications are invited for the post of Consultant Radiologist (whole-time) mainly for duty at Crumpsall Hospital (adult, general—1,400 beds), Manchester 8, and Booth Hall Hospital (children's general—650 beds), Blackley, Manchester 9, and elsewhere as required by the Committee. Candidates must have had considerable experience in diagnostic radiography. Salary £1,560 per annum subject to the Manchester Corporation conditions of service. Forms of application and copies of a memorandum on the terms and conditions of service of the appointment may be obtained from the Medical Officer of Health, Health Department, Hospitals Administration Section, P.O. Box No. 399, Town Hall, Manchester 2. Applications are to be addressed to the Town Clerk, Town Hall, Manchester 2, and not to any member of the Council and must be received not later than April 3, 1948. Canvassing in any form is prohibited.—Philip B. Dingle, Town Clerk, Town Hall, Manchester 2.

NOTTINGHAMSHIRE COUNTY COUNCIL
EAST RETFORD BOROUGH AND EAST RETFORD RURAL DISTRICT COUNCILS
JOINT MEDICAL OFFICER

The Nottinghamshire County Council and the East Retford Borough and Rural District Councils jointly invite applications from duly qualified and registered medical practitioners including those now serving in H.M. Forces for the joint whole-time appointment of a Medical Officer to act as:—

(a) Assistant Medical Officer of the County Council; (b) Medical Officer of Health of the Borough and Rural Districts of East Retford.

The salary attached to the position will be £960 by £50 to £1,160 per annum, plus cost-of-living bonus. The recommendation in Ministry of Health Circular 12/48 are under consideration. The person appointed will be required to reside within a radius of three miles of the Borough of East Retford. Applicants must have had at least three years' professional experience since qualifying, must be conversant by experience in the duties of a Medical Officer of Health, Medical Officer for Maternity and Child Welfare and School Medical Officer and must possess a Diploma in Public Health. Experience in the examination of Defective children is desirable. As regards his duties under the County Council the officer will act under the general control and supervision of the County Medical Officer and will be required to perform such duties either as Assistant School Medical Officer or otherwise as may be from time to time prescribed. As regards his duties as Medical Officer of Health of the Borough of East Retford the Officer will also be required to act as Medical Officer for Maternity and Child Welfare. The appointment is subject to superannuation and the selected candidate will be required to pass a medical examination. Forms of application and conditions of the appointment may be obtained from my Office, and applications accompanied by copies of not more than three recent testimonials must be forwarded to reach me not later than March 31, 1948.—K. Tweedale Meaby, Clerk of the County Council, Shire Hall, Nottingham.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM GENERAL HOSPITAL
(Regional Orthopaedic Centre—440 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A), including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Otherwise it will be for a period of twelve months. Salary is at the rate of £200 per annum, with full residential emoluments. Applications should be sent to the undersigned.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

NORTHUMBERLAND COUNTY COUNCIL
HEXHAM GENERAL HOSPITAL
(Regional Orthopaedic Centre—440 beds)
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident Medical Officer (B2). The duties will include those of Anaesthetist. R practitioners who now hold A posts may apply, when appointment will be limited to six months; otherwise it will be for a period of one year. The salary is at the rate of £300 per annum, with full residential emoluments in addition to the orthopaedic work a large amount of general surgery is carried out. Applications should be sent to the undersigned.—John B. Tilley, County Medical Officer, County Hall, Newcastle-upon-Tyne, 1.

STAFFORDSHIRE COUNTY COUNCIL
Public Health Department
COUNTY PSYCHIATRIST

Applications are invited from registered medical practitioners possessing a Diploma in Psychological Medicine for the above-mentioned post, and the candidate appointed will be on the staff of the County Medical Officer of Health, to whom he will be responsible for the organization of the mental health services under the National Health Service Act, 1946, and, in addition will undertake duties in connexion with the School Health Service. The salary scale will be in accordance with the modified interim Askwith Award, i.e. £975 per annum, rising by biennial increments of £50 and a final increment of £37 10s. to £1 162 10s per annum, plus a cost-of-living bonus The candidate appointed will be required to provide a car and will be paid allowances in accordance with the County Council's scale. The appointment, which will be terminable by three months' notice in writing on either side, will also be subject to the Local Government and Other Officers' Superannuation Act, 1937, in which connexion the successful candidate will be required to pass a medical examination and produce his or her birth certificate Applications should reach the undersigned not later than April 5, 1948. Canvassing, directly or indirectly, will disqualify, and all applicants must state whether, to their knowledge, they are related to any member or senior officer of the County Council.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford.

STAFFORDSHIRE COUNTY COUNCIL
WORDSLEY EMERGENCY HOSPITAL
near Stourbridge (total beds 450)
RESIDENT SURGICAL OFFICER (B2)

Applications are invited from suitably qualified registered medical practitioners for the abovementioned post, which is now vacant, the duties of which will be in connexion with the general surgical, orthopaedic and plastic surgery wards. The appointment, which will be subject to one calendar month's notice in writing on either side, will be for a period of six months with salary at the rate of £250 per annum, with full residential emoluments R practitioners now holding A appointments may apply Applications must reach the undersigned by April 5, 1948.—T. H. Evans, Clerk of the County Council, County Buildings, Stafford.

SURREY COUNTY COUNCIL
Public Health Department—Headquarters Staff
PRINCIPAL ASSISTANT MEDICAL OFFICER

Applications are invited for the appointment on the permanent staff of Principal Assistant Medical Officer on the salary grade £1,000 by £50 to £1,200 per annum inclusive, plus subsistence and travelling expenses in accordance with the Council's scale. Candidates must be registered medical practitioners with a public health qualification. Practical experience in the work of a public health department is essential. The successful candidate will be required to assist in the duties pertaining to the office of County Medical Officer, under whose control he will act, and to devote the whole of his time to the work. He will rank next to the Deputy County Medical Officer on the central administrative medical staff. The appointment will be subject to the provisions of the Local Government Superannuation Act, 1937, and to the Staffing Regulations of the Council, which provide, *inter alia*, that appointments may be determined at any time by three months' written notice. The officer will be required to pass a medical examination. Applications should be addressed to the County Medical Officer, County Hall, Kingston-on-Thames, of whom inquiries relating to the appointment may be made. Last date for receipt of applications, Saturday, April 10. Canvassing, directly or indirectly, will disqualify.—Dudley Aukland, Clerk of the Council, County Hall, Kingston-on-Thames.

BIRMINGHAM MATERNITY HOSPITAL
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (B2), including R practitioners who now hold A posts. The appointment is for six months from May 1, 1948. Salary at the rate of £100 per annum with full residential emoluments Applications to be sent immediately to Bernard Sylvester, House Governor.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

STAFFORDSHIRE, WOLVERHAMPTON AND DUDLEY JOINT BOARD FOR TUBERCULOSIS
ASSISTANT TUBERCULOSIS OFFICER

Applications for the above-mentioned appointment, which will be held in the south of the County, are invited from registered medical practitioners with experience in tuberculosis work, and the salary scale will be £675 per annum, rising by annual increments of £25 to a maximum of £875 per annum, in addition to which a cost-of-living bonus will be payable. The successful candidate will be required to provide a motor car and will be granted allowances in accordance with the Joint Board's scale. The appointment, which will be terminable by one month's notice in writing on either side, will also be subject to the provisions of the Local Government Superannuation Act, 1937, in which connexion the successful candidate will be required to pass a medical examination and produce his or her birth certificate. Forms of application may be obtained from the undersigned and should be returned by first post on April 7, 1948, accompanied by copies of not more than three recent testimonials.—T. H. Evans, Clerk of the Joint Board, County Buildings, Stafford.

WEST RIDING OF YORKSHIRE MENTAL HOSPITALS BOARD
MENSTON MENTAL HOSPITAL, near Leeds
TWO PHYSICIANS

Applications are invited for the permanent positions of Physician in the Mental Hospitals' Board's Service at the above hospital. The scale of salary in the case of a resident officer will be £875 rising by annual increments of £25 to a maximum of £975 inclusive. Emoluments, consisting of board, apartments, washing, coal, light and attendance, will be valued for superannuation purposes at £200 per annum. For a non-resident officer the scale of salary will be £905 rising by annual increments of £25 to a maximum of £1,005 inclusive. The sum of £200 per annum is payable in cash to non-resident officers in lieu of the above-named emoluments. Unfurnished houses will be available, if required, for which an inclusive rental of £72 per annum will be charged. The commencing salary at the discretion of the Board will be fixed within the above scales according to qualifications and experience. Applicants should have had experience in general medicine and the diagnosis and treatment of mental disorders, and should possess the D.P.M. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909 (Class I) in accordance with which deductions will be made from total salary and emoluments at the rate of 3 per cent in respect of contributions. Applications, together with copies of not more than two recent testimonials, should be forwarded as soon as possible to the Medical Superintendent, Menston Mental Hospital, near Leeds. There is no printed form of application.—G. L. Banner, Clerk of the Board, Board Offices, Wakefield.

BRADFORD JOINT HOSPITALS COUNCIL
VISITING ANAESTHETISTS

Applications are invited for three posts of Visiting Anaesthetists to the Bradford Group of Hospitals, including the Royal Infirmary, St. Luke's Municipal Hospital, the Royal Eye and Ear Hospital, and the Bradford Children's Hospital. These appointments will each carry an honorarium of £800 per annum and will involve attendances at the hospitals in the group as may be arranged. Applicants must be registered medical practitioners and must hold the Diploma in Anaesthetics. Private practice solely as Anaesthetist is permissible. Applications, with names of three referees, should be sent to the undersigned at the Royal Infirmary, Bradford, not later than April 19, 1948.—H. Trusson, Honorary Secretary, Bradford Joint Hospitals Council.

BLACKBURN AND EAST LANCASHIRE ROYAL INFIRMARY (248 beds, 7 Residents)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (B2), including R practitioners within three months of qualification or who are now holding A posts. Salary at the rate of £200 per annum with full residential emoluments. Applications are also invited from ex-Service medical officers under the Rehabilitation Scheme. Applications should be sent to the undersigned.—T. Dewhurst, General Superintendent and Secretary, Royal Infirmary, Blackburn.

BERKSHIRE MENTAL HOSPITAL, Wallingford
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the post of Assistant Medical Officer (B1). Commencing salary £550, rising by annual increments of £25 to £650 per annum, together with board, furnished apartments, and laundry valued at £130 per annum. Additional amount of £50 per annum is payable if in possession of the D.P.M. There is no married accommodation available, but, if non-resident, emoluments will be adjusted accordingly. Applications from R practitioners now holding B1 posts cannot be considered unless they are ineligible for H.M. Forces. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Applications in writing should reach the Medical Superintendent as soon as possible.

LONDON COUNTY COUNCIL

Medical practitioners required for the undermentioned positions:

(1) ASSISTANT MEDICAL OFFICERS Class I (B1). Salary £530 a year, rising by £25 to £630 a year. The appointment will not exceed four years unless the officer's name is placed on promotion list.

Hospital	*Duties*
Lambeth Hospital, Brook Drive, Kennington Road, S.E.11	Casualty Officer
St. Stephen's Hospital, 369, Fulham Road, S.W.10	Anaesthetics and pediatrics
St. Mary Abbots Hospital, Marloes Road, Kensington, W.8	Medical
Bethnal Green Hospital, Cambridge Heath Road, E.2	Mainly medical and anaesthetics
Dulwich Hospital, East Dulwich Grove, S.E.22	Anaesthetics

(2) ASSISTANT MEDICAL OFFICERS Class II (B2). Salary £400 a year. Appointment for one year only in first instance, renewable for second year under certain conditions.

Hospital	*Duties*
Queen Mary's Hospital for Children, Carshalton, Surrey	Surgical, mostly orthopaedic
St. Stephen's Hospital, 369, Fulham Road, S.W.10 (Two positions) ..	(1) General medical. (2) Surgical
St. James' Hospital, Ouseley Road, Balham, S.W.12	Anaesthetics

Suitably qualified R practitioners holding B2 appointments, also those holding B1 and ineligible for H.M. Forces, may apply for the B1 positions, and R practitioners holding A posts may apply for B2 appointments, which will be limited to six months.

(3) HOUSE PHYSICIANS AND SURGEONS (A) Salary £200 a year. Including R practitioners within three months of qualification. If held by an R practitioner, appointment will be for a period of six months. Otherwise it will be for six-monthly periods, to a maximum of two years. All the above positions are with board, lodging and washing.

Married quarters are not available, but in certain instances non-residence (excepting house physicians and surgeons) with the appropriate allowance is permitted. Application forms, obtainable from the Medical Officer of Health, S.D.2, County Hall, S.E.1 (stamped foolscap envelope necessary), must be returned by April 5, 1948. Canvassing disqualifies. (690).

BROCKHALL CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Langho, near Blackburn, Lancashire
SECOND ASSISTANT MEDICAL OFFICER (B1)

Applications are invited from registered medical practitioners (men or women) including R. practitioners holding B2 and (if ineligible, for H.M. Forces) those holding B1 appointments, for a post of Second Assistant Medical Officer (B1). Salary £715 per annum, with full residential emoluments valued at £200 per annum, plus the current cost-of-living bonus, £50 per annum is paid in addition to the holder of the D.P.M. or equivalent. A commodious flat (furnished or unfurnished) is available for a married man. Unfurnished, valued at £60 per annum as an emolument, the remainder of the emolument value being paid in cash. If furnished, a reasonable deduction will be made for the use of furniture, etc. The appointment is pensionable and the successful applicant will be required to pass a medical examination. The Institution is modern, fully equipped and accommodates 1,996 patients. Applicants should have had previous mental deficiency or mental hospital experience. Application by letter should be sent to the Medical Superintendent as soon as possible.

BIRKENHEAD GENERAL HOSPITAL
JUNIOR HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following resident appointment, vacant on April 1, 1948. Junior House Surgeon (A). Salary £150 per annum. The appointment is with full residential emoluments, and in the first instance for a period of six months, terminating on September 30, 1948, but this may be extended by mutual arrangement. Membership of a Medical Defence Society is a condition of appointment. Applications should be sent to the undersigned immediately.—H. Hewitt Cooke, Secretary-Superintendent.

BIRKENHEAD GENERAL HOSPITAL
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners, male or female, including R practitioners who hold A appointments, for the following resident appointment, vacant on April 22, 1948. Casualty Officer (B2). Salary £200 per annum, with full residential emoluments. Membership of a Medical Defence Society is a condition of appointment. Applications should be sent to the undersigned immediately.—H. Hewitt Cooke, Secretary-Superintendent.

BIRKENHEAD GENERAL HOSPITAL
HONORARY DERMATOLOGIST

Applications are invited from registered medical practitioners for the post of Honorary Dermatologist. It is preferable that applicants should possess the qualification of M.D. or M.R.C.P., or give an undertaking to obtain one of them within two years. The appointment will be an annual one, and the holder will be eligible for re-election. Applications, together with the names of three persons who would be willing to give a reference, should be addressed to the undersigned immediately.—H. Hewitt Cooke, Secretary-Superintendent.

BIRMINGHAM ACCIDENT HOSPITAL AND REHABILITATION CENTRE
HOUSE SURGEONS (A and B2)

Applications are invited from registered medical practitioners (male and female) for the appointments of House Surgeons A and B2, now vacant, including R practitioners who now hold A posts. The appointment will, in the first place, be for six months. The salary for newly qualified practitioners is at the rate of £200 per annum, with full residential emoluments; the salary for practitioners who have already held hospital appointments is at the rate of £300 per annum, with full residential emoluments.—W. George Spencer, Secretary.

BURTON-ON-TRENT GENERAL INFIRMARY
(Voluntary Hospital—235 beds)
SURGEON (Full-time, Temporary)

Surgeon (Full-time, Temporary) required for a period of not less than three months, from May 15, during the absence abroad of a Senior Surgeon. F.R.C.S. essential, and experience of fracture and orthopaedic work an advantage. Salary according to qualifications and experience, minimum £500 per annum, with residential emoluments. This post offers an excellent opportunity for suitably qualified surgeon for experience in a busy provincial hospital. Applications to J. E. Smith, Superintendent and Secretary, as soon as possible.

BIRMINGHAM UNITED HOSPITAL
The General Hospital
The Queen Elizabeth Hospital
(also incorporating the Queen's Hospital 1840-1941)
RESIDENT ANAESTHETISTS (B2)

Applications are invited from registered medical practitioners, male or female, for the appointments of Resident Anaesthetist (B2), including R practitioners who now hold A posts. The appointments are for six months from May 1 and are recognized Resident Anaesthetist posts for the purpose of taking the Diploma in Anaesthetics. Candidates from the Forces will be specially considered. Salary £100 to £120 per annum according to experience with full residential emoluments. Applications, stating present post, should be sent to the undersigned at once.—G. Hurford, Secretary, Birmingham United Hospital, The Queen Elizabeth Hospital, Birmingham, 15.

CREWE AND DISTRICT MEMORIAL HOSPITAL, Crewe
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the post of Resident House Surgeon (B2) which becomes vacant April 1, 1948. Salary from £200 to £350 per annum, according to experience and qualifications. Applications, stating sex, should be sent to reach the undersigned within one week of the publication of this advertisement.—Stanley W. Johnson, Secretary-Superintendent, Crewe and District Memorial Hospital, Crewe.

COUNTY MENTAL HOSPITAL, Gloucester
Resident ASSISTANT MEDICAL OFFICER (B1)

Assistant Medical Officer (B1) required. Salary (inclusive of bonus) £640 per annum, with additional £50 for possession of D.P.M. plus emoluments consisting of board, residence, and laundry, valued at £104 per annum for superannuation purposes (Married quarters are not available). The appointment will be a permanent one and 3% deduction will be made under the Asylums Officers' Superannuation Act, 1909. Applications should be sent to the Medical Superintendent as soon as possible.

BEDFORD COUNTY HOSPITAL (Voluntary)
FOURTH HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the post of Fourth House Surgeon (A), now vacant, including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £175 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

BEDFORD COUNTY HOSPITAL (Voluntary)
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners F.R.C.S. (male) for the post of Resident Surgical Officer (B1) vacant immediately, including R practitioners who now hold B2 posts. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £500 per annum, with full residential emoluments. Applications to be sent to the undersigned.—H. R. Neate, Secretary.

COVENTRY AND WARWICKSHIRE HOSPITAL

Applications are invited for the following positions (male or female):—

HOUSE SURGEON (B2) to the Gynaecological and Obstetric Dept., vacant April 30, 1948.

HOUSE SURGEON (B2) to the General Surgical Depts., vacant April 30, 1948.

HOUSE SURGEON (B2) to the Fracture and Orthopaedic Dept., vacant April 23, 1948.

HOUSE SURGEON (B2) combining Ear, Nose and Throat duties, vacant April 13, 1948.

HOUSE PHYSICIAN (B2), vacant April 1, 1948.

R practitioners who hold A posts are invited to apply. Each appointment is for six months. Salary at the rate of £200 per annum, together with full residential emoluments. Applications should be sent to the undersigned.—S. Cecil Hill, House Governor and Secretary.

COUNTY MENTAL HOSPITAL, Armagh
HOUSE PHYSICIAN (Single)

The Committee of Management will, at its Meeting to be held on Monday, April 12, 1948, appoint a House Physician (single) for a period of one year at a salary of £300, including war bonus, plus £50 cash in lieu of rations, with allowances consisting of furnished apartments, fuel, light, laundry, attendance, fruit and vegetables. The post is non-permanent and non-pensionable. Candidates must be duly qualified and registered. Preference will be given to an ex-Member of H.M. Forces. Applications should be furnished to the undersigned not later than Friday, April 9, 1948. If convenient, personal attendance desirable on Monday, April 12, 1948, at 12 noon. Resident Medical Superintendent.

CITY MENTAL HOSPITAL
Winson Green, Birmingham, 18
HOUSE PHYSICIAN (B1)

Applications are invited for the post of House Physician (B1) tenable for a period of six months in the first instance, with a possibility of extension to one year. Salary £350 per annum, together with residential emoluments valued at £120 and cost-of-living bonus, at present £59 19s. (of which 50% is paid in cash) Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. The hospital has a large out-Patient Department and there is ample scope for experience in all branches of Psychiatry. Applications to be sent to the Medical Superintendent not later than April 10.

CHESTER ROYAL INFIRMARY (225 beds)
OPHTHALMIC REGISTRAR (B1)

Applications are invited from registered medical practitioners for the post of Ophthalmic Registrar (B1), non-resident. Salary £650 per annum, with lunch and tea Appointment in the first instance for one year, to commence duties on April 25, 1948. Suitable qualified R practitioners holding B2 appointments, also those holding B1 posts and ineligible for H.M Forces, may apply. Applications should be sent immediately to P. R. J. Arnold, General Superintendent and Secretary.

CHELMSFORD AND ESSEX HOSPITAL
London Road, Chelmsford (170 beds)
CASUALTY OFFICER (B2)

Applications are invited for the post of Casualty Officer (B2) with experience, male or female, including R practitioners who hold A posts, to commence April 1. Salary £175 per annum, plus board, lodging and laundry. Apply with recent testimonials to the undersigned.—R. G. Morrish, House Governor and Secretary.

CLAYTON HOSPITAL, Wakefield
(Voluntary Hospital, 200 beds)
RESIDENT ORTHOPAEDIC OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic Officer (B2), including R practitioners who hold A posts. Salary £300 per annum, with full residential emoluments. Applications are to be sent immediately to the undersigned.—W. Read, Superintendent and Secretary.

CITY HOSPITAL, Chester
RESIDENT MEDICAL OFFICER
(HOUSE SURGEON)

Applications are invited for the post of Resident Medical Officer (House Surgeon), female, for the above General Hospital. Salary £200 per annum plus residential emoluments and cost-of-living bonus. Applications should be sent immediately to the Medical Officer of Health, Town Hall, Chester. Relationship to members or senior officials of the Council must be disclosed.—G. Burkinshaw, Town Clerk.

CHARING CROSS HOSPITAL
HONORARY CLINICAL ASSISTANT (Part-time)

Applications are invited for the post of Honorary Part-time Clinical Assistant (unpaid) at the Charing Cross Hospital Annexe at Mount Vernon Hospital, Northwood. Applications, together with the names of three referees, to be sent to the undersigned not later than first post Monday, April 26, 1948.—George J. Jones, House Governor, Charing Cross Hospital, Agar Street, Strand, W.C.2.

DURHAM COUNTY MENTAL HOSPITAL
LOCUM TENENS MEDICAL OFFICER

Required at the above hospital for the months of May, June, July and August. Knowledge of Psychiatry desirable but not essential. Salary up to £12 weekly according to experience. Residential emoluments provided free. Applications to be addressed to the Medical Superintendent, Durham County Mental Hospital, Winterton, Sedgefield, Stockton-on-Tees.

DURHAM COUNTY MENTAL HOSPITAL
ASSISTANT MEDICAL OFFICER (B1)

The Visiting Committee invite applications from duly registered medical practitioners, qualified to apply, for the appointment of Assistant Medical Officer (B1) at the Mental Hospital. Salary £472 10s. per annum rising by annual increments of £25 to £572 10s. per annum plus cost-of-living bonus, at present £0 1s. 3d. per annum together with board, lodging, laundry and attendance valued at £180 1s. 4d. per annum for Superannuation purposes, plus £50 per annum for the Diploma in Psychological Medicine. The appointment will be subject to the conditions of the Asylums Officers' Superannuation Act, 1909, and the successful candidate will be required to pass a medical examination. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications to be forwarded to the Medical Superintendent, Winterton, Sedgefield, Stockton-on-Tees.

DURHAM COUNTY HOSPITAL
North Road, Durham City (120 beds)
RESIDENT HOUSE SURGEON (B2) (male)

Applications are invited from registered medical practitioners for the appointment of a Resident House Surgeon (B2) (male), including R practitioners who hold A posts. The appointment is for six months, duties to commence on April 1, 1948. Salary at the rate of £250 per annum, with full residential emoluments. Applications to be sent immediately to the Secretary-Superintendent.

DURHAM COUNTY HOSPITAL (120 beds)
RESIDENT SURGICAL OFFICER (B1)
(Temporary)

Resident Surgical Officer (B1) (Temporary), vacant early April for five weeks approximately. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary at the rate of £600 per annum, plus full residential emoluments. Applications immediately to Secretary-Superintendent, Durham County Hospital.

DUCHESS OF YORK HOSPITAL FOR BABIES
Manchester, 19 (86 cots)
SENIOR RESIDENT MEDICAL OFFICER (B1)

Applications are invited from medical practitioners (male and female) for the post of Senior Resident Medical Officer (B1), for a period of six months in the first instance, from May 1, 1948. Salary £350 per annum with full emoluments. Candidates must have experience in paediatrics and higher qualifications are desirable. Suitably qualified R practitioners holding B2 posts, also those holding B1 and ineligible for H.M. Forces may apply. Applications to be sent by April 7, 1948, to Louise Gillespie, Secretary.

DERBYSHIRE ROYAL INFIRMARY, Derby
Orthopaedic and Accident Service
CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners (male and female) for the post of Casualty Officer (A), including practitioners within three months of qualification who are liable for service under the National Service Acts, vacant immediately, six months' appointment. Salary £200 per annum with full residential emoluments. Applications should be sent as early as possible to Arthur Taylor, Superintendent and Secretary.

EAST SUFFOLK AND IPSWICH HOSPITAL
(369 beds)
RESIDENT ANAESTHETIST AND CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners liable to service under the National Service Acts and within three months of qualification for the post of Resident Anaesthetist and Casualty Officer (A). The casualty duties are from 9 a.m. to 1 p.m. only. The post is now vacant. Appointment for six months. Salary at rate of £250 per annum with full residential emoluments. —Arthur Griffiths, Secretary, The Hospital, Ipswich.

GUY'S HOSPITAL, S.E.1
ASSISTANT SURGEON

Applications are invited for the appointment of Assistant Surgeon to Guy's Hospital. Copies of Standing Orders for the appointment can be obtained from the Superintendent to whom letters of application (twenty copies), together with names of three referees, should be submitted not later than May 1, 1948, and from whom any further information desired can be obtained.

ELIZABETH GARRETT ANDERSON HOSPITAL
144, Euston Road, N.W.1
OBSTETRIC ASSISTANT

Applications are invited from registered women practitioners for the post of an additional Obstetric Assistant. Duties to commence April 12. Appointment for six months, salary at the rate of £130 to £150 per annum, according to experience, with full residential emoluments. Applications to be sent to the Secretary by March 31.

ELLESMERE PORT AND DISTRICT HOSPITAL
(50 beds)
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable to service under the National Service Acts, for the appointment of House Physician (A). The appointment will be for a period of six months. Salary is at the rate of £350 to £400 per annum with full residential emoluments. Applications should be sent immediately to H. Roberts, Secretary-Superintendent.

GRANTHAM AND KESTEVEN GENERAL HOSPITAL, Manthorpe Road, Grantham, Lincs.
(125 beds—Medical, Surgical and Maternity & busy Out-Patient Departments)
SENIOR RESIDENT HOUSE SURGEON (B1)

Applications are invited from registered medical practitioners for the appointment of Senior Resident House Surgeon (B1), becoming vacant on May 1, 1948. Applicants should have held house appointments and had surgical experience. Preference will be given to candidates holding the Fellowship of one of the Royal Colleges or who are reading for a Fellowship. Suitably qualified R practitioners holding B2 appointments or B1 appointment if rejected for H.M. Forces are invited to apply. Salary will be at the rate of £450 per annum, plus furnished apartments, board and laundry at the hospital. Applications should be sent to the undersigned.—John E. Ray, House Governor and Secretary.

GRANTHAM AND KESTEVEN GENERAL HOSPITAL, Manthorpe Road, Grantham, Lincs
(125 beds—Medical, Surgical, and Maternity)
JUNIOR RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of a Junior Resident Medical Officer (A), including practitioners within three months of qualification who are liable under the National Service Acts. Facilities for giving anaesthetics with or without supervision are available. Post becomes vacant on June 1, 1948. The appointment will be for a period of six months. Salary is at the rate of £200 per annum, with full residential emoluments Applications should be addressed to the undersigned at the hospital.—John E. Ray, House Governor, The Hospital, Grantham, Lincs.

HEREFORD COUNTY AND CITY MENTAL HOSPITAL
ASSISTANT MEDICAL OFFICER (B1)

Applications are invited for the post of Assistant Medical Officer (B1), male or female. The work will consist chiefly of Psychotherapy at the annexe of 100 beds at Holme Lacy, where only acute or treatable female cases are admitted. Salary £600 per annum rising by two annual increments to £650 plus £50 for the D.P.M. together with full residential emoluments, valued for pension purposes at £150 per annum. In the event of a married man being appointed a living out allowance could be made in lieu of residential emoluments. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Applications should be addressed to the Medical Superintendent, Mental Hospital, Burghhill, Hereford, and must be received before March 31, 1948.

HIGH WYCOMBE AND DISTRICT WAR MEMORIAL HOSPITAL (100 beds)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A), now vacant. Salary £175 per annum, plus residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when appointment will be for six months. Applications to E Barber, Secretary.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
HOUSE PHYSICIAN (B2)
HOUSE SURGEON (B2)

There will be vacancies for a House Physician (B2) and a House Surgeon (B2) on May 15, 1948. The appointments are tenable for six months at a salary of £100 per annum, with full residential emoluments R practitioners now holding A posts, and practitioners, of either sex, ineligible for military service or rejected by the R.A.M.C may apply. Further particulars and form of application, which must be returned not later than April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HUDDERSFIELD ROYAL INFIRMARY
(321 beds)

RESIDENT ANAESTHETIST AND ASSISTANT CASUALTY OFFICER (A) required to commence duty as soon as possible. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150 with full residential emoluments.

HOUSE SURGEON (A) required to commence duty as soon as possible. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150, with full residential emoluments.

Applications should be addressed to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

Have you read the notice at top of page 12?

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HUDDERSFIELD ROYAL INFIRMARY
(321 beds)
HOUSE SURGEON (A)

Required to commence duty on May 1, 1948. Duties will include those of House Surgeon to the Abnormal Maternity Department. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £187, 10s. with full residential emoluments.

HOUSE SURGEON (A)

Required to commence duty on May 6, 1948. Practitioners within three months of qualification who are liable to service under the National Service Acts may apply. If held by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary at the rate of £150 with full residential emoluments.

Applications for each post should be sent to the undersigned immediately.—H. J. Johnson, General Superintendent and Secretary.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
RESIDENT MEDICAL REGISTRAR AND PATHOLOGIST (B1)

There will be a vacancy for a Resident Medical Registrar and Pathologist (B1) on June 1, 1948. The appointment, which is renewable, is tenable in the first instance for twelve months; salary £300, rising to £350 per annum after the first year. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R practitioners now holding B1 posts cannot be considered unless they have been rejected by the R.A.M.C. Full particulars, with form of application, which must be returned not later than Monday, April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HOSPITAL FOR SICK CHILDREN
Great Ormond Street, London, W.C.1
FIRST ASSISTANT ANAESTHETIST (Part-time)

There is a vacancy for a First Assistant Anaesthetist (Part-time). The appointment, which is renewable, is tenable in the first instance for twelve months; salary £300 per annum. Applicants must be registered medical practitioners, practising solely as Anaesthetists and must hold the Diploma of Anaesthetics. Selected applicants will be required to call upon members of the Visiting Medical Staff and to furnish them with copies of their applications, supported by three testimonials given specially for the purpose. Further particulars and form of application, which must be returned not later than April 5, 1948, are obtainable from the undersigned.—H. F. Rutherford, House Governor.

HULL ROYAL INFIRMARY

Applications are invited for the following posts (male), vacant April:

ORTHOPAEDIC HOUSE SURGEON (B2).
HOUSE SURGEON to Ophthalmic and Ear, Nose and Throat Department (B2).
HOUSE SURGEONS (B2) at Sutton Branch Hospital (two posts).

Suitably qualified R practitioners who now hold A posts may apply.

CASUALTY OFFICERS (A) (two posts; one vacant May) Practitioners within three months of qualification who are liable for service under the National Service Acts may apply

Salary for each of the above posts £200 per annum, with full residential emoluments. The appointments will be for six months in the first instance, but will be terminable by one month's notice on either side. Applications to R. J. Carless, House Governor.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3
HONORARY ASSISTANT RADIOLOGIST

The Council of Management invites applications for the office of Honorary Assistant Radiologist. Candidates are required to be medical practitioners engaged solely in consulting practice in this specialty holding a special diploma in medical radiology and able to attend on four full half days each week, namely, Tuesday, Wednesday and Thursday afternoons and Saturday mornings. Private practice in the department is permitted in accordance with regulations laid down. Applications, giving full details with the names of three referees, must reach the undersigned by April 5, 1948, from whom full particulars should be obtained in the first instance. By Order of the Council of Management, Kenneth A. F. Miles, House Governor.

HAMPSTEAD GENERAL HOSPITAL
The Green, N.W.3.
HOUSE SURGEON (B2)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who hold A posts, for the resident posts of House Surgeon (B2) and House Physician (B2), vacant June 1, tenable for six months. Salary £133 per annum, with board, lodging and laundry. Application on the prescribed form, with copies of three recent testimonials, to be returned by April 6 —Kenneth A. F. Miles, House Governor.

HARLOW WOOD ORTHOPAEDIC HOSPITAL
near Mansfield, Notts
(355 beds—E.M.S. and Civilian)
Regional Orthopaedic Centre
RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of Resident House Surgeon (B2), including R practitioners who now hold A posts. Appointment will be for a period of six months. Salary, with full residential emoluments, at the rate of £300 per annum. The hospital is recognized under the Government's scheme for the Postgraduate Education of Medical Officers released from the Forces and falling within Classes I and III, where applicable. Applications to be sent to the undersigned.—D. Roberts, Secretary-Superintendent.

HOUNSLOW HOSPITAL, Middlesex
HOUSE PHYSICIAN AND CASUALTY OFFICER (A)

Applications are invited for the appointment of House Physician and Casualty Officer (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. If held by a practitioner who is liable for Military Service the appointment is for six months only, otherwise it is renewable. Salary £150 per annum with full residential emoluments, post vacant April 24, 1948. Applications to the Secretary-Superintendent by April 12, 1948.

KING'S COLLEGE HOSPITAL
Denmark Hill, S.E.5
FULL-TIME ASSISTANT
in the X-ray Diagnostic Department

Applications are invited from specialists for the post of full-time Assistant in the X-ray Diagnostic Department at a salary of £1,000 per annum. Candidates must hold a Diploma in Medical Radiology Twelve copies of application together with the names of three referees should be sent to the undersigned not later than March 31, 1948.—S. W. Barnes, House Governor.

LONDON HOMOEOPATHIC HOSPITAL
(Incorporated by Royal Charter)
Great Ormond Street and Queen Square, W.C.1
RESIDENT MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification and liable under the National Service Acts, for appointment as Resident Medical Officer (A), vacant April 1, 1948. The appointment will be for a period of twelve months, four months surgical, four months gynaecological and four months medical. Salary commencing £180 per annum, increasing to £250 for the last four months, with full residential emoluments. Selected candidates will be required to attend a meeting of the Medical Committee for interview.—L. J. Knowles, Secretary.

LEEDS PUBLIC DISPENSARY AND HOSPITAL
North Street, Leeds, 2

Applications are invited from registered medical practitioners, male or female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following posts:—

HOUSE PHYSICIAN (A).
HOUSE SURGEON (A) to E.N.T. and Eye Dept.

Appointments for six months. Salary in each case £175 per annum, with full residential emoluments. Applications to be addressed to Charles F. J. Maury, Secretary and Superintendent.

LIVERPOOL AND DISTRICT HOSPITAL FOR DISEASES OF THE HEART
34, Oxford Street, Liverpool, 7
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male or female), including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of House Physician (A) to commence immediately. Appointment will be for a period of six months. Salary at the rate of £100 per annum, with full residential emoluments. Facilities for M.D. Thesis. Applications to the Secretary.

LUTON AND DUNSTABLE HOSPITAL
(214 beds)
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, including R practitioners who hold A posts, for the above post, vacant now. This post is recognized for the D.A. Salary £250 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—R. E. Lingard, Secretary.

LEITH HOSPITAL (Incorporated), Edinburgh, 6
ASSISTANT GYNAECOLOGIST

The Board of Managers invite applications, including those from candidates at present serving in H.M. Forces, to fill the appointment of Assistant Gynaecologist on the Honorary Medical Staff. Candidates must be Fellows of the Royal College of Surgeons, and should apply not later than April 20, 1948, to the Honorary Secretary, 10, Mill Lane, Leith, Edinburgh 6.

LEICESTER ROYAL INFIRMARY
ORTHOPAEDIC HOUSE SURGEON (B2)

Applications are invited for the post of Orthopaedic House Surgeon (B2), required for April 1. Salary £200 per annum. Applications should be R practitioners holding A posts may apply, forwarded immediately to the House Governor and Secretary.

MANCHESTER ROYAL INFIRMARY
CHIEF ASSISTANT (B1)
to the Ear, Nose and Throat Department

The Board of Management invite applications from registered medical practitioners (male and female) for the above appointment, now vacant. Applicants should have held House appointments and have had experience in the specialty. Preference will be given to candidates holding higher qualifications. Suitably qualified R practitioners now holding B2 posts, and also those holding B1 posts and ineligible for H.M. Forces, are invited to apply The post is for one year, renewable to a maximum of three years, at a commencing salary of £550 per annum, rising by two increments of £75 to £700 per annum, non-resident. Applications should be sent to the undersigned not later than April 9, 1948.—By Order, F. J. Cable, General Superintendent and Secretary.

MANCHESTER NORTHERN HOSPITAL
Cheetham Hill Road, Manchester, 8
(General Hospital, 116 beds)
Resident CASUALTY HOUSE SURGEON (A)

Salary £150 per annum, board and residence. Practitioners within three months of qualification who are liable for service under the National Service Acts are invited to apply. Appointment for six months to commence May 1 next. Applications to be sent to Mr. James C. Daniels, Secretary, 38, Barton Arcade, Manchester, 3, as soon as possible.

MANSFIELD AND DISTRICT GENERAL HOSPITAL, Notts (245 beds)
CASUALTY OFFICER (B2)

Casualty Officer (B2) required as soon as possible for busy department. R practitioners who now hold A posts may apply. If held by an R practitioner appointment will be limited to six months. Salary at the rate of £250 per annum, with full residential emoluments. Applications to the undersigned as soon as possible.—A. Ashworth, House Governor and Secretary.

MERTHYR GENERAL HOSPITAL (120 beds)
RESIDENT SECOND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of a Resident Second House Surgeon (A), male, including practitioners within three months of qualification who are liable to service under the National Service Acts. The appointment will be for a period of six months. Salary at the rate of £200 per annum, with board and lodging. Applications to the Secretary, Merthyr General Hospital, Merthyr Tydfil.

METROPOLITAN EAR, NOSE AND THROAT HOSPITAL (1838), INC.
14-16, Granville Place, W.1
ASSISTANT SURGEON

Applications are invited from suitably qualified medical practitioners for appointment as Assistant Surgeon. Applicants must be Fellows of one of the Royal Colleges of Surgeons or possess equivalent qualifications, and applications should reach the Secretary by April 12, 1948.

NORTHAMPTON COUNTY MENTAL HOSPITAL, Berrywood, Northampton
ASSISTANT MEDICAL OFFICER (B1)

Assistant Medical Officer (B1) required. Commencing salary £472 10s., annual increments £25 to £572 10s. per annum, plus cost-of-living bonus (at present £30 per annum), and board, lodging, and laundry valued for superannuation purposes at £180 per annum. An additional £50 per annum will be given if the officer holds or obtains the D.P.M. Whole-time appointment, subject to provisions of the Asylums Officers' Superannuation Act, 1909. Married quarters available. Applications from R practitioners now holding B1 appointments cannot be considered unless ineligible for H.M. Forces. Appplications with two testimonials to the Medical Superintendent.

NORFOLK AND NORWICH HOSPITAL
Norwich
ASSISTANT DIAGNOSTIC RADIOLOGIST
(full-time)

Applications are invited for the post of Assistant Diagnostic Radiologist (full-time). Salary according to qualifications and experience, but will be not less than £1,000 per annum. The successful applicant may be required to undertake duties in associated hospitals. Applications to be sent as soon as possible to the undersigned.—F. L. Gatfield, House Governor and Secretary.

NATIONAL TEMPERANCE HOSPITAL
Hampstead Road, N.W.1
CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the post of Casualty Officer (B2). Salary at the rate of £200 with board, residence, etc. Appointment is for a period of six months, to commence as soon as possible. Candidates must have held a house appointment in a recognized hospital. Applications to the Secretary by April 7, 1948.

NORTHAMPTON GENERAL HOSPITAL
(410 beds)

Applications are invited from registered medical practitioners for the following posts:—

SENIOR RESIDENT ANAESTHETIST (B2). Salary at the rate of £300 a year, with full residential emoluments.

JUNIOR RESIDENT ANAESTHETIST (A). Salary at the rate of £200 a year, with full residential emoluments.

Post recognized for the D.A.

The appointment of Junior Resident Anaesthetist will run until September 30, 1948, and may be renewed. Any further employment at the hospital beyond that date will be at the rate of £225 a year. Practitioners within three months of qualification and liable under the National Service Acts may apply, in which case appointment would be limited to a period of six months.

Registered practitioners holding A posts may apply for the post of Senior Resident Anaesthetist, in which case appointment would be limited to a period of six months

Applications should be sent as soon as possible to S. G. Hill, Superintendent.

NORTH ORMESBY HOSPITAL
Middlesbrough (196 beds)

Applications are invited from registered medical practitioners for the following appointments:—

RESIDENT HOUSE SURGEON (A), including practitioners within three months of qualification who are liable for service under the National Service Acts

RESIDENT HOUSE SURGEON (B2), including R practitioners who hold A appointments.

Salary at the rate of £200 and £275 per annum respectively with full residential emoluments. The appointment is for a period of six months. Appli-

the Secretary.

OLDHAM ROYAL INFIRMARY (203 beds)
HOUSE SURGEON (A)
to the Gynaecologist, Aural Surgeon, and Ophthalmic Surgeon

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Gynaecologist, Aural Surgeon, and Ophthalmic Surgeon. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OLDHAM ROYAL INFIRMARY (203 beds)
HOUSE SURGEON (A)
to the Orthopaedic Department, etc.

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A). Practitioners within three months of qualification and liable under the National Service Acts may apply, and the appointment will be for a period of six months. The person appointed will act as House Surgeon to the Orthopaedic Department, and will assist in the Casualty Department. The salary is at the rate of £200 per annum, with full residential emoluments. Applications to be submitted to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

OLDHAM ROYAL INFIRMARY
ASSISTANT Resident SURGICAL OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B2), becoming vacant on March 31. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £250 per annum with board, residence and laundry. To R practitioners, the appointment will be limited to six months. Applications should be sent to the undersigned immediately.—F. W. Barnett, House Governor and Secretary.

PRINCESS MARGARET ROSE HOSPITAL FOR CRIPPLED CHILDREN, Fairmilehead, Edinburgh
(150 beds, plus 40 E.M.S.)
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the post of House Surgeon (A) in the above Orthopaedic hospital. The appointment will be for six months at a salary of £200 per annum, with full residential emoluments. The post has been recognized as a Class I appointment for demobilized medical officers, the salary in such cases having been made up to the standard for such appointments. Applications should be sent as soon as possible to the undersigned. Demobilized medical officers who may have no recent testimonials are nevertheless invited to apply.—R. W. Martin, W.S., Honorary Secretary.

PEMBROKE COUNTY WAR MEMORIAL HOSPITAL, Haverfordwest
(Voluntary Hospital, 120 beds)
HOUSE SURGEONS

Applications are invited from registered medical practitioners for the following appointments, which will become vacant in May, 1948:

HOUSE SURGEON (B2). Salary at the rate of £250 per annum, with full residential emoluments. R practitioners holding A posts may apply, when the appointment will be limited to six months.

HOUSE SURGEON (A). Salary at the rate of £225 per annum, with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications in writing to be sent to the undersigned as soon as possible.—Griff. C. Morgan, Secretary-Superintendent.

CASUALTY OFFICER (B2)

Applications are invited from registered medical practitioners for the appointment of Casualty Officer (B2) falling vacant on April 1, 1948. R practitioners holding A posts may apply. Salary £200 per annum, with full residential emoluments Appointment for six months. Applications to be sent as soon as possible to the Superintendent, Royal Infirmary, Preston.

PAPWORTH VILLAGE SETTLEMENT
Cambridge
REGISTRAR to the General Thoracic Surgical Unit

Applications are invited for the post of Registrar to the General Thoracic Surgical Unit. The appointment is for six months, with the possibility of renewal. Salary £400 to £600 per annum according to experience. Enquiries should be addressed to the Secretary, Papworth Hall, Cambridge

POPLAR HOSPITAL
East India Dock Road, Poplar, E.14
RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (B1), to become vacant forthwith. Applicants should have held house appointments and had surgical experience. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M Forces. Salary is at the rate of £250 per annum, with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—Leslie P. Phillips, House Governor and Secretary.

QUEEN MARY'S HOSPITAL FOR THE EAST END, Stratford, E.15
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (A) including R practitioners. Salary will be at the rate of £200 per annum with residential emoluments, lodging being provided temporarily outside the hospital pending the extension of residential accommodation. The appointment will be for a period of six months. Candidates should send their applications to the undersigned as soon as possible.—M. J. Huntley, House Governor and Secretary.

QUEEN ELIZABETH HOSPITAL FOR CHILDREN, Hackney Road, E.2, Shadwell, E.1 Banstead Wood, Surrey
EAR, NOSE AND THROAT REGISTRAR

Applications are invited for the post of Ear, Nose and Throat Registrar (half-time). Candidates must have had experience in this speciality. Appointment will be for one year in first instance. Salary £350 per annum Applications should reach the undersigned not later than April 5 1948.—Charles H Bessell, General Secretary, Hackney Road, E.2

ROYAL BERKSHIRE HOSPITAL, Reading
RESIDENT ANAESTHETIST (B2)

Applications are invited from registered medical practitioners, male, for the appointment of Resident Anaesthetist (B2), vacant immediately Salary is at the rate of £200 per annum, with full residential emoluments. It is a recognized Resident Anaesthetist post for the purpose of taking the D.A. R practitioners who now hold A posts may apply when the appointment will be limited to six months Applications, stating present post, should be sent to H. E. Ryan, House Governor.

ROYAL BERKSHIRE HOSPITAL, Reading
HOUSE SURGEON (A) to the Accident Dept.

Applications are invited from registered medical practitioners (male) for the following appointment: House Surgeon (A) to the Accident Department, vacant immediately. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification, and liable under the National Service Acts may apply, when the appointment will be for a period of six months. Applications should be sent immediately to the House Governor.

ROYAL CANCER HOSPITAL (FREE)
(Incorporated under Royal Charter)
Fulham Road, London, S.W.3
ASSISTANT PATHOLOGIST

ications are invited for the post of Assistant gist, at a salary of £900 per annum with increments to £1,200 subject to deductions the F.S.S.U. These should state fully the n's previous experience in pathology, especi- pathological anatomy and museum work. uld be sent not later than first post Monday, 2, to the undersigned, from whom further of the post may be obtained.—Victor H , Secretary.

AL CORNWALL INFIRMARY, Truro
luntary General—280 beds, 7 residents)
HOUSE SURGEON (B2)
to the General Surgical Department

ations are invited for the post of House (B2) to the General Surgical Department, alls vacant on April 20, 1948, salary at of £200 per annum, with full residential ents. R practitioners now holding A posts ply. Applications should be sent to the Secretary, Royal Cornwall Infirmary, Truro, r than March 31, 1948.

L DEVON AND EXETER HOSPITAL
Exeter
eds, 7 Resident Medical Staff Employed)
HOUSE SURGEON (A)
Ear, Nose and Throat Department

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A) Ear, Nose and Throat Department, and to act as Casualty Officer during mornings, non-resident, vacant now, including practitioners within three months of qualification who are liable to service under the National Service Acts. If filled by a practitioner who is liable under these Acts, appointment will be for a period of six months. Salary is at the rate of £300 per annum Applications, with copies of two recent testimonials, should reach the undersigned immediately.—L. Parkhouse, Secretary and Manager.

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury
HOUSE SURGEON (A)

Applications are invited from registered medical practitioners for the post of House Surgeon (A), including practitioners within three months of qualification, who are liable to service under the National Service Acts. Appointment will be for six months and duties include Casualty, E N T. and Orthopaedic work. Salary at the rate of £200 per annum, together with full residential emoluments Post vacant now. Applications should be sent immediately to the Secretary-Superintendent.

WARNEFORD GENERAL HOSPITAL
Leamington Spa
CASUALTY OFFICER AND HOUSE SURGEON (A)

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the post of Casualty Officer and House Surgeon (A) to the Orthopaedic Surgeon and to the V.D. Officer. Salary is at the rate of £175 per annum with full residential emoluments. Applications should be addressed to W. A. James, House Governor and Secretary.

Have you read the notice at top of page 12?

Have you read the notice at top of page 12 ?

ROYAL BUCKINGHAMSHIRE HOSPITAL
Aylesbury
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners (male) for the post of House Surgeon (B2), comprising obstetric and gynaecological duties, with some medicine. R practitioners now holding A posts may also apply, when appointment will be limited to six months. Salary at the rate of £300 per annum, with full residential emoluments. Vacant from April 15, 1948. Applications should be sent immediately to the Secretary-Superintendent.

RUNWELL HOSPITAL, near Wickford, Essex (East Ham and Southend-on-Sea Joint Mental Hospital) (1,032 beds)
SENIOR RESIDENT PHYSICIAN

Applications are invited for the post of Senior Resident Physician at the above-named hospital. Salary £750 per annum, rising by £25 to £850 plus cost-of-living bonus at present £49 16s. 8d. with emoluments consisting of house, light, fuel and garden produce valued at £159 10s. 4d. per annum. The appointment is subject to the provisions of the Asylums Officers' Superannuation Act, 1909. Application forms, together with further particulars, obtainable from the Physician Superintendent.

ROYAL HAMPSHIRE COUNTY HOSPITAL
Winchester (330 beds)
HOUSE PHYSICIAN (B2)
to the Paediatric Department

Applications are invited from registered medical practitioners (men or women) for the post of House Physician (B2) to the Paediatric Department, vacant May 1, 1948. Salary at the rate of £220 per annum with full residential emoluments. The [illegible] is for six months in the first instance a[illegible] will be given to applicants wishing t[illegible] paediatrics. R practitioners holding [illegible] apply, when appointment will be [illegible] months. Applications should be sent t[illegible] Smith, C.A., F.H.A., Superintendent [illegible]

ROYAL HAMPSHIRE COUNTY [illegible]
Winchester (320 beds)
HOUSE PHYSICIA[illegible] (A)

Applications are invited from regis[illegible] practitioners (men or women) for the [illegible] House Physician (A), vacant immedi[illegible] at the rate of £175 per annum with f[illegible] emolumen's. Practitioners within thre[illegible] qualification and liable under t[illegible] Service Acts, may also apply, when [illegible] will be for a period of six months. [illegible] should be sent to R. Morrison Smith, [illegible] Superintendent and Secretary.

ROYAL EAST SUSSEX HOSPITA[illegible]
HOUSE SURGEON (A[illegible]

Applications are invited from regis[illegible] practitioners for the appointment of [illegible] geon (A), vacancy in March, includin[illegible] within th[illegible] months of qualification [illegible] to service under the National Serv[illegible] held by a practitioner who is liabl[illegible] Acts the appointment will be for a [illegible] months. Salary is at the rate of £20[illegible] with full residential emoluments. App[illegible] should be sent to Wilfrid G. Kemsley, Secretary and House Governor.

ROYAL NATIONAL THROAT, NOSE AND EAR HOSPITAL
Gray's Inn Road, W.C.1, and Golden Square, W.1
RESIDENT HOUSE SURGEON (B2) (Male)

There will be a vacancy for a House Surgeon to commence duty on May 17, 1948. R practitioners who hold A appointments are invited to apply. The appointment is for a period of six months and salary is at the rate of £150 per annum, with full residential emoluments. Applications should be sent to the undersigned immediately.—John H. Young, House Governor.

ROYAL ALBERT EDWARD INFIRMARY AND DISPENSARY, Wigan (225 beds)
RESIDENT MEDICAL AND SURGICAL OFFICER AND REGISTRAR (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Medical and Surgical Officer and Registrar (B1), vacant May 1, 1948. Applicants must hold diploma of F.R.C.S. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. Salary according to age and experience, with a minimum of £450 per annum, with full residential emoluments. Applications should be sent as soon as possible to A. Stanley Brunt, General Superintendent and Secretary.

ROYAL WEST SUSSEX HOSPITAL, Chichester
HONORARY ANAESTHETIST

The Board of Management invite applications for the appointment of Honorary Anaesthetist to the hospital from practitioners holding the Diploma in Anaesthetics and willing to share in the emergency anaesthetic work of the hospital. Applications giving the names of three referees should be received by the Chairman of the Board of Management not later than April 15, 1948.

ROYAL SHEFFIELD INFIRMARY AND HOSPITAL
Royal Infirmary Unit
SURGICAL REGISTRAR

Applications are invited from registered medical practitioners, male and female, including medical officers recently demobilized from H.M. Forces, for the post of Surgical Registrar at the Royal Infirmary Unit. Applicants should have held house appointments and had surgical experience. Candidates must hold the Fellowship of one of the Royal Colleges of Surgeons. The appointment will be for one year in the first instance and renewable thereafter. Salary will be at the rate of £1,000 to £1,250 per annum according to experience. Applications to be forwarded immediately to the undersigned.—Joseph Griffith, General Superintendent, Royal Sheffield Infirmary and Hospital, Royal Infirmary, Sheffield, 6.

ROYAL MASONIC HOSPITAL
Ravenscourt Park, London, W.6

Vacancies on the Medical and Surgical Staff

The Board of Management of the Royal Masonic Hospital give notice that there are the following vacancies on the visiting medical and surgical staff of the hospital, owing to retirement of former members:—

(a) An EAR, NOSE AND THROAT SURGEON
(b) TWO ANAESTHETISTS

Applications for the post of E.N.T. Surgeon are invited from candidates who are Fellows of the Royal College of Surgeons of England, and who are attached to the full staff of a recognized London teaching or special hospital. Applications for the post of Anaesthetist are invited from gentlemen who are engaged full-time in the practice of anaesthesia. The retiring age for these posts is 60, and the number of beds in the hospital is approximately 180. Applications should be sent in by the end of March, 1948.

ROTHERHAM HOSPITAL
Doncaster Gate, Rotherham

[illegible] applications are invited from suitably qualified registered medical practitioners for the appointment (resident or non-resident) of Paediatric Registrar (B1) at the above hospital which has a large neo-natal department. Candidates should preferably hold a higher qualification. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment will be for twelve months and the salary will be at the rate of from £500 per annum (resident) or £650 per annum (non-resident) in accordance with qualifications and experience. Applications to be sent to the undersigned, from whom a list of duties can be obtained, not later than April 10, 1948.—A. R. Wise, General Superintendent.

SAINT MARY'S HOSPITALS, Manchester
HOUSE PHYSICIAN (A)
to the Children's Department

Applications are invited from registered medical practitioners, male and female, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the appointment of House Physician (A) to the Children's Department for a period of six months from May 1, 1948. Salary at the rate of £75 per annum, with full residential emoluments. Applications to be sent to the undersigned not later than April 17, 1948.—A. R. Wise, General Superintendent.

ST. THOMAS' HOSPITAL, S.E.1
ASSISTANT MEDICAL OFFICER (Part-time)
in the Department of Physical Medicine

Applications are invited for the post of part-time Assistant Medical Officer in the Department of Physical Medicine (2 sessions a week) for a period of one year in the first instance, eligible for re-election up to a maximum of four years. Salary £275 per annum. Previous experience in the management of rheumatic and allied disorders is desirable. Applications, stating age, qualifications with dates, and the names and addresses of three referees, should be sent by April 20, 1948, to the Clerk of the Governors.

ST. BARTHOLOMEW'S HOSPITAL
London, E.C.1
CASUALTY PHYSICIAN

The Governors invite applications for the office of Casualty Physician. Preference will be given to holders of the Membership of the Royal College of Physicians of London. The appointment will be part-time and the salary attaching to the office will be at the rate of £600 per annum. The successful candidate will be required to attend in the Out-Patients' Department for five and six half days in alternate weeks. Applications should be lodged with the undersigned not later than Saturday, April 24, 1948.—C. C. Carus-Wilson, Clerk to the Governors.

ST. ANDREW'S HOSPITAL, Thorpe, Norwich
SENIOR ASSISTANT MEDICAL OFFICER

Applications are invited from registered medical practitioners for the appointment of Senior Assistant Medical Officer. Candidates must have had previous mental hospital experience and hold a Diploma in Psychological Medicine. Salary within the range £900 to £1,000 per annum with the usual residential emoluments. There is no accommodation for a married man but a cash allowance of £200 per annum in lieu of emoluments will be paid. Applications, together with copies of two recent testimonials, to be sent as soon as possible to the Medical Superintendent.—B. [illegible] Read, F.H.A. (Secretary), St. Andrew's Hospital, Thorpe, Norwich.

SOUTHEND MUNICIPAL HOSPITAL
Rochford, Essex
RESIDENT HOUSE MEDICAL OFFICER (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident House Medical Officer (A). Salary is at the rate of £200 per annum with full residential emoluments, valued at £100 per annum, plus current cost-of-living bonus. The person appointed will be liable to pay superannuation contributions if the provisions of the Local Government Superannuation Act are applicable. Practitioners within three months

[illegible] surgeon to the Hospital. One of the present surgeons to Out-patients will be a candidate and if he is appointed, there will be a vacancy for a HONORARY SURGEON to Out-patients. Candidates must be Fellows of the Royal College of Surgeons of England. Twenty copies of applications, which should include details of age, qualifications and experience, and the names and addresses of three referees to whom the Hospital may write, should be sent by April 14, 1948, to the Clerk of the Governors, to whom any inquiries should be addressed.

STOCKTON AND THORNABY HOSPITAL
Stockton-on-Tees (135 beds, 3 Residents)
HOUSE PHYSICIAN alternating CASUALTY OFFICER (A)

Applications are invited from registered medical practitioners for the above post becoming vacant April 1, 1948, including practitioners within three months of qualification who are liable for service under the National Service Acts, when appointment will be for a period of six months. Salary £200 per annum with full residential emoluments. Applications should be sent to the undersigned as soon as possible.—J. Wilkinson, Secretary-Superintendent.

SKIN HOSPITAL, Birmingham
John Bright Street, Birmingham, 1
RESIDENT MEDICAL OFFICER (B2)

Applications are invited from registered medical practitioners (male or female) for the appointment of Resident Medical Officer (B2), to become vacant on May 5, 1948, including R practitioners who now hold A posts. If held by an R practitioner, the appointment will be limited to six months. Otherwise, at the expiration of six months, the question of further re-appointment might be considered. Salary is at the rate of £200 per annum, with full residential emoluments. Applications as soon as possible to the undersigned.—T. E. Murtagh, House Governor and Secretary.

SALFORD ROYAL HOSPITAL (256 beds)
HOUSE SURGEON (B2) to Orthopaedic Dept.
HOUSE SURGEON (B2) to Special Departments (Ear, Nose and Throat and Gynaecology)
RESIDENT ANAESTHETIST (B2)

R practitioners who hold A posts are invited to apply. Salary £195 per annum, plus full residential emoluments. Appointment for six months. Applications should be made at once on a special form obtainable from the undersigned, accompanied by copies of three testimonials.—H. B. Shelswell, General Superintendent and Secretary.

SKIPTON AND DISTRICT HOSPITAL
Skipton Yorks (64 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the post of House Surgeon (B2), including R practitioners who hold A posts. The appointment is for six months. Salary £250 per annum, with full residential emoluments. Applications to be sent as soon as possible to C. Lawson, Secretary-Superintendent.

SALISBURY GENERAL INFIRMARY
(270 beds)
RESIDENT ANAESTHETIST (B2)

Resident Anaesthetist (B2) vacant now. R practitioners holding A posts may apply. Appointment for six months. Salary £200 per annum, full residential emoluments. Applications should be made to the Superintendent and Secretary immediately.

SWANSEA GENERAL AND EYE HOSPITAL
HOUSE PHYSICIAN (A)

Applications are invited from registered medical practitioners (male or female) for the appointment of House Physician (A), now vacant, including practitioners within three months of qualification who are liable to service under the National Service Acts. If held by a practitioner who is liable under these Acts appointment will be for a period of six months. Salary at the rate of £200 per annum with full residential emoluments. Applications [illegible]

Applications are invited from registered medical practitioners, including those in H.M. Forces, for the appointment of Resident Surgical Officer (B1), vacant now. Applicants should have held house appointments and had surgical experience. Salary is at the rate of £350 per annum with full residential emoluments. Suitably qualified R practitioners holding B2 appointments, also those holding B1 appointments and ineligible for H.M. Forces may apply. Applications should be sent as early as possible to the Secretary-Superintendent.

VICTORIA HOSPITAL, Blackpool
HOUSE SURGEON (B2) Orthopaedic Dept.

Applications are invited from registered medical practitioners (male or female) for the appointment of House Surgeon (B2) Orthopaedic Department (vacant May 10, 1948), including R practitioners who now hold A posts. The appointment is for a period of six months and the salary is at the rate of £200 per annum, with full residential emoluments, plus £150 per annum in the case of the successful candidate being a medical officer released from H.M. Forces who desires postgraduate education and rehabilitation as recommended by the Ministry of Health. Applications, stating present post, should be sent immediately to Walter R. Smith, General Superintendent.

IMPORTANT NOTICE

APPOINTMENTS

Medical practitioners are requested **not to apply** for any appointment referred to in this notice or for appointments under local authorities referred to in this notice without first having communicated with the Secretary to the British Medical Association, B.M.A. House, Tavistock Square, W.C.1.

CONTRACT PRACTICE

ABERTYSSWG MEDICAL AID SOCIETY
(Medical Officer.)

MID-RHONDDA MEDICAL AID SOCIETY, including the LLWYNYPIA, CLYDACH VALE and PEN-Y-GRAIG WORKMEN'S MEDICAL SCHEME
(Chief Medical Officer and Assistant Medical Officer.)

NEATH AND DISTRICT
(Medical Aid Association.)

LOCAL GOVERNMENT SERVICE

METROPOLITAN BOROUGH OF HACKNEY
(Consultant to Women's Clinic.)

BOROUGH OF TOTTENHAM
(Whole-time Temporary Assistant Medical Officer of Health (male).)

[illegible]

PART-TIME CASUALTY OFFICER

Applications are invited from registered medical practitioners (male or female) for the appointment of part-time Casualty Officer, to attend six mornings per week from 9.30 a.m. to 12.30 p.m. Salary at the rate of £200 per annum. The appointment is for a period of six months, commencing May 1, next. Applications should be sent to the Secretary not later than first post Wednesday, April 7, 1948.—D. St. John Bamford, Secretary.

VICTORIA HOSPITAL FOR SICK CHILDREN
Park Street, Hull
ASSISTANT PHYSIOTHERAPIST (Non-resident)

Assistant Physiotherapist required, non-resident. Salary as per J.N.C. and F.S.S.N. and H.O. Scheme in force.

RADIOGRAPHER (Non-resident) (female)

Applications are also invited for the post of non-resident Radiographer (female). Vacant May 31, 1948. M.S.R. essential. Salary according to J.N.C. scale. F.S.S. in force.

Applications for each post to be addressed to the Secretary as soon as possible.

WEST LONDON HOSPITAL
Hammersmith Road, W.6 (240 beds)
Resident ASSISTANT SURGEON AND TUTOR

Applications are invited from qualified registered medical practitioners (male), preferably unmarried, for the post of Resident Assistant Surgeon and Tutor. Candidates should hold one of the higher Surgical qualifications. Salary will be at the rate of £650 per annum with usual residential emoluments. Four weeks' holiday a year. The appointment is for one year, from June 1 next, terminable by three months' notice either side, and, subject to annual re-election, may be extended to not more than three years. The duties will include deputising for the Visiting Surgeons, teaching in the Medical School, and, as Senior Resident Officer, the candidate appointed will be responsible for certain administrative duties. Applications accompanied by the names of two referees should reach me not later than Tuesday, April 6. Selected candidates will be asked to attend for interview by the Medical Council and House Committee, and, if so notified, also attend a meeting of the Board of Management on Thursday, May 13, at 5.30 p.m., when the appointment will be made.—C. R. Lockhart, Secretary.

WATFORD AND DISTRICT PEACE MEMORIAL HOSPITAL
Watford, Herts (206 beds)
HOUSE PHYSICIAN (B2)

Applications are invited from registered medical practitioners for the post of House Physician (B2), vacant April 1. R practitioners who hold A posts may also apply when appointment will be limited to six months. Salary will be at the rate of £200 per annum with full residential emoluments. Applications, with copies of two recent testimonials, should be sent to the undersigned immediately.—H. M. Maskell, Administrator.

WESTMORLAND GENERAL HOSPITAL
Kendal (82 beds)
HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners for the appointment of House Surgeon (B2), non-resident, to become vacant at end [illegible] Salary £450 per annum. R practitioners who hold A posts may apply, when appointment will be limited to six months; otherwise may be extended. Applications should be sent without delay to [illegible] M. Somervell, Hon. Secretary.

[illegible]RCESTER ROYAL INFIRMARY

Applications are invited for the following posi[illegible]

HOUSE PHYSICIAN (A), vacant May 1.
HOUSE SURGEON (A), vacant April 1.

[illegible] practitioners within three months of qualification who are liable for service under the National Service Acts. If held by R practitioners the appointments will be limited to six months. Salaries at the rate of £170 per annum with full residential emoluments. Applications should be addressed to J. S. Rippier, House Governor.

WILSON HOSPITAL
Cranmer Road, Mitcham, Surrey
(72 beds—Resident Medical Staff 2)
RESIDENT SURGICAL OFFICER (A)

Applications are invited from registered medical practitioners for the appointment of Resident Surgical Officer (A). Salary at the rate of £150 per annum, with full residential emoluments. Practitioners within three months of qualification, who are liable under the National Service Acts may apply when appointment will be for a period of six months. Applications to be forwarded immediately to the Chairman, Medical Committee, Wilson Hospital, Mitcham, Surrey.

WEST KENT GENERAL HOSPITAL
(Incorporated) Maidstone (135 beds)
CASUALTY OFFICER (A or B2)

Applications are invited from registered medical practitioners (male and female), including practitioners within three months of qualification and R practitioners who hold A posts, for the appointment of Casualty Officer (A or B2), vacant April 5. The appointment will be limited to six months. Salary at the rate of £200 per annum with full residential emoluments. Applications should reach the undersigned forthwith.—Edward J. Gregg, House Governor and Secretary.

(Continued on page 25)

Have you read the notice at top of page 12?

THE Medical Defence Union

Established 1885 — *MUSeum 1337*

Annual Subscription £1 — **MEMBERSHIP EXCEEDS 31,500** — *Assets exceed £170,000*

Protection is essential for every practitioner engaged in any form of practice

Full particulars from the Secretary (Dr. ROBERT FORBES), The Medical Defence Union, Ltd., 49, Bedford Square, London, W.C.1.

CHARGES FOR CLASSIFIED ADVERTISEMENTS

(Revised 1/2/47)
Circulation 65,500

Advertisements should be addressed to the Advertisement Manager, accompanied by remittance. *The text of the advertisement itself should be clearly marked MEMBER.*

Every effort will be made to include MEMBERS' urgent small advertisements if they are received *not less* than TEN days before publication, but insertion cannot be guaranteed because of continued paper difficulty.

DO PLEASE WRITE ADVERTISEMENTS CLEARLY, NAME AND ADDRESS SHOULD BE IN BLOCK LETTERS.

CANCELLATION of Advertisements cannot be made if received after 4 p.m. on Monday.

(1) To MEMBERS of the B.M.A. the charge for each insertion under **Assistants, Locums, Partnerships, Practices, Medical Posts, Dispensers, Secretaries** is: 24 words, including name and address, 12s. (minimum); or 30 words, 15s.; or 36 words, 18s.; and 3s. for each six words *or less* thereafter.

If a BOX NO. is used the charges are: 18 words, 13s. (minimum); or 24 words, 16s.; or 30 words, 19s.; and 3s. for each six words *or less* thereafter.

(2) To all other advertisers the charge for each insertion under the headings quoted in paragraph (1) is: 24 words, including name and address, 14s. (minimum); or 30 words, 17s. 6d.; or 36 words, 21s.; and 3s. 6d. for each six words *or less* thereafter.

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(3) **Personal, Notices, University and Industrial Appointments** per insertion: 24 words, name and address, 24s (minimum); or 30s.; or 36 words, 36s.; and 6s. for words *or less* thereafter.

If a BOX NO. is used the charges are: 25s. (minimum); or 24 words, 31s; or 37s.; and 6s. for each six words *or less*.

(4) **Educational, Lectures, Hospital Health Appointments, Nursing Homes,** insertion for four lines (minimum charge per line thereafter.

(5) To ALL advertisers the charge for on under the headings **Consulting Room eating, Typing, Houses, Miscellaneous,** M is as quoted in paragraph (2).

Hotels and Miscellaneous Trade Annou per insertion: 24 words 24s. (minimum words 6s. each insertion for six words or

ADVERTS OF PRACTICES. Name a of owner and of firm negotiating the accompany the advertisement. This infor for office use only.

Every effort is made to ensure the ac advertisements appearing in the Journal. mendation is implied by acceptance, and t Medical Association reserves the right to disrupt the insertion of any advertisemen

Advertisement Manager, British Medical Journal, B.M.A. House, Tavistock Square, London, W.C.1.

Telephone: Euston 2111.

Telegrams: Britmedads, Westcent, London.

APPOINTMENTS—Hospitals and Public Health, commence at page 12

PERSONAL

WANTED FOR A SHORT TIME, Residence in a doctor's house, country or country town, for a well educated man of 40 convalescent from a nervous breakdown, or recommendation for a suitable place such as a farm.—Reply Box 175, B.M.J.

LADY SEEKS POSITION. DOCTOR'S WIDOW. Sole charge professional man's house. Thoroughly capable and active. Car driver. Fond of children. —Box 142, B.M.J.

ONE THOUSAND POUNDS for a Short Story. Full details in the Sunday Dispatch.

FOR AN ENJOYABLE SWISS HOLIDAY join one of the following proposed parties: May 6 to 20, Lugano and Lucerne; June 16 to 30, Pontresina in Engadine; June 30 to July 14, Zermatt; Aug. 6 to 19, Lauterbrunner (for Murren, Wengen and Jungfrau Joch) and Kiental; Aug. 17 to 31, Kiental and Saas-Fee; Sept. 4 to 15, Oberhofen (on Thun Lake) and Wengen; Sept. 1 to 11, Bernese Oberland Walking Party; Dec. to Jan., Winter Sports at Saas-Fee. Write C.T.U. (Estd. 1913, Dr. C. F. Fothergill), Chorley Wood, Herts. (Phone Chorley Wood 24).

NOTICES

APPLICANTS ARE ADVISED not to send original testimonials when replying to advertisements. Copies will answer the purpose quite as well, and in the event of their being lost or mislaid no inconvenience will ensue.

UNIVERSITY AND INDUSTRIAL APPOINTMENTS

APPLICATIONS ARE INVITED for the post of **LIBRARIAN.** Previous experience essential with preferably a knowledge of medical books. Salary range £400 to £600 per annum, according to experience and qualification. Application with names of three referees to Secretary, University College Hospital Medical School, University Street, Gower Street, W.C.1, within 14 days of publication of this advertisement.

BRITISH NYLON SPINNERS, LIMITED invite applications from men, aged not over 40, for the post of **COMPANY MEDICAL OFFICER** at Pontypool, Mon., to organize and administer medical services for both staff and works employees to an eventual total of approximately 2,000. Candidates, in addition to a medical degree obtained at a recognized British university, must possess a D.I.H., or its equivalent, and have had a minimum of 2 years' experience in industrial medicine. A spacious fully equipped modern surgery is provided, and duties will include advice on working conditions, hygiene, safety, etc., the training and supervision of ambulance teams, first aid men, etc., in addition to routine medical examinations. A starting salary of up to £1,800 per annum, depending on qualifications and experience, is offered, with good prospects. The Company is working a five-day week and will be introducing a pension fund during the current year. Applications in writing should be made to the

preferred. Applications with copies of three recent testimonials and the names of three other persons for reference purposes to Box 145, B.M.J.

UNIVERSITY OF SHEFFIELD.—Applications are invited for the post of **FULL-TIME RESEARCH ASSISTANT** in the Department of Medicine under the direction of Professor C. H. Stuart-Harris. The Assistant will be required to carry out research on the causation and prevention of acute respiratory disease and particularly of influenza and pneumonia. Previous training and experience should have included research work preferably in relation to pneumonia. The Assistant would be required to undertake both clinical and bacteriological work, but would receive instruction in the techniques employed in the study of viruses. The work will require observations in the field from time to time. Salary within the range of £500 to £650 per annum, with Superannuation provision under the Federated Superannuation Scheme for Universities, and family allowance. There will also be an allowance for travelling expenses. Applications (four copies) together with the names and addresses of referees and, if desired, copies of testimonials, should reach the undersigned (from whom further particulars may be obtained) not later than April 24, 1948.—A. W. Chapman, Registrar.

UNIVERSITY OF EDINBURGH. CHAIR OF ORTHOPAEDICS.—The Electors will shortly proceed to the appointment of a **PROFESSOR OF ORTHOPAEDICS** who will hold this appointment conjointly with that of Director of Orthopaedics for the South-Eastern Region of Scotland. The salary for the combined appointment will be £2,250 per annum. Further particulars are to be obtained from the undersigned, to whom applications, together with the names of two referees, should be sent not later than April 30, 1948.—Charles H. Stewart, Secretary to the University.

UNIVERSITY OF LONDON.—The Senate invites applications for the **CHAIR OF MEDICINE** tenable at St Thomas' Hospital Medical School (salary not less than £2,000). Applications must be received not later than May 10, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **CHAIR OF BIOCHEMISTRY** tenable at St. Mary's Hospital Medical School (salary £1,500). Applications must be received not later than May 13, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

UNIVERSITY OF LONDON.—The Senate invite applications for the **CHAIR OF BACTERIOLOGY** tenable at St. Mary's Hospital Medical School (salary £1,750). Applications must be received not later than May 12, 1948, by the Academic Registrar, University of London, Senate House, W.C.1, from whom further particulars should be obtained.

EDUCATIONAL

F.R.C.S.(Edin.)

POSTAL PREPARATORY AND REVISION COURSES for above Exam.—Full details, H. C. ORRIN, F.R.C.S., Surgeons' Hall, Edinburgh.

ANAESTHETICS, April 12 to 30, Royal Cancer Hospital. First week, Part I; second and third weeks, Part II. Candidates may attend either or both Parts. Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W.1. Langham 4266.

HAMPSTEAD GENERAL AND NORTH WEST LONDON HOSPITAL, POSTGRADUATE MEDICAL SOCIETY, The Green, Hampstead, N.W.3.—An **EXTENDED REFRESHER COURSE** for General Practitioners and ex-Service Medical Officers will be held at the Hampstead General

viva, London, early April. Also coaching other exams. Write Box 146 B.M.J.

PRIVATE TUITION IN NEUROLOGY FOR M.R.C.P. and D.P.M., London. Individual or class Box 101, B.M.J.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

FELLOWSHIP IN DENTAL SURGERY

Notice is hereby given that the following Examinations will commence on the dates stated below:—

PRIMARY EXAMINATION
Friday, April 23
FINAL EXAMINATION
Friday, April 30

Candidates who have fulfilled the necessary conditions, and who desire to present themselves for examination, must give notice in writing to the Examinations Secretary, Examination Hall, 8—11, Queen Square, London, W.C.1, at least 21 days before the Examination, transmitting at the same time such certificates as may be required by the regulations, together with the full amount of the fee for the Examination for which they desire to enter

F. M. STENT, Examinations Secretary.

THE BEDFORD PHYSICAL TRAINING COLLEGE, 37, Lansdown Road, Bedford. Principal, Miss C. M. Read. Vice-Principals, Miss D. M. Wilkie, Miss M. V. Laco. Students are trained to become teachers of all branches of physical education. The training extends over three years, and includes educational and remedial gymnastics, games, dancing, swimming, and allied theoretical subjects. Three scholarships of £50 each are offered annually. Application forms should be obtained from the Secretary and returned to the College between April 1 and May 31 of the year previous to entry.

MEDICAL CORRESPONDENCE COLLEGE, 19, Welbeck Street, London, W.1, provides COACHING for all Medical Examinations, D.A., D.P.M., D.O.M.S., D.L.O., D.C.H., D.M.R.D. and D.M.R.T., M.R.C.P., F.R.C.S., M.D. thesis, and all qualifying exams. by a staff of highly qualified Tutors, Honoursmen, and Gold Medallists. Complete Guide to Medical Examinations sent free on application. Applicants should state in which qualification they are interested.

ROYAL COLLEGE OF SURGEONS OF ENGLAND

LICENCE IN DENTAL SURGERY

Notice is hereby given that the following Examinations will commence on the dates stated below :—

THE PROPERTIES OF DENTAL MATERIALS
Thursday, April 22

DENTAL MECHANICS
Monday, April 26

Candidates who have fulfilled the necessary conditions, and who desire to present themselves for examination, must give notice in writing to the Examinations Secretary, Examination Hall, 8—11, Queen Square, London, W.C.1, at least 21 days before the Examination, transmitting at the same time such certificates as may be required by the regulations, together with the full amount of the fee for the Examination for which they desire to enter.

F. M. STEST, Examinations Secretary.

RHEUMATIC DISEASES (SOCIAL AND INDUSTRIAL ASPECTS): April 30, May 1 and 2. Friday evening and all day Saturday and Sunday. Roffey Park Rehabilitation Centre, Horsham. Accommodation provided. Limited. Apply Fellowship of Postgraduate Medicine, 1, Wimpole Street, London, W 1. Langham 4266.

THE COMBINED HOSPITALS POSTGRADUATE SCHOOL OF OBSTETRICS AND GYNAECOLOGY, ROYAL NORTHERN AND CITY OF LONDON MATERNITY ...

... full ... admission to the course is strictly limited, and applications must be lodged with the Dean of the Faculty of Medicine, The University, Glasgow, between May 1 and 15, 1948.

LECTURES

LONDON HOMOEOPATHIC HOSPITAL, Great Ormond Street and Queen Square, W.C.1. **HONYMAN GILLESPIE LECTURESHIPS. SUMMER COURSE.** The following series of lectures will be given at the Hospital, commencing April 20 and terminating July 9, 1948: Tuesdays at 2 p.m., "Study of the Repertory," by Agnes Moncrieff, M.B., Ch.B.Glas., F.F.Hom.; at 3 p.m., "Homoeopathic Materia Medica," by J. Douglas Kenyon, M.B., Ch.B., B.Sc.Vict., F.F.Hom.; at 4.15 p.m., Clinical Cases illustrating the drugs described in the second lecture, by William Lees Templeton, M.D., Ch.B.Glas., F.F.Hom. Fridays at 2 p.m. "Homoeopathic Materia Medica," by Percival G. Quinton, M.D., B.S.Lond., F.F.Hom.; at 3 p.m., Clinical Cases by Margery G. Blackie, M.D., B.S.Lond., F.F.Hom.; at 4.15 p.m., "Study of the Repertory," by Donald M. Foubister, B.Sc., M.B., Ch.B., D.C.H., M.F.Hom. There will be an interval for tea and discussion from 3.45 to 4.15 p.m. Five lectures on the "Nosodes" will be given by John Paterson, M.B., Ch.B.Glas., D.P.H.Camb., F.F.Hom., daily during the week commencing Monday, May 3, at 5 p.m. Two lectures on the "Emanometer Grouping of Drugs" will be given by W. Ritchie McCrae, M.B., Ch.B.Glas., F.F.Hom., on May 10 and 17 at 4 p.m. **CLINICAL TUTORIALS.** Practical instruction in the application of Homoeopathic principles is also given by Dr. Kenyon and Dr. Templeton at their Tutorial Clinics in the Out-Patient Department on Monday and Thursday afternoons at 2 p.m. throughout the year. Qualified medical men and women are welcome to this Clinic. Medical practitioners are invited to bring difficult cases. Fee for the whole course for registered medical practitioners, £5 5s. Undergraduates admitted without charge.

ASSISTANTSHIPS

VACANT

Wanted, Lady Doctor assistant in busy good-class private practice. Liverpool area. Experienced G.P., hospital and midwifery essential. Salary £600 p.a., all found, car supplied. Further particulars write: A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

Wanted, Assistant with or without View, in pleasant London Suburb, preferably with own car. Write stating full particulars.—Box 107, B.M.J.

Wanted immediately, Outdoor Assistant with view to early Partnership in private and panel practice. Lancashire seaside resort. Salary by arrangement. Car essential.—Box 148, B.M.J.

Wanted, Assistant, with or without View to Partnership, required in good class practice. Brighton district. Usual bond.—Box 108, B.M.J.

Wanted, end of April, male Assistant with early View to Partnership for practice on outskirts of west Sussex country town. Dispenser kept. Car owner preferred. Small unfurnished house to rent. Salary £750 with £100 car allowance.—Box 147, B.M.J.

Wanted, Indoor and Outdoor Assistants, with or without view to partnership, also Locums, for town and country practices. State full particulars to British Medical Bureau, 33, Cross St., Manchester, 2.

Wanted, Outdoor Male Assistant, South West Wales, rooms available to rent. Car essential. Inclusive salary £800.—Box 9704, B.M.J.

Wanted, Outdoor Assistant, single, in large mixed practice in South Yorks. Good accommodation available. Must be driver. Own car an advantage.—Box 9788, B.M.J.

Wanted, Male Assistant for mixed practice in South West Lancashire. Salary £700 per annum, plus £50 car allowance and rent-free unfurnished house.—Box ...

Assistant with View to Partnership, outskirts Birmingham. Protestant, English or Scotch.—Box 109, B.M.J.

Assistant, married, age approx. 30, for semi-industrial semi-rural middle-class practice in West Cheshire, must be keen on obstetrics. Car essential. Modern semi-detached house supplied. Permanency with View preferred. Salary £600 to £700 per annum.—Box 113, B.M.J.

Assistant with early View Partnership, industrial practice Tyneside area. Unfurnished house probably available. Salary £800.—Box 9782, B.M.J.

North Wales Coast. Assistant wanted for town and country practice. Own car essential. Welsh speaking desirable. Salary £600, living and car allowances by agreement.—Box 9754, B.M.J.

N.W. London. Male, married Assistant wanted, light work. Suit man reading. Unfurnished flat available. Remuneration by arrangement.—Box 9787, B.M.J.

Outdoor Assistant wanted with View to Partnership for Indian doctor's practice. Pleasant Birmingham Suburb. Good class private and panel. Salary £800 including car allowance.—Box 110, B.M.J.

Two Christian doctors require Long-Term Assistant busy mixed practice urban and rural, Birmingham area. Unfurnished house available.—Box 9731, B.M.J.

Vacancies are occurring from time to time for Assistants, Locums, Hospital Locums, and Ship's Surgeons' appointments—Write, A. Shaw, Medical Agent, Premier Buildings, 88, Church Street, Liverpool, 1.

WANTED

Wanted, Assistantship with View by Ex-R.N.V.R. M.B., Ch.B., D.Obst.R.C.O.G. Married, age 28, own car, furniture. G.P. and 18 months hospital experience. Northern country town preferred.—Box 149, B.M.J.

Wanted, Assistantship with early View by Scot M.B., Ch.B., aged 29, married. Protestant Ex-R.A.F., hospital and G.P. experience. Good presence, reliable. Own car. Furnished or unfurnished house essential. Free mid-April.—Box 121, B.M.J.

Wanted by experienced woman doctor, Assistantship, permanent or with View to Partnership. Car owner. Capital.—Box 119, B.M.J.

Wanted, Assistantship with definite early View in Kent, Sussex or Surrey, by B.A., B.M., B.Ch. (Oxford), 31, married, children. Car owner. Ex-R.A.M.C., recent G.P. and hospital experience. Town or country practice, latter preferred.—Box 116, B.M.J.

Wanted, Assistantship with View to permanency in country or English country town. Ten years' experience of general practice. English, single, Cantab., with own car.—Box 152, B.M.J.

Assistantship with or without View, or Locum, wanted by young doctor; four years experience G.P. including Midwifery and Anaesthetics, married, own car. South-west area preferred.—Box 153, B.M.J.

Assistantship, with or without View, wanted by M.B., Edin. early May, aged 36, married, well experienced G.P. with anaesthetics, midwifery and local hospital. Own car. Good references. Unfurnished accommodation.—Box 9760, B.M.J.

Doctor doing postgraduate work, free April 12, anxious to take Part-time Assistantship of Evening Surgeries, London area.—Box 115, B.M.J.

Experienced M.D. available Surgeries, week-ends, local Locums, travelling distance Ealing. 'Phone. Perivale 1976 or write Box 9734, B.M.J.

Glasgow graduate, at present in general practice, seeks Assistantship with View, 30, married, one child. Hospital and midwifery experience. Own ...l, or English Coast town preferred.— ... M.J.

...ctor, ex-R.A.M.C., 27, single, M.B., ...3, H.P., H.S., some G.P. experience. ...eeks Assistantship London area.—Box

...ssistantship wanted by M.B., Ch.B., ...ged 33, single, Protestant, own car. ... medical and obstetrical, hospitals and ...17, B.M.J.

...ork wanted by gentleman, M.B., B.S., —Box 151, B.M.J.

...ork, London, wanted by doctor, ex-... Experience P.H. Evenings, week-...in weekdays.—Box 150, B.M.J.

...glish general practitioner, qualified ...available for Long-term Assistantship ...ean town or country. Married, C. of ... Free April 6. Share in established ... Englishman, house or flat to rent ...ox 118, B.M.J.

LOCUMS

VACANT

...able and experienced Locums for ...try practices. State full particulars —British Medical Bureau, 33, Cross Street, Manchester, 2.

Wanted, Locum, last two weeks in June, all found. South-east Cornwall.—Box 157, B.M.J.

Gold Coast.—Locum Tenens required for mine appointment. Minimum period six months. Salary £100 per month. Passage paid. Applications with names of three persons for reference purposes to Box 156, B.M.J.

Hospitality Locum offered doctor and wife (no children), June 1 to 23 incl. Seaside town, near Bournemouth. Work light, no midder. Salary by arrangement.—Box 158, B.M.J.

Locum wanted, Stoke-on-Trent, about June 3 to 20. No midwifery. 2 guineas daily.—Box 9762, B.M.J.

Southern Rhodesia. All round experienced Locum required, September and October. Salary £100 per month, all found. Mining, farming and country town practice. Excellent opportunity see country. Suggest passage as ship's doctor.—Box 162, B.M.J.

Woman Locum for month from about April 5. South Devon, Austin 8. Accommodation provided. Fourteen guineas.—Box 125, B.M.J.

AVAILABLE

Wanted by medical woman (L.R.C.P.S., L.M., D.P.H.), Locums or Medical Post or Assistantship (fluent French), South of England, Channel Islands, Gib. or Malta preferred. Free April.—Box 126, B.M.J.

Coventry area. Graduate reading for higher examination willing to help morning or evening Surgery. Car. April, May, June, July.—Box 161, B.M.J.

Experienced M.O.H. (48) offers services Locum three weeks August, in return expenses, allowance for car. Seaside town preferred.—Box 163, B.M.J.

Experienced woman Doctor, aged 53, having sold own Practice, now available for Locums, anytime, anywhere, but seaside preferred, own car.—Box 164, B.M.J.

Experienced Doctor, aged 31, requires Locum, London area, April 2-23, or part thereof. Own car. —Mills, 51, Hollins Lane, Marple Bridge, Stockport, Cheshire.

Reliable and experienced Doctor available for Locum work, between May 14 and 30, seaside or country, south preferred, own car.—Box 159, B.M.J.

Young, male G.P. available as Locum for last 2 weeks of June, in small seaside practice, Northern counties. Married, one child. Own car if essential. Moderate.—Box 160, B.M.J.

PARTNERSHIPS

OFFERED

Leicester.—Half share worth £2,350 for sale in old established private and panel practice. Panel 3,200 increasing. Large P.M.S.—Box P165, B.M.J.

Partnership, Leeds, old established Practice. 1/3 share. Gross over £6,000. 1½ years' purchase.—Box P167, B.M.J.

Partner wanted in mixed town practice under 35 miles N.W. London, to commence May 1. Firm will dissolve July 5, but all partners can continue separate practice. Recent income of share offered over £2,500, panel of this share 320, good scope. Price £4,000, which will be adjusted to equal N.H.S. compensation. Good modern house (5 bedrooms) with surgery and garage to lease at £150.—Box P122, B.M.J.

Partnership share, established Medical Practice in North-east Scotland, for sale. Residence and separate surgery also for sale. Particulars from Mitchell, Kennaway and Co., C.A., 8, Bon-Accord Crescent, Aberdeen.

South Wales. One-third Share offered in semi-rural practice, mainly panel, for £900. Panel [illegible] suit recently demobilized man.—Box [illegible]

West Riding Yorkshire, near tow[illegible] £1,400, increasing. Large modern ho[illegible] rooms, garage, garden, etc., £6,000 o[illegible] P168, B.M.J.

Yorkshire, North Riding, semi-r[illegible] Large flat with garden available. [illegible] after short Assistantship. Receipts [illegible] 1/3 share offered, increase later, 1½ [illegible] —Box P166, B.M.J.

WANTED

Wanted, Partnership by M.B. [illegible] or W[illegible] England. Experienced G[illegible] M[illegible] 29. Own car and fur[illegible] 2,000. Unfurnished house [illegible] B.M.J.

Ophthalmic Partnership or As[illegible] View, by M.B., B.Ch., D.O.M.S. [illegible] and general experience. Hospital e[illegible] —Box P9738, B.M.J.

MEDICAL POSTS

VACANT

York County Hospital.—Applica[illegible] for the post of Biochemist. [illegible] annum. Applicants should have [illegible] chemistry. Preference will be given to [illegible] medical qualifications. The laborator[illegible] hospital beds. Applications shouk [illegible] Secretary, York County Hospital, [illegible] April 10.

WANTED

Ex-I.M.S. Lt.-Col. (regular), M.B., B.Ch., B.A.O. (Belfast) wants administrative appointment, hospital or industrial organization. Twenty-three and a half years service. General hospital and teaching experience, held senior administrative post in latter 5 years of service.—Box 154, B.M.J.

Ophthalmologist, experienced, would be glad to hear of salaried post offering interest and scope for research. Industrial considered.—Box 137, B.M.J.

PRACTICES

FOR SALE

Wanted, medical woman (single) as successor for a medical woman's general practice, established forty years. Easy terms.—Box P128, B.M.J.

Country Practice, Cambridgeshire. Old-established in prosperous market town. Panel 3,000. Good private, club, two appointments, use Cottage Hospital and two maternity homes. Scope for surgery. Receipts £4,750.—Box P131, B.M.J.

Essex Coast town. Well-established mixed practice, with ample scope for increase. Panel over 700. Pleasant house and garden at moderate rent.—Box P130, B.M.J.

For Sale, outskirts Birmingham, Nucleus branch Surgery. Panel 1,100, plus P.M.S. and private. Income £1,500, tremendous scope. Modern house, 3 bedrooms, garage, on long lease. Pleasant surroundings. Accept £2,000 quick sale. Reason for sale unable to give time due to specialist work.—Box P111, B.M.J.

London, N. Old-established Practice about £1,000. Panel 476. House for sale, in good suburb. 3 public rooms, 5 bedrooms. Practice and house £6,500.—Box P140, B.M.J.

Medical Practice for sale in growing suburban area of Hull. Panel 2,500. Receipts £3,500 (approx.). Modern detached house with surgery and garage. Good prospects of expansion. Sole reason for sale, ill health of principal. Price £7,500 inclusive. —Box P133, B.M.J.

Near South Coast. Part of Large Practice for sale. To include approximately 2,000 panel units, P.M.S. value £350 p.a., and associated goodwill which is very considerable and offers unlimited scope. Modern flat and surgery premises with most complete equipment, drugs, etc. Premium for whole, £10,000.—Box P9798, B.M.J.

N.W. Lancs. Old-established Mixed Practice Panel 1,600. Income £4,500 audited figures. Central consulting room, garage, living accommodation if required.—Box P9412, B.M.J.

Oxford. Mixed Practice, private and panel, £1,200 to £1,300 per annum, with freehold house for sale. Premium and house £4,200.—Box P134, B.M.J.

Old-established Practice for Sale, near Leeds. Gross receipts 1947, £4,700. Panel 2,500. Charming stone built house with large garden, separate surgery wing, garage for three cars. Assistant's house in grounds, all for sale, freehold.—Box P169, B.M.J.

Practices and Partnerships Shares for sale in Midland and Northern Counties. Full details free on request.—British Medical Bureau, 33, Cross Street, Manchester 2.

Practices and Partnerships for disposal. Details on request.—A Shaw, Medical Transfer Agency, Premier Buildings, 88, Church Street, Liverpool. Telephones: Royal 8116 and Royal 7480. Telegrams: "Organic," Liverpool.

West Coast of Scotland. Selected private and Panel Practice. Private fees £1,200 per annum and [illegible] Midwifery fees approx. £200. Panel 300 [illegible] No bad debts. [illegible] Income £1,300 to [illegible] P136, B.M.J.

Wanted, Practice in or near Reading, Wokingham, Aldershot, Newbury districts for family reasons, by experienced practitioner. Capital available. Replies strictly confidential.—Box P170, B.M.J.

Ex-I.M.S. Lt.-Col. (regular), M.B., B.Ch., B.A.O. (Belfast), wants Practice or Partnership, country town or coast with good house and garden. South Scotland, N. Ireland, South England. G.P. experience. Capital available.—Box P155, B.M.J.

Experienced Practitioner requires Practice, London suburbs, Home Counties, South or South-east coast. Income £1,600 to £2,500. Panel 1,000 up. Own capital ready.—Box P172, B.M.J.

Harrogate, North England, South Scotland. Practice or Partnership required now by experienced practitioner with capital. Protestant. Income £2,000. House with garden essential.—Box P177, B.M.J.

Practice wanted, seaside resort preferred but not essential. Partnership considered. Capital available. Replies in confidence to W. G. Richards, M.B., B.S., M.R.C.O.G., 65, Wentworth Avenue, Southbourne Hants.

Practice with scope, anywhere south or south-west of Birmingham. Keen ex-Service doctor, 28, married, well qualified, recent hospital (obstetrics and gynaecology) and G.P. experience, with excellent references and capital.—Box P9019, B.M.J.

Practices and Partnerships wanted anywhere, England, Scotland, Wales. Purchasers waiting. Capital available. Write, A. Shaw, Medical Agent and Insurance Consultant, Premier Buildings, 88, Church Street, Liverpool, 1.

Small Practice or Partnership in Scotland wanted by Aberdeen graduate, age 30, ex-Service, married, 2 children.—Box P171, B.M.J.

Southampton practice, partnership or assistantship wanted by well-qualified experienced doctor. Urgent.—Box P9447, B.M.J.

DIETITIANS, DISPENSERS, NURSES, [illegible]

VACANT

Wanted immediately, Qualified Dispenser for locum work. Busy practice market town East Anglia.—Box 102, B.M.J.

Wanted, Dispenser-Housekeeper in pleasant seaside and country practice. Furnished accommodation available.—Dr. C. S. Lewis, Cawsand, near Plymouth.

Locum Dispenser wanted May 31 to June 28. Pleasant country district, 22 miles London. Free weekends.—Dr. Cohen, Oxted, Surrey.

Young lady Dispenser required. Country practice, S. Coast. Secretary and another dispenser kept. Some evenings and week ends off—Box 9692, B.M.J.

AVAILABLE

Doctor's Nurse-Secretary desires re-engagement, aged 27, trained nurse, experienced motorist, typing, accounts, etc. London preferred.—Box 103, B.M.J.

Lady Dispenser and Secretary, evening post, some mornings at present; experienced; London only, 'phone Can 2521.—Box 173, B.M.J.

RECEPTIONISTS, SECRETARIES, TYPISTS, ETC.

VACANT

None of the vacancies under this heading relates to a man between the ages of 18 and 50 inclusive, or a woman between the ages of 18 and 40 inclusive, unless he or she is excepted from the provisions of the Control of Engagement Order, 1947, or the vacancy is for employment excepted from the provisions of that Order.

[illegible]se with Light Receptionist Duties [illegible] in N.W. London [illegible] 1616.—[illegible] writing Bureau, 30, City Road, E.C.1. Mon[illegible] Mai. 6344.

HOUSEKEEPERS

Professional man's daughter requires Post [illegible] Housekeeper-Receptionist (preferably bachelor), capable of taking complete charge. Highest references. London preferably.—D. Morris, 569, Gale Street, Dagenham, Essex.

MISCELLANEOUS

PRIVATE

For Sale, large Sunic (Watson) Infra-red and Radiant Heat Lamp £20. Ultra-violet Carbon Arc Lamp £5. Welbeck 5319 (weekdays 10 a.m. to 5 p.m.).

For Sale. Operating table, Operating table Lamp (Gallon et Cie) and various other surgical equipment. All unused and in good condition. Replies to Box 104, B.M.J.

Topley and Wilson's "General or Principles of General Bacteriology," new or secondhand copy, latest edition required—Write Dr. Wang, 21, Tothill Street, S.W.1.

Wanted, urgently for teaching and research purposes, a Reichert sliding microtome with automatic feed and fully orienting block holder. Knives not essential, but general mechanical condition must be good. Send details and price, etc. to Anatomy Department, Middlesex Hospital Medical School, London, W.1.

TRADE

A ready market for Microscopes. We pay the highest prices obtainable for fine modern apparatus. —Wallace Heaton, Ltd., 127, New Bond Street, London, W.1. Mayfair 7511.

Cotswold Vintage Cider and Perry supplied in returnable 6, 10, 15, and 30 gallon casks. Hot cider is the perfect cold resisting toddy. Stamped addressed envelope for price list: The Cotswold Cider Company, Newent, Gloucestershire.

Good Microscope wanted for cash, Binocular or Monocular.—Canister Lodge, Forty Hill, Enfield, Middlesex.

Handbags Repaired. Save purchase tax. Free estimates. No repair too small. Re-lined silk or leather.—Franklin's Handbag Repair Service (Dept., B.M.J.), 5, Railton Road, London, S.E.24.

Occupational Therapy. Prompt delivery of Leathercraft accessories, toy and slipper making materials, etc. We shall be pleased to quote firm prices and advice on all matters.—The Nottingham Leather Co., Ltd., Kent Street, Nottingham. Tel: 40055-6.

Selling Jewellery or Silver? We pay £15 to £35 for cultured pearl necklaces; £15 to £25 for 18ct pocket watches and chains; £3 to £7 for 22ct. wedding rings; £15 to £75 gold cigarette cases; £25 to £150 diamond eternity rings and watches; £20 for £5 gold pieces; £5 to £15 solid silver sports cups; £15 to £60 solid silver tea-sets; up to £1,000 for diamond or coloured stone rings, brooches, bracelets and earrings, etc. Valuations by qualified expert (Fellow Gemmological Assen.). Register your parcels (we send cash or offer per return) or call at M. Hayes & Sons, Ltd., 106, Hatton Garden, London, E.C.1. HOLborn 8177. Telegrams "Golcase Smith London."

APARTMENTS, BOARD, ETC.

AVAILABLE

Harley Street. Large Room, running h. and c., full or part board, with or without exclusive use of Standard 12 car and garage. Vacant approx. mid-April for three [illegible]

HOTELS

Bournemouth—Cranborne Court Hotel, West Cliff, for comfort, service and excellent cuisine. 45 bedrooms, many with private bathrooms. Lift. Central position. 2 minutes from sea and square. Moderate charges. Telephone 5769.

Convalescents specially catered for at The Bournemouth Hydro, West Cliff, sea front. Every comfort and convenience, excellent service and cuisine.—'Phone, Manager, 341.

Old Red Lion Hotel, Stow-on-the-Wold, Glos. (Tel.: 66). Cotswolds, easily reached by train, well heated, good cooking, own poultry, garden, magnificent country, restful. Summer terms from 5 to 6½ gns.

South Cornwall, Pendower Hotel, Ruan High Lanes, near Truro, for quiet holidays. Large garden with path to private beach and bathing pool in Gerrans Bay. A comfortable, well-appointed hotel, where the cooking is excellent.

Treharrock Manor, near Port Isaac, Cornwall. In 15 acres grounds gay in Spring with daffodils and other flowers. Enjoy the atmosphere of unique happiness and modern comfort in traditional country house style. All own produce. Tel.: Port Isaac 234.

HOUSES, CONSULTING ROOMS

New Cavendish Street, close Harley Street. Two Consulting Rooms on first floor to let. Apply, Sole Agents, Unicombe & Betts, Chartered Surveyors, 11, Portman Street, W.1 (Mayfair 2611).

Wimpole Street, W.1. To Let, large ground floor Unfurnished Consulting Room with use of waiting room. General services, constant hot water. —Box 138, B.M.J.

Wimbledon. Furnished Villa, 3 bedrooms, 3 living-rooms, available for period early April to mid-July. Rent 5½ guineas per week.—Box 141, B.M.J.

MOTOR CARS

MILHALL MOTOR CO. LTD.

1946 (first registered) Rolls Royce Phantom III semi-razor edge 7-seater limousine Mulliner. 6,500 miles only.

1940 M.G. 2.6 litre Sports Saloon.

1940 Morris 10 h.p. Saloon. Speedometer read-ing 25,000.

1938 Rover 90 Sports Saloon.

1934 Bentley 3½-litre Sports Saloon. Thrupp and Maberly.

1933 Rolls Royce 20-25 Sports Saloon. Thrupp Maberly.

Showrooms: 5, ST. JAMES'S STREET, S.W.1 (Whitehall 1952-4)

Service: 55-57, South Edwardes Square, W.8 (Western 2269)

Gentleman urgently requires 1946/7 car, earlier model considered if condition exceptional.—Cutmore, 34a, Burnt Ash Hill, London, S.E.12. (Imperial 3527).

Motourists (London) Ltd., of Great North Road, East Finchley Station, N.2, urgently require late model cars of all makes, any h.p. Representative will call by appointment. Tudor 2301-2.

1946-7 (Covenant-free) Car wanted immediately. Would consider well-kept earlier model. Please advise mileage and price required.—J. Spring, 48, Buckingham Avenue, London, N.20.

1939 Citroen Roadster 15 h.p. 26,000 miles. First class condition. Radio. £850.—Box 139, B.M.J.

1946-7 Standard eight saloon, h. [illegible]

[illegible] available. Terms from £12 15s. 4d. weekly.—Apply, Medical Secretary, Medical Director, Hilary Roche, M.D., M.R.C.P., M.R.A.C.P., T.D.D., F.A.C.C.P.

APPOINTMENTS

(*Continued from page 21*)

Have you read the notice at top of page 12?

WEST SUFFOLK GENERAL HOSPITAL
Bury St. Edmund's

Applications are invited from registered medical practitioners, including practitioners within three months of qualification who are liable for service under the National Service Acts, for the following appointment:—

HOUSE SURGEON (A) with responsibility for E.N.T. and general surgery. Immediate vacancy. Salary £200 per annum. Appointment normally for six months. Applications to be addressed to the Secretary, E. E. Hardwicke, F.H.A.

WEST CORNWALL HOSPITAL
Penzance (116 beds)

HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male) for the appointment of House Surgeon (A) vacant now. Salary is at the rate of £150 per annum with full residential emoluments. Practitioners within three months of qualification and liable under the National Service Acts may also apply, when the appointment will be for a period of six months. Applications should be sent to K. I. Newell, Secretary-Superintendent.

BURSLEM HAYWOOD AND TUNSTALL WAR MEMORIAL HOSPITAL
High Lane, Tunstall, Stoke-on-Trent

HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, male and female, including R practitioners who now hold A posts, for the post of House Surgeon (B2). If held by an R practitioner the appointment will be limited to six months. Salary at the rate of £225 per annum, plus full residential emoluments. Applications should be forwarded as soon as possible to C. Lowndes, Secretary.

BRIDGWATER AND DISTRICT GENERAL HOSPITAL

RESIDENT HOUSE SURGEON (B2)

Applications are invited from registered medical practitioners, including R practitioners holding A posts, for the appointment of Resident House Surgeon (B2). Salary at the rate of £250 per annum, with full residential emoluments. It is desirable that the successful applicant should commence duties on April 19, 1948. Applications should be sent as soon as possible, to the Secretary, Bridgwater and District General Hospital, Bridgwater, Somerset.

BOLTON ROYAL INFIRMARY
(245 beds plus auxiliary hospital 43 beds)
(Resident Medical Staff of 7)

Assistant RESIDENT SURGICAL OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Assistant Resident Surgical Officer (B1) to become vacant on April 10, 1948. Applicants should have held house appointments and had surgical experience. Suitably qualified R practitioners holding B2 appointments are invited to apply. Applications from R [illegible]rs now holding B1 appointments cannot [illegible]red unless they have been rejected by [illegible]I.C. Salary £275 per annum, with full [illegible] emoluments. Applications to be for[illegible] the undersigned.—H. P. Travis, General [illegible]ent.

[illegible]STONES CERTIFIED INSTITUTION FOR MENTAL DEFECTIVES
Whalley, near Blackburn

[illegible]STANT MEDICAL OFFICER (B1)

[illegible]mittee of Management invite applica[illegible] registered practitioners, who are not [illegible]ice with H.M. Forces, for the appoint[illegible]nt Medical Officer (B1). [illegible] salary [illegible]dent post is £473 per an[illegible] [illegible] increments of £25 to £573 per [illegible]ntial emoluments valued at £[illegible] [illegible]ether with bonus at present £29 18s. per [illegible]r a non-resident post the salary is £673 [illegible] £773 per annum, with bonus at present [illegible] of £59 16s. per annum, with an additional [illegible]ters of the D.P.M. In the event of the [illegible]pplicant being married, an unfurnished [illegible]able, when the salary will be reduced [illegible]emolument value. Applicants must not [illegible]age of 41 years unless they have had [illegible] H.M. Forces. The appointment will [illegible] to the provisions of the Asylums and [illegible] Institutions (Officers' Pensions) Act, 1918, [illegible]uccessful candidate will be required to pass [illegible] examination. The institution is modern, [illegible]ly equipped, and has a total of 2,378 beds. [illegible] suitably qualified R practitioners holding B1 (if ineligible for H.M. Forces), or B2 appointments are invited to apply. Applications, with names and addresses of three referees, should be forwarded to the Medical Superintendent not later than 9 a.m. on Monday, April 5, 1948.

WEIR HOSPITAL
Balham, London, S.W.12
(30 beds and a busy Out-patient Department)

HOUSE SURGEON (A)

Applications are invited from registered medical practitioners (male and female) for the appointment of House Surgeon (A), including practitioners within three months of qualification who are liable for service under the National Service Acts. The appointment is for a period of six months. Salary £300 per annum, resident. Applications to be sent forthwith to the Secretary-Superintendent.

WREXHAM AND EAST DENBIGHSHIRE WAR MEMORIAL HOSPITAL, Wrexham

RESIDENT PHYSICIAN (A)

Resident House Physician (A). Salary £300 per annum, with residential emoluments to commence April 12, 1948. Practitioners within three months of qualification who are liable for service under the National Service Acts may apply. Appointment for six months to male or female practitioners. Applications, stating date of commencing duties, with copies of testimonials to Leslie Spencer, Secretary.

WILLESDEN GENERAL HOSPITAL
Harlesden Road, N.W.10

CASUALTY OFFICER (B2)

Applications are invited for the post of Casualty Officer (B2), including R practitioners who hold A appointments. Salary at the rate of £200 per annum, with full residential emoluments. Appointment for six months from May 1, 1948. Applications should be sent at once to J. N. Drake, Secretary.

Have you read the notice at top of page 12 ?

YORK COUNTY HOSPITAL (222 beds)
HOUSE SURGEON (B2)
mainly Eye, Ear, Nose and Throat Department

Applications are invited from registered medical practitioners, male or female, for the appointment of House Surgeon (B2) whose main duties are in the Eye, Ear, Nose and Throat Department (37 beds, with busy Out-patient Clinics), but who will share in the general work of the hospital and in casualty duty, including R practitioners who now hold A posts. If held by an R practitioner appointment will be for a period of six months. Salary is at the rate of £1?5 per annum, with full residential emoluments. This post is recognized for D.O.M.S. and D.L.O. examinations and becomes vacant on April 1, 1948. Applications to be sent to the undersigned immediately.—J. R. Mackrill, Secretary.

YORK COUNTY HOSPITAL (268 beds)
RESIDENT ORTHOPAEDIC HOUSE SURGEON AND CASUALTY OFFICER (B1)

Applications are invited from registered medical practitioners for the appointment of Resident Orthopaedic House Surgeon and Casualty Officer (B1), vacant now. Applications from R practitioners who hold B1 appointments cannot be considered unless they are ineligible for H.M. Forces. The appointment is for twelve months. Salary £35? per annum with full residential emoluments. Applications should be sent to the undersigned immediately. —J. R. Mackrill, Secretary.

HOMES

The Psychoneuroses and Neurasth

BOWDEN HOUSE
Harrow-on-the-Hill

Diagnostic Week.—All patients are put t a routine series of clinical, pathological and logical tests, as well as undergoing a sess narco-analysis. For this an inclusive fee guineas is charged. There is no commitm either side for further treatment.
Medical Director: H. Crichton-Miller, F

THE COTSWOLD SANATORIUM

On the Cotswold Hills 7 miles from Chelt Gloucester and Stroud. Equipped for treatm all forms of TUBERCULOSIS. Terms guineas per week. Particulars from Se Cotswold Sanatorium, Cranham, Glo 'Phone: Witcombe 2181. 'Grams: Hoffman,

THE OLD MANOR, SALISBURY
Telephone: 3216 and 3217

A Private Hospital for the Care and Tr of those of both sexes suffering from MI DISORDERS. Extensive grounds. D villas. Chapel. Garden produce from own f Terms moderate.

Convalescent Home at Bournemouth
standing in 12 acres of ornamental groun separate villas, tennis courts, etc. Patie Boarders may visit the Home by arrangement. Illustrated Brochure on application to the Medical Superintendent, The Old Manor, Salisbury.

DR. FOX'S PRIVATE MENTAL HOSPITAL
BRISLINGTON HOUSE, near Bristol

Patients of both sexes received as Voluntary, Temporary or Certified cases. Modern treatments available, including electrical convulsive therapy, leucotomy and psychotherapy. The hospital is situated in large attractive grounds within easy reach of Bristol on the main Bristol-Bath road. T.T. milk from own herd of Guernsey cows. Fruit and vegetable produce from own gardens. Further details on application to Dr. G. O. Cowdy, Medical Superintendent. Telephone: Bristol 76702.

PECKHAM HOUSE
112, PECKHAM ROAD, LONDON, S.E.15
Telegrams: "Alleviated, London."
Telephone: Rodney 2641-2642.

A Private Mental Hospital for Ladies and Gentlemen suffering from Nervous and Mental Illness, where the amenities of a comfortable home are combined with full investigation and every well-established modern treatment. Terms from 5 guineas weekly. Illustrated Prospectus may be obtained from the Physician-Superintendent.

CITY OF LONDON MENTAL HOSPITAL
DARTFORD, KENT

Ladies and Gentlemen received for treatment under certificates and without certification as either VOLUNTARY or TEMPORARY PATIENTS at a weekly fee of £ 3s. and upwards.

ST. ANDREW'S HOSPITAL, NORTHAMPTON
For Nervous and Mental Disorders

President: The Most Hon. the MARQUESS OF EXETER, K.G., C.M.G., A.D.C. Medical Supt.: Thomas Tennent, M.D., F.R.C.P., D.P.H., D.P.M. This Registered Hospital is situated in 130 acres of park and pleasure grounds. Voluntary patients who are suffering from incipient mental disorders or who wish to prevent recurrent attacks of mental trouble, temporary patients and certified patients of both sexes are received for treatment. Careful clinical, biochemical, bacteriological and pathological examinations. Private rooms with special nurses, male or female, in Hospital or in one of the numerous villas in grounds of the various branches can be provided.

WANTAGE HOUSE.—This is a Reception Hospital in detached grounds with a separate entrance to which patients can be admitted. It is equipped with all the apparatus for the complete investigation and treatment of Mental and Nervous Disorders by the most modern methods; insulin treatment is available for suitable cases. It contains special departments for hydrotherapy by various methods, including Turkish and Russian baths, the prolonged immersion bath. Vichy Douche, Scotch Douche, Electrical baths. Plombières treatment, etc. There is an Operating Theatre, a Dental Surgery, an X-ray Room, an Ultra-Violet Apparatus, and a Department for Diathermy and High-frequency Treatment. It also contains laboratories for biochemical, bacteriological, and pathological research. Psychotherapeutic treatment is employed when indicated.

MOULTON PARK.—Two miles from the main Hospital there are several branch establishments and villas situated in a park and farm of 650 acres. Milk, meat, fruit, and vegetables are supplied to the Hospital from the farm, gardens, and orchards of Moulton Park. Occupational therapy is a feature of this branch, and patients are given every facility for occupying themselves in farming, gardening and fruit-growing.

BRYN-Y-NEUADD HALL.—The seaside house of

A PRIVATE HOSPITAL
For the Treatment of Mental Disorders
Full particulars may be obtained from the Secretary.

THE CONVALESCENT HOME is HOVE VILLA, BRIGHTON, and is 200 ft. above sea-level.

CHISWICK HOUSE, PINNER, MIDDLESEX
Telephone: Pinner 234

A Private Hospital for the Treatment and Care of Mental and Nervous Illnesses in both sexes. A modern country house 12 miles from Marble Arch, in attractive and secluded grounds. Fees from 10 guineas per week inclusive. Cases under Certificate. Voluntary and Temporary patients received for treatment. Douglas Macauley, M.D., D.P.M.

PENDYFFRYN HALL SANATORIUM
All Modern Methods of Treatment available

Ideally situated for the treatment of Tuberculosis. Shelter from E. and N.E. winds. Climate mild and bracing. Low rainfall, high average of sunshine. The Sanatorium is situated in its own Park. There are miles of graduated walks through pines, gorse, and heather, rising to 800 ft. and commanding extensive sea and mountain views. Central heating, electric light, x-ray installation. Wireless in all rooms. Full day and night nursing staff. Special milk supply from a tuberculin tested herd. Easily accessible from London, Manchester, Liverpool, Birmingham, and the North.

Medical Staff: Dennison Pickering, M.D.(Cantab), P. Keaney, M.B., B.Ch.

Apply Secretary, Pendyffryn Hall, near Penmaenmawr, North Wales. 'Phone: 20.

HAYDOCK LODGE
NEWTON-LE-WILLOWS, LANCASHIRE
Tel.: Wootton, Ashton-in-Makerfield.
Phone: Ashton-in-Makerfield 7311.

For the reception and treatment of PRIVATE PATIENTS of both sexes suffering from mental and nervous disorders, alcoholism and drug addiction, either voluntarily, temporarily, or under Certificate. Patients are classified in separate buildings according to their mental condition.

Situated in park and grounds of 400 acres. Self-supported by its own farm and gardens, in which patients are encouraged to occupy themselves. Every facility for indoor and outdoor recreation. For terms, prospectus, etc., apply Medical Superintendent.

THE COPPICE, NOTTINGHAM
Hospital for Mental Diseases

This institution is exclusively for the reception of a limited number of Private Patients of both sexes at moderate rates of payment. It is beautifully situated in its own grounds on an eminence a short distance from Nottingham, and from its singularly healthy position and comfortable arrangements affords every facility for the relief and cure of those mentally afflicted. Occupational Therapy. Voluntary and Temporary Patients received. Tel.: 64117. For terms, etc., apply to the Medical Superintendent.

CHEADLE ROYAL, CHEADLE, CHESHIRE

A registered Hospital for MENTAL DISEASES, and its Seaside Branch, GLAN-Y-DON, Colwyn Bay, N. Wales. The object of this Hospital is to provide the most efficient means for the treatment and care of Patients of both Sexes suffering from MENTAL and NERVOUS DISEASES. The Hospital is governed by a Committee appointed by the Trustees of the Manchester Royal Infirmary.

only), women), th d women) sup tees, from 35s. per m 41s. 6d pe week. For G.

hamsted)

from Insomnia, Functional, Nervous Disorders, Alcohol and Drug Habits, Chronic Heart and Kidney Disease, also Elderly and Convalescing Cases.—Apply J. C. Baker, M.B. Telephone: Bayford 262. Station: Bayford (L.N.E.Ry.).

NORTHUMBERLAND HOUSE
GREEN LANES, FINSBURY PARK, N.4

A PRIVATE HOSPITAL for the treatment of MENTAL and NERVOUS ILLNESSES. Conveniently situated and easy of access from all parts. Six acres of ground facing Finsbury Park. Voluntary and Temporary Patients received without certification. E.C.T. Group Psychotherapy. Trained Resident and Visiting Staff. INSULIN COMA UNIT. Telephone: Stamford Hill 7866/7 (2 lines) Telegrams: "Subsidiary, London." For further particulars apply to the Medical Superintendent, Robert M Riggall, Member, British Psycho-Analytical Society

CLIFFDEN, TEIGNMOUTH

For the early TREATMENT of NERVOUS DISORDERS and patients needing rest and care. A well-appointed house, with spacious balconies and extensive views of the South Devon Coast. Beautiful garden and own dairy in 35 acres. In the same grounds, ROWDENS, a comfortable house with lovely views. Private road to the beach. There is also a charming house, Ebworthy, Manaton, Dartmoor, situated in 25 acres, 1,100 ft. up for bracing moorland air. Resident physicians; Bertha M. Mules, M.D., B.S.; Anne S. Mules, M.R.C.S., L.R.C.P. Telephone: Teignmouth 289 and 537.

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